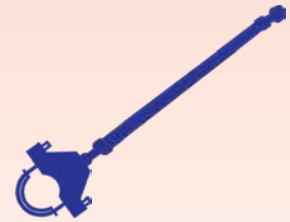
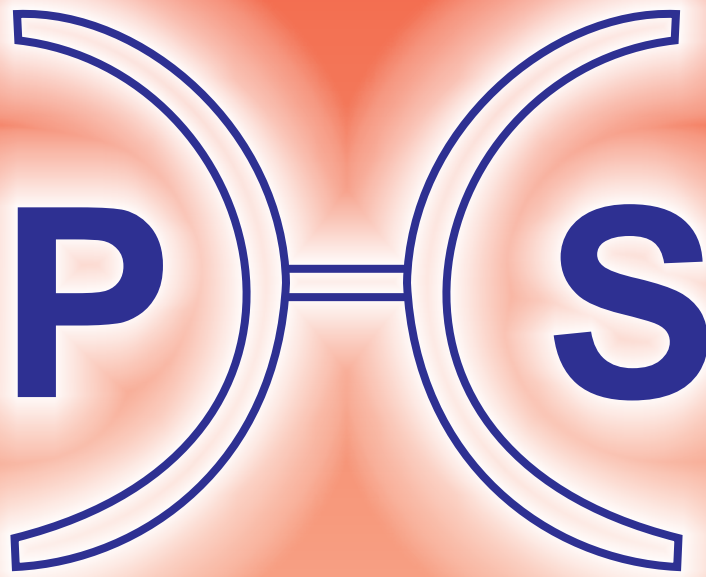


# Pipe Hangers & Supports





# Pipe Hangers & Supports Private Limited

## A Global Solution to Spring Hangers & Supports

We are a leading Global manufacturer of spring hangers, supports & accessories. Over the past 4 decades we have supplied to major power plants, refineries, nuclear installations & process industries around the world.

We operate out of two locations in India, one at Chennai & the other at Thanjavur, Tamil Nadu (about 30 kms from BHEL - Trichy).



**Products** : Spring Hangers & Supports (Variable & Constant), Rigid Struts, Rigid Hangers, Hydraulic Snubbers & Sag Compensating Springs

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**Certificates** : ISO - 9001 : 2015, 14001 : 2015 & OHSAS - 45001 : 2015



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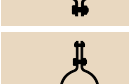








**Pipe Hangers & Supports Private Limited**

## **OUR PRODUCT PHOTOS AT SITE**





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		RA8D & RA8E PROFILED TURNBUCKLE	<b>198</b>		TB6 SPREADER BEAM — I — BEAM TYPE			

## VARIABLE EFFORT SUPPORTS

The current expanded range of variable effort supports are designed keeping in mind the space constraints imposed by modern industrial complexes generating power, refining petroleum products and off shore rigs. The design lends itself to application of high performance paints which are being increasingly specified by clients who are conscious of degradation & corrosion due to process and environmental conditions.

### APPLICATION

Pipe lines constructed of steel will expand along its axis by an amount equal to its co-eff of thermal expansion when carrying hot or cold fluids. The pipe lines when suspended from Variable effort supports will allow this thermal expansion or contraction relative to structure and at the same time support the weight of the pipe to prevent sagging.

The variable effort support is a simple devise such that a helical coil compression spring is pre-compressed (to reduce head room) in a casing. The spring will compress or expand by an amount equal to the thermal movement of pipe. Hence the load on the pipe will vary with movement and hence the name variable effort support as the supporting effort varies with movement.

### RANGE

Pipe Hanger & Supports offer a wide range of Variable effort supports right from 3.43 Kgs to 39120 Kgs spread across several travel, load & support configuration types

Available in the following variation

### WORKING RANGES

**VS1- 35mm**

**VS2-70mm**

**VS3-140mm**

**VS4-210mm**

**VS5-280mm**

With 29 spring sizes (Size 1 to Size 29) within each travel range. Newly introduced High load variable series to cater for large loads using multi –coil configuration:

**VS1- 35mm**

**VS2-70mm**

**VS3-140mm**

With 7 spring sizes ( Size H1 to H7) within each travel range.

### SUPPORT TYPES

<b>A, B, C</b>	Top Supported
<b>D</b>	Top Adjustable
<b>E</b>	Extended Support
<b>F</b>	Base mounted
<b>G</b>	Trapeze type double

### RELATED SPECIFICATIONS

The Pipe Hangers & Supports range of Variable Effort Supports are designed and manufactured to meet the requirements of the following Specifications:

BS3974	ANSI / ASME B31.1
ANSI / ASME B31.3	ANSI / MSS SP-58
ANSI / MSS SP69	

### INSTALLATION AND ERECTION

Please refer the exhaustive Erection / Commissioning manual for details. This is supplied free of cost along with every dispatch. This manual is also available as a free download from our web site [www.pipehangers.in](http://www.pipehangers.in).

### MAINTENANCE

The supports are engineered and designed to be maintenance free. Refrain from making any attempt whatsoever to open the canister to remove spring coil since the spring coil is pre-compressed and assembled in the can.

General guidelines for periodic inspection at site:

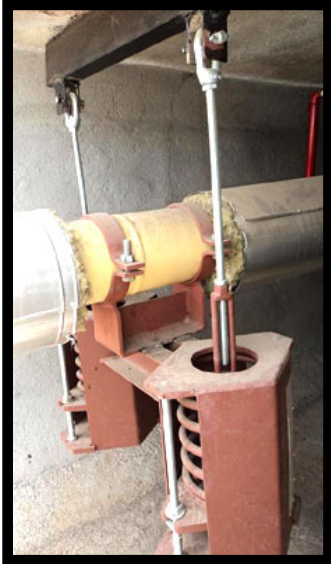
- Look for rusting on spring coil / locking rods as these are load carrying members.
- Check for visual damage which may impede free movement of spring coil.
- Inspect for fallen construction debris inside can which can cause the spring to deform during operation.
- Check whether the piston plate pointer is near about the "Hot" & "Cold" position marked on the name plate and that it is not at the extremities.
- If the hanger rod is loose or the pipe shoe has lifted, it means that the support is not taking load.
- If the spring is fully compressed to its home length or solid, it means excessive movement / load and needs the attention of Pipe line designer to sort out the issue.

**A more detailed erection and maintenance procedure is available upon request.**



# VARIABLE EFFORT SUPPORTS

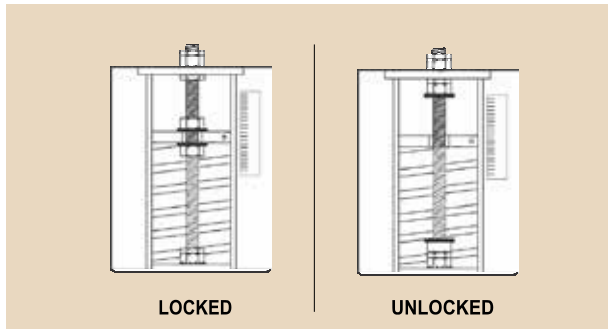
Type G



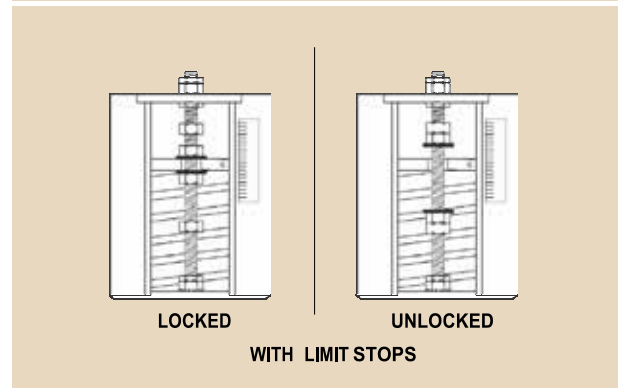
Type F



## STANDARD FEATURES



## OPTIONAL FEATURES



1. Occupies minimum head room, are compact with low installed heights.
2. Over travel provided at both ends of the travel range as follows:  
VS1=5mm  
VS2=10mm  
VS3=20mm  
VS4=30mm  
VS5=40mm
3. Supports fitted with Stainless / Aluminum name and scale plates punched / engraved with details pertaining to support like Loads, Tag No, Size, S/r Constant, unique serial number for co-relation to test certificate etc.
4. The supports are fitted with a Universal preset locking device using fully threaded rods and nuts such that the piston plate can be locked at any position of its travel range. During installation, the locking nuts are unwound to allow free movement of the piston plate. The locking device stays on the support as an integral part of the support. In order to carry out any maintenance activity on the pipe line during plant shut down / outages the nuts can be wound back to lock the piston plate in position.
5. The construction of the support ( bolted ) is of particular benefit when specialty high performance paints are used or the support is hot dip galvanized, after compressing the spring and locking it, the top plate is locked in position by nuts and there is no welding, hence the paint / HDG does not get damaged.

1. Limit stops can be incorporated when thermal movement has to be limited beyond a certain point. This simply means providing additional nuts welded in place on the side preset locking bars such that the piston plate cannot move beyond that. (see Fig 2).
2. For foot mounted supports, the load flange can be equipped with PTFE slider or graphite pads to reduce friction when large axial / transverse movements are envisaged.
3. Special supports can be designed to suit special operating conditions, please consult our design department for details.

# VARIABLE EFFORT SUPPORTS

## SELECTION

Variable Effort Supports can be selected manually with the help of the catalogue as shown below or can be selected by using our propriety software that is available as a free issue from our sales department.

## SELECTION FROM THE CATALOGUE

Refer the load charts for variable effort supports, open out the table pertaining to the units i.e Newtons or Kilograms.

Selection of VS1, VS2, VS3, VS4, VS5 will depend on the Thermal movement i.e. movement of pipe from cold position to hot position and the allowable load variation in percentage.

Since the pipe is slung or supported directly from the helical coil any vertical movement will represent a certain amount of compression or de-compression of spring coil, in turn manifesting itself as a change in supporting effort.

Thus when the pipe moves from the cold position to hot position the load will vary, the change in load or effort = movement x Spring Constant.

The change is normally expressed as a percentage of the operating load, provided the initial stress analysis is based on the hot load basis and client provide hot load and movement in their specification.

$$\text{Variation is Effort} = \frac{\text{Movement} \times \text{Spring Constant}}{\text{Operating Load}} \times 100 \%$$

Most Standards like MSS-SP58 limit this percentage variation, also called Load Variation to 25%, though depending on the criticality of application lower or higher Load variations are allowed by pipe work designers.

For the sake of guidance or rule of thumb basis, for movements upto 10 mm use VS1, for 10 to 25 mm use VS2, for 25 to 55mm movement use VS3.

## SUPPORT SIZE

Selection of the support size is done by using the selection charts. Use procedure detailed below for selection.

## SELECTION PROCEDURE

1. Determine the operating load or hot load and the thermal movement i.e movement of pipe from installed (cold or preset position) to hot or operating load. If there are attachments to pipe like heavy clamps or trapeze beams, the weight of these may be added to operating load.
2. Based on guide line above arrive at travel range required.
3. Refer selection chart & select smallest spring size which has the operating load in the working range shown.
4. Ensure that the spring size selected can accommodate the travel within economic range (not in over travel). If the movement is up then go down the chart from operating load and if movement is down, go up the chart by an amount equal to travel from the operating load.
5. Make sure that both operating load and preset load are in the same selected size.
6. If the movement cannot be accommodated by the selected spring try a next higher size or the next travel range.
7. If the travel cannot be accommodated by a VS5 range then select a constant effort support.
8. Calculate the percentage load variation by using formula shown above.

9. If the percentage variation exceeds the limit set by client or 25% (in the absence of any limit set by client) select the spring constant of the next travel range.
10. If the variation is less than half of the max allowed variation then a smaller travel range may do the job i.e from a VS3, you may select a VS2.
11. If the Load variation exceeds 25 % or the limit set by client then select a constant.
12. The process of selection is an iterative one.

## TYPE

Determine the configuration and geometry of support or hanger required based on site conditions and available space and availability of steel work near the support location. The various types are A, B, C, D, E, F, E Once the Size, travel range etc. are selected, the support can be described as VS3-12-C.

## CALCULATION OF INSTALLED DIMENSIONS

The Rod Take Out Dimension or "RTO" as it is popularly called for type A, B, C, G and "J" Dimn for D, E & F type supports tabulated in the tables are at min working load i.e dimensions at minimum load.

$$\text{a) Installed Load} = \text{Operating Load} + (\text{Movement} \times \text{Spring Rate}) \text{ for 'installed to operating' movement up.}$$

$$\text{b) Installed Load} = \text{Operating Load} - (\text{Movement} \times \text{Spring Rate}) \text{ for 'installed to operating' movement down.}$$

$$\text{Spring Displacement at Installed Load} = \frac{\text{Installed Load} - \text{Minimum Load}}{\text{Spring Rate}}$$

$$\text{Installed Dimension} = \text{R.T.O.} + \text{Spring Displacement at Installed Load}$$

$$\text{(A, B, C and G units). Installed Dimension} = \text{J} - \text{Spring Displacement at Installed Load}$$

$$\text{(D, E and F units).}$$

## ORDERING

For information on ordering a support or hanger please refer to Page no - 210



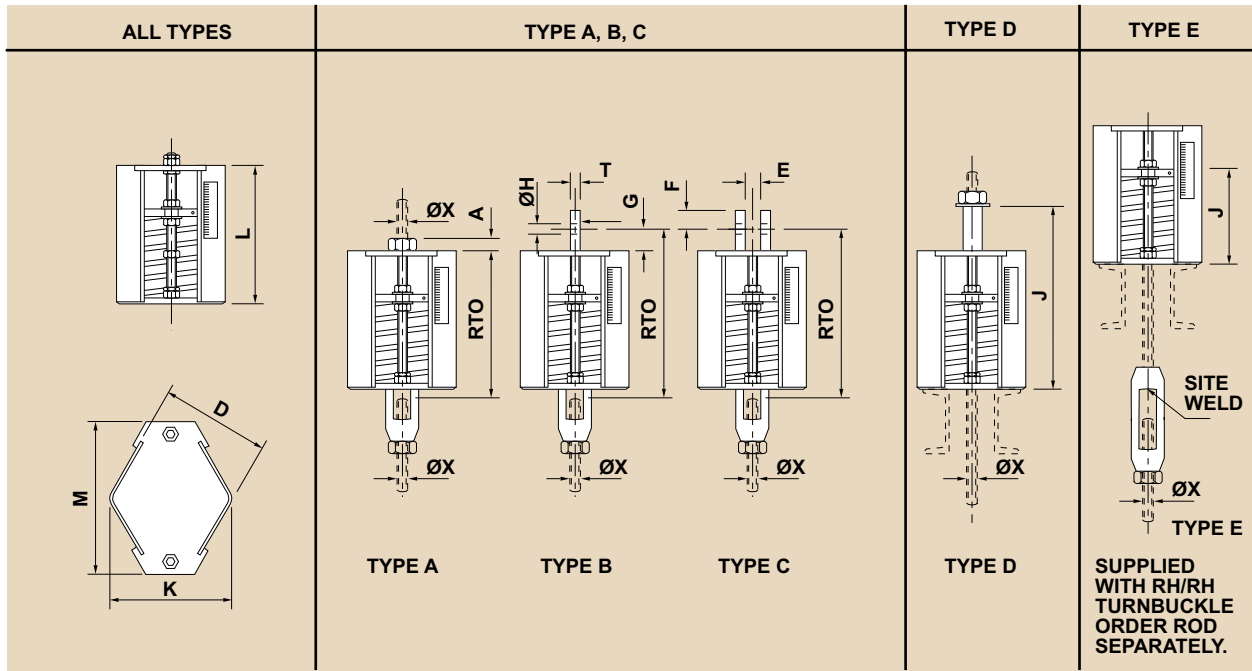


# VARIABLE EFFORT SUPPORT SELECTION CHART

Newton's

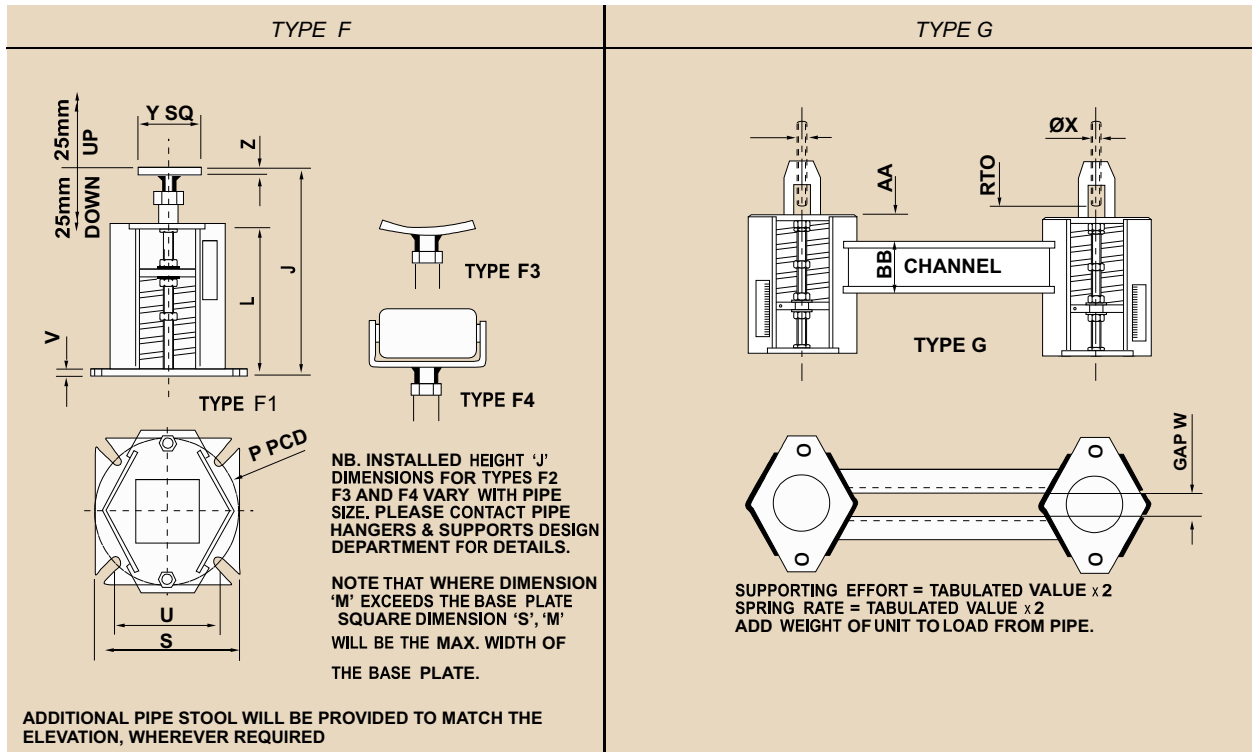
MOVEMENT mm					SPRING SIZE																													
	VS 1	VS 2	VS 3	VS 4	VS 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
						MIN	0	0	0	0	0	26.7	46.7	75.5	107	125	160	178	289	353	461	608	775	1079	1412	1981	2471	3501	4511	5972	7963	10611	14328	20006
MIN	0	0	0	0	0	28.1	48.4	77.6	110	129	165	183	296	363	473	625	798	1108	1453	2034	2544	3591	4631	6132	8176	10894	14711	20532	27483	36281	48270	63934	85360	114064
						29.5	50.2	79.7	112	133	170	189	303	373	486	642	821	1138	1493	2086	2617	3682	4752	6291	8389	11177	15095	21059	28183	37228	49517	65995	87619	116989
						30.9	51.9	81.8	115	137	175	194	310	382	499	659	844	1167	1534	2141	2690	3772	4872	6451	8602	11460	15479	21586	28884	38175	50764	67257	89878	119915
						32.3	53.7	83.9	118	141	179	200	317	392	511	676	867	1196	1575	2194	2763	3863	4992	6610	8815	11743	15863	22112	29584	39122	52010	68919	92137	122840
						33.7	55.5	86.0	121	146	184	206	324	402	524	693	890	1226	1615	2248	2836	3953	5113	6770	9029	12026	16247	22639	30285	40069	53257	70580	94396	125785
MIN	0	0	0	0	0	35.1	57.2	88.1	124	150	189	211	331	412	536	710	912	1255	1656	2301	2909	4043	5233	6929	9242	12309	16631	23166	30985	41016	54504	72242	96655	128690
						36.5	59.0	90.2	126	154	194	217	338	422	549	727	935	1285	1697	2354	2982	4134	5353	7089	9455	12591	17015	23692	31666	41964	55751	73904	98914	131616
						37.9	60.7	92.3	129	158	199	222	345	431	562	744	958	1314	1737	2406	3055	4224	5474	7249	9668	12874	17399	23287	32387	42911	56998	75565	101173	134541
						39.3	62.5	94.5	132	162	204	228	352	441	574	761	981	1344	1778	2461	3128	4315	5594	7408	9881	13157	17783	24746	33087	43658	58245	77227	103431	137466
						40.7	64.2	96.6	135	167	209	234	359	451	587	778	1004	1373	1819	2514	3201	4405	5714	7568	10094	13440	18166	25272	33788	44805	59492	78889	105690	140391
MIN	5	10	20	30	40	42.1	66.0	98.7	138	171	214	239	366	461	599	795	1027	1402	1859	2566	3274	4496	5834	7727	10307	13723	18550	25799	34488	45752	60739	80550	107949	143317
						43.5	67.7	101	140	175	219	245	373	471	612	812	1050	1432	1900	2621	3347	4586	5955	7887	10520	14006	18934	26326	35189	46700	61985	82212	110208	146242
						44.9	69.5	103	143	179	224	251	380	481	624	829	1073	1461	1941	2674	3420	4676	6075	8046	10733	14289	19318	26853	35889	47647	63232	83783	112467	149167
						46.3	71.3	105	146	183	228	256	387	490	637	846	1096	1491	1981	2728	3493	4767	6195	8206	10947	14572	19702	27379	36590	48594	64479	85535	114726	152092
						47.7	73.0	107	149	188	233	262	394	500	650	863	1119	1520	2022	2781	3566	4857	6316	8365	11160	14855	20086	27906	37291	49541	65726	87197	116985	155018
MIN	10	20	40	60	80	49.1	74.8	109	152	192	238	267	401	510	662	880	1142	1549	2063	2834	3639	4948	6436	8525	11373	15138	20470	28433	37991	50488	66973	88658	119244	157943
						50.5	76.5	111	154	196	243	273	408	520	675	897	1165	1579	2103	2888	3711	5038	6556	8684	11586	15421	20854	28959	38692	51435	68220	90520	121502	160688
						51.9	78.3	113	157	200	248	279	415	530	687	914	1188	1608	2144	2941	3784	5128	6677	8844	11799	15704	21238	29486	39392	52383	69467	92182	123761	163793
						53.3	80.0	116	160	205	253	284	422	539	700	931	1211	1638	2185	2994	3857	5219	6797	9003	12012	15987	21622	30013	40093	53300	70714	93843	126200	166719
						54.7	81.8	118	163	209	258	290	429	549	713	948	1234	1667	2225	3048	3930	5309	6917	9163	12225	16270	22005	30539	40794	54277	71960	95505	128279	169644
MIN	15	30	60	90	120	56.1	83.5	120	166	213	263	296	436	559	725	965	1257	1697	2266	3101	4003	5400	7038	9323	12438	16553	22389	31066	41494	55224	73207	97166	130538	172569
						57.5	85.3	122	168	217	268	301	443	569	738	982	1280	1726	2307	3154	4076	5490	7158	9482	12652	16836	22773	31593	42195	56171	74454	98828	132797	175494
						58.9	87.1	124	171	221	273	307	450	579	750	999	1303	1755	2347	3208	4149	5580	7278	9642	12865	17119	23157	32119	42895	57118	75701	100490	135056	178420
						60.3	88.8	126	174	226	278	312	457	588	763	1016	1326	1785	2388	3261	4222	5671	7399	9801	13078	17402	23541	32646	43596	58066	76948	102151	137315	181345
						61.7	90.6	128	177	230	282	318	465	598	775	1033	1349	1814	2429	3314	4295	5761	7519	9961	13291	17685	23925	33173	44296	59013	78195	103813	139574	184270
MIN	20	40	80	120	160	63.1	92.3	130	180	234	287	324	472	608	788	1050	1372	1844	2469	3368	4368	5852	7639	10120	13504	17968	24309	33699	44997	59960	79442	105475	141832	187195
						64.5	94.1	132	182	238	292	329	479	618	801	1067	1395	1873	2510	3421	4441	5942	7759	10280	13717	18251	24693	34226	45698	60907	80689	107136	144091	190121
						65.9	95.8	134	185	242	297	335	486	628	813	1084	1418	1902	2551	3474	4514	6033	7880	10439	13930	18534	25077	34753	46398	61854	81936	108798	146350	193046
						67.3	97.6	137	188	247	302	341	493	637	826	1100	1441	1932	2591	3528	4587	6123	8000	10599	14143	18817	25460	35280	47099	62802	83182	110459	148609	195971
						68.7	99.3	139	191	251	307	346	500	647	838	1117	1464	1961	2632	3581	4660	6213	8120	10758	14356	19100	25844	35806	47799	63749	84429	112121	150868	198896
MIN	25	50	100	150	200	70.1	101	141	194	255	312	352	507	657	851	1134	1487	1991	2673	3634	4733	6304	8241	10918	14570	19382	26228	36333	48500	64696	85676	113783	153127	201822
						71.5	103	143	196	259	317	357	514	667	864	1151	1510	2020	2713	3688	4806	6394	8361	11077	14783	19665	26612	36860	49200	65643	86923	115444	155386	204747
						72.9	105	145	199	263	322	363	521	677	876	1168	1532	2050	2754	3741	4879	6485	8481	11237	14996	19948	26996	37386	49901	66590	88170	117106	157645	207672
						74.3	106	147	202	268	327	369	528	686	889	1185	1555	2079	2795	3794	4952	6575	8602	11397	15209	20231	27380	37913	50602	67537	89417	118768	159903	210597
						75.7	108	149	205	272	331	374	535	696	901	1202	1578	2108	2835	3848	5025	6665	8722	11556	15422	20514	27764	38440	51302	68485	90664	120429	162162	213523
MIN	30	60	120	180	240	77.1	110	151	208	276	336	380	542	706	914	1219	1601	2138	2876	3901	5098	6756	8842	11716	15635	20797	28148	38966	52003	69432	91911	122091	164421	216448
						78.5	112	153	210	280	341	385	549	716	926	1236	1624	2167	2917	3954	5170	6846	8963	11875	15848	21080	28532	39493	52703	70379	93157	123753	166680	219373
						79.9	113	155	213	285	346	391	556	726	939	1253	1647	2197	2957	4008	5243	6937	9083	12035	16061	21363	28916	40020	53404	71326	94404	125414	168939	222298
						81.3	115	158	216	289	351	397	563	735	952	1270	1670	2226	2998	4061	5316	7027	9203	12194	16274	21646	29299	40546	54104	72273	95651	127076	171198	225224
						82.7	117	160	219	293	356	402	570	745	964	1287	1693	2256	3039	4114	5389	7117	9323	12354	16488	21929	29683	41073	54805	73221	96989	128737	173457	228149
MIN	35	70	140	210	280	84.1	119	162	222	297	361	408	577	755	977	1304	1716	2285	3079	4168	5462	7208	9											

# RANGE VS1



SUPPORT SIZE	ROD DIA	BODY DIMENSIONS					RTO AT MIN LOAD (mm)			DEPTH OF THRD	LUG DIMENSIONS TYPES B & C						WEIGHTS kgf			J AT MIN LOAD mm	WEIGHT kgf	J AT MIN LOAD mm	WEIGHT kgf
		X mm	D mm	K mm	M mm	L mm (not F)	A	B	C		A mm	E mm	F mm	G mm	H mm	T mm	A	B	C				
VS1-1	M12	108	122	155	133	150	182	182	12	20	20	30	14	6	4.0	4.1	4.2	153	3.2	84	3.4		
VS1-2	M12	108	122	155	117	150	182	182	12	20	20	30	14	6	4.1	4.2	4.3	157	3.2	88	3.5		
VS1-3	M12	108	122	155	123	150	182	182	12	20	20	30	14	6	4.1	4.2	4.3	163	3.3	93	3.5		
VS1-4	M12	108	122	155	124	150	182	182	12	20	20	30	14	6	4.2	4.3	4.4	164	3.3	94	3.6		
VS1-5	M12	108	122	155	123	150	182	182	12	20	20	30	14	6	4.2	4.3	4.4	163	3.3	93	3.6		
VS1-6	M12	108	122	155	126	150	182	182	12	20	20	30	14	6	4.2	4.3	4.4	166	3.3	96	3.6		
VS1-7	M12	108	122	155	127	150	182	182	12	20	20	30	14	6	4.3	4.4	4.5	167	3.4	97	3.7		
VS1-8	M12	108	122	155	133	150	182	182	12	20	20	30	14	6	4.4	4.5	4.6	173	3.5	103	3.8		
VS1-9	M12	108	122	155	136	150	182	182	12	20	20	30	14	6	4.4	4.5	4.6	176	3.6	106	3.8		
VS1-10	M12	108	122	155	134	150	182	182	12	20	20	30	14	6	4.5	4.6	4.7	174	3.6	105	3.9		
VS1-11	M12	108	122	155	139	150	182	182	12	20	20	30	14	6	4.6	4.7	4.8	179	3.7	109	4.0		
VS1-12	M12	108	122	155	139	150	182	182	12	20	20	30	14	6	4.7	4.8	4.9	179	3.8	110	4.1		
VS1-13	M12	108	122	155	160	158	196	196	12	25	30	36	18	6	5.0	5.1	5.3	200	4.1	130	4.4		
VS1-14	M12	108	122	155	173	171	209	209	12	25	30	36	18	6	5.4	5.6	5.7	213	4.6	143	4.8		
VS1-15	M12	108	122	155	194	192	230	230	12	25	30	36	18	6	6.0	6.2	6.3	234	5.1	165	5.4		
VS1-16	M16	145	164	200	210	207	260	260	16	30	35	50	22	10	12.3	12.6	13.0	250	10.4	172	10.8		
VS1-17	M16	145	164	200	184	181	234	234	16	30	35	50	22	10	11.5	11.9	12.2	224	9.6	146	10.1		
VS1-18	M16	145	164	200	197	194	247	247	16	30	35	50	22	10	12.2	12.5	12.9	237	10.3	159	10.7		
VS1-19	M20	175	198	250	209	205	269	269	20	35	45	60	26	10	20.8	21.4	22.0	249	16.7	163	17.3		
VS1-20	M24	175	198	250	231	226	301	301	24	40	55	70	33	12	23.0	24.0	25.1	271	18.3	181	19.3		
VS1-21	M30	175	198	250	259	253	339	339	30	45	55	80	40	15	26.4	27.8	29.4	299	20.5	204	22.2		
VS1-22	M30	220	250	330	268	262	348	348	30	45	55	80	40	15	45.3	46.6	48.2	308	35.8	208	37.5		
VS1-23	M36	220	250	330	313	306	403	403	36	60	75	90	46	15	57.2	59.2	61.5	353	44.6	242	46.6		
VS1-24	M42	220	250	330	360	352	465	465	42	70	85	105	52	20	72.1	75.6	79.8	400	55.4	277	58.3		
VS1-25	M48	330	376	500	366	356	486	486	48	75	100	120	60	20	137	142	148	406	112	283	116		
VS1-26	M56	330	376	500	398	387	538	538	56	80	115	140	68	20	161	167	175	438	132	307	139		
VS1-27	M64	330	376	520	425	412	580	580	64	90	130	155	76	25	184	194	205	465	148	328	158		
VS1-28	M72	330	376	530	488	474	643	643	72	90	130	155	76	25	233	241	253	528	185	378	198		
VS1-29	M80	330	376	540	571	555	746	746	80	100	150	175	85	25	293	304	318	611	228	448	247		

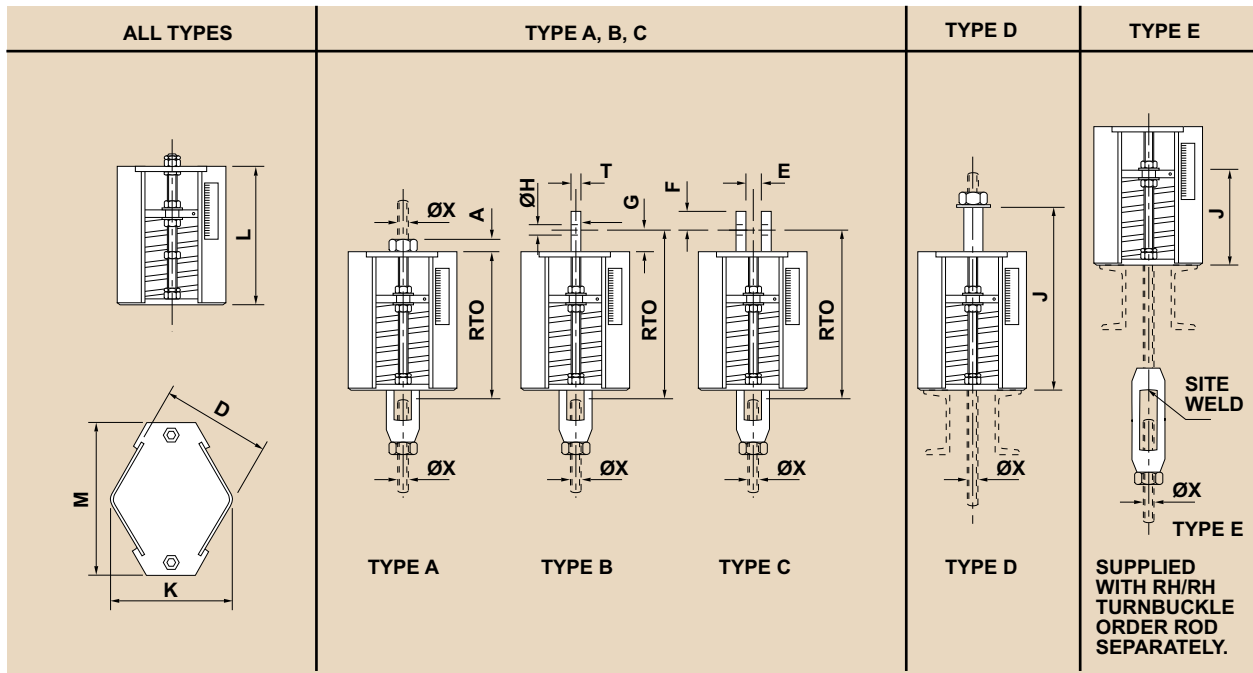
# RANGE VS1



SUPPORT SIZE	J AT MIN. LOAD TYPE F mm	BODY L'TH L mm	BASE PLATE SQ. S mm	BASE PLATE PCD P mm	BASE BOLT CRS. SQ. U mm	BASE BOLT SIZE	BASE PLATE THK V mm	LOAD PAD SQ. Y mm	LOAD PAD THK Z mm	WEIGHT kgf F	RTO AT MIN LOAD mm	DIM. AA mm	GAP W mm	BEAM DEPTH BB (mm)			WEIGHT kgf		
														800 MAX CENTRES	1200 MAX CENTRES	1600 MAX CENTRES	@ 800 CRS	@ 1200 CRS	@ 1600 CRS
VS1-1	184	104	150	160	113	M16	6	75	6	3.5	63	25	18	50	50	50	14	18	21
VS1-2	188	108	150	160	113	M16	6	75	6	3.5	59	25	18	50	50	50	14	18	21
VS1-3	193	113	150	160	113	M16	6	75	6	3.5	54	25	18	50	50	50	14	18	21
VS1-4	194	114	150	160	113	M16	6	75	6	3.6	53	25	18	50	50	50	15	18	22
VS1-5	193	113	150	160	113	M16	6	75	6	3.6	54	25	18	50	50	50	15	18	22
VS1-6	196	116	150	160	113	M16	6	75	6	3.6	51	25	18	50	50	50	15	18	22
VS1-7	197	117	150	160	113	M16	6	75	6	3.6	50	25	18	50	50	50	15	18	22
VS1-8	203	123	150	160	113	M16	6	75	6	3.7	44	25	18	50	50	50	15	18	22
VS1-9	206	126	150	160	113	M16	6	75	6	3.8	41	25	18	50	50	50	15	18	22
VS1-10	210	127	185	177	125	M20	8	75	6	5.4	42	25	22	75	75	75	19	24	30
VS1-11	214	131	185	177	125	M20	8	75	6	5.5	38	25	22	75	75	75	19	25	30
VS1-12	215	132	185	177	125	M20	8	75	6	5.6	37	25	22	75	75	75	19	25	31
VS1-13	241	152	200	197	139	M20	8	75	10	6.8	25	25	26	75	75	75	20	25	31
VS1-14	254	165	200	197	139	M20	8	75	10	7.2	25	25	26	75	75	75	21	26	32
VS1-15	276	187	200	197	139	M20	8	75	10	7.6	25	25	26	75	75	75	22	27	33
VS1-16	292	204	270	240	170	M20	10	100	12	15.1	25	25	33	100	100	125	38	46	64
VS1-17	266	178	270	240	170	M20	10	100	12	14.7	25	25	33	100	100	125	36	44	63
VS1-18	279	191	270	240	170	M20	10	100	12	15.2	25	25	33	100	100	125	37	45	64
VS1-19	289	199	270	240	170	M20	12	120	12	22.5	25	25	40	125	150	150	59	82	97
VS1-20	307	217	270	240	170	M20	12	120	12	23.6	25	25	40	125	150	150	63	86	102
VS1-21	330	240	270	240	170	M20	12	120	12	25.4	25	25	40	125	150	150	70	93	109
VS1-22	337	246	270	268	190	M20	12	150	15	38.6	25	25	52	200	200	250	119	138	158
VS1-23	361	270	270	268	190	M20	12	150	15	44	25	25	52	200	200	250	143	162	182
VS1-24	401	308	270	268	190	M20	20	150	15	57	25	25	52	200	200	250	172	192	212
VS1-25	422	320	400	400	283	M24	20	200	20	117	25	25	60	250	300	390	296	342	411
VS1-26	446	339	400	400	283	M24	20	200	20	132	25	25	70	250	300	390	345	391	459
VS1-27	473	363	400	400	283	M24	20	200	20	150	25	25	80	250	300	390	391	437	506
VS1-28	536	416	400	400	283	M24	25	200	25	189	25	25	80	390	390	430	517	560	629
VS1-29	626	495	400	400	283	M24	30	200	30	237	25	25	90	390	390	430	637	681	750

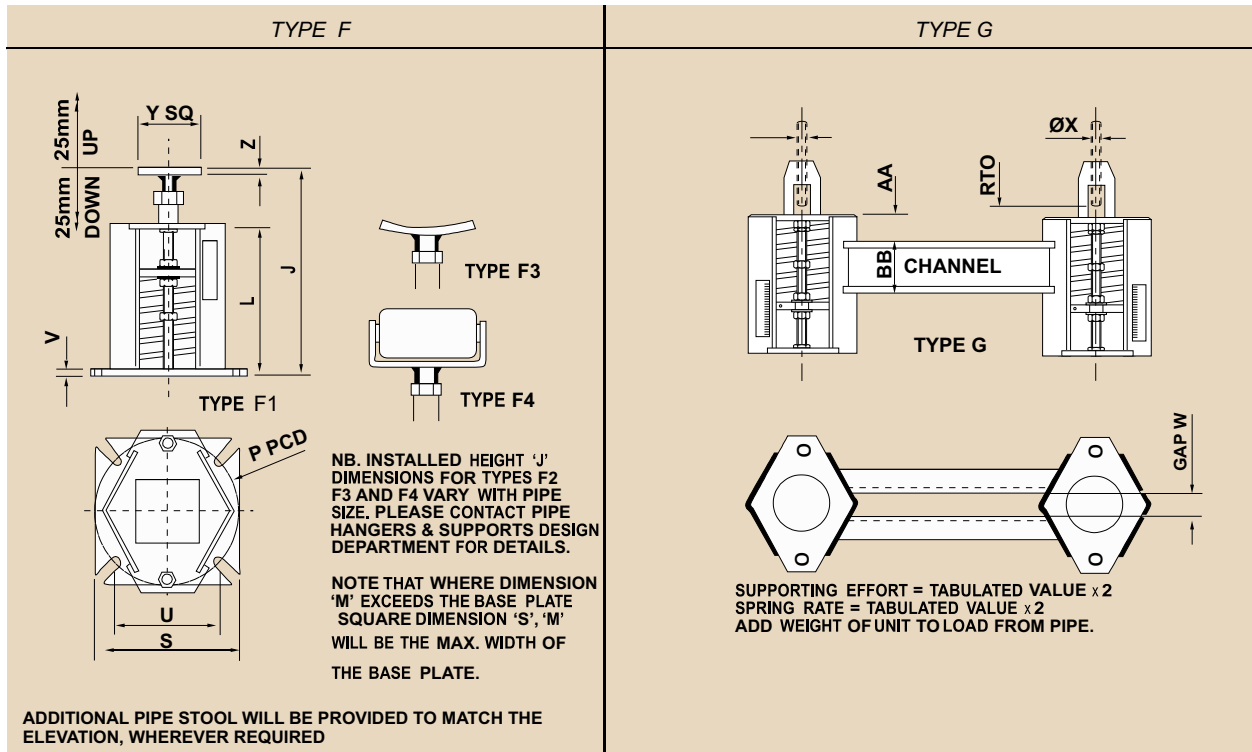


# RANGE VS2



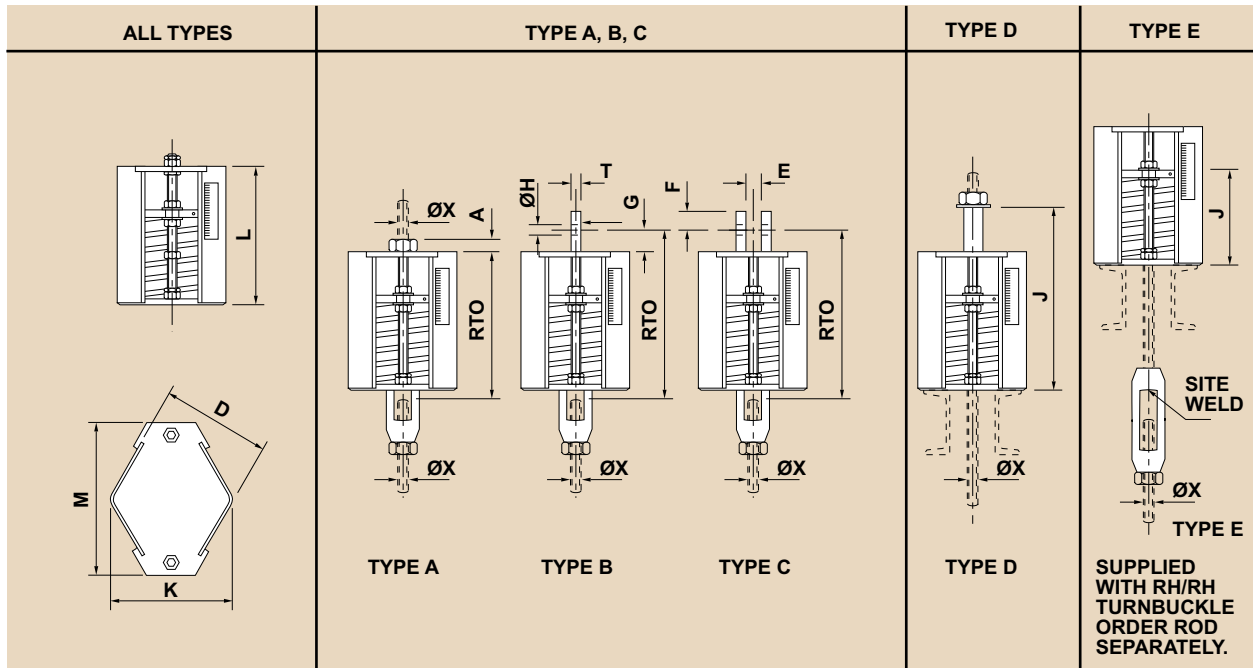
SUPPORT SIZE	ROD DIA	BODY DIMENSIONS					RTO AT MIN LOAD (mm)			DEPTH OF THRD	LUG DIMENSIONS TYPES B & C						WEIGHTS kgf			J AT MIN LOAD mm	WEIGHT kgf	J AT MIN LOAD mm	WEIGHT kgf
		X mm	D mm	K mm	M mm	L mm (not F)	A	B	C		A mm	E mm	F mm	G mm	H mm	T mm	A	B	C				
VS2-1	M12	108	122	155	169	167	199	199	12	20	20	30	14	6	4.4	4.5	4.6	249	3.6	133	3.8		
VS2-2	M12	108	122	155	176	174	206	206	12	20	20	30	14	6	4.5	4.6	4.7	256	3.7	140	3.9		
VS2-3	M12	108	122	155	185	183	215	215	12	20	20	30	14	6	4.7	4.8	4.9	265	3.8	148	4.1		
VS2-4	M12	108	122	155	191	189	221	221	12	20	20	30	14	6	4.8	4.9	5.0	271	3.9	155	4.2		
VS2-5	M12	108	122	155	187	185	217	217	12	20	20	30	14	6	4.7	4.8	4.9	267	3.9	151	4.1		
VS2-6	M12	108	122	155	197	195	227	227	12	20	20	30	14	6	4.8	4.9	5.0	277	4.0	161	4.2		
VS2-7	M12	108	122	155	190	188	220	220	12	20	20	30	14	6	4.8	4.9	5.0	270	4.0	154	4.2		
VS2-8	M12	108	122	155	206	204	236	236	12	20	20	30	14	6	5.1	5.1	5.3	286	4.2	170	4.4		
VS2-9	M12	108	122	155	208	206	238	238	12	20	20	30	14	6	5.0	5.1	5.2	288	4.2	171	4.4		
VS2-10	M12	145	164	200	206	204	236	236	12	20	20	30	14	6	9.5	9.6	9.7	286	8.4	167	8.6		
VS2-11	M12	145	164	200	209	207	239	239	12	20	20	30	14	6	9.7	9.8	9.9	289	8.6	171	8.8		
VS2-12	M12	145	164	200	213	211	243	243	12	20	20	30	14	6	9.9	10.0	10.1	293	8.8	175	9.0		
VS2-13	M12	145	164	200	222	220	258	258	12	25	30	36	18	6	10.2	10.3	10.5	302	9.1	183	9.3		
VS2-14	M12	145	164	200	235	233	271	271	12	25	30	36	18	6	10.9	11.0	11.1	315	9.7	197	9.9		
VS2-15	M12	145	164	200	261	259	297	297	12	25	30	36	18	6	12.2	12.4	12.5	341	11.1	223	11.3		
VS2-16	M16	175	198	250	244	241	294	294	16	30	35	50	22	10	17.7	18.0	18.4	324	15.2	199	15.5		
VS2-17	M16	175	198	250	264	261	314	314	16	30	35	50	22	10	18.8	19.2	19.6	344	16.3	219	16.7		
VS2-18	M16	175	198	250	284	281	334	334	16	30	35	50	22	10	20.4	20.8	21.1	364	17.9	239	18.2		
VS2-19	M20	220	250	320	285	281	345	345	20	35	45	60	26	10	34.0	34.6	35.2	365	28.5	232	29.0		
VS2-20	M24	220	250	320	311	306	381	381	24	40	55	70	33	12	37.7	38.7	39.8	391	31.7	254	32.4		
VS2-21	M30	220	250	320	348	342	428	428	30	45	55	80	40	15	45.5	46.9	48.5	428	36.1	281	37.5		
VS2-22	M30	220	250	330	389	383	469	469	30	45	55	80	40	15	55.2	56.5	58.2	469	45.4	322	46.9		
VS2-23	M36	220	250	330	454	447	544	544	36	60	75	90	46	15	71.2	73.1	75.5	534	58.3	376	59.6		
VS2-24	M42	220	250	330	526	518	631	631	42	70	85	105	52	20	89.9	93.4	97.6	606	72.4	436	74.6		
VS2-25	M48	330	376	500	467	457	587	587	48	75	100	120	60	20	165	170	176	547	139	377	143		
VS2-26	M56	330	376	500	541	530	681	681	56	80	115	140	68	20	193	199	206	621	162	443	168		
VS2-27	M64	330	376	520	611	598	766	766	64	90	130	155	76	25	234	243	255	691	195	507	204		
VS2-28	M72	330	376	530	728	714	883	883	72	90	130	155	76	25	303	312	323	808	250	611	262		
VS2-29	M80	330	376	540	845	829	1020	1020	80	100	150	175	85	25	382	393	407	925	309	715	328		

# RANGE VS2

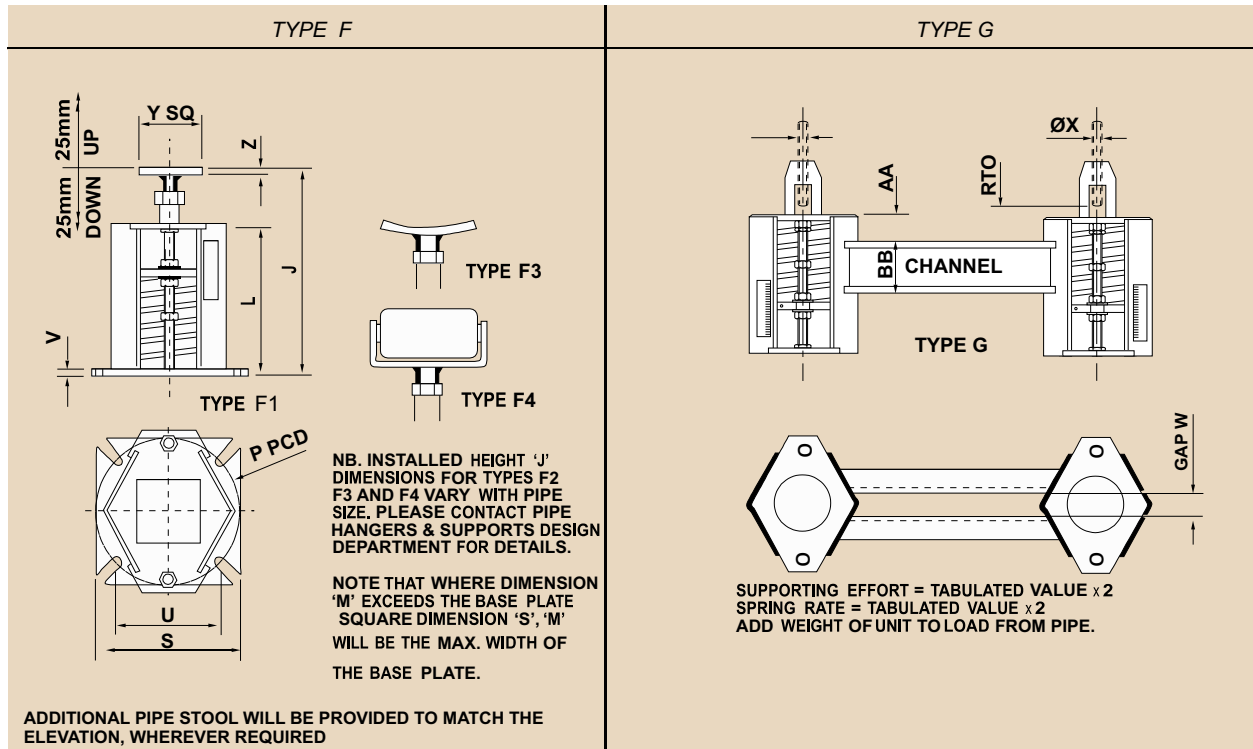


SUPPORT SIZE	J AT MIN. LOAD TYPE F mm	BODY L'TH L mm	BASE PLATE SQ. S mm	BASE PLATE PCD P mm	BASE BOLT CRS. SQ. U mm	BASE BOLT SIZE	BASE PLATE THK V mm	LOAD PAD SQ. Y mm	LOAD PAD THK Z mm	WEIGHT kgf F	RTO AT MIN LOAD mm	DIM. AA mm	GAP W mm	BEAM DEPTH BB (mm)			WEIGHT kgf		
														800 MAX CENTRES	1200 MAX CENTRES	1600 MAX CENTRES	@ 800 CRS	@ 1200 CRS	@ 1600 CRS
VS2-1	280	159	150	160	113	M16	6	75	6	3.7	25	25	18	50	50	50	15	18	22
VS2-2	287	166	150	160	113	M16	6	75	6	3.7	25	25	18	50	50	50	15	19	22
VS2-3	295	174	150	160	113	M16	6	75	6	3.8	25	25	18	50	50	50	16	19	23
VS2-4	302	181	150	160	113	M16	6	75	6	3.9	25	25	18	50	50	50	16	19	23
VS2-5	298	177	150	160	113	M16	6	75	6	3.8	25	25	18	50	50	50	16	19	23
VS2-6	308	187	150	160	113	M16	6	75	6	3.9	25	25	18	50	50	50	16	19	23
VS2-7	301	180	150	160	113	M16	6	75	6	3.9	25	25	18	50	50	50	16	19	23
VS2-8	317	196	150	160	113	M16	6	75	6	4.1	25	25	18	50	50	50	16	20	23
VS2-9	318	197	150	160	113	M16	6	75	6	4.0	25	25	18	50	50	50	16	20	23
VS2-10	325	205	200	197	139	M20	10	75	6	9.6	25	25	22	75	75	75	28	34	40
VS2-11	329	209	200	197	139	M20	10	75	6	9.7	25	25	22	75	75	75	29	34	40
VS2-12	333	213	200	197	139	M20	10	75	6	9.9	25	25	22	75	75	75	29	35	40
VS2-13	347	221	200	197	139	M20	10	75	10	10.8	25	25	26	75	75	75	30	35	41
VS2-14	361	235	200	197	139	M20	10	75	10	11.3	25	25	26	75	75	75	31	37	42
VS2-15	387	261	200	197	139	M20	10	75	10	12.4	25	25	26	75	75	75	34	39	45
VS2-16	368	239	270	240	170	M20	12	100	12	20.0	25	25	33	100	100	125	48	56	74
VS2-17	388	259	270	240	170	M20	12	100	12	20.9	25	25	33	100	100	125	50	58	76
VS2-18	408	279	270	240	170	M20	12	100	12	22.2	25	25	33	100	100	125	53	61	80
VS2-19	405	276	270	268	190	M20	12	120	12	31.7	25	25	40	125	150	150	84	106	122
VS2-20	427	298	270	268	190	M20	12	120	12	34.2	25	25	40	125	150	150	91	113	129
VS2-21	454	325	270	268	190	M20	12	120	12	37.8	25	25	40	125	150	150	107	129	145
VS2-22	498	366	270	268	190	M20	12	150	15	46.8	25	25	52	200	200	250	139	158	178
VS2-23	542	410	270	268	190	M20	12	150	15	55.5	25	25	52	200	200	250	171	190	210
VS2-24	607	473	270	268	190	M20	20	150	15	71.4	25	25	52	200	200	250	208	228	247
VS2-25	563	420	400	400	283	M24	20	200	20	141	25	25	60	250	300	390	352	398	467
VS2-26	629	481	400	400	283	M24	20	200	20	158	25	25	70	250	300	390	409	455	523
VS2-27	699	548	400	400	283	M24	20	200	20	192	25	25	80	250	300	390	491	537	606
VS2-28	816	655	400	400	283	M24	25	200	25	248	25	25	80	390	390	430	657	700	769
VS2-29	940	768	400	400	283	M24	30	200	30	312	25	25	90	390	390	430	815	859	928

# RANGE VS3



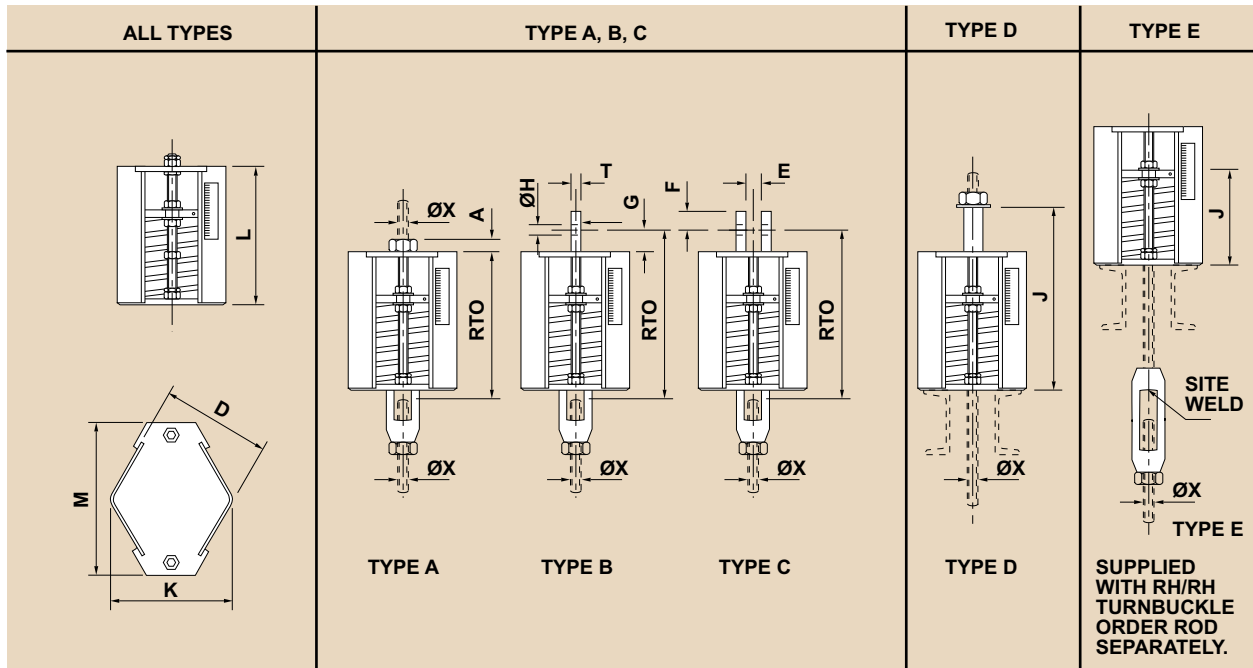
SUPPORT SIZE	ROD DIA	BODY DIMENSIONS					RTO AT MIN LOAD (mm)			DEPTH OF THRD	LUG DIMENSIONS TYPES B & C						WEIGHTS kgf			J AT MIN LOAD mm	WEIGHT kgf	J AT MIN LOAD mm	WEIGHT kgf
		X mm	D mm	K mm	M mm	L mm (not F)	A	B	C		A mm	E mm	F mm	G mm	H mm	T mm	A	B	C				
VS3-1	M12	108	122	155	294	292	324	324	12	20	20	30	14	6	5.4	5.5	5.6	454	4.7	243	4.8		
VS3-2	M12	108	122	155	315	313	345	345	12	20	20	30	14	6	5.8	5.8	6.0	475	5.0	264	5.1		
VS3-3	M12	108	122	155	329	327	359	359	12	20	20	30	14	6	5.9	6.0	6.1	489	5.1	278	5.2		
VS3-4	M12	108	122	155	330	328	360	360	12	20	20	30	14	6	6.0	6.1	6.2	490	5.2	279	5.3		
VS3-5	M12	108	122	155	323	321	353	353	12	20	20	30	14	6	6.0	6.1	6.2	483	5.2	272	5.3		
VS3-6	M12	108	122	155	328	326	358	358	12	20	20	30	14	6	6.0	6.1	6.2	488	5.2	277	5.3		
VS3-7	M12	108	122	155	336	334	366	366	12	20	20	30	14	6	6.2	6.3	6.4	496	5.4	286	5.5		
VS3-8	M12	108	122	155	356	354	386	386	12	20	20	30	14	6	6.6	6.7	6.8	516	5.7	306	5.9		
VS3-9	M12	108	122	155	370	368	400	400	12	20	20	30	14	6	7.0	7.1	7.2	530	6.1	319	6.2		
VS3-10	M12	145	164	200	351	349	381	381	12	20	20	30	14	6	12.0	12.0	12.2	511	10.9	299	11.0		
VS3-11	M12	145	164	200	357	355	387	387	12	20	20	30	14	6	12.3	12.4	12.5	517	11.2	305	11.4		
VS3-12	M12	145	164	200	364	362	394	394	12	20	20	30	14	6	12.7	12.8	12.9	524	11.6	312	11.7		
VS3-13	M12	145	164	200	380	378	416	416	12	25	30	36	18	6	13.2	13.3	13.5	540	12.1	328	12.2		
VS3-14	M12	145	164	200	406	404	442	442	12	25	30	36	18	6	14.4	14.5	14.7	566	13.3	353	13.4		
VS3-15	M12	145	164	200	455	453	491	491	12	25	30	36	18	6	16.9	17.1	17.2	615	15.8	403	15.9		
VS3-16	M16	220	250	320	374	371	424	424	16	30	35	50	22	10	30.0	30.3	30.7	534	27.0	315	27.2		
VS3-17	M16	220	250	320	409	406	459	459	16	30	35	50	22	10	33.6	33.9	34.3	569	30.5	350	30.7		
VS3-18	M16	220	250	320	430	427	480	480	16	30	35	50	22	10	36.0	36.4	36.7	590	32.9	371	33.1		
VS3-19	M20	220	250	320	473	469	533	533	20	35	45	60	26	10	43.8	44.4	45.0	633	38.2	406	38.4		
VS3-20	M24	220	250	320	519	514	589	589	24	40	55	70	33	12	50.0	51.0	52.1	679	43.8	448	44.2		
VS3-21	M30	220	250	320	578	572	658	658	30	45	55	80	40	15	61.6	63.0	64.6	738	51.6	497	52.6		
VS3-22	M30	220	250	330	649	643	729	729	30	45	55	80	40	15	76.1	77.5	79.1	809	65.7	568	66.7		
VS3-23	M36	220	250	330	759	752	849	849	36	60	75	90	46	15	101	103	105	919	87.0	667	87.2		
VS3-24	M42	220	250	330	929	921	1034	1034	42	70	85	105	52	20	136	140	144	1089	117	825	117		
VS3-25	M48	330	376	500	806	796	926	926	48	75	100	120	60	20	235	240	246	966	207	702	209		
VS3-26	M56	330	376	500	942	931	1082	1082	56	80	115	140	68	20	283	289	297	1102	248	830	251		
VS3-27	M64	330	376	520	1074	1061	1229	1229	64	90	130	155	76	25	358	367	379	1234	311	956	318		
VS3-28	M72	330	376	530	1285	1271	1440	1440	72	90	130	155	76	25	474	483	494	1445	408	1154	417		
VS3-29	M80	330	376	540	1503	1487	1678	1678	80	100	150	175	85	25	609	620	635	1663	517	1359	532		



SUPPORT SIZE	J AT MIN. LOAD TYPE F mm	BODY L'TH L mm	BASE PLATE SQ. S mm	BASE PLATE PCD P mm	BASE BOLT CRS. SQ. U mm	BASE BOLT SIZE	BASE PLATE THK V mm	LOAD PAD SQ. Y mm	LOAD PAD THK Z mm	WEIGHT kgf	RTO AT MIN LOAD mm	DIM. AA mm	GAP W mm	BEAM DEPTH BB (mm)			WEIGHT kgf		
														800 MAX CENTRES	1200 MAX CENTRES	1600 MAX CENTRES	@ 800 CRS	@ 1200 CRS	@ 1600 CRS
VS3-1	484	281	150	160	113	M16	6	75	6	4.1	25	25	18	50	50	50	17	20	24
VS3-2	505	302	150	160	113	M16	6	75	6	4.3	25	25	18	50	50	50	18	21	25
VS3-3	519	316	150	160	113	M16	6	75	6	4.4	25	25	18	50	50	50	18	21	25
VS3-4	520	317	150	160	113	M16	6	75	6	4.4	25	25	18	50	50	50	18	22	25
VS3-5	513	310	150	160	113	M16	6	75	6	4.5	25	25	18	50	50	50	18	22	25
VS3-6	518	315	150	160	113	M16	6	75	6	4.5	25	25	18	50	50	50	18	22	25
VS3-7	527	324	150	160	113	M16	6	75	6	4.7	25	25	18	50	50	50	19	22	26
VS3-8	547	344	150	160	113	M16	6	75	6	4.9	25	25	18	50	50	50	19	23	26
VS3-9	560	357	150	160	113	M16	6	75	6	5.2	25	25	18	50	50	50	20	24	27
VS3-10	551	349	200	197	139	M20	10	75	6	10.9	25	25	22	75	75	75	33	39	45
VS3-11	557	355	200	197	139	M20	10	75	6	11.2	25	25	22	75	75	75	34	39	45
VS3-12	564	362	200	197	139	M20	10	75	6	11.5	25	25	22	75	75	75	35	40	46
VS3-13	586	378	200	197	139	M20	10	75	10	12.6	25	25	26	75	75	75	36	41	47
VS3-14	611	403	200	197	139	M20	10	75	10	13.6	25	25	26	75	75	75	38	44	49
VS3-15	661	453	200	197	139	M20	10	75	10	15.6	25	25	26	75	75	75	43	49	54
VS3-16	580	371	270	268	190	M20	12	100	12	28.4	25	25	33	100	100	125	71	79	97
VS3-17	615	406	270	268	190	M20	12	100	12	31.4	25	25	33	100	100	125	79	87	105
VS3-18	636	427	270	268	190	M20	12	100	12	33.5	25	25	33	100	100	125	83	91	109
VS3-19	673	462	270	268	190	M20	12	120	12	39.5	25	25	40	125	150	150	103	126	141
VS3-20	715	504	270	268	190	M20	12	120	12	43.9	25	25	40	125	150	150	116	138	154
VS3-21	764	553	270	268	190	M20	12	120	12	50.6	25	25	40	125	150	150	139	161	177
VS3-22	838	624	270	268	190	M20	12	150	15	63.7	25	25	52	200	200	250	180	200	220
VS3-23	927	713	270	268	190	M20	12	150	15	79.5	25	25	52	200	200	250	230	250	269
VS3-24	1090	874	270	268	190	M20	20	150	15	109	25	25	52	200	200	250	300	320	339
VS3-25	982	757	400	400	283	M24	20	200	20	200	25	25	60	250	300	390	492	538	607
VS3-26	1109	880	400	400	283	M24	20	200	20	232	25	25	70	250	300	390	589	635	703
VS3-27	1242	1009	400	400	283	M24	20	200	20	295	25	25	80	250	300	390	739	785	854
VS3-28	1453	1210	400	400	283	M24	25	200	25	390	25	25	80	390	390	430	999	1042	1111
VS3-29	1678	1424	400	400	283	M24	30	200	30	501	25	25	90	390	390	430	1269	1313	1382

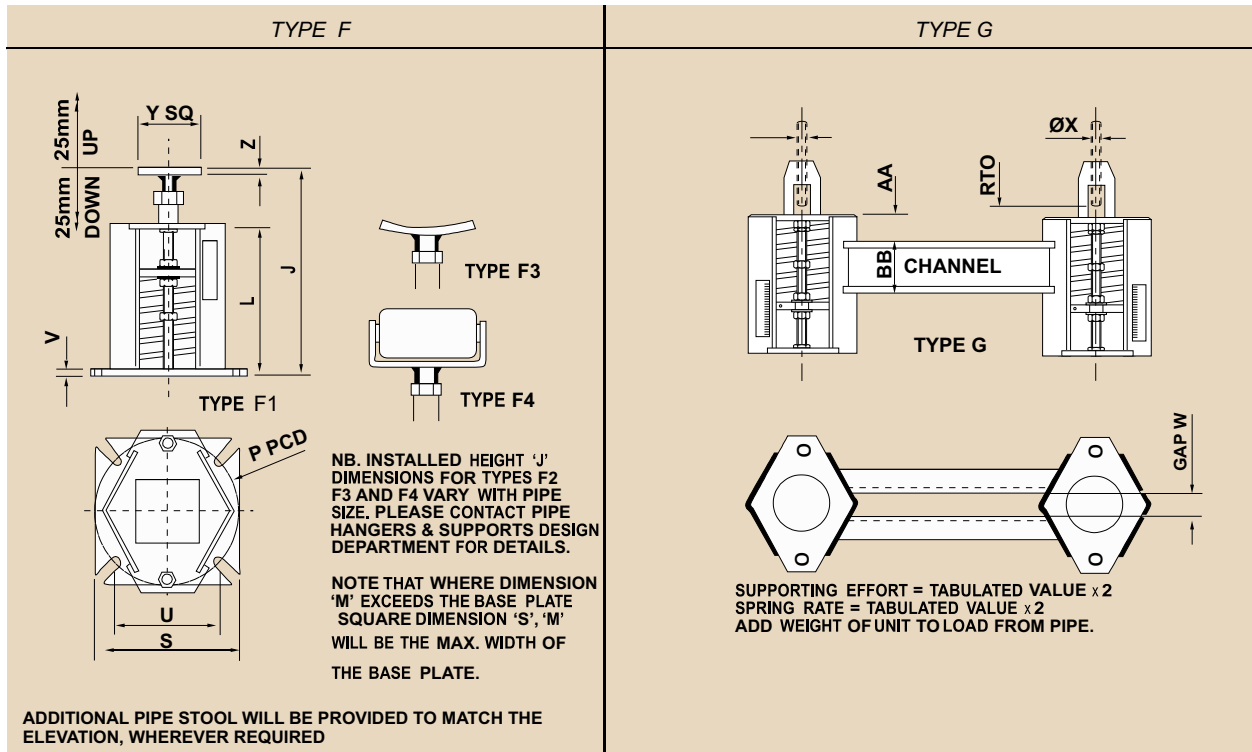


# RANGE VS4



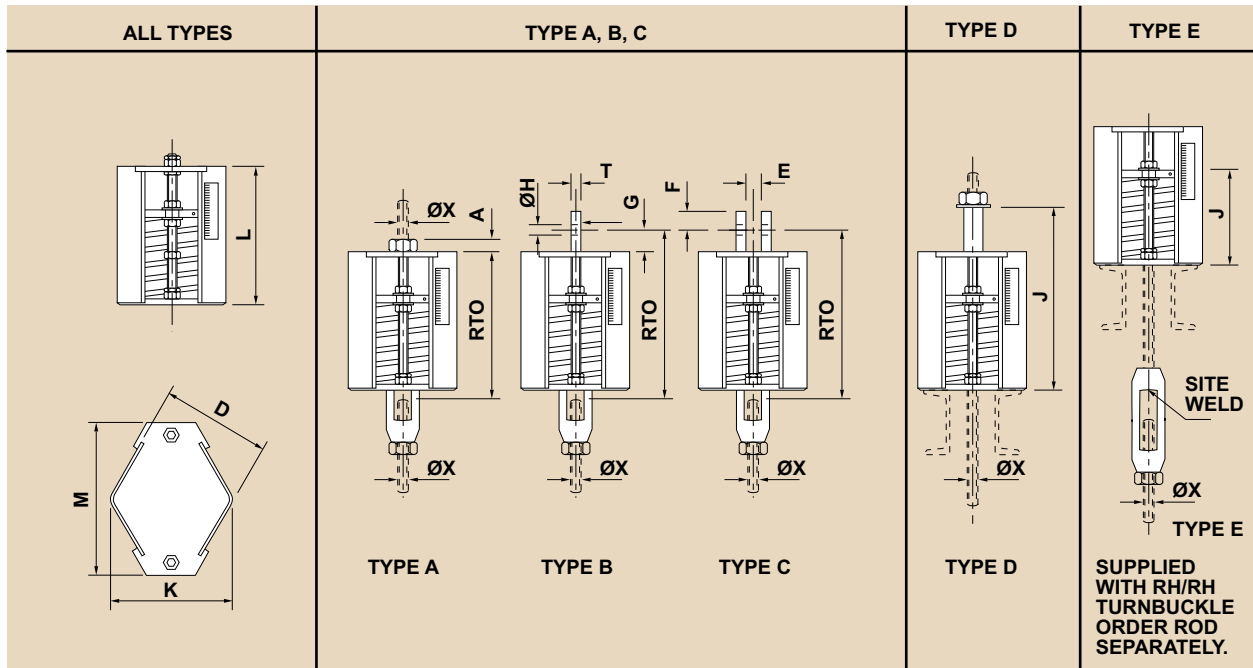
SUPPORT SIZE	ROD DIA	BODY DIMENSIONS					RTO AT MIN LOAD (mm)			DEPTH OF THRD	LUG DIMENSIONS TYPES B & C						WEIGHTS kgf			J AT MIN LOAD mm	WEIGHT kgf	J AT MIN LOAD mm	WEIGHT kgf
		X mm	D mm	K mm	M mm	L mm (not F)	A	B	C		A mm	E mm	F mm	G mm	H mm	T mm	A	B	C				
VS4-1	M12	149.2	156.2	155	429	427	459	459	12	20	20	30	14	6	7.6	7.7	7.8	669	6.6	378	6.7		
VS4-2	M12	149.2	156.2	155	457	455	487	487	12	20	20	30	14	6	8.1	8.1	8.4	697	7.0	406	7.1		
VS4-3	M12	149.2	156.2	155	480	478	510	510	12	20	20	30	14	6	8.3	8.4	8.5	720	7.1	429	7.3		
VS4-4	M12	149.2	156.2	155	487	485	517	517	12	20	20	30	14	6	8.4	8.5	8.7	727	7.3	436	7.4		
VS4-5	M12	149.2	156.2	155	476	474	506	506	12	20	20	30	14	6	8.4	8.5	8.7	716	7.3	425	7.4		
VS4-6	M12	149.2	156.2	155	486	484	516	516	12	20	20	30	14	6	8.4	8.5	8.7	726	7.3	435	7.4		
VS4-7	M12	149.2	156.2	155	492	490	522	522	12	20	20	30	14	6	8.7	8.8	9.0	732	7.6	442	7.7		
VS4-8	M12	149.2	156.2	155	528	526	558	558	12	20	20	30	14	6	9.2	9.4	9.5	768	8.0	478	8.3		
VS4-9	M12	149.2	156.2	155	544	542	574	574	12	20	20	30	14	6	9.8	9.9	10.1	784	8.5	493	8.7		
VS4-10	M12	177.6	188.9	200	523	521	553	553	12	20	20	30	14	6	16.8	16.8	17.1	763	15.3	471	15.4		
VS4-11	M12	177.6	188.9	200	532	530	562	562	12	20	20	30	14	6	17.2	17.4	17.5	772	15.7	480	16.0		
VS4-12	M12	177.6	188.9	200	543	541	573	573	12	20	20	30	14	6	17.8	17.9	18.1	783	16.2	491	16.4		
VS4-13	M12	177.6	188.9	200	568	566	604	604	12	25	30	36	18	6	18.5	18.6	18.9	808	16.9	516	17.1		
VS4-14	M12	177.6	188.9	200	607	605	643	643	12	25	30	36	18	6	20.2	20.3	20.6	847	18.6	554	18.8		
VS4-15	M12	177.6	188.9	200	682	680	718	718	12	25	30	36	18	6	23.7	23.9	24.1	922	22.1	630	22.3		
VS4-16	M16	246.2	263.5	320	578	575	628	628	16	30	35	50	22	10	42.0	42.4	43.0	818	37.8	517	38.1		
VS4-17	M16	246.2	263.5	320	633	630	683	683	16	30	35	50	22	10	47.0	47.5	48.0	873	42.7	572	43.0		
VS4-18	M16	246.2	263.5	320	675	672	725	725	16	30	35	50	22	10	50.4	51.0	51.4	915	46.1	614	46.3		
VS4-19	M20	246.2	263.5	320	709	705	769	769	20	35	45	60	26	10	61.3	62.2	63.0	949	53.5	639	53.8		
VS4-20	M24	246.2	263.5	320	778	773	848	848	24	40	55	70	33	12	70.0	71.4	72.9	1018	61.3	704	61.9		
VS4-21	M30	246.2	263.5	320	863	857	943	943	30	45	55	80	40	15	86.2	88.2	90.4	1103	72.2	779	73.6		
VS4-22	M30	248.2	263.5	330	970	964	1050	1050	30	45	55	80	40	15	107	109	111	1210	92.0	884	93.4		
VS4-23	M36	248.2	263.5	330	1129	1122	1219	1219	36	60	75	90	46	15	141	144	147	1369	122	1032	122		
VS4-24	M42	248.2	263.5	330	1343	1335	1448	1448	42	70	85	105	52	20	190	196	202	1583	164	1239	164		
VS4-25	M48	375.8	408.5	500	1165	1155	1285	1285	48	75	100	120	60	20	329	336	344	1405	290	1056	293		
VS4-26	M56	375.8	408.5	500	1367	1356	1507	1507	56	80	115	140	68	20	396	404	416	1607	347	1245	351		
VS4-27	M64	379.2	412.5	520	1572	1559	1727	1727	64	90	130	155	76	25	501	515	531	1812	435	1434	445		
VS4-28	M72	379.2	412.5	530	1882	1868	2037	2037	72	90	130	155	76	25	664	676	692	2122	571	1726	584		
VS4-29	M80	379.2	412.5	540	2200	2184	2375	2375	80	100	150	175	85	25	853	868	889	2440	724	2031	745		

# RANGE VS4

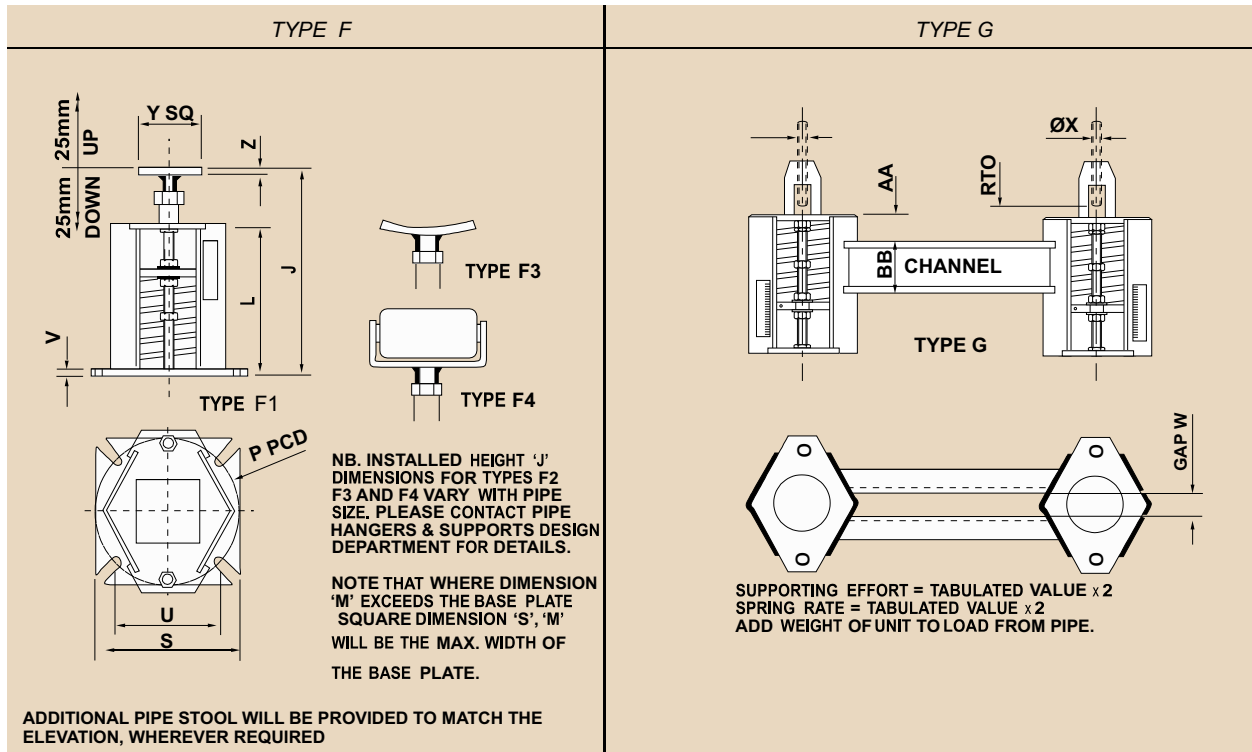


SUPPORT SIZE	J AT MIN. LOAD TYPE F mm	BODY L'TH L mm	BASE PLATE E SQ. S mm	BASE PLATE E PCD P mm	BASE BOLT CRS. SQ. U mm	BASE BOLT SIZE V mm	LOAD PAD SQ. Y mm	LOAD PAD THK Z mm	WEIGHT TYPE F kcf	RTO AT MIN LOAD mm	DIM. M mm	GAP W mm	RSC SIZE			WEIGHT kgf			
													900 MAX CENTRES	1300 MAX CENTRES	1800 MAX CENTRES	@ 900 CRS	@ 1300 CRS	@ 1800 CRS	
VS4-1	701	416	156	170	120	M16	6	75	6	5.7	25	25	18	51 x 25	51 x 25	51 x 25	20.6	23.3	26.7
VS4-2	729	444	156	170	120	M16	6	75	6	6.0	25	25	18	51 x 25	51 x 25	51 x 25	21.5	24.2	27.7
VS4-3	752	467	156	170	120	M16	6	75	6	6.2	25	25	18	51 x 25	51 x 25	51 x 25	21.9	24.7	28.1
VS4-4	759	474	156	170	120	M16	6	75	6	6.2	25	25	18	51 x 25	51 x 25	51 x 25	22.1	24.9	28.3
VS4-5	748	463	156	170	120	M16	6	75	6	6.3	25	25	18	51 x 25	51 x 25	51 x 25	22.1	24.8	28.3
VS4-6	758	473	156	170	120	M16	6	75	6	6.3	25	25	18	51 x 25	51 x 25	51 x 25	22.3	25.0	28.4
VS4-7	765	480	156	170	120	M16	6	75	6	6.6	25	25	18	51 x 25	51 x 25	51 x 25	22.8	25.6	29.0
VS4-8	801	516	156	170	120	M16	6	75	6	6.9	25	25	18	51 x 25	51 x 25	51 x 25	23.8	26.6	30.0
VS4-9	816	531	156	170	120	M16	6	75	6	7.3	25	25	18	51 x 25	51 x 25	51 x 25	24.9	27.7	31.1
VS4-10	805	521	200	205	145	M20	10	75	6	15.3	25	25	22	76 x 38	76 x 38	76 x 38	43.4	48.8	55.5
VS4-11	814	530	200	205	145	M20	10	75	6	15.7	25	25	22	76 x 38	76 x 38	76 x 38	44.4	49.8	56.5
VS4-12	825	541	200	205	145	M20	10	75	6	16.1	25	25	22	76 x 38	76 x 38	76 x 38	45.5	50.9	57.6
VS4-13	856	566	200	205	145	M20	10	75	10	17.6	25	25	26	76 x 38	76 x 38	76 x 38	47.0	52.3	59.0
VS4-14	894	604	200	205	145	M20	10	75	10	19.0	25	25	26	76 x 38	76 x 38	76 x 38	50.3	55.6	62.3
VS4-15	970	680	200	205	145	M20	10	75	10	21.8	25	25	26	76 x 38	76 x 38	76 x 38	57.4	62.7	69.4
VS4-16	864	573	270	280	198	M20	12	100	12	39.8	25	25	33	76 x 38	102 x 51	102 x 51	92.8	106	117
VS4-17	919	628	270	280	198	M20	12	100	12	44.0	25	25	33	76 x 38	102 x 51	102 x 51	103	116	127
VS4-18	961	670	270	280	198	M20	12	100	12	46.9	25	25	33	76 x 38	102 x 51	102 x 51	110	123	134
VS4-19	988	695	270	287	203	M20	12	120	12	55.3	25	25	40	102 x 51	127 x 64	127 x 64	136	154	169
VS4-20	1053	760	270	287	203	M20	12	120	12	61.5	25	25	40	102 x 51	127 x 64	127 x 64	154	172	187
VS4-21	1128	835	270	287	203	M20	12	120	12	70.8	25	25	40	102 x 51	127 x 64	127 x 64	186	204	218
VS4-22	1236	940	276	294	208	M20	12	150	15	89.2	25	25	52	152 x 76	203 x 76	203 x 76	237	264	288
VS4-23	1377	1081	300	308	218	M20	12	150	15	111.3	25	25	52	152 x 76	203 x 76	203 x 76	306	333	357
VS4-24	1586	1288	300	308	218	M20	20	150	15	152.6	25	25	52	152 x 76	203 x 76	203 x 76	405	431	455
VS4-25	1418	1111	430	453	320	M24	20	200	20	280.0	25	25	60	203 x 89	254 x 89	305 x 89	689	724	777
VS4-26	1606	1295	430	453	320	M24	20	200	20	324.8	25	25	70	203 x 89	254 x 89	305 x 89	823	858	911
VS4-27	1802	1487	440	467	330	M24	20	200	20	413.0	25	25	80	203 x 89	254 x 89	305 x 89	1031	1067	1120
VS4-28	2107	1782	460	481	340	M24	25	200	25	546.0	25	25	80	305 x 89	305 x 102	381 x 102	1369	1411	1483
VS4-29	2432	2096	480	495	350	M24	30	200	30	701.4	25	25	90	305 x 89	305 x 102	381 x 102	1746	1788	1861

# RANGE VS5



SUPPORT SIZE	ROD DIA	BODY DIMENSIONS					RTO AT MIN LOAD (mm)			DEPTH OF THRD	LUG DIMENSIONS TYPES B & C						WEIGHTS kgf			J AT MIN LOAD mm	WEIGHT kgf	J AT MIN LOAD mm	WEIGHT kgf
		X mm	D mm	K mm	M mm	L mm (not F)	A	B	C		A mm	E mm	F mm	G mm	H mm	T mm	A	B	C				
VS5-1	M12	149.2	156.2	155	556	554	586	586	12	20	20	30	14	6	9.2	9.4	9.5	876	8.0	505	8.2		
VS5-2	M12	149.2	156.2	155	598	596	628	628	12	20	20	30	14	6	9.9	9.9	10.2	918	8.5	547	8.7		
VS5-3	M12	149.2	156.2	155	626	624	656	656	12	20	20	30	14	6	10.0	10.2	10.4	946	8.7	575	8.8		
VS5-4	M12	149.2	156.2	155	628	626	658	658	12	20	20	30	14	6	10.2	10.4	10.5	948	8.8	577	9.0		
VS5-5	M12	149.2	156.2	155	614	612	644	644	12	20	20	30	14	6	10.2	10.4	10.5	934	8.8	563	9.0		
VS5-6	M12	149.2	156.2	155	624	622	654	654	12	20	20	30	14	6	10.2	10.4	10.5	944	8.8	573	9.0		
VS5-7	M12	149.2	156.2	155	640	638	670	670	12	20	20	30	14	6	10.5	10.7	10.9	960	9.2	590	9.4		
VS5-8	M12	149.2	156.2	155	680	678	710	710	12	20	20	30	14	6	11.2	11.4	11.6	1000	9.7	630	10.0		
VS5-9	M12	149.2	156.2	155	708	706	738	738	12	20	20	30	14	6	11.9	12.1	12.2	1028	10.4	657	10.5		
VS5-10	M12	177.6	188.9	200	670	668	700	700	12	20	20	30	14	6	20.4	20.4	20.7	990	18.5	618	18.7		
VS5-11	M12	177.6	188.9	200	682	680	712	712	12	20	20	30	14	6	20.9	21.1	21.3	1002	19.0	630	19.4		
VS5-12	M12	177.6	188.9	200	696	694	726	726	12	20	20	30	14	6	21.6	21.8	21.9	1016	19.7	644	19.9		
VS5-13	M12	177.6	188.9	200	728	726	764	764	12	25	30	36	18	6	22.4	22.6	23.0	1048	20.6	676	20.7		
VS5-14	M12	177.6	188.9	200	780	778	816	816	12	25	30	36	18	6	24.5	24.7	25.0	1100	22.6	727	22.8		
VS5-15	M12	177.6	188.9	200	878	876	914	914	12	25	30	36	18	6	28.7	29.1	29.2	1198	26.9	826	27.0		
VS5-16	M16	246.2	263.5	320	714	711	764	764	16	30	35	50	22	10	51.0	51.5	52.2	1034	45.9	653	46.2		
VS5-17	M16	246.2	263.5	320	781	778	831	831	16	30	35	50	22	10	57.1	57.6	58.3	1101	51.9	720	52.2		
VS5-18	M16	246.2	263.5	320	822	819	872	872	16	30	35	50	22	10	61.2	61.9	62.4	1142	55.9	761	56.3		
VS5-19	M20	246.2	263.5	320	899	895	959	959	20	35	45	60	26	10	74.5	75.5	76.5	1219	64.9	829	65.3		
VS5-20	M24	246.2	263.5	320	987	982	1057	1057	24	40	55	70	33	12	85.0	86.7	88.6	1307	74.5	913	75.1		
VS5-21	M30	246.2	263.5	320	1095	1089	1175	1175	30	45	55	80	40	15	105	107	110	1415	87.7	1011	89.4		
VS5-22	M30	248.2	263.5	330	1231	1225	1311	1311	30	45	55	80	40	15	129	132	134	1551	111.7	1145	113.4		
VS5-23	M36	248.2	263.5	330	1436	1429	1526	1526	36	60	75	90	46	15	172	175	179	1756	147.9	1339	148.2		
VS5-24	M42	248.2	263.5	330	1704	1696	1809	1809	42	70	85	105	52	20	231	238	245	2024	198.9	1600	198.9		
VS5-25	M48	375.8	408.5	500	1449	1439	1569	1569	48	75	100	120	60	20	400	408	418	1769	351.9	1340	355.3		
VS5-26	M56	375.8	408.5	500	1708	1697	1848	1848	56	80	115	140	68	20	481	491	505	2028	421.6	1586	426.7		
VS5-27	M64	379.2	412.5	520	1970	1957	2125	2125	64	90	130	155	76	25	609	624	644	2290	528.7	1832	540.6		
VS5-28	M72	379.2	412.5	530	2367	2353	2522	2522	72	90	130	155	76	25	806	821	840	2687	693.6	2211	708.9		
VS5-29	M80	379.2	412.5	540	2778	2762	2953	2953	80	100	150	175	85	25	1035	1054	1080	3098	879	2609	904		



SUPPORT SIZE	J AT MIN. LOAD TYPE F mm	BODY L'TH L mm	BASE PLATE SQ. S mm	BASE PLATE PCD P mm	BASE BOLT CRS. SQ. U mm	BASE BOLT SIZE	BASE PLATE THK V mm	LOAD PAD SQ. Y mm	LOAD PAD THK Z mm	WEIGHT TYPE F kgf	RTO AT MIN LOAD mm	DIM. M mm	GAP W mm	RSC SIZE			WEIGHT kgf		
														900 MAX CENTRES	1300 MAX CENTRES	1800 MAX CENTRES	@ 900 CRS	@ 1300 CRS	@ 1800 CRS
VS5-1	910	543	156	169.7	120	M16	6	75	6	7.0	25	25	18	51 x 25	51 x 25	51 x 25	23.9	26.7	30.2
VS5-2	952	585	156	169.7	120	M16	6	75	6	7.3	25	25	18	51 x 25	51 x 25	51 x 25	25.0	27.7	31.5
VS5-3	980	613	156	169.7	120	M16	6	75	6	7.5	25	25	18	51 x 25	51 x 25	51 x 25	25.5	28.4	31.9
VS5-4	982	615	156	169.7	120	M16	6	75	6	7.5	25	25	18	51 x 25	51 x 25	51 x 25	25.7	28.6	32.2
VS5-5	968	601	156	169.7	120	M16	6	75	6	7.7	25	25	18	51 x 25	51 x 25	51 x 25	25.7	28.5	32.2
VS5-6	978	611	156	169.7	120	M16	6	75	6	7.7	25	25	18	51 x 25	51 x 25	51 x 25	25.9	28.7	32.3
VS5-7	995	628	156	169.7	120	M16	6	75	6	8.0	25	25	18	51 x 25	51 x 25	51 x 25	26.5	29.4	33.0
VS5-8	1035	668	156	169.7	120	M16	6	75	6	8.3	25	25	18	51 x 25	51 x 25	51 x 25	27.7	30.7	34.2
VS5-9	1062	695	156	169.7	120	M16	6	75	6	8.8	25	25	18	51 x 25	51 x 25	51 x 25	29.1	32.0	35.6
VS5-10	1034	668	200	205.1	145	M20	10	75	6	18.5	25	25	22	76 x 38	76 x 38	76 x 38	50.6	56.0	63.0
VS5-11	1046	680	200	205.1	145	M20	10	75	6	19.0	25	25	22	76 x 38	76 x 38	76 x 38	51.8	57.4	64.2
VS5-12	1060	694	200	205.1	145	M20	10	75	6	19.6	25	25	22	76 x 38	76 x 38	76 x 38	53.1	58.6	65.5
VS5-13	1098	726	200	205.1	145	M20	10	75	10	21.4	25	25	26	76 x 38	76 x 38	76 x 38	54.9	60.3	67.3
VS5-14	1149	777	200	205.1	145	M20	10	75	10	23.1	25	25	26	76 x 38	76 x 38	76 x 38	59.0	64.4	71.4
VS5-15	1248	876	200	205.1	145	M20	10	75	10	26.5	25	25	26	76 x 38	76 x 38	76 x 38	67.6	73.1	80.0
VS5-16	1082	709	270	280	198	M20	12	100	12	48.3	25	25	33	76 x 38	102 x 51	102 x 51	110.8	124.5	135.5
VS5-17	1149	776	270	280	198	M20	12	100	12	53.4	25	25	33	76 x 38	102 x 51	102 x 51	122.9	136.7	147.7
VS5-18	1190	817	270	280	198	M20	12	100	12	57.0	25	25	33	76 x 38	102 x 51	102 x 51	131.3	145.2	156.4
VS5-19	1260	885	270	287.1	203	M20	12	120	12	67.2	25	25	40	102 x 51	127 x 64	127 x 64	162.3	181.2	197.0
VS5-20	1344	969	270	287.1	203	M20	12	120	12	74.6	25	25	40	102 x 51	127 x 64	127 x 64	184.0	203.4	219.9
VS5-21	1442	1067	270	287.1	203	M20	12	120	12	86.0	25	25	40	102 x 51	127 x 64	127 x 64	223.2	243.2	259.4
VS5-22	1579	1201	276	294.2	208	M20	12	150	15	108.3	25	25	52	152 x 76	203 x 76	203 x 76	282.5	311.5	337.7
VS5-23	1766	1388	300	308.3	218	M20	12	150	15	135.2	25	25	52	152 x 76	203 x 76	203 x 76	366.4	396.2	423.0
VS5-24	2029	1649	300	308.3	218	M20	20	150	15	185.3	25	25	52	152 x 76	203 x 76	203 x 76	486.4	518.0	547.6
VS5-25	1784	1395	430	452.5	320	M24	20	200	20	340.0	25	25	60	203 x 89	254 x 89	305 x 89	830	872	933
VS5-26	2029	1636	430	452.5	320	M24	20	200	20	394.4	25	25	70	203 x 89	254 x 89	305 x 89	993	1037	1101
VS5-27	2282	1885	440	466.7	330	M24	20	200	20	501.5	25	25	80	203 x 89	254 x 89	305 x 89	1246	1295	1365
VS5-28	2674	2267	460	480.8	340	M24	25	200	25	663.0	25	25	80	305 x 89	305 x 102	381 x 102	1654	1708	1796
VS5-29	3092	2674	480	495	350	M24	30	200	30	851.7	25	25	90	305 x 89	305 x 102	381 x 102	2112	2169	2263

## VARIABLE EFFORT SUPPORTS





## SELECTION CHART FOR HIGH LOAD VARIABLE EFFORT SUPPORTS LOADS IN Newtons

## SELECTION CHART FOR HIGH LOAD VARIABLE EFFORT SUPPORTS LOADS IN kgf

MOVEMENT mm				SPRING SIZE						
	VS 1	VS 2	VS 3	H1	H2	H3	H4	H5	H6	H7
				55741	74276	100293	120033	140039	160692	187474
				57233	76256	102980	123194	143726	164895	192378
				58725	78237	105667	126354	147413	169099	197282
				60216	80218	108354	129514	151099	173302	202186
				61708	82198	111042	132674	154786	177506	207090
MIN	0	0	0	63200	84179	113729	135834	158473	181709	211994
				64692	86160	116416	138994	162160	185913	216898
				66184	88140	119103	142154	165847	190116	221802
				67675	90121	121791	145314	169534	194319	226706
				69167	92102	124478	148475	173220	198523	231610
W	5	10	20	70659	94083	127165	151635	176907	202726	236514
				72151	96063	129852	154795	180594	206930	241418
				73643	98044	132540	157955	184281	211133	246322
				75134	100025	135227	161115	187968	215337	251226
				76626	102005	137914	164275	191654	219540	256130
				78118	103986	140602	167435	195341	223744	261034
R	10	20	40	79610	105967	143289	170596	199028	227947	265938
				81102	107948	145976	173756	202715	232151	270842
				82594	109928	148663	176916	206402	236354	275746
				84085	111909	151351	180076	210089	240558	280651
				85577	113890	154038	183236	213775	244761	285555
				87069	115870	156725	186396	217462	248965	290459
				88561	117851	159412	189556	221149	253168	295363
				90053	119832	162100	192716	224836	257371	300267
				91544	121812	164787	195877	228523	261575	305171
				93036	123793	167474	199037	232210	265778	310075
				94528	125774	170161	202197	235896	269982	314979
				96020	127755	172849	205357	239583	274185	319883
				97512	129735	175536	208517	243270	278389	324787
				99003	131716	178223	211677	246957	282592	329691
				100495	133697	180910	214837	250644	286796	334595
				101987	135677	183598	217998	254330	290999	339499
				103479	137658	186285	221158	258017	295203	344403
				104971	139639	188972	224318	261704	299406	349307
				106462	141620	191659	227478	265391	303610	354211
				107954	143600	194347	230638	269078	307813	359115
				109446	145581	197034	233798	272765	312017	364019
				110938	147562	199721	236958	276451	316220	368923
				112430	149542	202409	240118	280138	320423	373827
				113921	151523	205096	243279	283825	324627	378731
				115413	153504	207783	246439	287512	328830	383635
MAX	35	70	140	116905	155484	210470	249599	291199	333034	388539
				118397	157465	213158	252759	294885	337237	393444
				119889	159446	215845	255919	298572	341441	398348
				121380	161427	218532	259079	302259	345644	403252
				122872	163407	221219	262239	305946	349848	408156

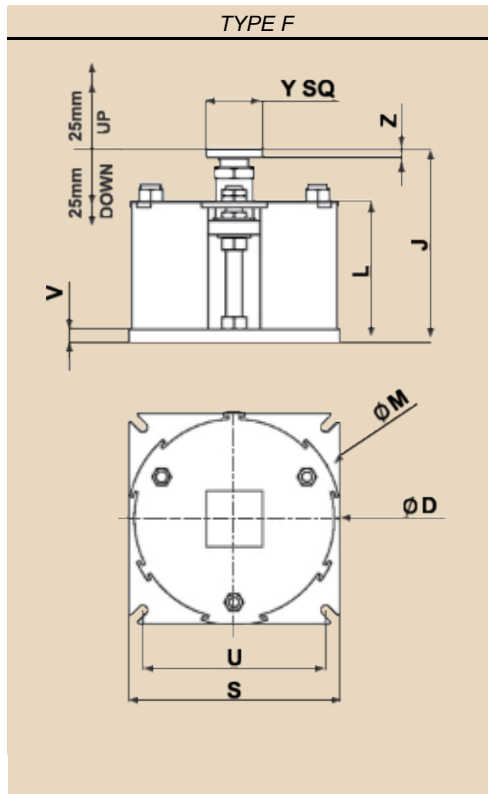
MOVEMENT mm				SPRING SIZE						
	VS 1	VS 2	VS 3	H1	H2	H3	H4	H5	H6	H7
				5684	7574	10227	12240	14280	16386	19117
				5836	7776	10501	12562	14656	16815	19617
				5988	7978	10775	12884	15032	17243	20117
				6140	8180	11049	13207	15408	17672	20617
				6292	8382	11323	13529	15784	18101	21117
MIN	0	0	0	6445	8584	11597	13851	16160	18529	21617
				6597	8786	11871	14173	16536	18958	22117
				6749	8988	12145	14496	16912	19386	22618
				6901	9190	12419	14818	17288	19815	23118
				7053	9392	12693	15140	17664	20244	23618
W	5	10	20	7205	9594	12967	15462	18040	20672	24118
				7357	9796	13241	15785	18415	21101	24618
				7509	9998	13515	16107	18791	21530	25118
				7662	10200	13789	16429	19167	21958	25618
				7814	10402	14063	16751	19543	22387	26118
				7966	10604	14337	17074	19919	22816	26618
R	10	20	40	8118	10806	14611	17396	20296	23244	27118
				8270	11008	14885	17718	20671	23673	27618
				8422	11210	15159	18040	21047	24101	28118
				8574	11412	15433	18363	21423	24530	28618
				8726	11614	15707	18685	21799	24959	29118
				8879	11815	15982	19007	22175	25387	29619
				9031	12017	16256	19329	22551	25816	30119
				9183	12219	16530	19652	22927	26245	30619
				9335	12421	16804	19974	23303	26673	31119
				9487	12623	17078	20296	23679	27102	31619
				9639	12825	17352	20618	24055	27530	32119
				9791	13027	17626	20941	24431	27959	32619
				9943	13229	17900	21263	24807	28388	33119
				10096	13431	18174	21585	25183	28816	33619
				10248	13633	18448	21907	25559	29245	34119
				10400	13835	18722	22230	25934	29674	34619
				10552	14037	18996	22552	26310	30102	35119
				10704	14239	19270	22874	26686	30531	35619
				10856	14441	19544	23196	27062	30960	36119
				11008	14643	19818	23519	27438	31388	36620
				11160	14845	20092	23841	27814	31817	37120
				11313	15047	20366	24163	28190	32245	37620
				11465	15249	20640	24485	28566	32674	38120
				11617	15451	20914	24808	28942	33103	38620
				11769	15653	21188	25130	29318	33531	39120
MAX	35	70	140	11921	15855	21462	25452	29694	33960	39620
				12073	16057	21736	25774	30070	34389	40120
				12225	16259	22010	26096	30446	34817	40620
				12377	16461	22284	26419	30822	35246	41120
				12529	16663	22558	26741	31198	35675	41620

SPRING RATE N/mm	VS							
	VS1	H1	H2	H3	H4	H5	H6	H7
	VS2	1492	1981	2802	3160	3687	4203	4904
VS3	745.9	990	1401	1580	1843	2102	2452	
		373	495.2	700.6	790	922	1051	1226

SPRING RATE KG/MM	VS							
	VS1	H1	H2	H3	H4	H5	H6	H7
	VS2	152	202	286	322	376	429	500
VS3	76.1	101	143	161	188	214	250	
		38.0	50.5	71.4	80.6	94	107	125

TURNOUT THIS PAGE FOR VS5 TYPE F AND TYPE G DIMENSIONS AND SELECTION TABLE IN KGS

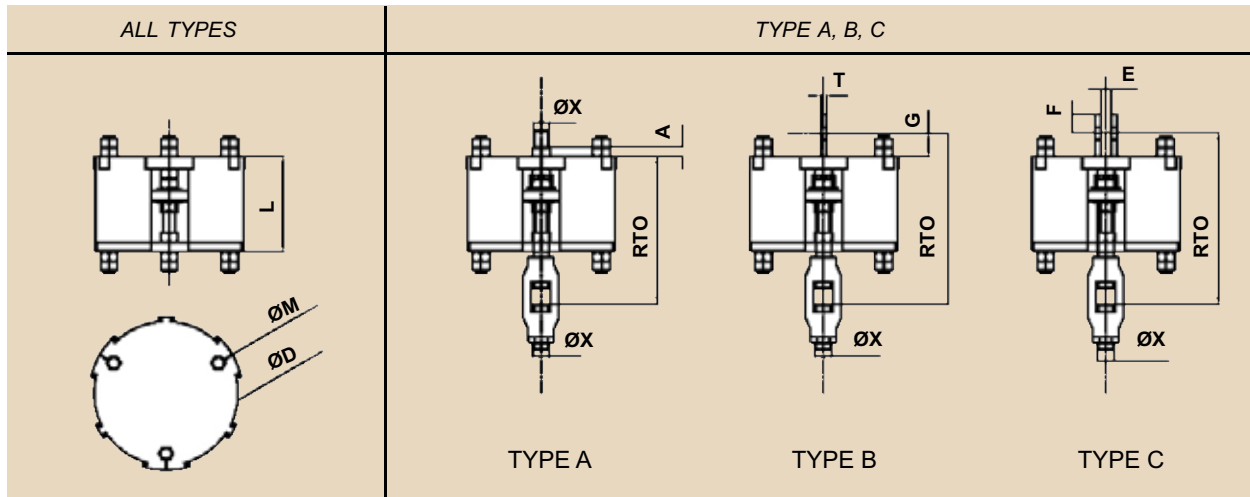
## HIGH LOAD VARIABLES



High load variable with multi coil design

SUPPORT SIZE	ALL TYPES		TYPE F								
	BODY DIMENSIONS		J AT MIN. LOAD TYPE F mm	BODY L'TH L mm	BASE PLATE SQ. S mm	BASE BOLT CRS. SQ. U mm	BASE BOLT SIZE	BASE PLATE THK V mm	LOAD PAD SQ. Y mm	LOAD PAD THK Z mm	WEIGHT TYPE F kgf
	ØD mm	ØM mm									
VS1-H1	630	657	408	276	650	550	M24	35	200	25	326.0
VS1-H2	630	657	449	313	650	550	M24	40	200	25	383.3
VS1-H3	730	757	460	313	750	650	M24	40	200	30	519.0
VS1-H4	730	757	508	361	750	650	M30	50	200	30	600.8
VS1-H5	730	757	558	371	750	650	M30	50	200	30	646.8
VS1-H6	730	757	595	396	750	650	M30	50	200	40	672.0
VS1-H7	780	807	608	409	800	700	M30	60	200	40	818.1
VS2-H1	730	757	526	354	750	650	M24	35	200	25	458.9
VS2-H2	730	757	574	398	750	650	M24	40	200	25	545.8
VS2-H3	730	757	622	435	750	650	M24	40	200	30	586.9
VS2-H4	730	757	690	503	750	650	M30	50	200	30	681.9
VS2-H5	730	757	740	513	750	650	M30	50	200	30	737.5
VS2-H6	730	757	802	563	750	650	M30	50	200	40	772.9
VS2-H7	780	807	815	576	800	700	M30	60	200	40	933.6
VS3-H1	730	757	809	557	750	650	M24	35	200	25	543.6
VS3-H2	730	757	886	630	750	650	M24	40	200	25	658.1
VS3-H3	730	757	964	697	750	650	M24	40	200	30	729.9
VS3-H4	730	757	1077	810	750	650	M30	50	200	30	853.4
VS3-H5	730	757	1127	820	750	650	M30	50	200	30	929.0
VS3-H6	730	757	1242	923	750	650	M30	50	200	40	996.7
VS3-H7	780	807	1255	936	800	700	M30	60	200	40	1190.2

# HIGH LOAD VARIABLES



SUPPORT SIZE	ROD DIA X mm	BODY DIMENSIONS			RTO AT MIN LOAD (mm)			DEPTH OF THR'D A mm	LUG DIMENSIONS TYPES B & C					WEIGHTS kgf		
		ØD mm	ØM mm	L mm (not F)	A	B	C		E mm	F mm	G mm	H mm	T mm	A	B	C
VS1-H1	M56	630	657	353	539	690	690	56	80	115	140	68	20	386	393	400
VS1-H2	M64	630	657	400	584	752	752	64	90	130	155	76	25	472	482	493
VS1-H3	M72	730	757	406	577	766	766	72	100	150	175	85	25	633	645	659
VS1-H4	M80	730	757	469	638	854	854	80	100	160	200	95	40	732	755	781
VS1-H5	M90	730	757	479	666	884	884	90	100	160	200	95	40	814	834	860
VS1-H6	M90	730	757	514	701	919	919	90	100	160	200	95	40	872	892	918
VS1-H7	M100	780	807	537	722	957	957	100	110	170	215	105	40	1044	1066	1096
VS2-H1	M56	730	757	431	622	773	773	56	80	115	140	68	20	532	538	546
VS2-H2	M64	730	757	485	674	842	842	64	90	130	155	76	25	654	664	675
VS2-H3	M72	730	757	528	704	893	893	72	100	150	175	85	25	702	714	728
VS2-H4	M80	730	757	611	785	1001	1001	80	100	160	200	95	40	816	839	865
VS2-H5	M90	730	757	621	813	1031	1031	90	100	160	200	95	40	909	929	955
VS2-H6	M90	730	757	681	873	1091	1091	90	100	160	200	95	40	978	998	1024
VS2-H7	M100	780	807	704	894	1129	1129	100	110	170	215	105	40	1167	1189	1219
VS3-H1	M56	730	757	634	835	986	986	56	80	115	140	68	20	619	625	633
VS3-H2	M64	730	757	717	916	1084	1084	64	90	130	155	76	25	767	777	788
VS3-H3	M72	730	757	790	976	1165	1165	72	100	150	175	85	25	848	860	875
VS3-H4	M80	730	757	918	1102	1318	1318	80	100	160	200	95	40	994	1018	1044
VS3-H5	M90	730	757	928	1130	1348	1348	90	100	160	200	95	40	1111	1131	1157
VS3-H6	M90	730	757	1041	1243	1461	1461	90	100	160	200	95	40	1215	1235	1261
VS3-H7	M100	780	807	1064	1264	1499	1499	100	110	170	215	105	40	1441	1463	1493

## CONSTANT EFFORT SUPPORTS

The design of the current range of constant effort supports is the result of experience and know how accrued over several decades.

The present form and function of the Constant Effort Supports are based on the geometry derived from this know how such that the theoretical deviation of supporting effort as the pipe moves from cold to hot or vice versa is kept to a minimum. By reducing the number of rotating joints and providing maintenance free PTFE based bearings on rotating joints, friction is reduced to an extent where there is little deviation between theory & practice.

Helical coil compression springs play a major role in the performance of supports and engineers at Pipe Hangers & Supports have made great efforts to design a compact range of springs capable of delivering the performance demanded of them. They are also designed keeping in mind present trends in plant design with increasing space limitations with smaller head rooms and form factor typical to Power Plants, Process plants, Off shore rigs & marine applications.

Other important considerations during design stage are:

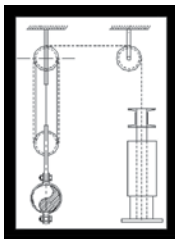
- Effect of spring ageing or fatigue
- The ambient environment that the supports function in.
- The needs of the pipe work company to "balance" lines during erection.
- The need to revise pre-set loads on hangers due to changes in routing or otherwise that may occur on-site after completion of supplies.
- Quick and easy locking and un-locking of hangers during operation for undertaking maintenance activities like routine gasket changes, valve replacements etc
- Such above operations to be carried out with out any special tools and tackles and make do with std tools and tackles already available at site.
- Structurally rigid to withstand handling prior to erection.
- Large well readable travel scales and pointers to show actual travel position during operation, visible from a distance.

### APPLICATION

Constant effort supports are complex mechanical leverage systems designed to provide a constant supporting effort as the pipe moves from cold position to hot position or vice-versa. Constant effort supports are normally used for large vertical movements typically more than 50mm to 60mm or when the travel provided by variable effort supports are insufficient. There are certain typical situations where the movements are small but the stress engineer does not want any differential loading to be transferred from pipe to other attached equipment and the result is the use of a constant effort support.

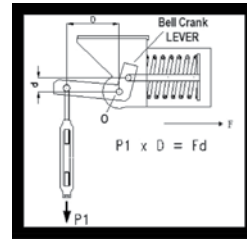
The Pipe Hanger and Supports range of Constant effort supports are based on the "Bell Crank Lever" mechanism.

To very simply illustrate the working idea of a constant effort support consider the sketch below :



A pipe is suspended from a wire rope connected to a dead weight by using a pulley mechanism. As the pipe moves up the dead weight moves down and moves up when the pipe moves down. The weight of the pipe is perfectly counterbalanced by the dead weight such that the pipe can be said to be floating, the supporting force remains constant irrespective of movement.

The modern Constant effort support using the Bell crank lever mechanism and its geometry and mathematics is illustrated below.



The Bell crank lever rotates around the Fulcrum point 'O'. One end of the Bell crank lever is connected to the pipe 'P1', the other end is connected to the spring by the tie rod. Thus when the pipe moves down from cold to hot condition, the point P1 moves down, and as it moves down the Bell crank lever will rotate in the anti clock wise direction & tie rod connected to the spring will be pulled in, by which the spring gets further compressed.

When the pipe moves up the bell crank lever will rotate (in the clock wise direction) & the tie rod connected to spring will be pushed out thus allowing the spring to expand or relax. By computing moments around the fulcrum point 'O', we will arrive at the formula:

$$P1 \times D = F \times d$$

$$F \times d$$

$$P1 = \frac{F \times d}{D}$$

Our purpose is to keep P1 constant i.e the reaction experienced by the pipe as a constant. As the bell crank rotates around the Fulcrum point 'O', the values of 'F' (the load due to the spring reaction) 'd' & 'D' will change in such a predetermined manner so as to keep value of 'P1' constant. Theoretically & mathematically the value of P1 will remain constant but due to friction at rotating points, spring hysteresis, manufacturing tolerances, MSS-SP 58 allows a deviation of  $\pm 6\%$  on the preset load and BS3974 allows  $\pm 5\%$ .

The formula for calculating the permitted deviation is :-

$$\text{Deviation from Specified Load} = \frac{\text{Max. Reading moving down} - \text{Min Reading Moving up}}{\text{Max. Reading moving down} + \text{Min Reading Moving up}}$$

### RANGE

Our Standard range of Constant effort support units cater to movements upto 750mm and loads upto 50 tons.

### FRAME SIZE AND SPRING SIZE

The support designation gives the support frame size and spring size:

$$\text{FRAME SIZE CE} \quad \text{CE-17} \quad \text{SPRING SIZE 17}$$

Many dimensions are common for a given frame size.

### SUPPORT TYPES

We offer eleven standard support types:

- H1** Horizontal type – single point suspension
- H2** Horizontal type – double point suspension
- V1** Vertical type – single point suspension
- V2** Vertical type – double point suspension
- VU1** Vertical inverted type – single point suspension
- VU2** Vertical inverted type – double point suspension
- HFMH** Horizontal base mounted
- HFMT** Horizontal base mounted compression seat
- VFM** Vertical base mounted
- VFMT** Vertical base mounted compression seat
- VUB** Vertical inverted base mounted

## CONSTANT EFFORT SUPPORTS

Details of Vertical inverted tandem type (type VIT) are available on request.

### SUSPENSION STYLES

For the suspended types, five styles of top suspension are available, namely **S1**, **S2**, **S3**, **S4** and **S5**.



Constant Effort Supports Type HFMT



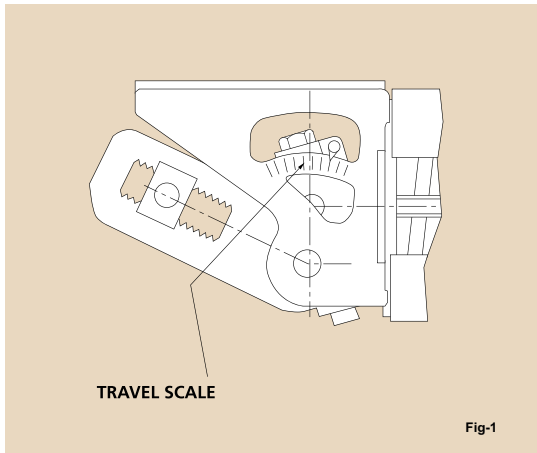
Type VFM



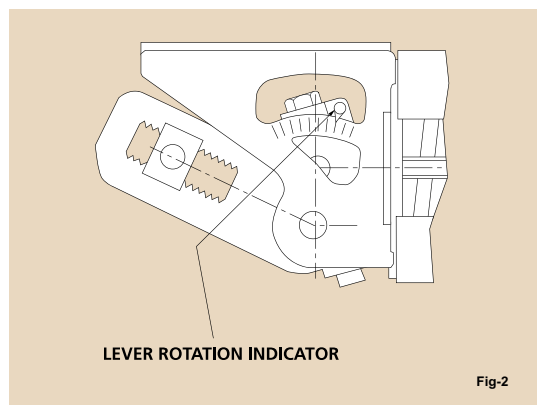
# CONSTANT EFFORT SUPPORTS

## STANDARD FEATURES

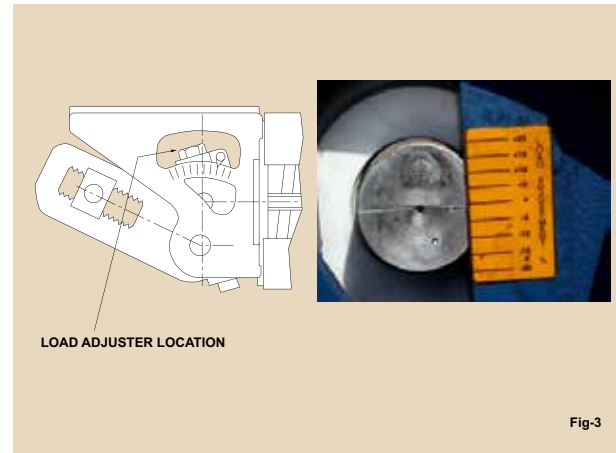
1. Units are compact with minimum head room requirements, installed heights and over all foot print.
2. Travel indicator with travel scale as illustrated in Fig 1 below enables monitoring of pipe work movement & visible from a distance. The "Hot" & "Cold" set positions are marked on the travel scale by means of a red & blue coloured washer riveted on the travel scale enabling visual confirmation of any system irregularities like excess movement etc.



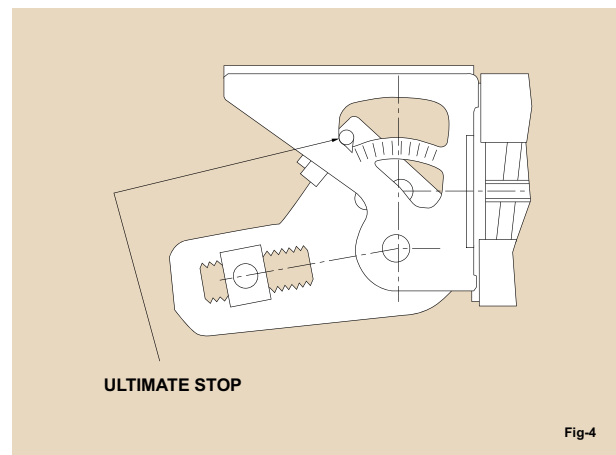
3. The lever rotation indicator (see Fig 2 below) provides a visual indication of position of lever and whether the hanger is loaded correctly. If the indicator is at the back of the window then the spring is under loaded and if at the front then the support is overloaded. If the indicator is not at the extremities then support is taking the load correctly. When the indicator is at the extremities then support load / travel adjustment may be required.



4. A load adjustment facility of  $\pm 20\%$  (of the set preset cold load of the support) is available on the support units. This adjustment can be carried out on site with out any special tools or tackles and with out compromising the travel provided. The adjustment can be carried out by rotating the Load adjuster as shown in Fig 3 below and read out the amount of adjustment from the load adjustment scale attached to lever as shown.



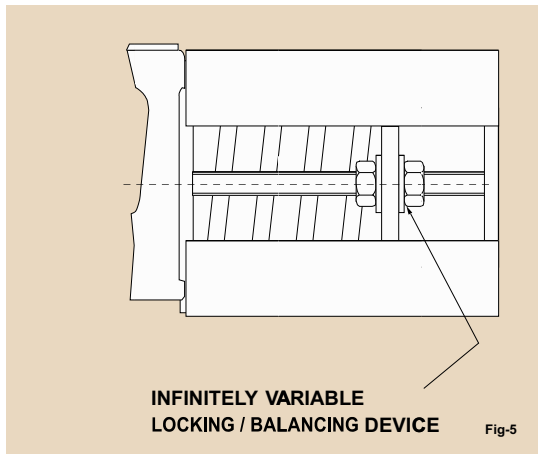
5. Ultimate Stop. The geometry of the frame, lever and its attachments are designed in such a way that in case of over load / travel the lever will be arrested prior to the spring becoming solid, thus protecting the helical coil from excessive stresses.



6. The Pipe Hangers & Supports Constant Effort Support Units are shipped to site in the Preset locked position as indicated in the contract drawings. The Infinitely Variable Locking / Balancing device used for preset locking consists of 2 threaded rods which run the full length of the spring can. The locking at preset position is achieved by locking the piston plate above the spring as shown in Fig 5. The support then becomes a rigid member. Thus the locking device is permanently attached to the support and can be used any number of times and since it is fully threaded, the support can be locked anywhere in its travel range i.e infinitely variable number of positions.

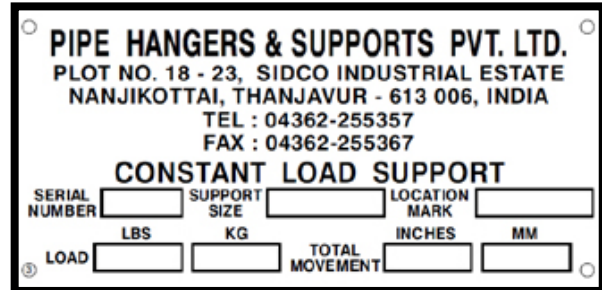
# CONSTANT EFFORT SUPPORTS

## STANDARD FEATURES



8. The Serial nos of each support is unique allowing traceability of support details, MOC & spring test certificate of spring manufacturer.

The name plate of constant effort support shown below provided all details required for identification of support, load / travel details, size of support etc.



7. Variable Position Load Pin Carrier as shown in Fig 6 below is fitted on supports whose total travel is greater than following values

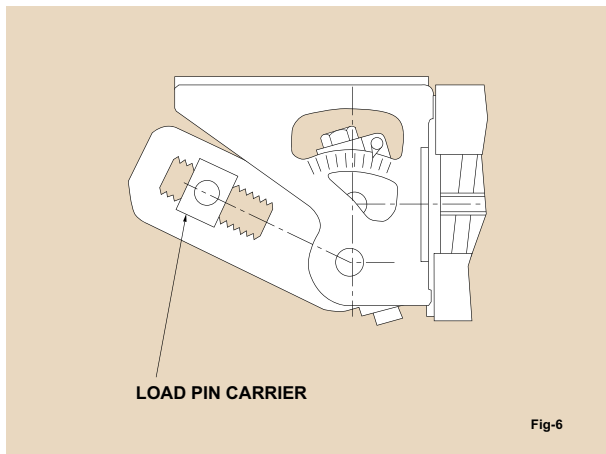
CA-1: 120 mm, CB: 120 mm, CC: 120 mm, CD: 160 mm, CE: 100 mm, CF: 130 mm, CG: 180 mm.

Once the carrier is repositioned, there is still the  $\pm 20\%$  load adjustment available.

By moving the load pin carrier closer to the fulcrum travel is reduced, load is increased by moving it away, the travel is increased and load is decreased, thus allowing maximum flexibility in situations where changes are required to loads and travels. This adjustment and flexibility is provided with out sacrificing the  $\pm 20\%$  load adjustment facility.

9. Every Constant Effort Support Unit is tested on our test rig and calibrated to contractual load & travel requirements. The deviation in supporting forces as the lever is actuated from top to bottom position is recorded and compared to allowed deviations as stipulated in MSS –SP 58 before declaring it fit for service. A test certificate is produced giving all the observed load & travel values as part of final documentation.

10. Our standard finish is to thoroughly clean and apply a metal primer followed by a finish top coat designed for the protection of fabricated steel articles. Other project specific specialty & high performance coatings to suit varying site / ambient requirements can be provided on request.



## CONSTANT EFFORT SUPPORTS

### SELECTION

Constant effort support sizes can be selected based on input parameters manually by looking at the selection chart or by using a software issued by us.

#### SELECTION BY USING CATALOGUE

Determine the Hot load or working load of the Unit (Remember that in a constant effort unit the hot load = cold load or preset load = operating load).

Add over travel to actual travel to arrive at required travel. Recommended to add 10% as over travel or 25 mm whichever is maximum.

Decide on the model, type and suspension style of the support that is intended for use.

Having decided type of hanger, load, travel required refer the load selection chart and proceed as follows.

- a) Locate total travel required at side of chart.
- b) Move horizontally across until load equal to or just greater than the load to be supported is located. Never select less than the actual load.
- c) Read off vertically support size.
- d) Return to load and move down remaining in same vertical column until nearest figure to design load is found.
- e) Returning horizontally across this column will give total travel provided for this support.

### DETERMINATION OF SUPPORT DIMENSIONS

Having selected the appropriate support size, model, type, total movement provided, proceed to work out the dimensions.

1. Refer Page 115 & 138 to show the appropriate type.
2. Open out correct page for referring dimensions of appropriate frame selected ex CA, CB, CC etc
3. Dimensions can be read from tables as shown:

Dimensions are in one of four categories:

#### a) Dependent on Movement Provided

Dimensions dependent on movement provided, these dimensions are provided on the right hand page and in the table headed single point suspension.

#### b) Travel Range Dependent

The dimensions are prefixed with a "T" or a "U" and given on left hand table on the left hand page. Note, the spring dependent dimensions for the top suspension details like AA, BB are shown in this table.

#### c) Spring Size Dependent

These dimensions start with the prefix "S" and provided in the mid centre table on left hand page.

#### d) Fixed

These dimensions start with prefix "F" or "X" and can be read off top centre table on left hand page.

4. Rod take out dimensions A1, A2, A3, J4, J5, J6, J7 & J8 and pivot to load pin dimensions D & E are given at zero rotation of lever. In this connection it is noteworthy to mention that the total rotation of the lever is 45 Deg from top position to bottom position. Hence these dimensions refer to lever at top most position. To work out the take out dimension at preset load Subtract actual travel from total travel and divide by 2. This figure must be added to A1, A2, A3 or subtracted from J4, J5, J6, J7 or J8.

### ORDERING INFORMATION

For ordering information refer to page 221



Constant effort support model HFMH & Variable effort support type D, under calibration test in our hydro mechanical test rig with load measurement by load cells and digital displays.

## CONSTANT EFFORT SUPPORTS

### INSTALLATION AND ERECTION

Refer the Erection installation manual for detailed instructions or download a copy from our website [www.pipehangers.in](http://www.pipehangers.in).

### MAINTENANCE

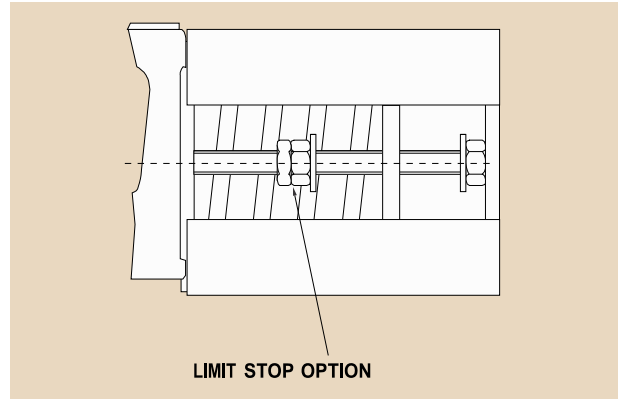
It is recommended that the supports are visually inspected once in 6 months by conducting a "walk down" along the pipe work.

Look for foreign objects left over from erection or maintenance activities like tools or construction debris which can impair operation of the support by obstruction.

The position of the travel indicator is not at the extremities and that it is close to the intended HOT or COLD marking on the travel scale.

### OPTIONAL FEATURES

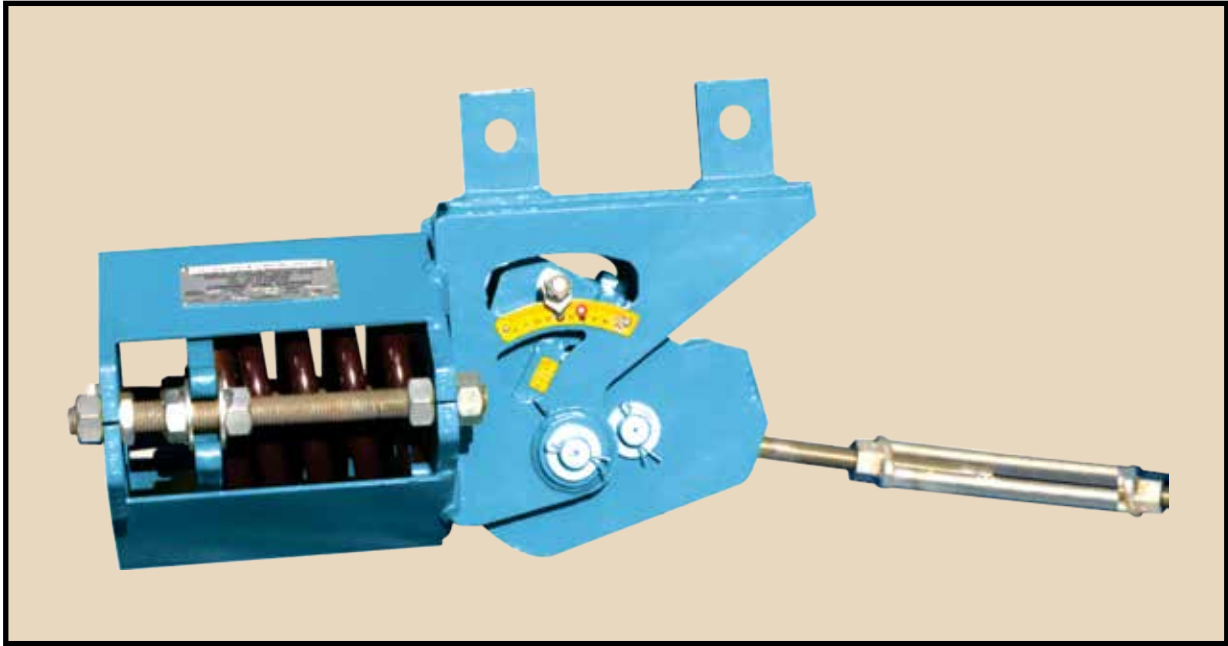
1. Limit Stops : Sometimes the piping engineer may want to restrict the movement of pipe beyond a certain predetermined level. The infinitely locking / balancing mechanism lends itself to such provisions with ease. By simply adding an additional nut in place the travel gets restricted and will act as a limit stop. (See Fig below for details)



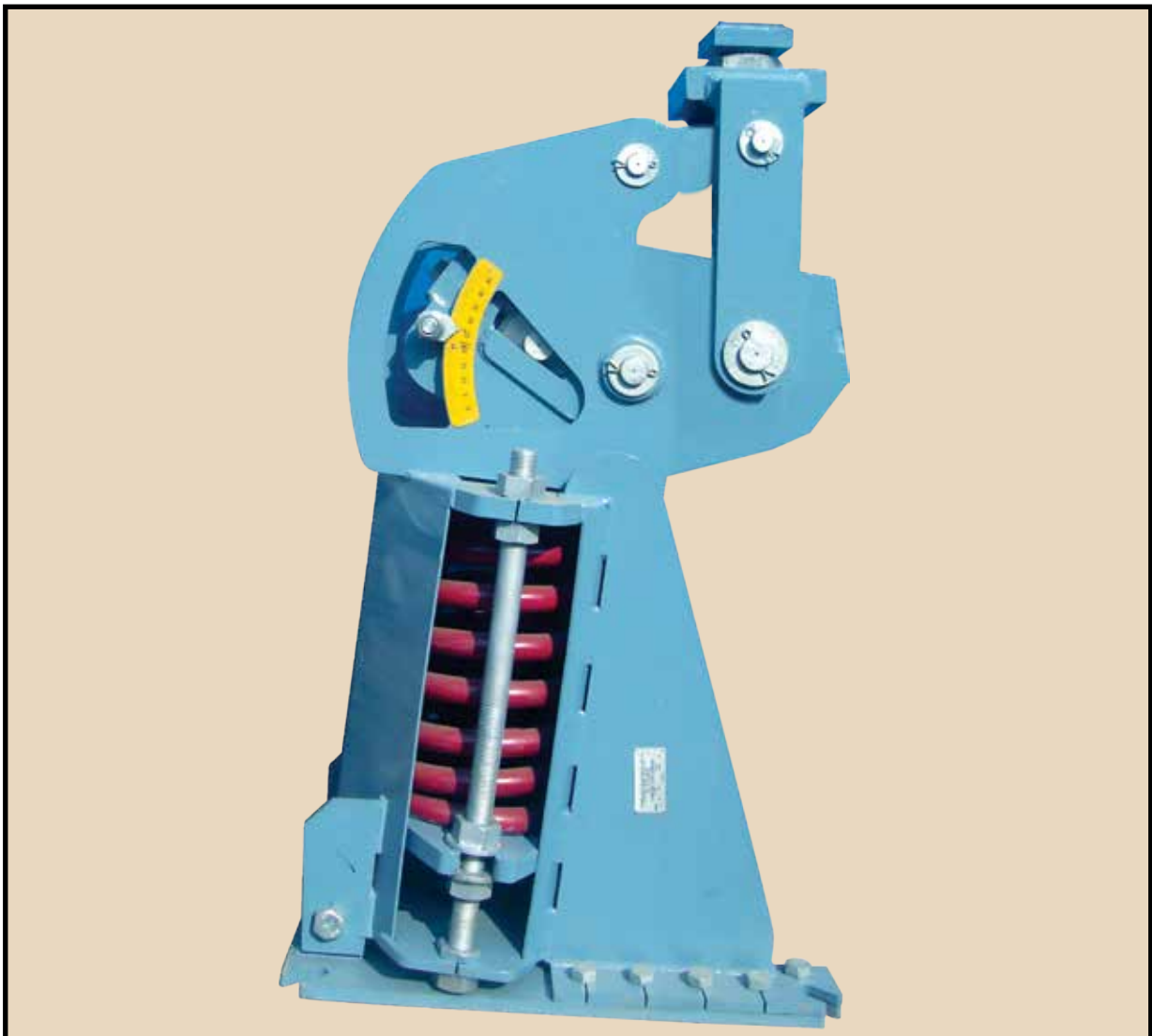
2. The supports can be supplied with plastic coated coils for superior corrosion resistant properties. The partnering spring can and attachments need to be Hot dip Galvanized. Since the support is of a bolted construction no welding activity takes place after galvanizing
3. Where extreme corrosive conditions exist, extra thick body parts can be supplied.
4. For supports operating in sub zero temperatures the MOC is different, please ask for details.
5. For Foot mounted supports HFMT & VFMT where large axial or transverse movements are envisaged or the loadings in that direction exceed 25% of vertical loads, the load flange can be supplied with low friction sliding pads.



CONSTANT EFFORT SUPPORTS



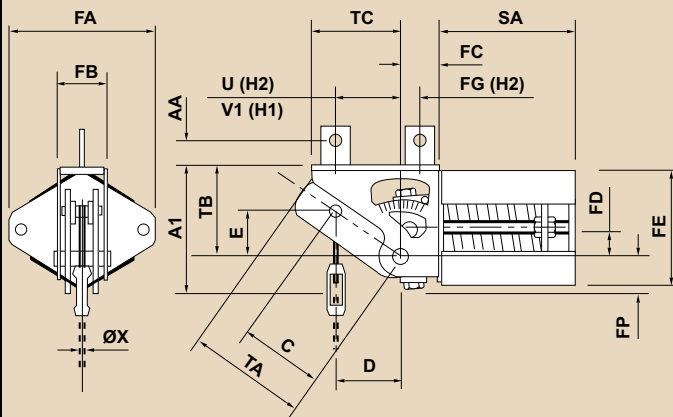
Type H2 – S2



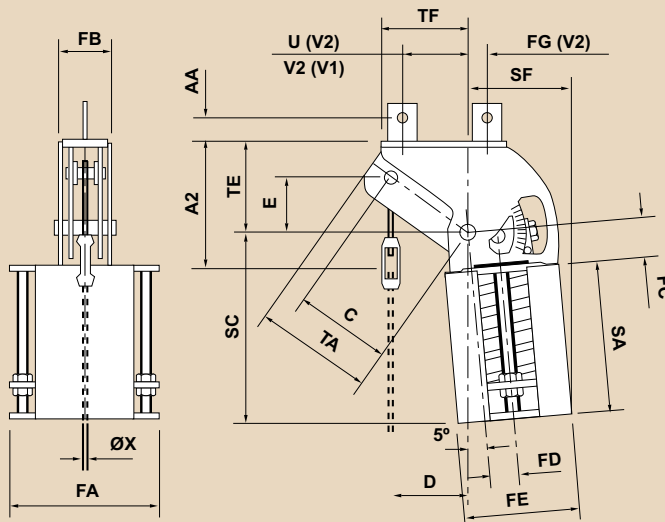
Type VFMT

# CONSTANT EFFORT SUPPORTS: SUSPENDED TYPES

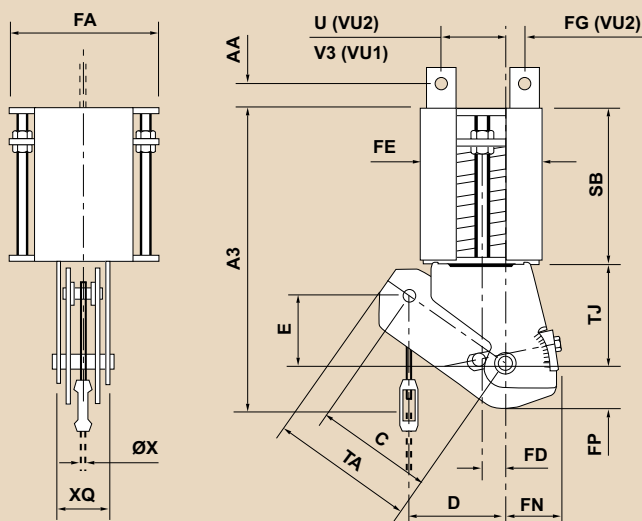
## TYPES H2 & H1



## TYPES V2 & V1

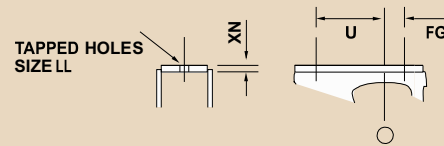


## TYPES VU2 & VU1



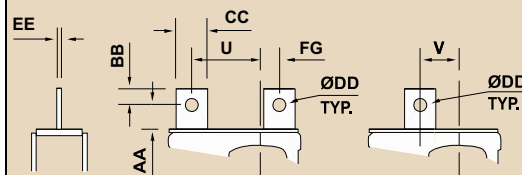
## ALTERNATIVE TOP SUSPENSION STYLES

### STYLE S1 (TYPES H2 & V2)



TYPES H2 & V2

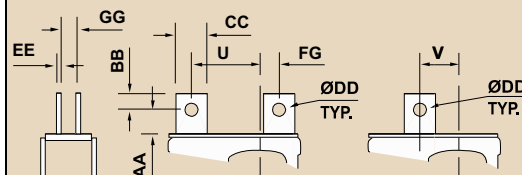
### STYLE S2 (ALL TYPES)



TYPES H2, V2 & VU2

TYPES H1, V1 & VU1

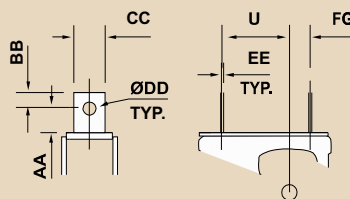
### STYLE S3 (ALL TYPES)



TYPES H2, V2 & VU2

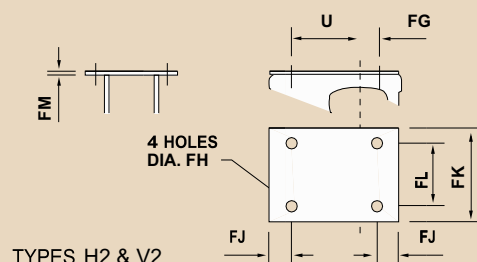
TYPES H1, V1 & VU1

### STYLE S4 (TYPES H2, V2 & VU2)



TYPES H2, V2 & VU2

### STYLE S5 (TYPES H2 & V2)



TYPES H2 & V2





# CONSTANT SUPPORT SELECTION CHART (LOADS IN kgf)

SIZE	CA-1	CA-2	CA-3	CA-4	CB-5	CB-6	CB-7	CC-8	CC-9	CC-10	CD-11	CD-12	CD-13	CD-14	CD-15	CE-16	CE-17	CE-18	CE-19	TRAVEL
40	74	102	134	187	235	331	426	471	661	853	1129	1506	2006							40
50	59	82	107	150	188	264	341	376	529	682	903	1205	1605	2168	3024					50
60	49	68	89	125	157	220	284	314	441	569	753	1004	1337	1806	2520	3417	4333			60
70	42	58	77	107	134	189	244	269	378	487	645	860	1146	1548	2160	2929	3714	4571	5714	70
80	37	51	67	94	118	165	213	235	331	426	565	753	1003	1355	1890	2563	3250	4000	5000	80
90	33	45	60	83	105	147	190	209	294	379	502	669	892	1204	1680	2278	2889	3556	4444	90
100	30	41	54	75	94	132	171	188	264	341	452	602	802	1084	1512	2050	2600	3200	4000	100
110	27	37	49	68	86	120	155	171	240	310	411	548	730	985	1375	1864	2364	2909	3636	110
120	25	34	45	62	78	110	142	157	220	284	376	502	669	903	1260	1708	2167	2667	3333	120
130	23	31	41	58	72	102	131	145	203	262	347	463	617	834	1163	1577	2000	2462	3077	130
140	21	29	38	54	67	94	122	134	189	244	323	430	573	774	1080	1464	1857	2286	2857	140
150	20	27	36	50	63	88	114	125	176	227	301	402	535	723	1008	1367	1733	2133	2667	150
160	18	26	34	47	59	83	107	118	165	213	282	376	502	677	945	1281	1625	2000	2500	160
170	17	24	32	44	55	78	100	111	156	201	266	354	472	638	890	1206	1529	1882	2353	170
180	16	23	30	42	52	73	95	105	147	190	251	335	446	602	840	1139	1444	1778	2222	180
190	16	21	28	39	50	70	90	99	139	180	238	317	422	570	796	1079	1368	1684	2105	190
200	15	20	27	37	47	66	85	94	132	171	226	301	401	542	756	1025	1300	1600	2000	200
210	14	19	26	36	45	63	81	90	126	162	215	287	382	516	720	976	1238	1524	1905	210
220	13	19	24	34	43	60	78	86	120	155	205	274	365	493	687	932	1182	1455	1818	220
230	13	18	23	33	41	57	74	82	115	148	196	262	349	471	657	891	1130	1391	1739	230
240	12	17	22	31	39	55	71	78	110	142	188	251	334	452	630	854	1083	1333	1667	240
250	12	16	21	30	38	53	68	75	106	136	181	241	321	434	605	820	1040	1280	1600	250
260	11	16	21	29	36	51	66	72	102	131	174	232	309	417	582	788	1000	1231	1538	260
270	11	15	20	28	35	49	63	70	98	126	167	223	297	401	560	759	963	1185	1481	270
280	11	15	19	27	34	47	61	67	94	122	161	215	287	387	540	732	929	1143	1429	280
290	10	14	19	26	32	46	59	65	91	118	156	208	277	374	521	707	897	1103	1379	290
300	10	14	18	25	31	44	57	63	88	114	151	201	267	361	504	683	867	1067	1333	300
310					30	43	55	61	85	110	146	194	259	350	488	661	839	1032	1290	310
320					29	41	53	59	83	107	141	188	251	339	473	641	813	1000	1250	320
330					29	40	52	57	80	103	137	183	243	328	458	621	788	970	1212	330
340					28	39	50	55	78	100	133	177	236	319	445	603	765	941	1176	340
350					27	38	49	54	76	97	129	172	229	310	432	586	743	914	1143	350
360					26	37	47	52	73	95	125	167	223	301	420	569	722	889	1111	360
370					25	36	46	51	71	92	122	163	217	293	409	554	703	865	1081	370
380					25	35	45	50	70	90	119	159	211	285	398	539	684	842	1053	380
390					24	34	44	48	68	87	116	154	206	278	388	526	667	821	1026	390
400					24	33	43	47	66	85	113	151	201	271	378	513	650	800	1000	400
410								46	65	83	110	147	196	264	369	500	634	780	976	410
420								45	63	81	108	143	191	258	360	488	619	762	952	420
430								44	62	79	105	140	187	252	352	477	605	744	930	430
440								43	60	78	103	137	182	246	344	466	591	727	909	440
450								42	59	76	100	134	178	241	336	456	578	711	889	450
460								41	57	74	98	131	174	236	329	446	565	696	870	460
470								40	56	73	96	128	171	231	322	436	553	681	851	470
480								39	55	71	94	125	167	226	315	427	542	667	833	480
490								38	54	70	92	123	164	221	309	418	531	653	816	490
500								38	53	68	90	120	160	217	302	410	520	640	800	500
510											89	118	157	213	297	402	510	627	784	510
520											87	116	154	208	291	394	500	615	769	520
530											85	114	151	204	285	387	491	604	755	530
540											84	112	149	201	280	380	481	593	741	540
550											82	110	146	197	275	373	473	582	727	550
560											81	108	143	194	270	366	464	571	714	560
570											79	106	141	190	265	360	456	561	702	570
580											78	104	138	187	261	353	448	552	690	580
590											77	102	136	184	256	347	441	542	678	590
600											75	100	134	181	252	342	433	533	667	600
610																336	426	525	656	610
620																331	419	516	645	620
630																325	413	508	635	630
640																320	406	500	625	640
650																315	400	492	615	650
660																311	394	485	606	660
670																306	388	478	597	670
680																301	382	471	588	680
690																297	377	464	580	690
700																293	371	457	571	700
710																289	366	451	563	710
720																285	361	444	556	720
730																281	356	438	548	730
740																277	351	432	541	740
750																273	347	427	533	750

SIZE	CA-1	CA-2	CA-3	CA-4	CB-5	CB-6	CB-7	CC-8	CC-9	CC-10	CD-11	CD-12	CD-13	CD-14	CD-15	CE-16	CE-17	CE-18	CE-19	
------	------	------	------	------	------	------	------	------	------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	--





## CA: DIMENSIONS FOR SIZES CA-1 TO CA-4

MOVEMENT DEPENDENT DIMENSIONS				
MOVEMENT PROVIDED mm		40-120	130-210	220-300
TRAVEL RANGE DEPENDENT DIMENSIONS	U	105	105	205
	TA	205	325	446
	TB	135	200	270
	TC	130	130	230
	TD	60	80	100
	TE	135	205	270
	TF	150	215	275
	TG	65	90	110
	TH	65	90	110
	TJ	100	100	128

TOP SUSPENSION DETAILS	
DD	14
AA	30
BB	20
CC	50
EE	6
GG	20
LL	M12

FIXED DIMENSIONS					
FA	155	FQ	75	XE	14
FB	85	FR	180	XF	190
FC	45	FS	180	XG	105
FD	25	FT	105	XH	55
FE	122	FU	35	XJ	150
FF	6	FV	140	XK	200
FG	35	FW	14	XL	14
FH	14	FX	60	XM	75
FJ	20	FY	80	XN	10
FK	180	FZ	180	XP	100
FL	140	XA	245	XQ	104
FM	6	XB	105	XR	100
FN	75	XC	100		
FP	40	XD	140		

SPRING SIZE DEPENDENT DIMENSIONS				
	CA-1	CA-2	CA-3	CA-4
SA	132	150	162	184
SB	142	160	172	194
SC	180	200	210	235
SD	195	215	225	250
SE	195	215	225	250
SF	105	105	105	110

WEIGHTS (kgf)				
	CA-1	CA-2	CA-3	CA-4
H1/H2	9	10	10	11
V1/V2	11	11	12	12
VU1/VU2	11	11	11	12
HFMT	11	11	12	12
HFMH	9	9	10	10
VFM	10	10	10	11
VFMT	13	13	13	14
VUB	10	10	11	11

SINGLE POINT SUSPENSION DIMENSION 'V'						
MOVEMENT PROVIDED mm	ALL SIZES		CA-1	CA-2	CA-3	CA-4
	V1	V3	V2	V2	V2	V2
40	41	45				
50	50	55				
60	59	65	58	61	63	65
70	68	74	66	70	73	75
80	76	82	74	78	82	85
90	83	91	81	86	90	94
100	91	99	88	94	99	103
110	98	107	94	102	107	112
120	106	114	100	109	115	121
130	TYPES H1 AND VU1 ARE NOT USED ABOVE 120mm TRAVEL		106	116	122	129
140			112	122	130	138
150			117	129	137	146
160			123	135	144	153
170			128	141	151	161
180			132	147	157	169
190			137	153	164	176
200			142	158	170	183
210			146	164	176	190
220			150	169	182	197
230	154	174	188	204		
240	158	179	194	210		
250	162	183	199	217		
260	166	188	205	223		
270	170	193	210	229		
280	173	197	215	235		
290	177	201	220	241		
300	180	206	225	247		

INSTALLED HEIGHT DIMENSIONS J4 AND J7 ALLOW  $\pm 25$ mm ADJUSTMENT.

TAKE-OUT DIMENSIONS A1, A2, A3, J5, J6 AND J8 ALLOW  $\pm 75$ mm ADJUSTMENT.

WHERE SEVERE HEADROOM LIMITATIONS EXIST, DIMENSIONS A1, A2 AND A3 CAN BE REDUCED AND DIMENSIONS J5, J6 AND J8 INCREASED AS FOLLOWS BY USE OF A SHORTENED EYEBOLT:

$\varnothing X$	M12
CHANGE mm	160

NOTE DIA. X IS THREADED ISO METRIC COARSE RIGHT HAND AS STANDARD. NOTE THAT DIMENSIONS A1, A2, A3, J4, J5, J6, J7 AND J8 ARE GIVEN AT ZERO ROTATION, THAT IS WITH THE LEVER IN THE UPPERMOST POSITION.

N.B. DIMENSION TA IS THE MINIMUM FORWARD CLEARANCE REQUIRED.

## CA: DIMENSIONS FOR SIZES CA-1 TO CA-4

MOVEMENT PROVIDED (mm)	ALL SIZES								CA-1			CA-2			CA-3			CA-4						
	ALL			H1 H2	V1 V2	HFMT	HFMH	VUB	ØX mm	VU1 VU2	VFM	VFMT	ØX mm	VU1 VU2	VFM	VFMT	ØX mm	VU1 VU2	VFM	VFMT				
	C mm	D mm	E mm	A1 mm	A2 mm	J4 mm	J5 mm	J8 mm		A3 mm	J6 mm	J7 mm		A3 mm	J6 mm	J7 mm		A3 mm	J6 mm	J7 mm	A3 mm	J6 mm	J7 mm	
	AT ZERO ROTATION								AT 0° ROTATION			AT 0° ROTATION			AT 0° ROTATION			AT 0° ROTATION						
	40	54	44	31	479		307	-279	-279	M12	586		422	M12	604		442	M12	616		452	M12	638	
50	67	55	38	472		314	-272	-272	M12	579		429	M12	597		449	M12	609		459	M12	631		484
60	80	66	46	464	464	322	-264	-264	M12	571	-134	437	M12	589	-114	457	M12	601	-104	467	M12	623	-79	492
70	94	77	54	456	456	330	-256	-256	M12	563	-126	445	M12	581	-106	465	M12	593	-96	475	M12	615	-71	500
80	107	88	61	449	449	337	-249	-249	M12	556	-119	452	M12	574	-99	472	M12	586	-89	482	M12	608	-64	507
90	120	99	69	441	441	345	-241	-241	M12	548	-111	460	M12	566	-91	480	M12	578	-81	490	M12	600	-56	515
100	134	110	77	433	433	353	-233	-233	M12	540	-103	468	M12	558	-83	488	M12	570	-73	498	M12	592	-48	523
110	147	121	84	426	426	360	-226	-226	M12	533	-96	475	M12	551	-76	495	M12	563	-66	505	M12	585	-41	530
120	161	132	92	418	418	368	-218	-218	M12	525	-88	483	M12	543	-68	503	M12	555	-58	513	M12	577	-33	538
130	174	143	100	475	480	396	-185	-185	M12	517	-80	491	M12	535	-60	511	M12	547	-50	521	M12	569	-25	546
140	187	153	107	468	473	403	-178	-178	M12	510	-73	498	M12	528	-53	518	M12	540	-43	528	M12	562	-18	553
150	201	164	115	460	465	411	-170	-170	M12	502	-65	506	M12	520	-45	526	M12	532	-35	536	M12	554	-10	561
160	214	175	123	452	457	419	-162	-162	M12	494	-57	514	M12	512	-37	534	M12	524	-27	544	M12	546	-2	569
170	228	186	130	445	450	426	-155	-155	M12	487	-50	521	M12	505	-30	541	M12	517	-20	551	M12	539	5	576
180	241	197	138	437	442	434	-147	-147	M12	479	-42	529	M12	497	-22	549	M12	509	-12	559	M12	531	13	584
190	254	208	146	429	434	442	-139	-139	M12	471	-34	537	M12	489	-14	557	M12	501	-4	567	M12	523	21	592
200	268	219	154	421	426	450	-131	-131	M12	463	-26	545	M12	481	-6	565	M12	493	4	575	M12	515	29	600
210	281	230	161	414	419	457	-124	-124	M12	456	-19	552	M12	474	1	572	M12	486	11	582	M12	508	36	607
220	294	241	169	476	476	485	-96	-96	M12	476	-11	560	M12	494	9	580	M12	506	19	590	M12	528	44	615
230	308	252	177	468	468	493	-88	-88	M12	468	-3	568	M12	486	17	588	M12	498	27	598	M12	520	52	623
240	321	263	184	461	461	500	-81	-81	M12	461	4	575	M12	479	24	595	M12	491	34	605	M12	513	59	630
250	335	274	192	453	453	508	-73	-73	M12	453	12	583	M12	471	32	603	M12	483	42	613	M12	505	67	638
260	348	285	200	445	445	516	-65	-65	M12	445	20	591	M12	463	40	611	M12	475	50	621	M12	497	75	646
270	361	296	207	438	438	523	-58	-58	M12	438	27	598	M12	456	47	618	M12	468	57	628	M12	490	82	653
280	375	307	215	430	430	531	-50	-50	M12	430	35	606	M12	448	55	626	M12	460	65	636	M12	482	90	661
290	388	318	223	422	422	539	-42	-42	M12	422	43	614	M12	440	63	634	M12	452	73	644	M12	474	98	669
300	401	329	230	415	415	546	-35	-35	M12	415	50	621	M12	433	70	641	M12	445	80	651	M12	467	105	676

## CB: DIMENSIONS FOR SIZES CB-5 TO CB-7

MOVEMENT DEPENDENT DIMENSIONS					
MOVEMENT PROVIDED mm		40-120	130-210	220-300	310-400
TRAVEL RANGE DEPENDENT DIMENSIONS	U	105	105	270	270
	TA	209	329	450	583
	TB	140	205	275	350
	TC	130	130	295	295
	TD	70	85	105	120
	TE	140	215	275	350
	TF	155	235	305	370
	TG	80	95	115	135
	TH	80	95	115	135
	TJ	120	120	120	168

TOP SUSPENSION DETAILS	
DD	14
AA	30
BB	20
CC	50
EE	6
GG	20
LL	M12

FIXED DIMENSIONS					
FA	200	FQ	75	XE	14
FB	85	FR	180	XF	190
FC	55	FS	180	XG	105
FD	25	FT	105	XH	55
FE	164	FU	35	XJ	150
FF	6	FV	140	XK	200
FG	35	FW	14	XL	14
FH	14	FX	70	XM	80
FJ	20	FY	90	XN	10
FK	180	FZ	180	XP	110
FL	140	XA	265	XQ	104
FM	6	XB	105	XR	120
FN	80	XC	120		
FP	50	XD	140		

SPRING SIZE DEPENDENT DIMENSIONS			
SA	197	172	184
SB	207	182	194
SC	260	235	245
SD	275	250	260
SE	275	250	260
SF	130	130	130

WEIGHTS (kgf)			
	CB 5	CB 6	CB 7
H1/H2	16	16	16
V1/V2	18	18	18
VU1/VU2	19	19	19
HFMT	18	18	18
HFMH	16	16	16
VFM	17	17	17
VFMT	20	20	20
VUB	19	19	19

SINGLE POINT SUSPENSION DIMENSION 'V'					
MOVEMENT PROVIDED mm	ALL SIZES		CB 5	CB 6	CB 7
	V1	V3	V2	V2	V2
40	42	47			
50	52	58			
60	61	69			
70	71	78			
80	79	88	82	87	88
90	88	98	91	96	99
100	97	107	100	106	109
110	106	116	108	115	118
120	114	125	116	124	128
130			124	133	138
140			131	142	147
150			139	151	156
160			146	159	165
170			153	167	174
180			160	175	182
190			167	183	191
200			173	191	199
210			180	199	208
220			186	206	216
230			192	214	224
240			198	221	232
250			203	228	240
260			209	235	247
270			215	242	255
280			220	249	262
290			225	255	270
300			230	262	277
310			235	268	284
320			240	274	291
330			245	281	298
340			250	287	305
350			255	293	311
360			259	298	318
370			264	304	324
380			268	310	331
390			272	316	337
400			277	321	343

TYPES H1 AND VU1 ARE NOT USED ABOVE 120mm TRAVEL

INSTALLED HEIGHT DIMENSIONS J4 AND J7 ALLOW  $\pm 25$ mm ADJUSTMENT.

TAKE-OUT DIMENSIONS A1, A2, A3, J5, J6 AND J8 ALLOW  $\pm 75$ mm ADJUSTMENT.

WHERE SEVERE HEADROOM LIMITATIONS EXIST, DIMENSIONS A1, A2 AND A3 CAN BE REDUCED AND DIMENSIONS J5, J6 AND J8 INCREASED AS FOLLOWS BY USE OF A SHORTENED EYEBOLT:

ØX	M12
CHANGE mm	160

NOTE DIA. X IS THREADED ISO METRIC COARSE RIGHT HAND AS STANDARD. NOTE THAT DIMENSIONS A1, A2, A3, J4, J5, J6, J7 AND J8 ARE GIVEN AT ZERO ROTATION, THAT IS WITH THE LEVER IN THE UPPERMOST POSITION.

N.B. DIMENSION TA IS THE MINIMUM FORWARD CLEARANCE REQUIRED.

# CB: DIMENSIONS FOR SIZES CB-5 TO CB-7

MOVEMENT PROVIDED mm	ALL SIZES								CB-5				CB-6				CB-7			
	ALL			H1 H2	V1 V2	HFMT	HFMH	VOB	ØX mm	VU1 VU2	VFM	VFMT	ØX mm	VU1 VU2	VFM	VFMT	ØX mm	VU1 VU2	VFM	VFMT
	C mm	D mm	E mm	A1 mm	A2 mm	J4 mm	J5 mm	J8 mm		A3 mm	J6 mm	J7 mm		A3 mm	J6 mm	J7 mm		A3 mm	J6 mm	J7 mm
	AT ZERO ROTATION								AT 0° ROTATION				AT 0° ROTATION				AT 0° ROTATION			
40	54	44	31	484		333	-264	-264	M12	671		518	M12	646		493	M12	658		503
50	67	55	38	477		340	-257	-257	M12	664		525	M12	639		500	M12	651		510
60	80	66	46	469		348	-249	-249	M12	656		533	M12	631		508	M12	643		518
70	94	77	54	461		356	-241	-241	M12	648		541	M12	623		516	M12	635		526
80	107	88	61	454	454	363	-234	-234	M12	641	-39	548	M12	616	-64	523	M12	628	-54	533
90	120	99	69	446	446	371	-226	-226	M12	633	-31	556	M12	608	-56	531	M12	620	-46	541
100	134	110	77	438	438	379	-218	-218	M12	625	-23	564	M12	600	-48	539	M12	612	-38	549
110	147	121	84	431	431	386	-211	-211	M12	618	-16	571	M12	593	-41	546	M12	605	-31	556
120	161	132	92	423	423	394	-203	-203	M12	610	-8	579	M12	585	-33	554	M12	597	-23	564
130	174	143	100	480	490	411	-180	-180	M12	602	0	581	M12	577	-25	556	M12	589	-15	566
140	187	153	107	473	483	418	-173	-173	M12	595	7	588	M12	570	-18	563	M12	582	-8	573
150	201	164	115	465	475	426	-165	-165	M12	587	15	596	M12	562	-10	571	M12	574	0	581
160	214	175	123	457	467	434	-157	-157	M12	579	23	604	M12	554	-2	579	M12	566	8	589
170	228	186	130	450	460	441	-150	-150	M12	572	30	611	M12	547	5	586	M12	559	15	596
180	241	197	138	442	452	449	-142	-142	M12	564	38	619	M12	539	13	594	M12	551	23	604
190	254	208	146	434	444	457	-134	-134	M12	556	46	627	M12	531	21	602	M12	543	31	612
200	268	219	154	426	436	465	-126	-126	M12	548	54	635	M12	523	29	610	M12	535	39	620
210	281	230	161	419	429	472	-119	-119	M12	541	61	642	M12	516	36	617	M12	528	46	627
220	294	241	169	481	481	500	-91	-91	M12	533	69	650	M12	508	44	625	M12	520	54	635
230	308	252	177	473	473	508	-83	-83	M12	525	77	658	M12	500	52	633	M12	512	62	643
240	321	263	184	466	466	515	-76	-76	M12	518	84	665	M12	493	59	640	M12	505	69	650
250	335	274	192	458	458	523	-68	-68	M12	510	92	673	M12	485	67	648	M12	497	77	658
260	348	285	200	450	450	531	-60	-60	M12	502	100	681	M12	477	75	656	M12	489	85	666
270	361	296	207	443	443	538	-53	-53	M12	495	107	688	M12	470	82	663	M12	482	92	673
280	375	307	215	435	435	546	-45	-45	M12	487	115	696	M12	462	90	671	M12	474	100	681
290	388	318	223	427	427	554	-37	-37	M12	479	123	704	M12	454	98	679	M12	466	108	689
300	401	329	230	420	420	561	-30	-30	M12	472	130	711	M12	447	105	686	M12	459	115	696
310	415	340	238	487	487	584	-2	-2	M12	512	138	719	M12	487	113	694	M12	499	123	704
320	428	351	246	479	479	592	6	6	M12	504	146	727	M12	479	121	702	M12	491	131	712
330	442	362	253	472	472	599	13	13	M12	497	153	734	M12	472	128	709	M12	484	138	719
340	455	373	261	464	464	607	21	21	M12	489	161	742	M12	464	136	717	M12	476	146	727
350	468	384	269	456	456	615	29	29	M12	481	169	750	M12	456	144	725	M12	468	154	735
360	482	395	276	449	449	622	36	36	M12	474	176	757	M12	449	151	732	M12	461	161	742
370	495	406	284	441	441	630	44	44	M12	466	184	765	M12	441	159	740	M12	453	169	750
380	509	417	292	433	433	638	52	52	M12	458	192	773	M12	433	167	748	M12	445	177	758
390	522	428	299	426	426	645	59	59	M12	451	199	780	M12	426	174	755	M12	438	184	765
400	535	439	307	418	418	653	67	67	M12	443	207	788	M12	418	182	763	M12	430	192	773

## CC: DIMENSIONS FOR SIZES CC-8 TO CC-10

MOVEMENT DEPENDENT DIMENSIONS							
MOVEMENT PROVIDED mm	40-120		130-210		220-300		
	120	120	270	270	310-400	410-500	
TRAVEL RANGE DEPENDENT DIMENSIONS	U	120	120	270	270	270	
	TA	213	306	454	587	721	
	TB	155	195	280	355	430	
	TC	145	145	295	295	295	
	TD	80	90	110	125	145	
	TE	155	195	280	355	430	
	TF	155	225	315	390	455	
	TG	90	100	120	140	165	
	TH	90	100	120	140	165	
	TJ	155	155	155	155	207	
TOP SUSPENSION DETAILS	CC-8	DD	14	14	14	14	14
		AA	30	30	30	30	30
		BB	20	20	20	20	20
		CC	50	50	50	50	50
		EE	6	6	6	6	6
		GG	20	20	20	20	20
	CC-9	LL	M12	M12	M12	M12	M12
		DD	18	14	14	14	14
		AA	36	30	30	30	30
		BB	30	20	20	20	20
		CC	50	50	50	50	50
		EE	6	6	6	6	6
	CC-10	GG	25	20	20	20	20
		LL	M16	M12	M12	M12	M12
		DD	18	14	14	14	14
		AA	36	30	30	30	30
		BB	30	20	20	20	20
		CC	50	50	50	50	50

FIXED DIMENSIONS					
FA	250	FQ	75	XE	14
FB	89	FR	180	XF	220
FC	65	FS	195	XG	120
FD	50	FT	120	XH	90
FE	198	FU	35	XJ	180
FF	8	FV	140	XK	250
FG	35	FW	14	XL	14
FH	14	FX	85	XM	115
FJ	20	FY	120	XN	12
FK	180	FZ	220	XP	145
FL	140	XA	330	XQ	118
FM	8	XB	120	XR	155
FN	115	XC	170		
FP	60	XD	180		

SPRING SIZE DEPENDENT DIMENSIONS			
	φ	φ	CC-10
	CC-8	CC-9	CC-10
SA	211	233	253
SB	223	245	265
SC	280	305	325
SD	300	325	345
SE	300	325	345
SF	175	175	180

WEIGHTS (kgf)			
	φ	φ	CC-10
	CC-8	CC-9	CC-10
H1/H2	24	25	26
V1/V2	25	27	28
VU1/VU2	27	28	30
HFMT	27	28	30
HFMH	23	24	26
VFM	24	25	27
VFMT	29	30	32
VUB	28	29	31

SINGLE POINT SUSPENSION DIMENSION 'V'					
MOVEMENT PROVIDED mm	ALL SIZES		CC-8	CC-9	CC-10
	V1	V3	V2	V2	V2
40	43	48			
50	53	60			
60	63	71			
70	73	81	75	77	78
80	83	92	85	87	89
90	92	102	94	98	99
100	101	112	103	107	110
110	110	123	112	117	120
120	119	132	121	127	130
130			130	136	139
140			139	145	149
150			147	155	159
160			155	163	168
170			163	172	177
180			171	181	187
190			179	190	196
200			186	198	204
210			193	206	213
220			201	214	222
230			208	222	231
240			215	230	239
250			222	238	247
260			228	246	256
270			235	253	264
280			242	261	272
290			248	268	280
300			254	275	287
310			260	282	295
320			266	290	303
330			272	296	310
340			278	303	318
350			284	310	325
360			290	317	333
370			295	323	340
380			301	330	347
390			306	336	354
400			311	343	361
410			317	349	368
420			322	355	375
430			327	361	381
440			332	367	388
450			337	373	395
460			342	379	401
470			346	385	407
480			351	390	414
490			356	396	420
500			360	401	426

TYPES H1 AND VU1 ARE NOT USED ABOVE 120mm TRAVEL

INSTALLED HEIGHT DIMENSIONS J4 AND J7 ALLOW ±25mm ADJUSTMENT.

TAKE-OUT DIMENSIONS A1, A2, A3, J5, J6 AND J8 ALLOW ±75mm ADJUSTMENT.

WHERE SEVERE HEADROOM LIMITATIONS EXIST, DIMENSIONS A1, A2 AND A3 CAN BE REDUCED AND DIMENSIONS J5, J6 AND J8 INCREASED AS FOLLOWS BY USE OF A SHORTENED EYEBOLT:

ØX	M12
CHANGE mm	160

NOTE DIA. X IS THREADED ISO METRIC COARSE RIGHT HAND AS STANDARD. NOTE THAT DIMENSIONS A1, A2, A3, J4, J5, J6, J7 AND J8 ARE GIVEN AT ZERO ROTATION, THAT IS WITH THE LEVER IN THE UPPERMOST POSITION.

N.B. DIMENSION TA IS THE MINIMUM FORWARD CLEARANCE REQUIRED.



CC: DIMENSIONS FOR SIZES CC-8 TO CC-10

MOVEMENT PROVIDED mm	ALL SIZES								CC-8				CC-9				CC-10			
	ALL			H1 H2	V1 V2	HFMH	HFMH	VBM	ØX mm	VU1 VU2	VFM	VFMT	ØX mm	VU1 VU2	VFM	VFMT	ØX mm	VU1 VU2	VFM	VFMT
	C mm	D mm	E mm	A1 mm	A2 mm	J4 mm	J5 mm	J8 mm		A3 mm	J6 mm	J7 mm		A3 mm	J6 mm	J7 mm		A3 mm	J6 mm	J7 mm
	AT ZERO ROTATION								AT 0° ROTATION				AT 0° ROTATION				AT 0° ROTATION			
40	54	44	31	499		387	-254	-254	M12	722		582	M16	744		607	M16	764		627
50	67	55	38	492		394	-247	-247	M12	715		589	M12	737		614	M16	757		634
60	80	66	46	484		402	-239	-239	M12	707		597	M12	729		622	M16	749		642
70	94	77	54	476	476	410	-231	-231	M12	699	-21	605	M12	721	4	630	M12	741	24	650
80	107	88	61	469	469	417	-224	-224	M12	692	-14	612	M12	714	11	637	M12	734	31	657
90	120	99	69	461	461	425	-216	-216	M12	684	-6	620	M12	706	19	645	M12	726	39	665
100	134	110	77	453	453	433	-208	-208	M12	676	2	628	M12	698	27	653	M12	718	47	673
110	147	121	84	446	446	440	-201	-201	M12	669	9	635	M12	691	34	660	M12	711	54	680
120	161	132	92	438	438	448	-193	-193	M12	661	17	643	M12	683	42	668	M12	703	62	688
130	174	143	100	470	470	462	-175	-175	M12	653	25	647	M12	675	50	672	M12	695	70	692
140	187	153	107	463	463	469	-168	-168	M12	646	32	654	M12	668	57	679	M12	688	77	699
150	201	164	115	455	455	477	-160	-160	M12	638	40	662	M12	660	65	687	M12	680	85	707
160	214	175	123	447	447	485	-152	-152	M12	630	48	670	M12	652	73	695	M12	672	93	715
170	228	186	130	440	440	492	-145	-145	M12	623	55	677	M12	645	80	702	M12	665	100	722
180	241	197	138	432	432	500	-137	-137	M12	615	63	685	M12	637	88	710	M12	657	108	730
190	254	208	146	424	424	508	-129	-129	M12	607	71	693	M12	629	96	718	M12	649	116	738
200	268	219	154	501	501	530	-101	-101	M12	599	79	695	M12	621	104	720	M12	641	124	740
210	281	230	161	494	494	537	-94	-94	M12	592	86	702	M12	614	111	727	M12	634	131	747
220	294	241	169	486	486	545	-86	-86	M12	584	94	710	M12	606	119	735	M12	626	139	755
230	308	252	177	478	478	553	-78	-78	M12	576	102	718	M12	598	127	743	M12	618	147	763
240	321	263	184	471	471	560	-71	-71	M12	569	109	725	M12	591	134	750	M12	611	154	770
250	335	274	192	463	463	568	-63	-63	M12	561	117	733	M12	583	142	758	M12	603	162	778
260	348	285	200	455	455	576	-55	-55	M12	553	125	741	M12	575	150	766	M12	595	170	786
270	361	296	207	448	448	583	-48	-48	M12	546	132	748	M12	568	157	773	M12	588	177	793
280	375	307	215	440	440	591	-40	-40	M12	538	140	756	M12	560	165	781	M12	580	185	801
290	388	318	223	432	432	599	-32	-32	M12	530	148	764	M12	552	173	789	M12	572	193	809
300	401	329	230	425	425	606	-25	-25	M12	523	155	771	M12	545	180	796	M12	565	200	816
310	415	340	238	492	492	629	3	3	M12	515	163	779	M12	537	188	804	M12	557	208	824
320	428	351	246	484	484	637	11	11	M12	507	171	787	M12	529	196	812	M12	549	216	832
330	442	362	253	477	477	644	18	18	M12	500	178	794	M12	522	203	819	M12	542	223	839
340	455	373	261	469	469	652	26	26	M12	492	186	802	M12	514	211	827	M12	534	231	847
350	468	384	269	461	461	660	34	34	M12	484	194	810	M12	506	219	835	M12	526	239	855
360	482	395	276	454	454	667	41	41	M12	477	201	817	M12	499	226	842	M12	519	246	862
370	495	406	284	446	446	675	49	49	M12	469	209	825	M12	491	234	850	M12	511	254	870
380	509	417	292	438	438	683	57	57	M12	461	217	833	M12	483	242	858	M12	503	262	878
390	522	428	299	431	431	690	64	64	M12	454	224	840	M12	476	249	865	M12	496	269	885
400	535	439	307	423	423	698	72	72	M12	446	232	848	M12	468	257	873	M12	488	277	893
410	549	449	315	490	490	726	105	105	M12	490	240	856	M12	512	265	881	M12	532	285	901
420	562	460	322	483	483	733	112	112	M12	483	247	863	M12	505	272	888	M12	525	292	908
430	575	471	330	475	475	741	120	120	M12	475	255	871	M12	497	280	896	M12	517	300	916
440	589	482	338	467	467	749	128	128	M12	467	263	879	M12	489	288	904	M12	509	308	924
450	602	493	345	460	460	756	135	135	M12	460	270	886	M12	482	295	911	M12	502	315	931
460	616	504	353	452	452	764	143	143	M12	452	278	894	M12	474	303	919	M12	494	323	939
470	629	515	361	444	444	772	151	151	M12	444	286	902	M12	466	311	927	M12	486	331	947
480	642	526	368	437	437	779	158	158	M12	437	293	909	M12	459	318	934	M12	479	338	954
490	656	537	376	429	429	787	166	166	M12	429	301	917	M12	451	326	942	M12	471	346	962
500	669	548	384	421	421	795	174	174	M12	421	309	925	M12	443	334	950	M12	463	354	970

# CD: DIMENSIONS FOR SIZES CD-11 TO CD-15

MOVEMENT DEPENDENT DIMENSIONS							
MOVEMENT PROVIDED mm	TRAVEL RANGE DEPENDENT DIMENSIONS						
	40-80	90-160	170-220	230-300	310-400	410-500	510-600
U	155	155	155	155	345	345	345
TA	188	291	368	470	599	727	855
TB	200	200	235	295	365	435	510
TC	205	205	205	205	370	370	370
TD	115	115	115	130	145	165	180
TE		200	255	315	375	435	510
TF		230	280	345	425	505	580
TG	130	130	130	145	160	180	195
TH	130	130	130	145	160	180	195
TJ	195	195	195	195	195	195	226
TOP SUSPENSION DETAILS							
CD-11							
DD	22	14	14	14	14	14	14
AA	50	30	30	30	30	30	30
BB	35	20	20	20	20	20	20
CC	60	50	50	50	50	50	50
EE	10	6	6	6	6	6	6
GG	30	20	20	20	20	20	20
LL	M20	M12	M12	M12	M12	M12	M12
CD-12							
DD	22	18	14	14	14	14	14
AA	50	36	30	30	30	30	30
BB	35	30	20	20	20	20	20
CC	60	50	50	50	50	50	50
EE	10	6	6	6	6	6	6
GG	30	25	20	20	20	20	20
LL	M20	M16	M12	M12	M12	M12	M12
CD-13							
DD	26	18	18	18	14	14	14
AA	60	36	36	36	30	30	30
BB	45	30	30	30	20	20	20
CC	80	50	50	50	50	50	50
EE	10	6	6	6	6	6	6
GG	35	25	25	25	20	20	20
LL	M24	M16	M16	M16	M12	M12	M12
CD-14							
DD	26	22	18	18	14	14	14
AA	60	50	36	36	30	30	30
BB	45	35	30	30	20	20	20
CC	80	60	50	50	50	50	50
EE	10	10	6	6	6	6	6
GG	35	30	25	25	20	20	20
LL	M24	M20	M16	M16	M12	M12	M12
CD-15							
DD	33	26	22	22	18	18	18
AA	70	60	50	50	36	36	36
BB	55	45	35	35	30	30	30
CC	100	80	60	60	50	50	50
EE	12	10	10	10	6	6	6
GG	40	35	30	30	25	25	25
LL	M30	M24	M20	M20	M16	M16	M16

FIXED DIMENSIONS					
FA	330	FQ	100	XE	18
FB	115	FR	225	XF	270
FC	95	FS	240	XG	155
FD	51	FT	155	XH	110
FE	250	FU	35	XJ	220
FF	10	FV	175	XK	315
FG	35	FW	18	XL	18
FH	18	FX	105	XM	155
FJ	25	FY	160	XN	20
FK	225	FZ	300	XP	190
FL	175	XA	415	XQ	148
FM	10	XB	155	XR	195
FN	155	XC	210		
FP	90	XD	250		

SPRING SIZE DEPENDENT DIMENSIONS					
	CD-11	CD-12	CD-13	CD-14	CD-15
SA	264	286	312	351	400
SB	284	306	332	371	420
SC	365	390	415	455	505
SD	385	410	435	475	525
SE	385	410	435	475	525
SF	210	210	215	215	220

WEIGHTS (kgf)					
	CD-11	CD-12	CD-13	CD-14	CD-15
H1/H2	55	55	60	65	75
V1/V2	60	60	65	70	80
VU1/VU2	60	65	70	75	80
HFMT	60	65	70	75	80
HFMH	50	55	60	65	70
VFM	55	55	60	65	75
VFMT	65	70	75	80	85
VUB	60	65	70	75	80

SINGLE POINT SUSPENSION DIMENSION 'V'								
MOVEMENT PROVIDED mm	ALL SIZES			CD-11	CD-12	CD-13	CD-14	CD-15
	V1	V3	V2	V2	V2	V2	V2	
40	43	48						
50	53	60						
60	63	71						
70	73	82						
80	82	93						
90	92	104	95					
100	101	114	104	107	110	112	113	
110	111	124	113	117	120	122	124	
120	120	135	122	126	130	133	135	
130	129	145	131	136	139	143	145	
140	138	155	140	145	149	153	156	
150	147	165	148	154	159	163	166	
160	155	174	156	163	168	173	176	
170			164	172	177	182	187	
180			172	180	187	192	197	
190			180	189	196	202	207	
200			188	197	205	211	217	
210			195	206	213	221	226	
220			203	214	222	230	236	
230			210	222	231	239	246	
240			217	230	239	248	255	
250			224	237	248	257	265	
260			231	245	256	266	274	
270			238	252	264	275	284	
280			245	260	272	283	293	
290			251	267	280	292	302	
300			258	274	288	300	311	
310			264	282	296	309	320	
320			270	289	304	317	329	
330			276	295	311	325	338	
340			282	302	319	334	347	
350			288	309	326	342	355	
360			294	316	333	350	364	
370			300	322	341	358	373	
380			305	329	348	366	381	
390			311	335	355	373	389	
400			316	341	362	381	398	
410			322	348	369	389	406	
420			327	354	376	396	414	
430			332	360	382	404	422	
440			337	366	389	411	431	
450			343	372	396	418	439	
460			348	377	402	426	447	
470			353	383	409	433	454	
480			357	389	415	440	462	
490			362	394	422	447	470	
500			367	400	428	454	478	
510			372	406	434	461	485	
520			376	411	440	468	493	
530			381	416	446	475	501	
540			385	422	452	482	508	
550			390	427	458	488	516	
560			394	432	464	495	523	
570			399	437	470	502	530	
580			403	442	476	508	537	
590			407	447	482	515	545	
600			411	452	487	521	552	

TYPES H1 AND VU1 ARE NOT USED ABOVE 160mm TRAVEL

INSTALLED HEIGHT DIMENSIONS J4 AND J7 ALLOW ±25mm ADJUSTMENT.

TAKE-OUT DIMENSIONS A1, A2, A3, J5, J6 AND J8 ALLOW ±75mm ADJUSTMENT.

WHERE SEVERE HEADROOM LIMITATIONS EXIST, DIMENSIONS A1, A2 AND A3 CAN BE REDUCED AND DIMENSIONS J5, J6 AND J8 INCREASED AS FOLLOWS BY USE OF A SHORTENED EYEBOLT:

ØX	M12	M16	M20	M24	M30
CHANGE mm	160	160	140	140	120

NOTE DIA. X IS THREADED ISO METRIC COARSE RIGHT HAND AS STANDARD. NOTE THAT

DIMENSIONS A1, A2, A3, J4, J5, J6, J7 AND J8 ARE GIVEN AT ZERO ROTATION, THAT IS WITH THE LEVER IN THE UPPERMOST POSITION.

N.B. DIMENSION TA IS THE MINIMUM FORWARD CLEARANCE REQUIRED.



# CE: DIMENSIONS FOR SIZES CE-16 TO CE-19

MOVEMENT DEPENDENT DIMENSIONS									
MOVEMENT PROVIDED mm	TRAVEL RANGE DEPENDENT DIMENSIONS								
	60-100	110-170	180-240	250-330	340-400	410-500	510-600	610-750	
U	235	235	235	235	235	450	450	450	
TA	218	310	401	519	610	741	872	1068	
TB	280	280	280	325	375	450	525	635	
TC	300	300	300	300	300	480	480	480	
TD	135	135	135	160	160	180	200	225	
TE	230	230	280	350	400	475	525	635	
TF	300	300	300	390	450	530	610	720	
TG	150	150	150	175	175	195	215	240	
TH	150	150	150	175	175	195	215	240	
TJ	255	255	255	255	255	255	255	255	
DD	33	26	22	22	22	22	22	22	
AA	70	60	50	50	50	50	50	50	
BB	55	45	35	35	35	35	35	35	
CC	100	80	60	60	60	60	60	60	
EE	12	10	10	10	10	10	10	10	
GG	40	35	30	30	30	30	30	30	
LL	M30	M24	M20	M20	M20	M20	M20	M20	
DD	40	33	22	22	22	22	22	22	
AA	80	70	50	50	50	50	50	50	
BB	55	55	35	35	35	35	35	35	
CC	110	100	60	60	60	60	60	60	
EE	15	12	10	10	10	10	10	10	
GG	45	40	30	30	30	30	30	30	
LL	M36	M30	M20	M20	M20	M20	M20	M20	
DD	40	33	26	26	26	22	22	22	
AA	80	70	60	60	60	50	50	50	
BB	55	55	45	45	45	35	35	35	
CC	110	100	80	80	80	60	60	60	
EE	15	12	10	10	10	10	10	10	
GG	45	40	35	35	35	30	30	30	
LL	M36	M30	M24	M24	M24	M20	M20	M20	
DD	46	33	26	26	26	22	22	22	
AA	90	70	60	60	60	50	50	50	
BB	75	55	45	45	45	35	35	35	
CC	130	100	80	80	80	60	60	60	
EE	15	12	10	10	10	10	10	10	
GG	60	40	35	35	35	10	10	10	
LL	M42	M30	M24	M24	M24	M20	M20	M20	

FIXED DIMENSIONS					
FA	410	FQ	120	XE	22
FB	141	FR	265	XF	320
FC	110	FS	360	XG	235
FD	92	FT	235	XH	170
FE	319	FU	65	XJ	260
FF	12	FV	205	XK	465
FG	65	FW	22	XL	22
FH	22	FX	140	XM	215
FJ	30	FY	190	XN	25
FK	265	FZ	380	XP	265
FL	205	XA	600	XQ	182
FM	15	XB	235	XR	255
FN	215	XC	305		
FP	100	XD	320		

SPRING SIZE DEPENDENT DIMENSIONS				
	CE-16	CE-17	CE-18	CE-19
SA	472	519	538	583
SB	497	544	563	608
SC	590	635	655	700
SD	615	660	680	725
SE	615	660	680	725
SF	305	310	310	315

WEIGHTS (kgf)				
	CE-16	CE-17	CE-18	CE-19
H1/H2	120	130	140	150
V1/V2	130	140	150	160
VU1/VU2	135	145	155	165
HFMT	135	145	155	165
HFMH	120	130	135	150
VFM	125	135	140	155
VFMT	145	160	165	175
VUB	130	140	150	160

SINGLE POINT SUSPENSION DIMENSION 'V'						
MOVEMENT PROVIDED mm	ALL SIZES		CE-16	CE-17	CE-18	CE-19
	V1	V3	V2	V2	V2	V2
60	64	73				
70	75	85				
80	86	96				
90	96	107				
100	105	119	110			
110	116	130	121	122	124	125
120	126	141	131	133	134	136
130	135	152	141	143	145	146
140	145	163	151	153	155	157
150	155	174	161	163	166	168
160	164	184	171	173	176	178
170	174	195	180	183	186	189
180	183	205	190	193	197	199
190	193	216	200	203	207	209
200	202	226	209	213	217	220
210	211	236	218	222	227	230
220	220	246	227	232	236	240
230	229	256	237	241	246	250
240	238	266	246	251	256	260
250			254	260	265	270
260			263	269	275	279
270			272	278	284	289
280			281	287	294	299
289			289	296	303	309
300			298	305	312	318
310			306	314	322	328
320			314	322	331	337
330			323	331	340	346
340			331	340	349	356
350			339	348	357	365
360			347	356	366	374
370			355	365	375	383
380			363	373	384	392
390			370	381	392	401
400			378	389	401	410
410			386	397	409	419
420			393	405	418	428
430			401	413	426	436
440			408	421	435	445
450			415	429	443	454
460			423	437	451	462
470			430	444	459	471
480			437	452	467	479
490			444	460	475	488
500			451	467	483	496
510			458	474	491	505
520			465	482	499	513
530			472	489	507	521
540			479	496	515	529
550			485	504	522	537
560			492	511	530	545
570			499	518	538	553
580			505	525	545	561
590			512	532	553	569
600			518	539	560	577
610			525	546	567	585
620			531	553	575	593
630			537	559	582	600
640			544	566	589	608
650			550	573	597	616
660			556	579	604	623
670			562	586	611	631
680			568	592	618	638
690			574	599	625	646
700			580	605	632	653
710			586	612	639	661
720			592	618	646	668
730			597	624	652	675
740			603	631	659	682
750			609	637	666	690

TYPES H1 AND VU1 ARE NOT USED ABOVE 240mm TRAVEL

INSTALLED HEIGHT DIMENSIONS J4 AND J7 ALLOW ±25mm ADJUSTMENT.

TAKE-OUT DIMENSIONS A1, A2, A3, J5, J6 AND J8 ALLOW ±75mm ADJUSTMENT.

WHERE SEVERE HEADROOM LIMITATIONS EXIST, DIMENSIONS A1, A2 AND A3 CAN BE REDUCED AND DIMENSIONS J5, J6 AND J8 INCREASED AS FOLLOWS BY USE OF A SHORTENED EYEBOLT:

ØX CHANGE mm	M12	M16	M20	M24	M30	M36	M42
	160	160	140	140	120	100	80

NOTE DIA. X IS THREADED ISO METRIC COARSE RIGHT HAND AS STANDARD. NOTE THAT DIMENSIONS A1, A2, A3, J4, J5, J6, J7 AND J8 ARE GIVEN AT ZERO ROTATION, THAT IS WITH THE LEVER IN THE UPPERMOST POSITION.

N.B. DIMENSION TA IS THE MINIMUM FORWARD CLEARANCE REQUIRED.



# CF: DIMENSIONS FOR SIZES CF-20 TO CF-23

MOVEMENT DEPENDENT DIMENSIONS										
MOVEMENT PROVIDED mm	TRAVEL RANGE DEPENDENT DIMENSIONS									
	80-130	140-210	220-300	310-410	420-500	510-600	610-750			
TRAVEL RANGE DEPENDENT DIMENSIONS	U	290	290	290	290	400	400	400	400	
	TA	276	379	496	639	756	886	1080		
	TB	355	355	355	395	460	535	645		
	TC	380	380	380	380	450	450	450		
	TD	190	190	190	210	210	230	250		
	TE	295	295	355	435	500	575	645		
	TF	380	380	380	475	550	630	745		
	TG	205	205	205	225	225	240	265		
	TH	205	205	205	225	225	240	265		
	TJ	305	305	305	305	305	305	305		
TOP SUSPENSION DETAILS	CF-20	DD	46	40	33	33	33	33	33	
		AA	90	80	70	70	70	70	70	
		BB	75	55	55	55	55	55	55	
		CC	130	110	100	100	100	100	100	
		EE	15	15	12	12	12	12	12	
	CF-21	GG	M42	M36	M30	M30	M30	M30	M30	
		DD	52	40	33	33	33	33	33	
		AA	105	80	70	70	70	70	70	
		BB	85	55	55	55	55	55	55	
		CC	150	110	100	100	100	100	100	
CF-22	EE	20	15	12	12	12	12	12		
	GG	M48	M36	M30	M30	M30	M30	M30		
	LL	M48	M36	M30	M30	M30	M30	M30		
	DD	52	46	40	33	33	33	33		
	AA	105	90	80	70	70	70	70		
CF-23	BB	85	75	55	55	55	55	55		
	CC	150	130	110	110	100	100	100		
	EE	20	15	15	15	12	12	12		
	GG	M56	M42	M36	M36	M30	M30	M30		
	LL	M56	M42	M36	M36	M30	M30	M30		

FIXED DIMENSIONS					
FA	520	FQ	150	XE	33
FB	177	FR	355	XF	430
FC	160	FS	455	XG	290
FD	111	FT	290	XH	210
FE	394	FU	75	XJ	340
FF	15	FV	265	XK	590
FG	75	FW	33	XL	33
FH	33	FX	200	XM	280
FJ	45	FY	260	XN	40
FK	355	FZ	490	XP	345
FL	265	XA	760	XQ	228
FM	20	XB	290	XR	305
FN	280	XC	380		
FP	150	XD	400		

SPRING SIZE DEPENDENT DIMENSIONS				
	CF-20	CF-21	CF-22	CF-23
SA	662	735	782	848
SB	702	775	822	888
SC	830	900	950	1015
SD	855	925	975	1040
SE	855	925	975	1040
SF	380	385	390	395

WEIGHTS (kgf)				
	CF-20	CF-21	CF-22	CF-23
H1/H2	270	300	330	370
V1/V2	290	320	350	380
VU1/VU2	300	330	360	390
HFMT	300	330	360	390
HFMH	260	290	320	360
VFM	280	310	340	370
VFMCS	320	350	380	410
VUB	290	320	340	380

SINGLE POINT SUSPENSION DIMENSION 'V'							
MOVEMENT PROVIDED mm	ALL SIZES			CF-20	CF-21	CF-22	CF-23
	V1	V3	V2	V2	V2	V2	
80	83	97					
90	93	108					
100	103	120					
110	112	131					
120	122	142					
130	132	153	142	143			
140	141	164	152	153	155	156	
150	151	175	162	164	165	167	
160	160	186	172	174	176	177	
170	170	197	182	184	186	188	
180	179	208	192	194	196	198	
190	188	218	201	204	206	208	
200	197	228	211	214	216	219	
210	206	239	220	223	226	229	
220	215	249	230	233	236	239	
230	224	259	239	243	246	249	
240	233	270	248	252	256	259	
250	241	279	258	262	265	269	
260	250	289	267	271	275	279	
270	259	299	276	280	284	288	
280	267	309	285	289	294	298	
290	275	319	293	298	303	308	
300	284	328	302	307	312	317	
310			311	316	322	327	
320			319	325	331	336	
330			328	334	340	346	
340			336	343	349	355	
350			345	352	358	364	
360			353	360	367	373	
370			361	369	376	382	
380			369	377	384	392	
390			378	386	393	401	
400			386	394	402	410	
410			394	402	410	418	
420			401	410	419	427	
430			409	419	427	436	
440			417	427	436	445	
450			425	435	444	453	
460			432	443	452	462	
470			440	451	461	471	
480			447	459	469	479	
490			455	466	477	488	
500			462	474	485	496	
510			470	482	493	505	
520			477	489	501	513	
530			484	497	509	521	
540			491	505	517	529	
550			498	512	525	538	
560			505	519	532	546	
570			512	527	540	554	
580			519	534	548	562	
590			526	541	555	570	
600			533	549	563	578	
610			540	556	571	586	
620			547	563	578	593	
630			553	570	585	601	
640			560	577	593	609	
650			566	584	600	617	
660			573	591	607	624	
670			579	598	615	632	
680			586	604	622	639	
690			592	611	629	647	
700			599	618	636	655	
710			605	625	643	662	
720			611	631	650	669	
730			617	638	657	677	
740			624	644	664	684	
750			630	651	671	691	

TYPES H1 AND VU1 ARE NOT USED ABOVE 300mm

INSTALLED HEIGHT DIMENSIONS J4 AND J7 ALLOW ±25mm ADJUSTMENT.

TAKE-OUT DIMENSIONS A1, A2, A3, J5, J6 AND J8 ALLOW ±75mm ADJUSTMENT.

WHERE SEVERE HEADROOM LIMITATIONS EXIST, DIMENSIONS A1, A2 AND A3 CAN BE REDUCED AND DIMENSIONS J5, J6 AND J8 INCREASED AS FOLLOWS BY USE OF A SHORTENED EYEBOLT:

ØX	M16	M20	M24	M30	M36	M42	M48	M56
CHANGE mm	160	140	140	120	100	80	NIL	NIL

NOTE DIA. X IS THREADED ISO METRIC COARSE RIGHT HAND AS STANDARD. NOTE THAT DIMENSIONS A1, A2, A3, J4, J5, J6, J7 AND J8 ARE GIVEN AT ZERO ROTATION, THAT IS WITH THE LEVER IN THE UPPERMOST POSITION.

N.B. DIMENSION TA IS THE MINIMUM FORWARD CLEARANCE REQUIRED.





## CG: DIMENSIONS FOR SIZES CG-24 TO CG-27

MOVEMENT DEPENDENT DIMENSIONS									
MOVEMENT PROVIDED mm	90-180		190-340		350-440		450-540		
	90-180	190-340	350-440	450-540	550-640	650-750			
TRAVEL RANGE DEPENDENT DIMENSIONS	U	355	355	385	385	525	525		
	TA	445	630	745	860	975	1102		
	TB	510	510	540	540	600	665		
	TC	475	475	475	475	600	600		
	TD	270	270	270	270	270	280		
	TE	510	510	540	600	640	695		
	TF	475	475	525	600	685	770		
	TG	290	290	290	290	290	300		
	TH	290	290	290	290	290	300		
	TJ	460	460	460	460	460	460		
	TOP SUSPENSION DETAILS	CG-24	DD	60	46	40	40	40	40
			AA	120	90	80	80	80	80
BB			100	75	55	55	55	55	
CC			180	130	110	110	110	110	
EE			20	15	15	15	15	15	
GG			75	60	45	45	45	45	
LL		M56	M42	M36	M36	M36	M36		
CG-25		DD	68	52	40	40	40	40	
		AA	140	105	80	80	80	80	
		BB	115	85	55	55	55	55	
		CC	200	150	110	110	110	110	
		EE	20	20	15	15	15	15	
		GG	80	70	45	45	45	45	
LL		M64	M48	M36	M36	M36	M36		
CG-26		DD	68	60	46	46	40	40	
		AA	140	120	90	90	80	80	
		BB	115	100	75	75	55	55	
		CC	200	180	130	130	110	110	
		EE	20	20	15	15	15	15	
		GG	80	75	60	60	45	45	
LL		M64	M56	M42	M42	M36	M36		
CG-27		DD	76	60	52	46	46	46	
		AA	155	120	105	90	90	90	
		BB	130	100	85	75	75	75	
	CC	220	180	150	130	130	130		
	EE	25	20	20	15	15	15		
	GG	90	75	70	60	60	60		
LL	M72	M56	M48	M42	M42	M42			

FIXED DIMENSIONS					
FA	655	FQ	150	XE	40
FB	228	FR	480	XF	570
FC	240	FS	585	XG	355
FD	179	FT	355	XH	320
FE	526	FU	100	XJ	440
FF	25	FV	350	XK	805
FG	100	FW	40	XL	40
FH	40	FX	280	XM	400
FJ	65	FY	375	XN	50
FK	480	FZ	630	XP	500
FL	350	XA	1020	XQ	302
FM	30	XB	355	XR	460
FN	400	XC	535		
FP	230	XD	500		

SPRING SIZE DEPENDENT DIMENSIONS				
	CG-24	CG-25	CG-26	CG-27
SA	868	868	868	868
SB	918	918	918	918
SC	1115	1115	1115	1115
SD	1150	1150	1150	1150
SE	1150	1150	1150	1150
SF	540	540	540	540

WEIGHTS (kgf)				
	CG-24	CG-25	CG-26	CG-27
HS/HD	580	620	670	720
VS/VD	610	660	710	760
VIS/VID	630	680	730	780
HBMCS	630	670	720	770
HBM	560	610	650	710
VBM	590	640	690	740
VBMCS	670	720	770	820
VUB	610	650	700	750

SINGLE POINT SUSPENSION DIMENSION 'V'						
MOVEMENT PROVIDED mm	ALL SIZES		CG-24	CG-25	CG-26	CG-27
	V1	V3				
90	91	110				
100	101	122				
110	111	133				
120	120	144				
130	130	156				
140	139	167	149			
150	149	178	158	162	165	166
160	157	189	168	172	175	177
170	167	200	178	182	185	187
180	176	211	187	192	196	198
190	185	222	197	202	206	208
200	194	232	206	212	216	218
210	203	243	216	222	226	229
220	212	254	225	232	236	239
230	220	264	234	241	246	249
240	229	275	243	251	256	259
250	238	285	252	260	266	269
260	246	295	261	270	275	279
270	255	305	270	279	285	289
280	263	315	279	288	295	299
290	272	325	287	297	304	308
300	280	335	296	307	314	318
310	288	345	304	316	323	328
320	297	355	313	325	331	337
330	305	364	321	334	342	347
340	313	374	330	342	351	356
350			338	351	360	366
360			346	360	369	375
370			354	369	378	384
380			362	377	387	394
390			370	386	396	403
400			378	394	405	412
410			386	403	414	421
420			394	411	423	430
430			401	419	431	439
440			409	428	440	448
450			416	436	449	457
460			424	444	457	466
470			431	452	466	475
480			439	460	474	483
490			446	468	483	492
500			454	476	491	501
510			461	484	499	509
520			468	492	508	518
530			475	500	516	527
540			482	507	524	535
550			489	515	532	543
560			496	523	540	552
570			503	530	548	560
580			510	538	556	569
590			517	545	564	577
600			523	553	572	585
610			530	560	580	593
620			537	567	588	601
630			543	575	596	609
640			550	582	603	617
650			556	589	611	625
660			563	596	619	633
670			569	603	626	641
680			576	610	634	649
690			582	617	641	657
700			588	624	649	665
710			594	631	656	673
720			601	638	663	680
730			607	645	671	688
740			613	652	678	696
750			619	658	685	703

TYPES H1 AND VU1 ARE NOT USED ABOVE 340mm TRAVEL

INSTALLED HEIGHT DIMENSIONS J4 AND J7 ALLOW ± 25mm ADJUSTMENT.

TAKE-OUT DIMENSIONS A1, A2, A3, J5, J6 AND J8 ALLOW ±75mm ADJUSTMENT.

WHERE SEVERE HEADROOM LIMITATIONS EXIST, DIMENSIONS A1, A2 AND A3 CAN BE REDUCED AND DIMENSIONS J5, J6 AND J8 INCREASED AS FOLLOWS BY USE OF A SHORTENED EYEBOLT:

ØX	M20	M24	M30	M36	M42	M48	M56	M64	M72
CHANGE mm	140	140	120	100	80	NIL	NIL	NIL	NIL

NOTE DIA. X IS THREADED ISO METRIC COARSE RIGHT HAND AS STANDARD.

NOTE THAT DIMENSIONS A1, A2, A3, J4, J5, J6, J7 AND J8 ARE GIVEN AT ZERO ROTATION, THAT IS WITH THE LEVER IN THE UPPERMOST POSITION.

N.B. DIMENSION TA IS THE MINIMUM FORWARD CLEARANCE REQUIRED.



## CG: DIMENSIONS FOR SIZES CG-28 TO CG-29

MOVEMENT DEPENDENT DIMENSIONS								
MOVEMENT PROVIDED mm	90-180		190-340		350-440		450-540	
	90-180	190-340	350-440	450-540	550-640	650-750		
TRAVEL RANGE DEPENDENT DIMENSIONS	U	355	355	385	385	525	525	
	TA	445	630	745	860	975	1102	
	TB	510	510	540	540	600	665	
	TC	475	475	475	475	600	600	
	TD	270	270	270	270	270	280	
	TE	510	510	570	600	655	700	
	TF	475	475	545	630	700	790	
	TG	290	290	290	290	290	300	
	TH	290	290	290	290	290	300	
	TJ	460	460	460	460	460	460	
TOP SUSPENSION DETAILS	CG-28	DD	76	68	52	52	46	46
		AA	155	140	105	105	90	90
		BB	130	115	85	85	75	75
		CC	220	200	150	150	130	130
		EE	25	20	20	20	15	15
		GG	90	80	70	70	60	60
	CG-29	LL	M72	M64	M48	M48	M42	M42
		DD	85	68	60	60	52	52
		AA	175	140	120	120	105	105
		BB	150	115	100	100	85	85
		CC	240	200	180	180	150	150
		EE	25	20	20	20	20	20
GG	100	80	75	75	70	70		
LL	M80	M64	M56	M56	M48	M48		

FIXED DIMENSIONS					
FA	710	FQ	150	XE	46
FB	228	FR	480	XF	570
FC	240	FS	585	XG	355
FD	179	FT	355	XH	320
FE	572	FU	100	XJ	440
FF	25	FV	350	XK	805
FG	100	FW	46	XL	40
FH	46	FX	280	XM	415
FJ	65	FY	375	XN	60
FK	480	FZ	680	XP	500
FL	350	XA	1060	XQ	302
FM	30	XB	355	XR	460
FN	415	XC	575		
FP	230	XD	550		

SPRING SIZE DEPENDENT DIMENSIONS		
	CG-28	CG-29
SA	999	999
SB	1059	1059
SC	1245	1245
SD	1280	1280
SE	1280	1280
SF	575	575

WEIGHTS (kgf)		
	CG-28	CG-29
H1/H2	930	1000
V1/V2	970	1040
VU1/VU2	990	1060
HFMT	1000	1070
HFMH	910	980
VFM	960	1030
VFMT	1050	1120
VUB	960	1030

SINGLE POINT SUSPENSION DIMENSION 'V'				
MOVEMENT PROVIDED mm	ALL SIZES		CG-28	CG-29
	V1	V3	V2	V2
120	123	145		
130	132	157		
140	142	168		
150	152	180		
160	162	191		
170	171	203		
180	181	214	196	
190	190	225	207	209
200	199	236	217	219
210	209	247	227	229
220	218	258	237	240
230	227	269	247	250
240	237	279	256	260
250	246	290	267	270
260	255	301	277	280
270	263	311	286	290
280	272	322	296	300
290	281	332	306	310
300	290	343	315	320
310	299	353	323	329
320	308	364	334	339
330	317	374	344	349
340	325	384	353	358
350			362	368
360			371	377
370			381	387
380			390	396
390			399	405
400			408	415
410			417	424
420			426	433
430			435	442
440			443	451
450			452	460
460			461	469
470			469	478
480			478	487
490			487	496
500			495	505
510			504	514
520			512	522
530			520	531
540			529	540
550			537	548
560			545	557
570			553	567
580			562	574
590			570	582
600			578	590
610			586	599
620			594	607
630			602	615
640			609	623
650			617	632
660			625	640
670			633	648
680			640	656
690			648	664
700			656	672
710			663	680
720			671	688
730			678	695
740			686	703
750			693	711

TYPES H1 AND VU1 ARE NOT USED ABOVE 340mm TRAVEL

INSTALLED HEIGHT DIMENSIONS J4 AND J7 ALLOW ± 25mm ADJUSTMENT.

TAKE-OUT DIMENSIONS A1, A2, A3, J5, J6 AND J8 ALLOW ±75mm ADJUSTMENT.

WHERE SEVERE HEADROOM LIMITATIONS EXIST, DIMENSIONS A1, A2 AND A3 CAN BE REDUCED AND DIMENSIONS J5, J6 AND J8 INCREASED AS FOLLOWS BY USE OF A SHORTENED EYEBOLT:

ØX	M36	M42	M48	M56	M64	M72	M80
CHANGE mm	100	80	NIL	NIL	NIL	NIL	NIL

NOTE DIA. X IS THREADED ISO METRIC COARSE RIGHT HAND AS STANDARD.

NOTE THAT DIMENSIONS A1, A2, A3, J4, J5, J6, J7 AND J8 ARE GIVEN AT ZERO ROTATION, THAT IS WITH THE LEVER IN THE UPPERMOST POSITION.

N.B. DIMENSION TA IS THE MINIMUM FORWARD CLEARANCE REQUIRED.



## CH: DIMENSIONS FOR SIZE CH-30

MOVEMENT DEPENDENT DIMENSIONS								
MOVEMENT PROVIDED mm	150-190		200-340		350-440		450-540	
	U	300	400	400	500	500	600	600
TRAVEL RANGE DEPENDENT DIMENSIONS	TA	470	600	720	850	970	1110	
	TB	650	650	650	650	650	705	
	TC	440	520	520	615	615	690	
	TE	—	650	650	650	675	705	
	TF	—	540	540	620	700	775	
	TG	320	320	320	320	320	320	
	TOP SUSPENSION DETAILS	DD	95	76	68	60	60	52
AA		200	155	140	120	120	105	
BB		170	130	115	100	100	85	
CC		260	220	200	180	180	150	
EE		30	25	20	20	20	20	
GG		120	90	80	75	75	70	

FIXED DIMENSIONS			
FA	812	FR	565
FB	332	FS	660
FC	330	FT	400
FD	179	FU	150
FE	657	FV	455
FF	25	FW	40
FG	150	SA	1200
FP	280	SC	1540

WEIGHTS (kgf)	
	CH-30
H1/H2	1570
V1/V2	1660
HFMH	1540

CH-30 SUPPORTS ARE AVAILABLE IN THE FOLLOWING TYPES

TYPE HFMH

TYPE H1, STYLE S2 AND S3

TYPE H2, STYLE S2, S3 AND S4

TYPE V1, STYLE S2 AND S3

TYPE V2, STYLE S2, S3 AND S4

TAKE-OUT DIMENSIONS A1, A2 AND J5 ALLOW  $\pm 75$ mm ADJUSTMENT

NOTE DIA. X IS THREADED ISO METRIC COARSE RIGHT HAND AS STANDARD.

NOTE THAT DIMENSIONS A1, A2 AND J5 ARE GIVEN AT ZERO ROTATION, THAT IS WITH THE LEVER IN THE UPPERMOST POSITION.

MOVEMENT PROVIDED mm	ØX mm	ALL			H1 H2	H1	V1 V2	V1	HFMH
		C mm	D mm	E mm	A1 mm	V1 mm	A2 mm	V2 mm	J5 mm
		AT ZERO ROTATION							
150	M90	201	164	115	1210	141			-240
160	M80	214	175	123	1102	150			-132
170	M80	228	186	130	1095	159			-125
180	M80	241	197	138	1087	168			-117
190	M80	254	208	146	1079	177			-109
200	M72	268	219	154	991	186	991	215	-21
210	M72	281	230	161	984	194	984	224	-14
220	M72	294	241	169	976	203	976	234	-6
230	M72	308	252	177	968	211	968	244	2
240	M72	321	263	184	961	220	961	254	9
250	M72	335	274	192	953	228	953	264	17
260	M64	348	285	200	895	237	895	273	75
270	M64	361	296	207	888	245	888	283	82
280	M64	375	307	215	880	253	880	293	90
290	M64	388	318	223	872	261	872	302	98
300	M64	401	329	230	865	270	865	312	105
310	M64	415	340	238	857	278	857	321	113
320	M64	428	351	246	849	286	849	330	121
330	M64	442	362	253	842	294	842	339	128
340	M56	455	373	261	819	302	819	349	151
350	M56	468	384	269	811	310	811	358	159
360	M56	482	395	276	804	318	804	367	166
370	M56	495	406	284	796	325	796	376	174
380	M56	509	417	292	788	333	788	385	182
390	M56	522	428	299	781	341	781	394	189
400	M56	535	439	307	773	348	773	403	197
410	M56	549	449	315	765	356	765	411	205
420	M56	562	460	322	758	364	758	420	212
430	M56	575	471	330	750	371	750	429	220
440	M56	589	482	338	742	379	742	437	228
450	M56	602	493	345	735	386	735	446	235
460	M56	616	504	353	727	394	727	455	243
470	M48	629	515	361	704	401	704	463	266
480	M48	642	526	368	697	408	697	471	273
490	M48	656	537	376	689	415	689	480	281
500	M48	669	548	384	681	423	681	488	289
510	M48	683	559	391	674	430	674	496	296
520	M48	696	570	399	666	437	666	505	304
530	M48	709	581	407	658	444	658	513	312
540	M48	723	592	415	650	451	650	521	320
550	M48	736	603	422	643	458	668	529	327
560	M48	749	614	430	635	465	660	537	335
570	M48	763	625	438	627	472	652	545	343
580	M48	776	636	445	620	479	645	553	350
590	M48	790	647	453	612	486	637	561	358
600	M48	803	658	461	604	493	629	569	366
610	M42	816	669	468	557	499	582	577	413
620	M42	830	680	476	549	506	574	584	421
630	M42	843	691	484	541	513	566	592	429
640	M42	857	702	491	534	520	559	600	436
650	M42	870	713	499	581	526	581	608	444
660	M42	883	724	507	573	533	573	615	452
670	M42	897	734	514	566	539	566	623	459
680	M42	910	745	522	558	546	558	630	467
690	M42	923	756	530	550	552	550	638	475
700	M42	937	767	537	543	559	543	645	482
710	M42	950	778	545	535	565	535	653	490
720	M42	964	789	553	527	571	527	660	498
730	M42	977	800	560	520	578	520	667	505
740	M42	990	811	568	512	584	512	674	513
750	M42	1004	822	576	504	590	504	682	521



## CH: DIMENSIONS FOR SIZE CH-31

MOVEMENT DEPENDENT DIMENSIONS								
MOVEMENT PROVIDED mm	160-190		200-340		350-440		450-640	
	160-190	200-340	350-440	450-640	550-640	650-750		
TRAVEL RANGE DEPENDENT DIMENSIONS	U	300	400	400	500	500	600	
	TA	470	600	720	850	970	1110	
	TB	650	650	650	650	650	705	
	TC	440	520	520	615	615	690	
	TE	—	650	650	650	675	705	
	TF	—	540	540	620	700	775	
	TG	320	320	320	320	320	320	
TOP SUSPENSION DETAILS	DD	95	85	68	68	68	60	
	AA	200	175	140	140	140	120	
	BB	170	150	115	115	115	100	
	CC	260	240	200	200	200	180	
	EE	30	25	20	20	20	20	
	GG	120	100	80	80	80	75	

FIXED DIMENSIONS			
FA	876	FR	565
FB	332	FS	660
FC	330	FT	400
FD	179	FU	150
FE	733	FV	455
FF	25	FW	40
FG	150	SA	1250
FP	280	SC	1590

WEIGHTS (kgf)	
	CH-31
H1/H2	1950
V1/V2	2040
HFMH	1920

CH-31 SUPPORTS ARE AVAILABLE IN THE FOLLOWING TYPES

TYPE HFMH

TYPE H1, STYLE S2 AND S3

TYPE H2, STYLE S2, S3 AND S4

TYPE V1, STYLE S2 AND S3

TYPE V2, STYLE S2, S3 AND S4

TAKE-OUT DIMENSIONS A1, A2 AND J5 ALLOW  $\pm 75$ mm ADJUSTMENT

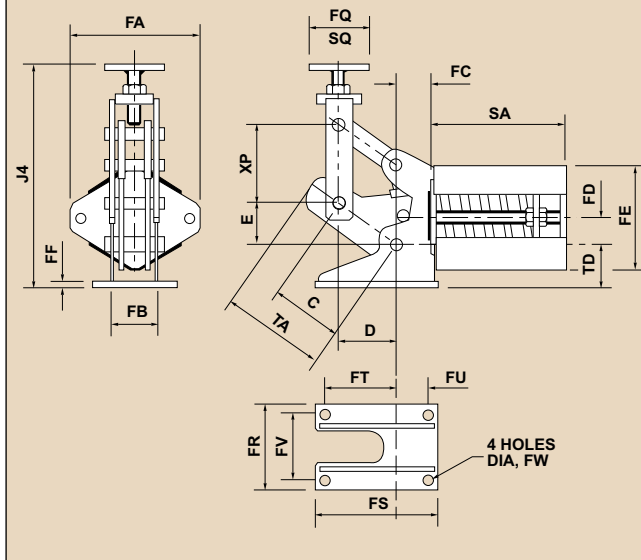
NOTE DIA. X IS THREADED ISO METRIC COARSE RIGHT HAND AS STANDARD.

NOTE THAT DIMENSIONS A1, A2 AND J5 ARE GIVEN AT ZERO ROTATION, THAT IS WITH THE LEVER IN THE UPPERMOST POSITION.

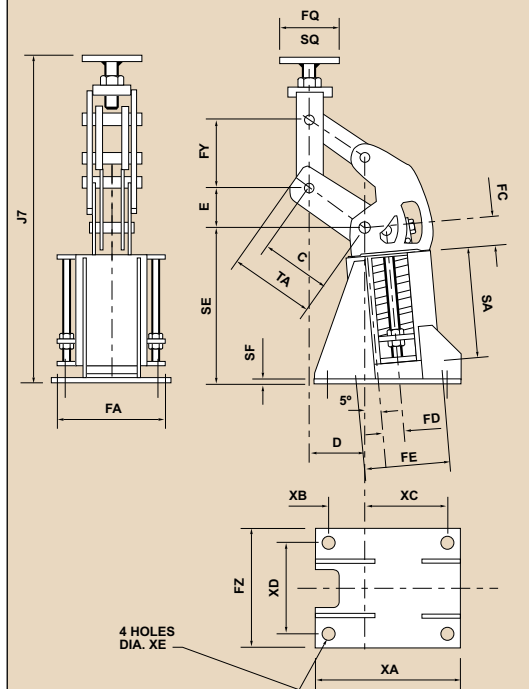
MOVEMENT PROVIDED mm	ØX mm	ALL			H1 H2	H1	V1 V2	V1	HFMH
		C mm	D mm	E mm	A1 mm	V1 mm	A2 mm	V2 mm	J5 mm
		AT ZERO ROTATION							
160	M90	214	175	123	1202	148			-232
170	M90	228	186	130	1195	157			-225
180	M90	241	197	138	1187	166			-217
190	M90	254	208	146	1179	174			-209
200	M80	268	219	154	1071	183			-101
210	M80	281	230	161	1064	191			-94
220	M80	294	241	169	1056	200			-86
230	M80	308	252	177	1048	208			-78
240	M80	321	263	184	1041	216	1041	254	-71
250	M72	335	274	192	953	225	953	263	17
260	M72	348	285	200	945	233	945	273	25
270	M72	361	296	207	938	241	938	283	32
280	M72	375	307	215	930	249	930	292	40
290	M72	388	318	223	922	257	922	302	48
300	M72	401	329	230	915	266	915	311	55
310	M72	415	340	238	907	274	907	320	63
320	M64	428	351	246	849	281	849	330	121
330	M64	442	362	253	842	289	842	339	128
340	M64	455	373	261	834	297	834	348	136
350	M64	468	384	269	826	305	826	357	144
360	M64	482	395	276	819	313	819	366	151
370	M64	495	406	284	811	320	811	375	159
380	M64	509	417	292	803	328	803	384	167
390	M64	522	428	299	796	336	796	393	174
400	M64	535	439	307	788	343	788	402	182
410	M64	549	449	315	780	351	780	411	190
420	M64	562	460	322	773	358	773	419	197
430	M56	575	471	330	750	366	750	428	220
440	M56	589	482	338	742	373	742	437	228
450	M56	602	493	345	735	380	735	445	235
460	M56	616	504	353	727	388	727	454	243
470	M56	629	515	361	719	395	719	462	251
480	M56	642	526	368	712	402	712	471	258
490	M56	656	537	376	704	409	704	479	266
500	M56	669	548	384	696	416	696	488	274
510	M56	683	559	391	689	424	689	496	281
520	M56	696	570	399	681	431	681	504	289
530	M56	709	581	407	673	438	673	512	297
540	M56	723	592	415	665	445	665	520	305
550	M56	736	603	422	658	451	658	529	312
560	M56	749	614	430	650	458	650	537	320
570	M56	763	625	438	642	465	642	545	328
580	M56	776	636	445	635	472	635	553	335
590	M48	790	647	453	612	479	637	560	358
600	M48	803	658	461	604	485	629	568	366
610	M48	816	669	468	597	492	622	576	373
620	M48	830	680	476	589	499	614	584	381
630	M48	843	691	484	581	505	606	592	389
640	M48	857	702	491	574	512	599	599	396
650	M48	870	713	499	567	519	592	607	404
660	M48	883	724	507	560	525	585	615	412
670	M48	897	734	514	553	531	578	622	419
680	M48	910	745	522	546	538	571	630	427
690	M48	923	756	530	539	544	564	637	435
700	M48	937	767	537	533	551	557	645	442
710	M48	950	778	545	527	557	550	652	450
720	M48	964	789	553	520	563	543	659	458
730	M48	977	800	560	514	569	536	667	465
740	M48	990	811	568	508	576	529	674	473
750	M48	1004	822	576	501	582	522	681	481

# CONSTANT EFFORT SUPPORTS: BASE MOUNTED TYPES

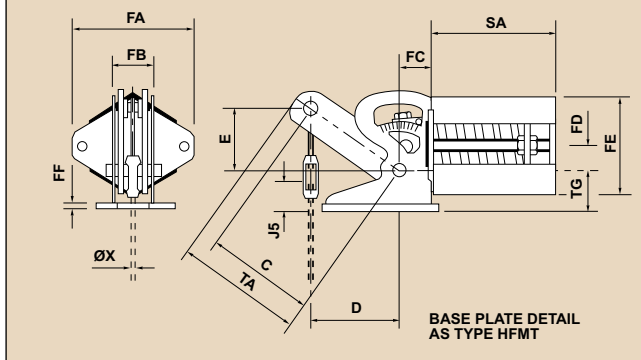
## TYPE HFMT



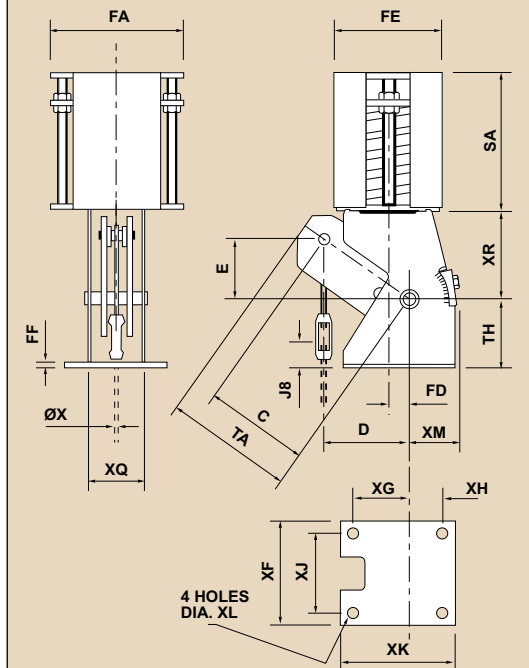
## TYPE VFMT



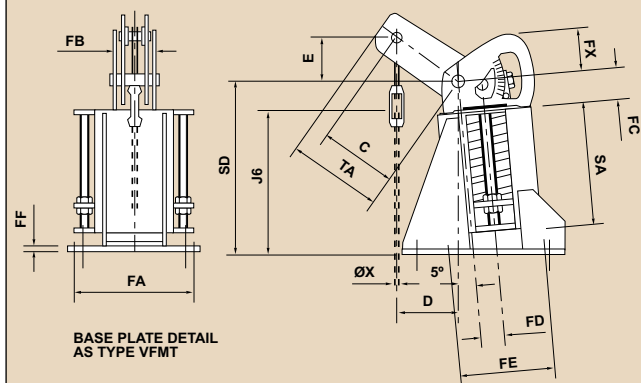
## TYPE HFMH



## TYPE VUB



## TYPE VFM





**TURN OUT THIS PAGE FOR DETAILS OF SUPPORT SIZE CH-31  
AND FOR DIAGRAMS OF CONSTANT EFFORT SUPPORTS: BASE  
MOUNTED TYPES**

## CONSTANT EFFORT SUPPORTS

Constant Effort Support  
Type HFMT  
Onsite.



Constant Effort Support —  
Type HFMT

### DESCRIPTION

Sway Braces are essentially a double-acting spring, housed in a canister. Unlike variable effort supports, Sway Braces are not intended to carry the weight of pipework; their purpose is to limit undesirable movement.

Sway Braces act like a rigid strut until a small preload is reached, whereafter the restraining force increases in proportion to the applied deflection. Fig. 1

Undesirable movement can occur due to many phenomena, such as wind loading, sympathetic vibration, rapid valve closure, relief valves opening, two phase flow or earthquake. It may be necessary to limit this type of deflection to prevent the generation of unacceptable stresses and equipment loadings.

The Sway Brace is a cost-effective means of limiting pipework deflection. It should be noted however that it does provide some resistance to the thermal movement of the pipework and care should be taken when specifying to ensure that this is acceptable. Installation of Sway Braces will have the effect of raising the fundamental frequency of vibration of a pipework system; this is likely to reduce undesirable deflections.

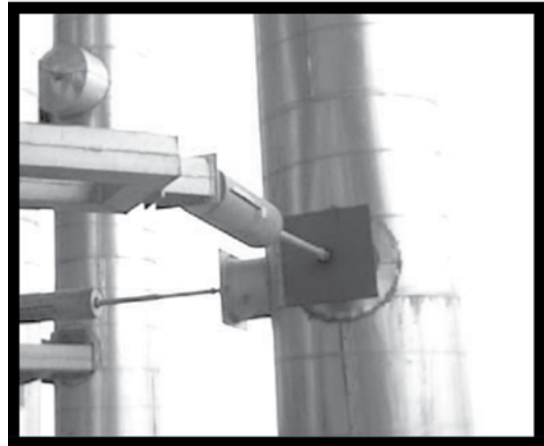
Sway Braces are often used to solve unforeseen problems of resonant vibration.

### THE PH SPL RANGE OF SWAY BRACES

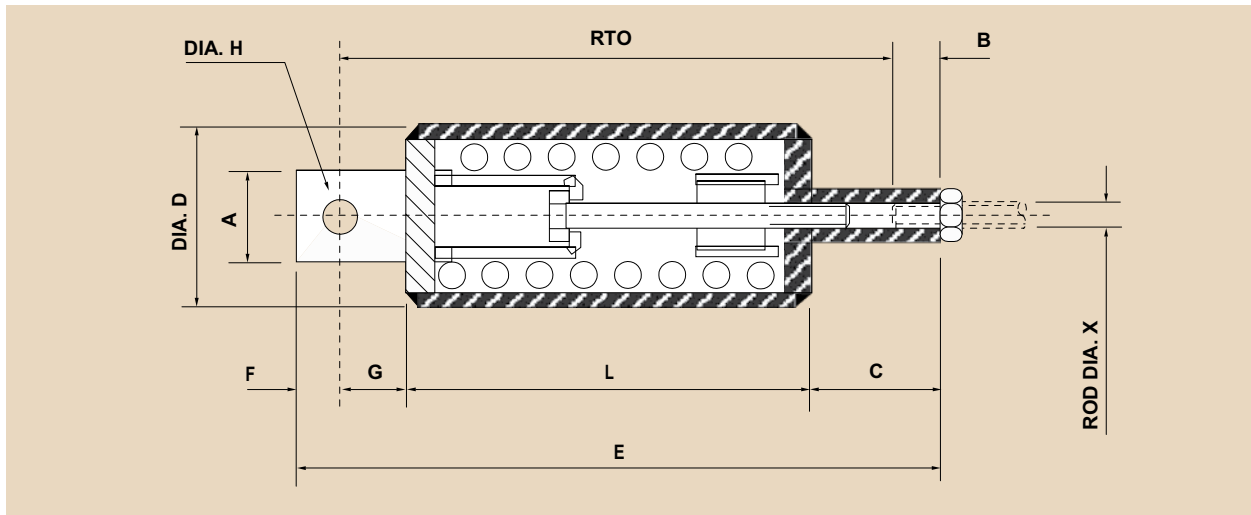
PHSPL offer a range of eight Sway Braces, all of which limit movement to a maximum of 70mm in either direction. Preloads range from 14 kgf to 1040 kgf and corresponding maximum loads from 85 to 6170 kgf.

### SELECTION

Care should be taken when selecting to ensure the Sway Brace provides sufficient force to limit the deflection caused by the dynamic occurrence, but not so much as to unduly restrain the thermal movement of the piping. Ideally selections should be checked by analysis.



## SWAY BRACES



SIZE	SWB1	SWB2	SWB3	SWB4	SWB5	SWB6	SWB7	SWB8
PRELOAD kgf	14	45	140	300	400	535	770	1040
MAX LOAD kgf	85	260	800	1860	2470	3340	4620	6170
RATE kgf/mm	1.0	3.1	9.5	22.3	29.6	40.1	55.1	73.2
PRELOAD N	137	441	1370	2940	3920	5250	7550	10200
MAX. LOAD N	834	2550	7850	18240	24220	32750	45310	60510
RATE N/mm	9.8	30.4	93.2	219	290	393	540	718
RTO mm	308	305	311	359	395	406	447	495
ROD SIZE X	M20	M24	M24	M30	M36	M36	M42	M48
A mm	80	80	80	100	100	100	110	130
B mm	25	30	30	38	45	45	53	60
C mm	80	80	78	75	95	90	100	105
DIA. D mm	102	102	152	168	168	219	219	219
E mm	378	380	386	462	505	516	575	640
F mm	45	45	45	65	65	65	75	85
G mm	60	60	60	80	80	80	90	105
DIA. H mm	26	26	26	39	39	39	45	52
L mm	193	195	203	242	265	281	310	345
WEIGHT kgf	6.8	7.6	16	27	31	51	60	73

### STANDARD DESIGN FEATURES

1. Rugged construction.
2. Compact design.
3. Spring preloaded.
4. 70 mm of travel in both directions.
5. Painted finish as standard.

### NON STANDARD DESIGN FEATURES

1. Sway Braces are available in all the corrosion-resistant materials and finishes which are applicable to our range of variable effort supports.
2. Special units to suit particular preload and spring rate requirements are available. Please contact our design department for details.

### ORDERING INFORMATION

1. Size
2. Finish if other than PHSP standard.
3. Thread form if other than isometric coarse.
4. Mark No. (if known).

### INSTALLATION AND ERECTION

Refer manual

### MAINTENANCE

Periodic inspection should be made at intervals to suit the operating environment. Check for visual damage, corrosion and wear.





Rigid Strut with  
Fig RY3 stiff clamp



Fig RY4 stiff clamp

## DYNAMIC RESTRAINTS

Pipe work can be subjected to dynamic loading caused by earth quakes, 2 Phase flow, water hammer, safety relief valve opening etc. These are transient events, in most cases unpredictable and can cause considerable damage to pipe work, even accidents and loss of life.

Pipes are normally supported by Rod hangers or spring hangers with a combination of pipe shoes etc., all subjected to single direction acting loads. Rod hangers are subjected to tensile loads as the pipe is hanging from them. If the pipe moves up then the load acting direction changes from tensile to compression and the rod hangers will immediately buckle and fail.

Pipe work subjected to dynamic forces and vibration needs to be supported using rigid struts which act in both directions rather than hanger rods which support only downward acting loads. Rigid struts can be used in combination to act like a restraint in 1 or multiple axes.

Rigid struts are also used as lateral restraint where this is required.

### RIGID STRUT — TYPE. RS

The comprehensive range of Rigid Struts manufactured by Pipe Hangers & Supports Private limited covers loadings up to more than 90 Ton force and lengths of up to 6 meters. Provision of spherical bearings on hinge points allow angulation and off centre loadings. The struts are designed to provide a length adjustment at site of  $\pm 100$  mm by use of left hand / right hand threads with out disconnecting from installed position.

The easy to use selection process and numbering system allow quick selection of strut size from the load / length chart. Once the size is known selecting the structural welding clevis and pipe clamp is very easy.

Where there are length limitations, Pipe Hangers & Supports have introduced short length struts with limited field adjustment facility, refer tables for details.

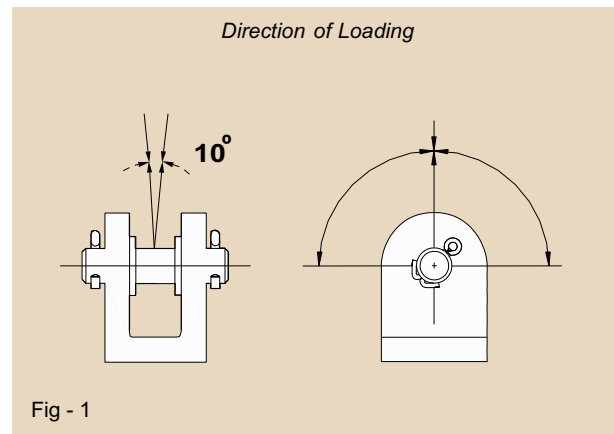
### WELDING CLEVIS — TYPE. RWC

The strut is attached to the structure / steel work by use of the welding clevis. The welding clevis (as shown in Fig 1) is capable of providing  $\pm 5$  Degrees and  $\pm 90$  Degrees of angulation as shown in the figure.

### CLAMPS FOR RIGID STRUTS (TYPE RY3, RY4 AND RY5)

Pipe hangers and Supports offer a wide variety of clamps for rigid struts.

- The RY3 is a yoke type stiff clamp profiled from a single plate and used in conjunction with a sheathed U-Bolt.
- The RY4 is again a yoke type stiff clamp, but a double plate stiff clamp with sheathed U Bolt and the axis of the connecting pin is parallel to pipe axis.
- The RY5 stiff clamp is a conventional 3 bolt type pressed pipe clamp. As the pipe OD can vary due to manufacturing tolerances, use of shim stock between pipe and clamp is advised to result in a positive grip to provide good dynamic restraint.



All the above types of clamps are designed to operate in a  $10^\circ$  Cone of load application and use hardened and ground pins of close tolerance to prevent chattering of pin during vibration.

### SELECTION – RIGID STRUTS

Selection of rigid struts is based on the length between pin centers and maximum applied load. The table shows max loading at 1 meter length intervals, for intermediate lengths max loadings can be arrived at by interpolation. If load is not provided, do not select struts. If a minimum stiffness of rigid strut is required, then refer table giving stiffness of struts. The lengths of struts should be such that its within max permitted angulation else resort to cold offset to counter this.

### SELECTION – WELDING CLEVIS

Welding clevises are selected to suit the corresponding strut with which it is supposed to be used. For example a Rigid Strut size RS-4 will use welding clevis Size RWC-4.

### SELECTION – PIPE CLAMP FOR STRUTS

Turn to the page relating to the appropriate pipe size in question.

1. From the table find the column relating to clamp maximum temperature just greater than or equal to pipe work temperature.
2. The clamp part nos are designed to easily identify the correct clamp size For Example Fig RY4-200-3-530 means a RY4 yoke type double plate clamp for pipe size NB 200, load group 3 (which is same as the strut load group) and 530 is the maximum operating temperature.

### STANDARD FEATURES OF RIGID STRUT ASSEMBLIES

- Eleven standard sizes to choose from.
- Length adjustment of  $\pm 100$  mm without disconnection.
- Sight holes provided in strut tube to verify full thread engagement.
- A choice of various paint finishes.
- Angulation of  $\pm 5$  Degrees provided.

### SPECIAL ITEMS

Stainless steel clamps.  
Riser clamps for rigid Struts  
Clamps for rigid struts with inclined loadings  
Double clamps.

## MATERIAL SPECIFICATIONS\* — CLAMPS FOR RIGID STRUTS AND SNUBBERS

### Clamps for use up to 400 °C

Item	UK Material	US Material	Indian Material / US Material
Clamp Body	BS EN10025 Grade S275JR	ASTM A36	IS 2062 E250 Gr BR
Clamp Bolts	BS 4190 Grade 4.6	ASTM A193 Gr B7	IS1367 Cl 4.6
U-Bolt	BS EN10025 Grade S275JR	ASTM A36	IS 2062 E250 Gr BR
Nuts	BS 4190 Grade 4	ASTM A194 Gr 2H	IS 1367 Cl 4.0
Pin	BS 970 Grade 709M40" T"	ASTM A193 Grade B7	ASTM A193 Grade B7
Spacers (Clamp)	BS 1387	ASTM A106 Grade B	ASTM A106 Grade B
Spacers (Pin)	BS 970 Grade 230M07	AISI 1213	AISI 1213

### Clamps for use in the Range 400 °C to 530 °C

Item	UK Material	US Material
Clamp Body	BS EN10028-2 Grade 13CrMo4-5	ASTM A387 Grade 12 Class 2
Clamp Bolts	BS 4882 Grade B16	ASTM A193 Grade B16
U-Bolt	BS EN10028-2 Grade 13CrMo4-5	ASTM A182 Grade F12 Class 2
Nuts	BS 4882 Grade 4	ASTM A194 Grade 4
Pin	BS 970 Grade 709M40" T"	ASTM A193 Grade B7
Spacers (Clamp)	BS 3604 Grade 620-440	ASTM A335 Grade P12
Spacers (Pin)	BS 970 Grade 230M07	AISI 1213

### Clamps for use in the Range 530 °C to 570 °C

Item	UK Material	US Material
Clamp Body	BS EN10028-2 Grade 10CrMo9-10	ASTM A387 Grade 22 Class 2
Clamp Bolts	BS 4882 Grade B16	ASTM A193 Grade B16
U-Bolt	BS EN10028-2 Grade 13 CrMo4-5	ASTM A182 Grade F12 Class 2
Nuts	BS 4882 Grade 4	ASTM A194 Grade 4
Pin	BS 970 Grade 709M40" T"	ASTM A193 Grade B7
Spacers (Clamp)	BS 3604 Grade 620-440	ASTM A335 Grade P12
Spacers (Pin)	BS 970 Grade 230M07	AISI 1213

\*Detailed erection and maintenance procedures for rigid struts are available on request.

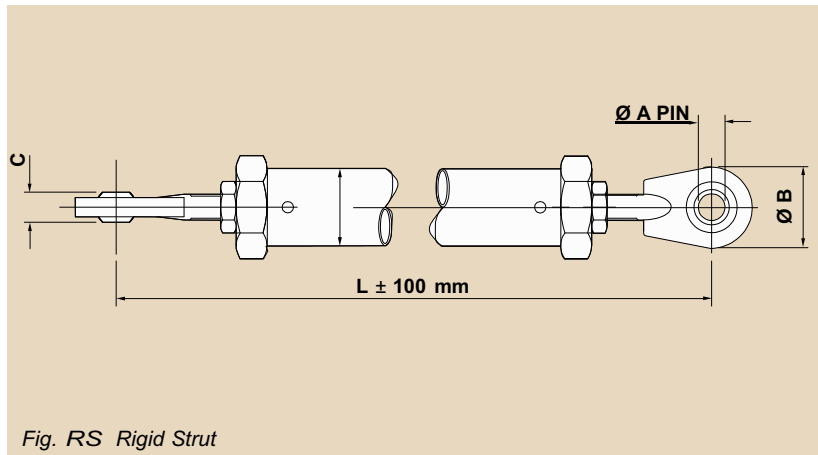


Fig. RS Rigid Strut

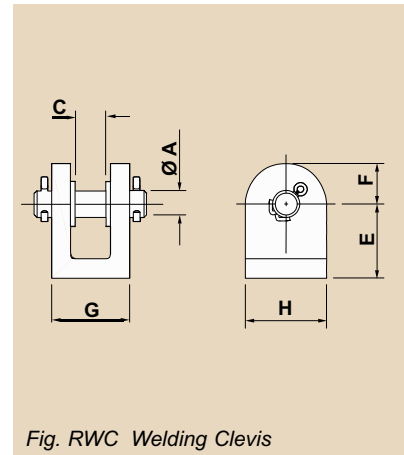


Fig. RWC Welding Clevis

**LOAD CARRYING CAPACITIES OF RIGID STRUTS**

Fig. RS Rigid Struts

SIZE	Max. Load @ L= 1m	Max. Load @ L= 2m	Max. Load @ L= 3m	Max. Load @ L= 4m	Max. Load @ L= 5m	Max. Load @ L= 6m
	kgf	kgf	kgf	kgf	kgf	kgf
RS-1	423	171				
RS-2	985	356	158			
RS-3	2125	2125	1034	567		
RS-4	4293	3708	1664	948	552	
RS-5	6324	6324	3632	2069	1288	809
RS-6	12754	12414	7867	4448	2811	1913
RS-7	18132	18132	15042	8860	5672	3875
RS-8	25524	25524	25524	20643	13911	9812
RS-9	55135	55135	50963	39364	27952	20225
RS-10	70330	70330	70330	64670	50450	38065
RS-11	90785	90785	90785	90785	90785	84373

**DIMENSIONS OF RIGID STRUTS**

Fig. RS Rigid Struts

SIZE	PIN DIA. A	DIA. B	C	DIA. D	L (Min.)*	L (Max.)
	mm	mm	mm	mm	mm	mm
RS-1	10	38	9	21	442	2000
RS-2	10	38	9	27	456	3000
RS-3	15	50	12	42	510	4000
RS-4	20	70	16	48	552	5000
RS-5	25	82	20	60	604	6000
RS-6	35	110	25	73	670	6000
RS-7	40	130	28	89	722	6000
RS-8	50	150	35	114	826	6000
RS-9	70	220	49	141	980	6000
RS-10	80	250	55	168	1064	6000
RS-11	90	280	60	219	1152	6000

\*For reduced adjustment of +/- 50mm, L(Min.) can be reduced by 150mm

**WEIGHTS OF RIGID STRUTS**

Fig. RS Rigid Struts

SIZE	WEIGHT @ L = Min.	WEIGHT @ L = 1m	WEIGHT @ L = 2m	WEIGHT @ L = 3m	WEIGHT @ L = 4m	WEIGHT @ L = 5m	WEIGHT @ L = 6m
	kgf	kgf	kgf	kgf	kgf	kgf	kgf
RS-1	0.8	1.6	2.8				
RS-2	1.1	2.0	3.7	5.4			
RS-3	2.8	5.0	9.5	13.9	18.4		
RS-4	4.5	6.9	12.3	17.8	23.2	28.6	
RS-5	7.1	10.1	17.6	25.0	32.5	40.0	47.5
RS-6	12.8	16.6	28.0	39.4	50.9	62.3	73.7
RS-7	20.0	24.2	39.5	54.8	70.1	85.4	100.7
RS-8	34.6	38.5	60.8	83.2	105.5	127.9	150.2
RS-9	78.3	78.9	109.9	140.9	171.8	202.8	233.8
RS-10	112.6	110.3	153.0	195.6	238.2	280.8	323.4
RS-11	175.3	166.5	231.2	295.9	360.7	425.4	490.1

**AXIAL STIFFNESSES**

Fig. RS Rigid Struts in Tension

SIZE	Stiffness @ L = Min.	Stiffness @ L = 1m	Stiffness @ L = 2m	Stiffness @ L = 3m	Stiffness @ L = 4m	Stiffness @ L = 5m	Stiffness @ L = 6m
	kgf/mm x 1000	kgf/mm x 1000	kgf/mm x 1000	kgf/mm x 1000	kgf/mm x 1000	kgf/mm x 1000	kgf/mm x 1000
RS-1	6.6	3.1	1.6				
RS-2	9.5	4.4	2.2	1.5			
RS-3	16.8	9.9	5.4	3.7	2.8		
RS-4	22.2	13.1	6.9	4.7	3.5	2.8	
RS-5	30.5	19.0	9.7	6.5	4.9	3.9	3.3
RS-6	43.8	29.7	15.0	10.0	7.6	6.0	5.0
RS-7	57.7	41.4	20.5	13.6	10.2	8.2	6.8
RS-8	79.6	64.6	31.0	20.4	15.2	12.1	10.0
RS-9	117.3	114.0	47.8	30.3	22.1	17.4	14.4
RS-10	143.9	154.4	65.4	41.5	30.4	23.9	19.8
RS-11	183.7	214.9	95.6	61.5	45.3	35.9	29.7

**LOAD CARRYING CAPACITIES OF WELDING CLEVISES**

Fig. RWC Welding Clevis

SIZE	Max. Load
	kgf
RWC-1	423
RWC-2	985
RWC-3	2125
RWC-4	4293
RWC-5	6324
RWC-6	12754
RWC-7	18132
RWC-8	25524
RWC-9	55135
RWC-10	70330
RWC-11	90785

**DIMENSIONS OF WELDING CLEVISES**

Fig. RWC Welding Clevis

SIZE	PIN DIA. A	C	E	F	G	H
	mm	mm	mm	mm	mm	mm
RWC-1	10	9	30	12.5	30	25
RWC-2	10	9	30	12.5	30	25
RWC-3	15	12	38	20	35	40
RWC-4	20	16	52	25	45	50
RWC-5	25	20	62	35	55	70
RWC-6	35	25	80	50	70	100
RWC-7	40	28	98	50	90	100
RWC-8	50	35	115	65	110	130
RWC-9	70	49	160	90	145	180
RWC-10	80	55	190	90	180	180
RWC-11	90	60	210	105	195	210

**WEIGHTS OF WELDING CLEVISES**

Fig. RWC Welding Clevis

SIZE	WEIGHT
	kgf
RWC-1	0.17
RWC-2	0.17
RWC-3	0.41
RWC-4	0.89
RWC-5	1.9
RWC-6	4.3
RWC-7	6.8
RWC-8	13.2
RWC-9	32.4
RWC-10	48.5
RWC-11	67.4

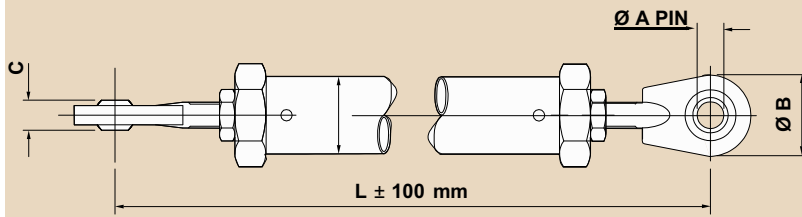


Fig. RS Rigid Strut

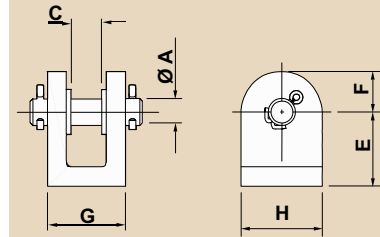


Fig. RWC Welding Clevis

**LOAD CARRYING CAPACITIES OF RIGID STRUTS**

Fig. RS Rigid Struts

SIZE	Max. Load @ L= 1m kN	Max. Load @ L= 2m kN	Max. Load @ L= 3m kN	Max. Load @ L= 4m kN	Max. Load @ L= 5m kN	Max. Load @ L= 6m kN
RS-1	4.15	1.67				
RS-2	9.7	3.49	1.55			
RS-3	20.8	20.8	10.1	5.56		
RS-4	42.1	36.4	16.3	9.30	5.41	
RS-5	62.0	62.0	35.6	20.3	12.6	7.94
RS-6	125	122	77.1	43.6	27.6	18.8
RS-7	178	178	148	86.9	55.6	38.0
RS-8	250	250	250	202	136	96.2
RS-9	541	541	500	386	274	198
RS-10	690	690	690	634	495	373
RS-11	890	890	890	890	890	827

**DIMENSIONS OF RIGID STRUTS**

Fig. RS Rigid Struts

SIZE	PIN DIA. A mm	DIA. B mm	C mm	DIA. D mm	L (Min.)* mm	L (Max.) mm
RS-1	10	38	9	21	442	2000
RS-2	10	38	9	27	456	3000
RS-3	15	50	12	42	510	4000
RS-4	20	70	16	48	552	5000
RS-5	25	82	20	60	604	6000
RS-6	35	110	25	73	670	6000
RS-7	40	130	28	89	722	6000
RS-8	50	150	35	114	826	6000
RS-9	70	220	49	141	980	6000
RS-10	80	250	55	168	1064	6000
RS-11	90	280	60	219	1152	6000

\*For reduced adjustment of +/- 50mm, L(Min.) can be reduced by 150mm

**WEIGHTS OF RIGID STRUTS Fig.**

RS Rigid Struts

SIZE	WEIGHT @ L = Min. N	WEIGHT @ L = 1m N	WEIGHT @ L = 2m N	WEIGHT @ L = 3m N	WEIGHT @ L = 4m N	WEIGHT @ L = 5m N	WEIGHT @ L = 6m N
RS-1	8	15	28				
RS-2	11	20	36	53			
RS-3	27	49	93	137	181		
RS-4	44	68	121	174	227	280	
RS-5	70	99	172	246	319	393	466
RS-6	126	163	275	387	499	611	723
RS-7	196	237	387	537	687	837	987
RS-8	339	377	596	816	1035	1254	1473
RS-9	768	774	1078	1381	1685	1989	2293
RS-10	1105	1082	1500	1918	2336	2754	3172
RS-11	1719	1633	2267	2902	3537	4172	4806

**AXIAL STIFFNESSES**

Fig. RS Rigid Struts in Tension

SIZE	Stiffness @ L = Min. kN/mm	Stiffness @ L = 1m kN/mm	Stiffness @ L = 2m kN/mm	Stiffness @ L = 3m kN/mm	Stiffness @ L = 4m kN/mm	Stiffness @ L = 5m kN/mm	Stiffness @ L = 6m kN/mm
RS-1	64	31	16				
RS-2	93	43	22	15			
RS-3	165	98	53	37	28		
RS-4	218	129	67	46	35	28	
RS-5	299	186	95	64	48	39	32
RS-6	430	291	147	99	74	59	49
RS-7	566	406	201	134	100	80	67
RS-8	781	633	304	200	149	118	98
RS-9	1150	1118	469	297	217	171	141
RS-10	1411	1515	641	407	298	235	194
RS-11	1802	2108	937	603	444	352	291

**LOAD CARRYING CAPACITIES OF WELDING CLEVISES**

Fig. RWC Welding Clevis

SIZE	Max. Load kN
RWC-1	4.15
RWC-2	9.66
RWC-3	20.8
RWC-4	42.1
RWC-5	62.0
RWC-6	125
RWC-7	178
RWC-8	250
RWC-9	541
RWC-10	690
RWC-11	890

**DIMENSIONS OF WELDING CLEVISES**

Fig. RWC Welding Clevis

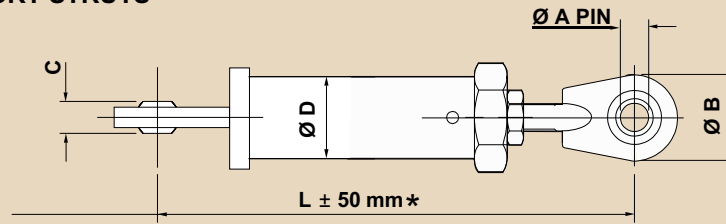
SIZE	PIN DIA. A mm	C mm	E mm	F mm	G mm	H mm
RWC-1	10	9	30	12.5	30	25
RWC-2	10	9	30	12.5	30	25
RWC-3	15	12	38	20	35	40
RWC-4	20	16	52	25	45	50
RWC-5	25	20	62	35	55	70
RWC-6	35	25	80	50	70	100
RWC-7	40	28	98	50	90	100
RWC-8	50	35	115	65	110	130
RWC-9	70	49	160	90	145	180
RWC-10	80	55	190	90	180	180
RWC-11	90	60	210	105	195	210

**WEIGHTS OF WELDING CLEVISES**

Fig. RWC Welding Clevis

SIZE	WEIGHT N
RWC-1	1.7
RWC-2	1.7
RWC-3	4.1
RWC-4	8.8
RWC-5	19
RWC-6	43
RWC-7	66
RWC-8	130
RWC-9	317
RWC-10	476
RWC-11	661

FIG. RSA SHORT STRUTS



**LOAD CARRYING CAPACITIES OF SHORT STRUTS**  
Fig. RSA SHORT STRUTS

SIZE	Max. Load
	Kgf
RSA-1	423
RSA-2	985
RSA-3	2125
RSA-4	4293
RSA-5	6324
RSA-6	12754
RSA-7	18132
RSA-8	25524
RSA-9	55135
RSA-10	70330
RSA-11	90785
RSA-12	136104

**DIMENSIONS OF SHORT STRUTS**  
Fig. RSA SHORT STRUTS

SIZE	PIN DIA. A	PIN DIA. B	C	DIA D	L (Min) for +50/-5 mm Adjustment	L for ±50mm Adjustment	L (Max.)
	m	mm	mm	mm	mm	mm	mm
RSA-1	10	38	9	21	212	257	292
RSA-2	10	38	9	27	223	268	306
RSA-3	15	50	12	42	269	314	360
RSA-4	20	70	16	48	304	349	402
RSA-5	25	82	20	60	336	381	454
RSA-6	35	110	25	73	397	442	520
RSA-7	40	130	28	89	430	475	572
RSA-8	50	150	35	114	515	560	676
RSA-9	70	220	49	141	634	679	830
RSA-10	80	250	55	168	705	750	914
RSA-11	90	280	60	219	773	818	1002
RSA-12	100	330	70	219	707	842	1076

**WEIGHTS AND AXIAL STIFFNESSES**

Fig. RSA SHORT STRUTS IN TENSION

SIZE	WEIGHT @ Length=L	WEIGHT @ Length=L (Max.)	Stiffness @ Length=L	Stiffness @ Length=L (Max.)
	kgf	kgf	kgf/mm x 1000	kgf/mm x 1000
RSA-1	0.6	0.6	12.3	10.8
RSA-2	0.7	0.8	17.3	14.9
RSA-3	1.8	2.0	28.3	25.4
RSA-4	2.9	3.2	37.7	32.8
RSA-5	4.7	5.3	51.2	42.7
RSA-6	8.9	9.8	72.4	60.7
RSA-7	13.9	15.4	96.8	78.3
RSA-8	24.0	26.7	127.2	101.2
RSA-9	56.1	60.9	188.7	139.5
511A-10	80.5	87.4	227.1	171.7
511A-11	118.4	131.7	289.0	214.7
511A-12	159.8	181.0	346.9	259.5

\*FOR LENGTHS BETWEEN L(MIN) AND L, THE ADJUSTMENT IN (-) DIRECTION WILL BE L REQD -L (MIN)+5.

SIZE	PIN DIA A	PIN DIA B	C	DIA D	L (min) for +50/-5 mm Adjustment	L ±50mm Adjustment	L (Max)
	mm	mm	mm	mm	mm	mm	mm
1	10	38	9	21	212	257	292
2	10	38	9	27	223	268	306
3	15	50	12	42	269	314	360
4	20	70	16	48	304	349	402
5	25	82	20	60	336	381	454
6	35	110	25	73	397	442	520
7	40	130	28	89	430	475	572
8	50	150	35	114	515	560	676
9	70	220	49	141	634	679	830
10	80	250	55	168	700	745	904
11	90	280	60	219	765	810	986

For lengths between L (min) and L the adjustment in (-) direction will be L Reqd -L(min)+5

USE WITH FIG.RWC WELDING CLEVIS

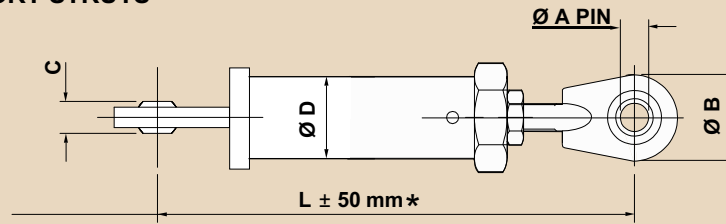
FOR USE WHEN PIN TO PIN IS LESS THAN MINIMUM PIN TO PIN FOR FIG RS RIGID STRUT (WITH REDUCED ADJUSTMENT).

FOR PIN-TO-PIN BETWEEN "L" AND "L (MAX)", FIG. 511A SHORT STRUT GIVES ± 50 MM LENGTH ADJUSTMENT.

AT PIN-TO-PIN LESS THAN "L" THE AMOUNT OF LENGTH ADJUSTMENT IS REDUCED.



FIG. RSA SHORT STRUTS



**LOAD CARRYING CAPACITIES OF SHORT STRUTS**

Fig. RSS SHORT STRUTS

SIZE	Max. Load @ L= 39in
	KN
RSA-1	4.15
RSA-2	9.7
RSA-3	20.8
RSA-4	42.1
RSA-5	62.0
RSA-6	125
RSA-7	178
RSA-8	250
RSA-9	541
RSA-10	690
RSA-11	890
RSA-12	1335

**DIMENSIONS OF SHORT STRUTS**

Fig. RSA SHORT STRUTS

SIZE	PIN DIA A	PIN DIA B	C	DIA D	L (min) for +50/-5 mm Adjustment	L ±50mm Adjustment	L (Max)
	mm	mm	mm	mm	mm	mm	mm
RSA-1	10	38	9	21	212	257	292
RSA-2	10	38	9	27	223	268	306
RSA-3	15	50	12	42	269	314	360
RSA-4	20	70	16	48	304	349	402
RSA-5	25	82	20	60	336	381	454
RSA-6	35	110	25	73	397	442	520
RSA-7	40	130	28	89	430	475	572
RSA-8	50	150	35	114	515	560	676
RSA-9	70	220	49	141	634	679	830
RSA-10	80	250	55	168	700	745	904
RSA-11	90	280	60	219	765	810	986

For lengths between L (min) and L the adjustment in (-) direction will be L Reqd -L(min)+5

**WEIGHTS AND AXIAL STIFFNESSES**

Fig. RSS SHORT STRUTS IN TENSION

SIZE	WEIGHT @ Length=L	WEIGHT @ Length=L (Max.)	Stiffness @ Length=L	Stiffness @ Length=L(Max.)
	N	N	kN/mm	kN/mm
RSA-1	5	6	121	105
RSA-2	7	8	170	146
RSA-3	17	19	277	249
RSA-4	29	32	370	322
RSA-5	46	52	502	419
RSA-6	87	96	710	595
RSA-7	136	151	949	768
RSA-8	236	262	1248	993
RSA-9	550	597	1851	1368
RSA-10	790	857	2227	1684
RSA-11	1161	1291	2834	2106
RSA-12	1567	1775	3402	2545

USE WITH FIG.RWC WELDING CLEVIS

FOR USE WHEN PIN TO PIN IS LESS THAN MINIMUM PIN TO PIN FOR FIG RS RIGID STRUT (WITH REDUCED ADJUSTMENT).

FOR PIN-TO-PIN BETWEEN "L" AND "L (MAX)", FIG. RSA SHORT STRUT GIVES ± 50 MM LENGTH ADJUSTMENT.

AT PIN-TO-PIN LESS THAN "L" THE AMOUNT OF LENGTH ADJUSTMENT IS REDUCED.

## CLAMPS FOR RIGID STRUTS

N.B. 0.5" / 15mm

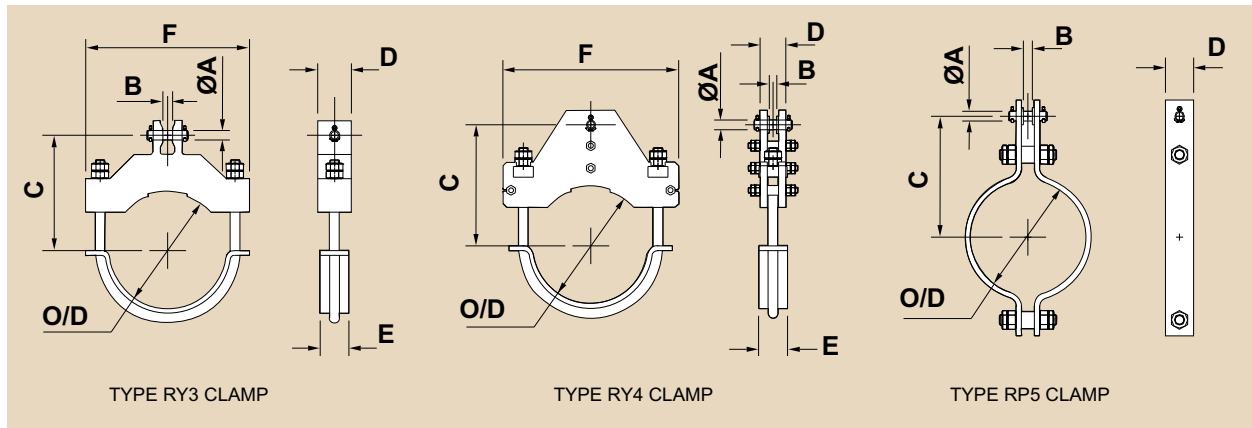


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				mm	N	lbs
RY3-15-1-400	21.3	400	423	4.15	933	10	9	85	3.35	20	20	65	0.6	6	1.3
RP5-15-1-400	21.3	400	423	4.15	933	10	9	85	3.35	40			0.7	6	1.4
RP5-15-2-400	21.3	400	985	9.66	2172	10	9	85	3.35	40			0.7	6	1.4
RY3-15-1-490	21.3	490	423	4.15	933	10	9	85	3.35	20	20	65	0.6	6	1.3
RP5-15-1-490	21.3	490	423	4.15	933	10	9	85	3.35	40			0.6	6	1.4
RP5-15-2-490	21.3	490	985	9.66	2172	10	9	85	3.35	40			0.6	6	1.4
RY3-15-1-530	21.3	530	423	4.15	933	10	9	85	3.35	20	30	72	0.7	7	1.5
RP5-15-1-530	21.3	530	423	4.15	933	10	9	85	3.35	40			0.6	6	1.4
RP5-15-2-530	21.3	530	985	9.66	2172	10	9	85	3.35	40			0.6	6	1.4
RY3-15-1-570	21.3	570	423	4.15	933	10	9	85	3.35	25	30	83	1.0	10	2.2
RP5-15-1-570	21.3	570	423	4.15	933	10	9	85	3.35	40			0.6	6	1.4
RP5-15-2-570	21.3	570	985	9.66	2172	10	9	85	3.35	40			0.6	6	1.4

## CLAMPS FOR RIGID STRUTS

N.B. 0.75" / 20mm

Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				mm	N	lbs
RY3-20-1-400	26.7	400	423	4.15	933	10	9	87	3.43	20	20	70	0.6	6	1.3
RP5-20-1-400	26.7	400	423	4.15	933	10	9	85	3.35	40			0.7	7	1.5
RY3-20-2-400	26.7	400	985	9.66	2172	10	9	87	3.43	20	30	77	0.7	7	1.6
RP5-20-2-400	26.7	400	985	9.66	2172	10	9	85	3.35	40			0.7	7	1.5
RY3-20-1-490	26.7	490	423	4.15	933	10	9	87	3.43	20	20	70	0.6	6	1.3
RP5-20-1-490	26.7	490	423	4.15	933	10	9	85	3.35	40			0.7	7	1.5
RY3-20-2-490	26.7	490	985	9.66	2172	10	9	87	3.43	20	30	77	0.7	7	1.6
RP5-20-2-490	26.7	490	985	9.66	2172	10	9	85	3.35	40			0.7	7	1.5
RY3-20-1-530	26.7	530	423	4.15	933	10	9	87	3.43	20	30	77	0.7	7	1.5
RP5-20-1-530	26.7	530	423	4.15	933	10	9	85	3.35	40			0.7	7	1.5
RY3-20-2-530	26.7	530	985	9.66	2172	10	9	87	3.43	25	30	88	1.0	10	2.3
RP5-20-2-530	26.7	530	985	9.66	2172	10	9	85	3.35	40			0.7	7	1.5
RY3-20-1-570	26.7	570	423	4.15	933	10	9	87	3.43	25	30	88	1.0	10	2.2
RP5-20-1-570	26.7	570	423	4.15	933	10	9	85	3.35	40			0.7	7	1.5
RY3-20-2-570	26.7	570	985	9.66	2172	10	9	87	3.43	30	40	102	1.5	15	3.4
RP5-20-2-570	26.7	570	985	9.66	2172	10	9	85	3.35	50			1.3	13	3.0

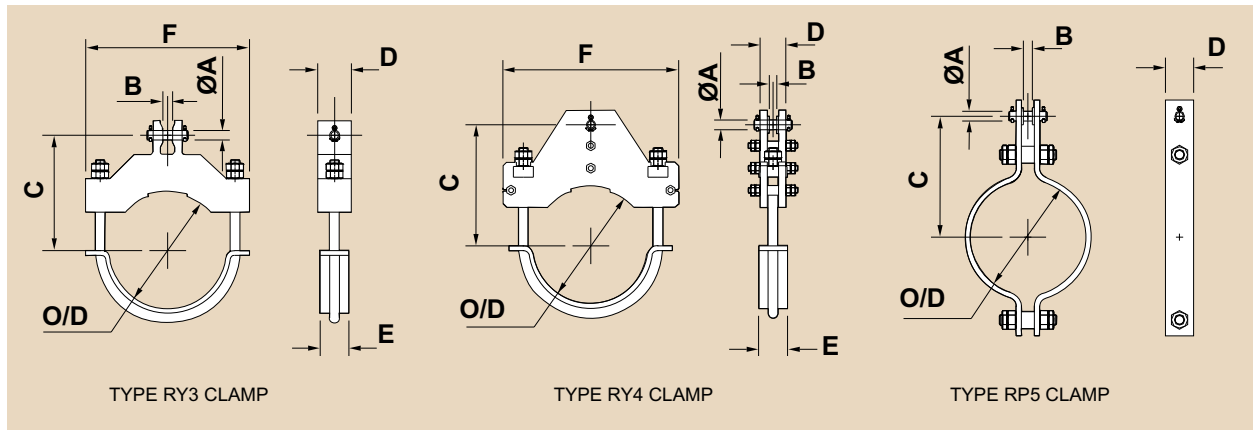


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-25-1-400	33.4	400	423	4.15	933	10	9	106	4.17	20	20	78	0.7	7	1.6
RP5-25-1-400	33.4	400	423	4.15	933	10	9	105	4.13	40			0.8	8	1.7
RY3-25-2-400	33.4	400	985	9.66	2172	10	9	106	4.17	20	30	85	0.9	9	2.0
RP5-25-2-400	33.4	400	985	9.66	2172	10	9	105	4.13	40			0.8	8	1.7
RY3-25-1-490	33.4	490	423	4.15	933	10	9	106	4.17	20	20	78	0.7	7	1.6
RP5-25-1-490	33.4	490	423	4.15	933	10	9	105	4.13	40			0.8	8	1.7
RY3-25-2-490	33.4	490	985	9.66	2172	10	9	106	4.17	20	30	85	0.9	9	2.0
RP5-25-2-490	33.4	490	985	9.66	2172	10	9	105	4.13	40			0.8	8	1.7
RY3-25-1-530	33.4	530	423	4.15	933	10	9	106	4.17	20	30	85	0.9	8	1.9
RP5-25-1-530	33.4	530	423	4.15	933	10	9	105	4.13	40			0.8	8	1.7
RY3-25-2-530	33.4	530	985	9.66	2172	10	9	106	4.17	25	30	96	1.3	12	2.8
RP5-25-2-530	33.4	530	985	9.66	2172	10	9	105	4.13	50			1.6	15	3.4
RY3-25-1-570	33.4	570	423	4.15	933	10	9	106	4.17	25	30	96	1.2	12	2.7
RP5-25-1-570	33.4	570	423	4.15	933	10	9	105	4.13	40			0.8	8	1.7
RY3-25-2-570	33.4	570	985	9.66	2172	10	9	106	4.17	30	40	110	1.8	18	4.0
RP5-25-2-570	33.4	570	985	9.66	2172	10	9	105	4.13	50			1.6	15	3.4

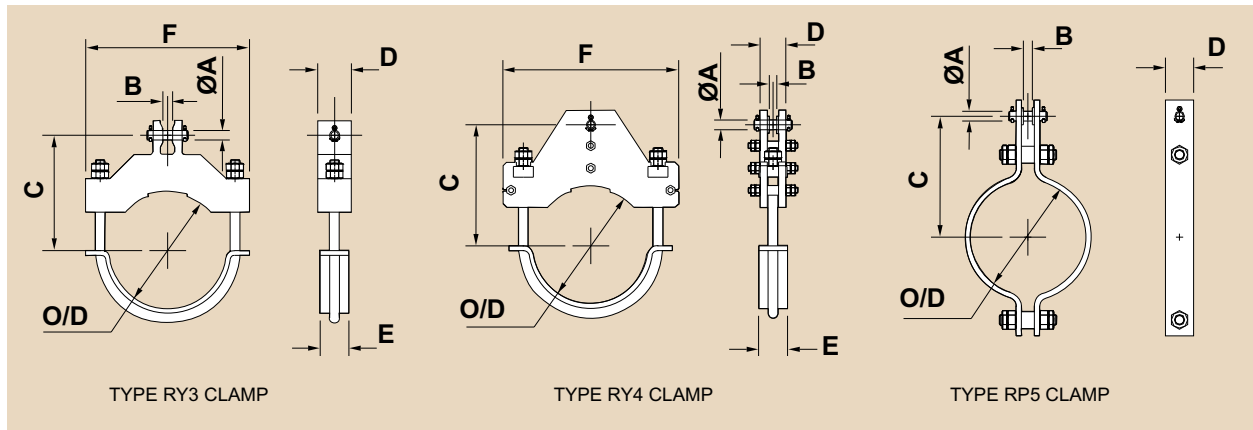


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-32-1-400	42.2	400	423	4.15	933	10	9	110	4.33	20	20	86	0.8	8	1.8
RP5-32-1-400	42.2	400	423	4.15	933	10	9	110	4.33	40			0.8	8	1.8
RY3-32-2-400	42.2	400	985	9.66	2172	10	9	110	4.33	20	30	93	1.0	10	2.2
RP5-32-2-400	42.2	400	985	9.66	2172	10	9	110	4.33	50			1.7	16	3.6
RY3-32-3-400	42.2	400	2125	20.8	4684	15	12	117	4.61	30	40	118	2.2	21	4.8
RP5-32-3-400	42.2	400	2125	20.8	4684	15	12	115	4.53	50			1.8	18	4.0
RY3-32-1-490	42.2	490	423	4.15	933	10	9	110	4.33	20	20	86	0.8	8	1.8
RP5-32-1-490	42.2	490	423	4.15	933	10	9	110	4.33	40			0.8	8	1.8
RY3-32-2-490	42.2	490	985	9.66	2172	10	9	110	4.33	20	30	93	1.0	10	2.2
RP5-32-2-490	42.2	490	985	9.66	2172	10	9	110	4.33	50			1.7	16	3.6
RY3-32-3-490	42.2	490	2125	20.8	4684	15	12	117	4.61	30	40	118	2.2	21	4.8
RP5-32-3-490	42.2	490	2125	20.8	4684	15	12	115	4.53	50			1.8	18	4.0
RY3-32-1-530	42.2	530	423	4.15	933	10	9	110	4.33	20	30	93	1.0	9	2.1
RP5-32-1-530	42.2	530	423	4.15	933	10	9	110	4.33	40			0.8	8	1.8
RY3-32-2-530	42.2	530	985	9.66	2172	10	9	110	4.33	25	30	104	1.4	14	3.1
RP5-32-2-530	42.2	530	985	9.66	2172	10	9	110	4.33	50			1.7	16	3.6
RY3-32-3-530	42.2	530	2125	20.8	4684	15	12	117	4.61	40	50	132	3.2	31	7.0
RP5-32-3-530	42.2	530	2125	20.8	4684	15	12	115	4.53	50			1.8	18	4.0
RY3-32-1-570	42.2	570	423	4.15	933	10	9	110	4.33	25	30	104	1.3	13	3.0
RP5-32-1-570	42.2	570	423	4.15	933	10	9	110	4.33	40			0.8	8	1.8
RY3-32-2-570	42.2	570	985	9.66	2172	10	9	110	4.33	30	40	118	2.0	20	4.4
RP5-32-2-570	42.2	570	985	9.66	2172	10	9	110	4.33	50			1.7	16	3.6
RY3-32-3-570	42.2	570	2125	20.8	4684	15	12	117	4.61	50	50	150	4.6	45	10.1
RP5-32-3-570	42.2	570	2125	20.8	4684	15	12	115	4.53	70			2.9	29	6.4

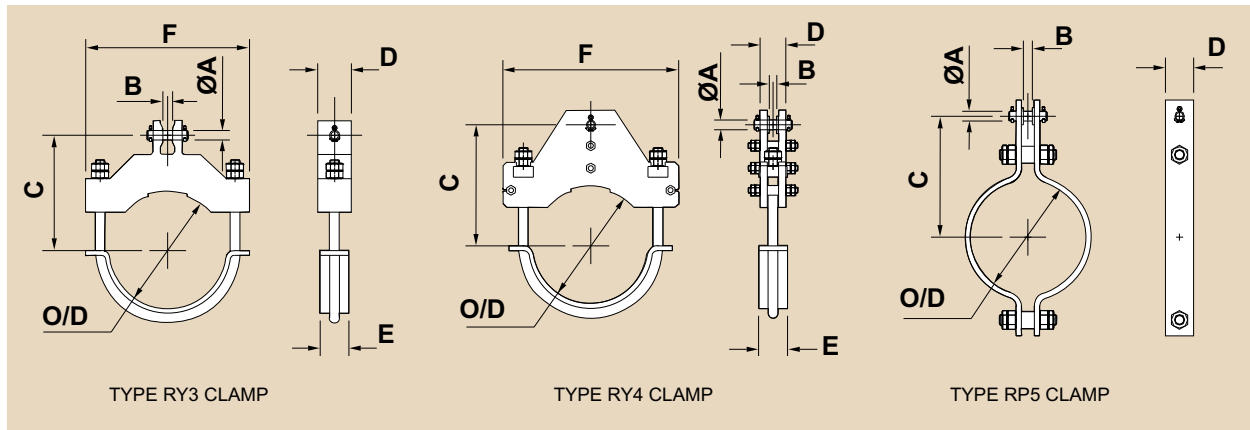


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-40-1-400	48.3	400	423	4.15	933	10	9	113	4.45	20	20	92	0.9	9	2.0
RP5-40-1-400	48.3	400	423	4.15	933	10	9	115	4.53	40			0.9	9	1.9
RY3-40-2-400	48.3	400	985	9.66	2172	10	9	113	4.45	20	30	99	1.1	11	2.4
RP5-40-2-400	48.3	400	985	9.66	2172	10	9	115	4.53	50			1.8	17	3.9
RY3-40-3-400	48.3	400	2125	20.8	4684	15	12	120	4.72	30	40	124	2.3	22	5.1
RP5-40-3-400	48.3	400	2125	20.8	4684	15	12	120	4.72	50			1.9	19	4.2
RY3-40-1-490	48.3	490	423	4.15	933	10	9	113	4.45	20	20	92	0.9	9	2.0
RP5-40-1-490	48.3	490	423	4.15	933	10	9	115	4.53	40			0.9	9	1.9
RY3-40-2-490	48.3	490	985	9.66	2172	10	9	113	4.45	20	30	99	1.1	11	2.4
RP5-40-2-490	48.3	490	985	9.66	2172	10	9	115	4.53	50			1.8	17	3.9
RY3-40-3-490	48.3	490	2125	20.8	4684	15	12	120	4.72	30	40	124	2.3	22	5.1
RP5-40-3-490	48.3	490	2125	20.8	4684	15	12	120	4.72	50			1.9	19	4.2
RY3-40-1-530	48.3	530	423	4.15	933	10	9	113	4.45	20	30	99	1.0	10	2.3
RP5-40-1-530	48.3	530	423	4.15	933	10	9	115	4.53	40			0.9	9	1.9
RY3-40-2-530	48.3	530	985	9.66	2172	10	9	113	4.45	25	30	110	1.5	15	3.3
RP5-40-2-530	48.3	530	985	9.66	2172	10	9	115	4.53	50			1.8	17	3.9
RY3-40-3-530	48.3	530	2125	20.8	4684	15	12	120	4.72	40	50	138	3.3	33	7.4
RP5-40-3-530	48.3	530	2125	20.8	4684	15	12	120	4.72	50			1.9	19	4.2
RY3-40-1-570	48.3	570	423	4.15	933	10	9	113	4.45	25	30	110	1.5	14	3.2
RP5-40-1-570	48.3	570	423	4.15	933	10	9	115	4.53	50			1.8	17	3.9
RY3-40-2-570	48.3	570	985	9.66	2172	10	9	113	4.45	30	40	124	2.1	21	4.7
RP5-40-2-570	48.3	570	985	9.66	2172	10	9	115	4.53	50			1.8	17	3.9
RY3-40-3-570	48.3	570	2125	20.8	4684	15	12	120	4.72	50	50	156	4.8	47	10.7
RP5-40-3-570	48.3	570	2125	20.8	4684	15	12	120	4.72	70			3.1	30	6.8

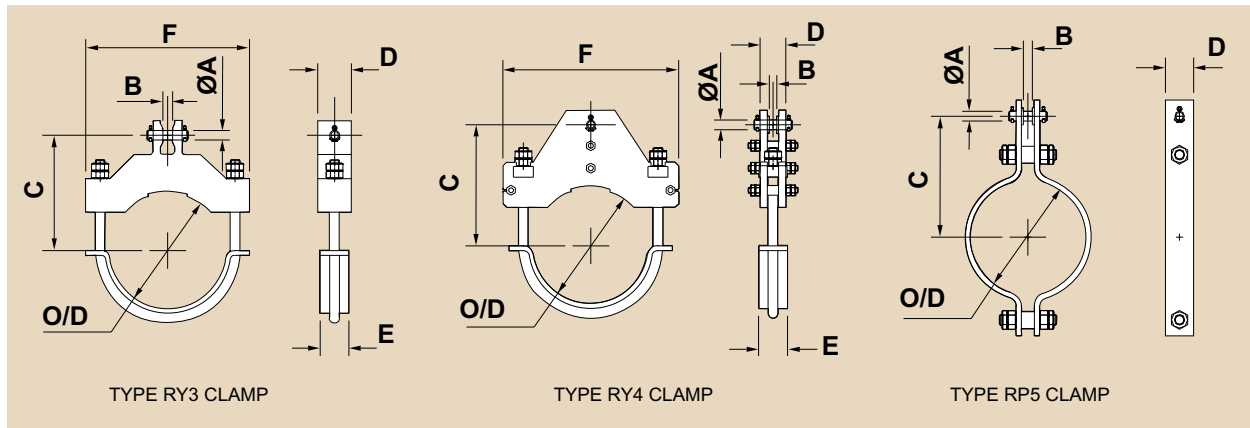


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-50-1-400	60.3	400	423	4.15	933	10	9	119	4.69	20	20	104	1.1	10	2.3
RY4-50-1-400	60.3	400	423	4.15	933	10	9	119	4.69	36	20	150	1.9	18	4.1
RP5-50-1-400	60.3	400	423	4.15	933	10	9	120	4.72	40			0.9	9	2.0
RY3-50-2-400	60.3	400	985	9.66	2172	10	9	119	4.69	20	30	111	1.3	12	2.8
RP5-50-2-400	60.3	400	985	9.66	2172	10	9	120	4.72	50			1.9	18	4.1
RY3-50-3-400	60.3	400	2125	20.8	4684	15	12	126	4.96	30	40	136	2.6	26	5.7
RP5-50-3-400	60.3	400	2125	20.8	4684	15	12	125	4.92	50			2.2	21	4.8
RY3-50-4-400	60.3	400	4293	42.1	9465	20	16	137	5.39	40	50	150	4.2	41	9.3
RP5-50-4-400	60.3	400	4293	42.1	9465	20	16	135	5.31	70			4.0	40	8.9
RY3-50-1-490	60.3	490	423	4.15	933	10	9	119	4.69	20	20	104	1.1	10	2.3
RY4-50-1-490	60.3	490	423	4.15	933	10	9	119	4.69	36	20	150	1.9	19	4.2
RP5-50-1-490	60.3	490	423	4.15	933	10	9	120	4.72	40			0.9	9	2.0
RY3-50-2-490	60.3	490	985	9.66	2172	10	9	119	4.69	20	30	111	1.3	12	2.8
RP5-50-2-490	60.3	490	985	9.66	2172	10	9	120	4.72	50			1.9	18	4.1
RY3-50-3-490	60.3	490	2125	20.8	4684	15	12	126	4.96	30	40	136	2.6	26	5.7
RP5-50-3-490	60.3	490	2125	20.8	4684	15	12	125	4.92	50			2.0	20	4.4
RY3-50-4-490	60.3	490	4293	42.1	9465	20	16	137	5.39	40	50	150	4.2	41	9.3
RP5-50-4-490	60.3	490	4293	42.1	9465	20	16	135	5.31	70			3.8	37	8.3
RY3-50-1-530	60.3	530	423	4.15	933	10	9	119	4.69	20	30	111	1.2	12	2.7
RY4-50-1-530	60.3	530	423	4.15	933	10	9	119	4.69	36	30	152	2.0	20	4.5
RP5-50-1-530	60.3	530	423	4.15	933	10	9	120	4.72	40			0.9	9	2.0
RY3-50-2-530	60.3	530	985	9.66	2172	10	9	119	4.69	25	30	122	1.7	17	3.8
RY4-50-2-530	60.3	530	985	9.66	2172	10	9	119	4.69	39	30	166	2.4	24	5.3
RP5-50-2-530	60.3	530	985	9.66	2172	10	9	120	4.72	50			1.9	18	4.1
RY3-50-3-530	60.3	530	2125	20.8	4684	15	12	126	4.96	40	50	150	3.7	37	8.2
RP5-50-3-530	60.3	530	2125	20.8	4684	15	12	125	4.92	60			2.4	23	5.3
RY3-50-4-530	60.3	530	4293	42.1	9465	20	16	137	5.39	50	50	168	5.9	58	13.1
RP5-50-4-530	60.3	530	4293	42.1	9465	20	16	135	5.31	80			4.3	42	9.4
RY3-50-1-570	60.3	570	423	4.15	933	10	9	119	4.69	25	30	122	1.7	16	3.7
RY4-50-1-570	60.3	570	423	4.15	933	10	9	119	4.69	36	30	158	2.4	24	5.3
RP5-50-1-570	60.3	570	423	4.15	933	10	9	120	4.72	50			1.9	18	4.1
RY3-50-2-570	60.3	570	985	9.66	2172	10	9	119	4.69	30	40	136	2.4	24	5.4
RY4-50-2-570	60.3	570	985	9.66	2172	10	9	119	4.69	39	40	170	3.4	33	7.4
RP5-50-2-570	60.3	570	985	9.66	2172	10	9	120	4.72	50			1.9	18	4.1
RY3-50-3-570	60.3	570	2125	20.8	4684	15	12	126	4.96	50	50	168	5.4	53	11.9
RP5-50-3-570	60.3	570	2125	20.8	4684	15	12	125	4.92	70			3.3	33	7.4
RY3-50-4-570	60.3	570	4293	42.1	9465	20	16	137	5.39	60	70	189	8.7	85	19.1
RP5-50-4-570	60.3	570	4293	42.1	9465	20	16	135	5.31	80			5.4	53	11.8



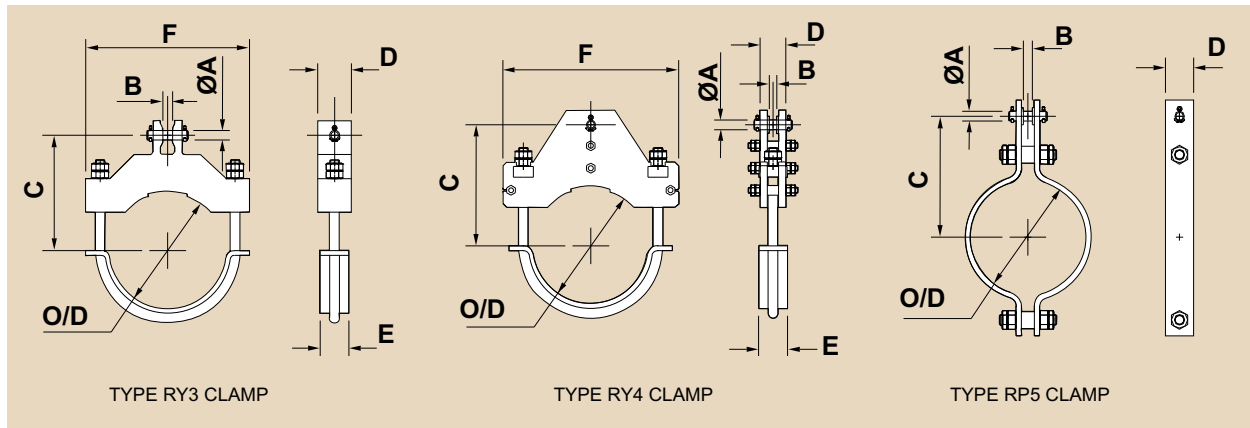


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				mm	N	lbs
RY3-65-1-400	73	400	423	4.15	933	10	9	128	5.04	20	20	122	1.3	13	2.9
RY4-65-1-400	73	400	423	4.15	933	10	9	128	5.04	36	20	168	2.3	23	5.1
RP5-65-1-400	73	400	423	4.15	933	10	9	125	4.92	40			1.0	10	2.2
RY3-65-2-400	73	400	985	9.66	2172	10	9	128	5.04	20	30	129	1.5	15	3.4
RY4-65-2-400	73	400	985	9.66	2172	10	9	128	5.04	39	30	178	2.7	26	5.9
RP5-65-2-400	73	400	985	9.66	2172	10	9	125	4.92	50			2.1	20	4.5
RY3-65-3-400	73	400	2125	20.8	4684	15	12	135	5.31	30	40	154	3.1	30	6.8
RP5-65-3-400	73	400	2125	20.8	4684	15	12	130	5.12	60			2.8	27	6.1
RY3-65-4-400	73	400	4293	42.1	9465	20	16	146	5.75	40	50	168	4.9	48	10.9
RP5-65-4-400	73	400	4293	42.1	9465	20	16	140	5.51	80			4.9	48	10.8
RY3-65-5-400	73	400	6324	62	13942	25	20	153	6.02	50	50	186	7.4	73	16.4
RY3-65-1-490	73	490	423	4.15	933	10	9	128	5.04	20	20	122	1.3	13	2.9
RY4-65-1-490	73	490	423	4.15	933	10	9	128	5.04	36	20	168	2.3	23	5.2
RP5-65-1-490	73	490	423	4.15	933	10	9	125	4.92	40			1.0	10	2.2
RY3-65-2-490	73	490	985	9.66	2172	10	9	128	5.04	20	30	129	1.5	15	3.4
RY4-65-2-490	73	490	985	9.66	2172	10	9	128	5.04	39	30	178	2.7	26	5.9
RP5-65-2-490	73	490	985	9.66	2172	10	9	125	4.92	50			2.1	20	4.5
RY3-65-3-490	73	490	2125	20.8	4684	15	12	135	5.31	30	40	154	3.1	30	6.8
RP5-65-3-490	73	490	2125	20.8	4684	15	12	130	5.12	60			2.6	25	5.7
RY3-65-4-490	73	490	4293	42.1	9465	20	16	146	5.75	40	50	168	4.9	48	10.9
RP5-65-4-490	73	490	4293	42.1	9465	20	16	140	5.51	80			4.6	45	10.2
RY3-65-5-490	73	490	6324	62	13942	25	20	153	6.02	50	50	186	7.4	73	16.4
RY3-65-1-530	73	530	423	4.15	933	10	9	128	5.04	20	30	129	1.5	15	3.3
RY4-65-1-530	73	530	423	4.15	933	10	9	128	5.04	36	30	170	2.5	24	5.5
RP5-65-1-530	73	530	423	4.15	933	10	9	125	4.92	40			1.0	10	2.2
RY3-65-2-530	73	530	985	9.66	2172	10	9	128	5.04	25	30	140	2.1	21	4.6
RY4-65-2-530	73	530	985	9.66	2172	10	9	128	5.04	39	30	184	2.7	27	6.0
RP5-65-2-530	73	530	985	9.66	2172	10	9	125	4.92	50			2.1	20	4.5
RY3-65-3-530	73	530	2125	20.8	4684	15	12	135	5.31	40	50	168	4.4	43	9.7
RP5-65-3-530	73	530	2125	20.8	4684	15	12	130	5.12	70			3.6	36	8.0
RY3-65-4-530	73	530	4293	42.1	9465	20	16	146	5.75	50	50	186	6.8	67	15.1
RP5-65-4-530	73	530	4293	42.1	9465	20	16	140	5.51	80			5.8	57	12.7
RY3-65-5-530	73	530	6324	62	13942	25	20	153	6.02	60	70	207	10.5	102	23.0
RY3-65-1-570	73	570	423	4.15	933	10	9	128	5.04	25	30	140	2.0	20	4.5
RY4-65-1-570	73	570	423	4.15	933	10	9	128	5.04	36	30	176	2.5	24	5.5
RP5-65-1-570	73	570	423	4.15	933	10	9	125	4.92	50			2.1	20	4.5
RY3-65-2-570	73	570	985	9.66	2172	10	9	128	5.04	30	40	154	2.9	28	6.4
RY4-65-2-570	73	570	985	9.66	2172	10	9	128	5.04	39	40	188	3.6	36	8.0
RP5-65-2-570	73	570	985	9.66	2172	10	9	125	4.92	50			2.1	20	4.5
RY3-65-3-570	73	570	2125	20.8	4684	15	12	135	5.31	50	50	186	6.2	61	13.7
RP5-65-3-570	73	570	2125	20.8	4684	15	12	130	5.12	80			4.4	43	9.7
RY3-65-4-570	73	570	4293	42.1	9465	20	16	146	5.75	60	70	207	9.8	96	21.6
RP5-65-4-570	73	570	4293	42.1	9465	20	16	140	5.51	100			7.2	70	15.8
RY3-65-5-570	73	570	6324	62	13942	25	20	153	6.02	70	80	232	14.8	145	32.6

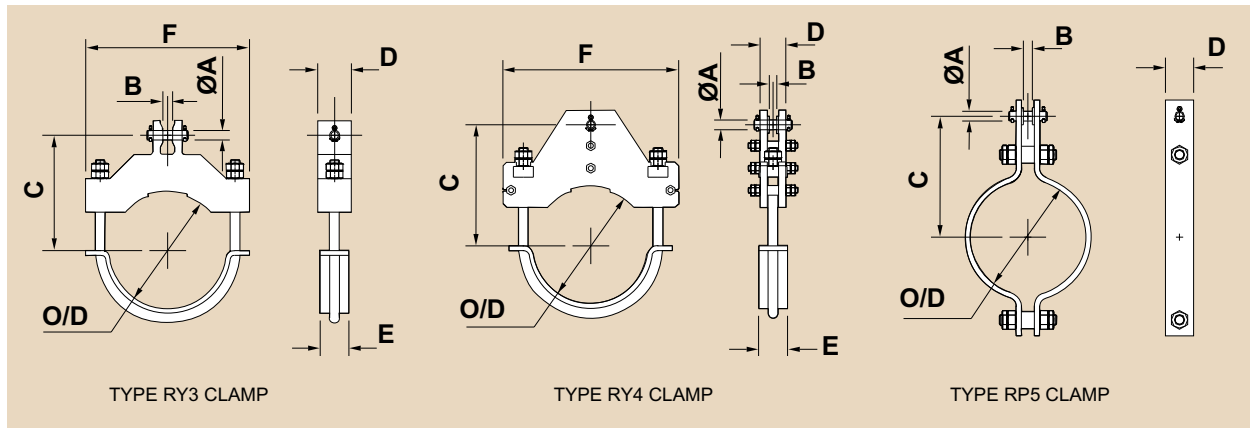


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-80-1-400	88.9	400	423	4.15	933	10	9	134	5.28	20	20	134	1.5	15	3.3
RY4-80-1-400	88.9	400	423	4.15	933	10	9	134	5.28	36	20	180	2.0	20	4.5
RP5-80-1-400	88.9	400	423	4.15	933	10	9	135	5.31	40			1.1	11	2.4
RY3-80-2-400	88.9	400	985	9.66	2172	10	9	134	5.28	20	30	141	1.7	17	3.8
RY4-80-2-400	88.9	400	985	9.66	2172	10	9	134	5.28	39	30	190	2.4	23	5.3
RP5-80-2-400	88.9	400	985	9.66	2172	10	9	135	5.31	50			2.3	22	5.0
RY3-80-3-400	88.9	400	2125	20.8	4684	15	12	141	5.55	30	40	166	3.4	34	7.6
RY4-80-3-400	88.9	400	2125	20.8	4684	15	12	140	5.51	47	40	238	5.2	51	11.4
RP5-80-3-400	88.9	400	2125	20.8	4684	15	12	140	5.51	70			4.1	40	9.1
RY3-80-4-400	88.9	400	4293	42.1	9465	20	16	152	5.98	40	50	180	5.4	53	11.9
RP5-80-4-400	88.9	400	4293	42.1	9465	20	16	150	5.91	80			6.6	64	14.5
RY3-80-5-400	88.9	400	6324	62	13942	25	20	159	6.26	50	50	198	8.1	79	17.8
RP5-80-5-400	88.9	400	6324	62	13942	25	20	165	6.50	100			9.1	89	20.0
RY3-80-1-490	88.9	490	423	4.15	933	10	9	134	5.28	20	20	134	1.5	15	3.3
RY4-80-1-490	88.9	490	423	4.15	933	10	9	134	5.28	36	20	180	2.1	20	4.5
RP5-80-1-490	88.9	490	423	4.15	933	10	9	135	5.31	40			1.1	11	2.4
RY3-80-2-490	88.9	490	985	9.66	2172	10	9	134	5.28	20	30	141	1.7	17	3.8
RY4-80-2-490	88.9	490	985	9.66	2172	10	9	134	5.28	39	30	190	2.4	24	5.3
RP5-80-2-490	88.9	490	985	9.66	2172	10	9	135	5.31	50			2.3	22	5.0
RY3-80-3-490	88.9	490	2125	20.8	4684	15	12	141	5.55	30	40	166	3.4	34	7.6
RY4-80-3-490	88.9	490	2125	20.8	4684	15	12	140	5.51	47	40	238	5.2	51	11.5
RP5-80-3-490	88.9	490	2125	20.8	4684	15	12	140	5.51	70			3.9	38	8.6
RY3-80-4-490	88.9	490	4293	42.1	9465	20	16	152	5.98	40	50	180	5.4	53	11.9
RP5-80-4-490	88.9	490	4293	42.1	9465	20	16	150	5.91	80			6.3	61	13.8
RY3-80-5-490	88.9	490	6324	62	13942	25	20	159	6.26	50	50	198	8.1	79	17.8
RP5-80-5-490	88.9	490	6324	62	13942	25	20	155	6.10	100			8.4	82	18.5
RY3-80-1-530	88.9	530	423	4.15	933	10	9	134	5.28	20	30	141	1.7	17	3.7
RY4-80-1-530	88.9	530	423	4.15	933	10	9	134	5.28	36	30	182	2.3	22	5.1
RP5-80-1-530	88.9	530	423	4.15	933	10	9	135	5.31	50			2.3	22	5.0
RY3-80-2-530	88.9	530	985	9.66	2172	10	9	134	5.28	25	30	152	2.4	23	5.2
RY4-80-2-530	88.9	530	985	9.66	2172	10	9	134	5.28	39	30	196	2.8	28	6.3
RP5-80-2-530	88.9	530	985	9.66	2172	10	9	135	5.31	50			2.3	22	5.0
RY3-80-3-530	88.9	530	2125	20.8	4684	15	12	141	5.55	40	50	180	4.8	47	10.6
RY4-80-3-530	88.9	530	2125	20.8	4684	15	12	141	5.55	47	50	242	6.9	67	15.1
RP5-80-3-530	88.9	530	2125	20.8	4684	15	12	140	5.51	70			4.1	40	9.1
RY3-80-4-530	88.9	530	4293	42.1	9465	20	16	152	5.98	50	50	198	7.4	73	16.4
RP5-80-4-530	88.9	530	4293	42.1	9465	20	16	150	5.91	80			6.3	61	13.8
RY3-80-5-530	88.9	530	6324	62	13942	25	20	159	6.26	60	70	219	11.2	110	24.6
RP5-80-5-530	88.9	530	6324	62	13942	25	20	165	6.50	100			11.6	114	25.5
RY3-80-1-570	88.9	570	423	4.15	933	10	9	134	5.28	25	30	152	2.3	22	5.0
RY4-80-1-570	88.9	570	423	4.15	933	10	9	134	5.28	36	30	188	2.9	29	6.4
RP5-80-1-570	88.9	570	423	4.15	933	10	9	135	5.31	50			2.3	22	5.0
RY3-80-2-570	88.9	570	985	9.66	2172	10	9	134	5.28	30	40	166	3.3	32	7.2
RY4-80-2-570	88.9	570	985	9.66	2172	10	9	134	5.28	39	40	200	3.8	38	8.5
RP5-80-2-570	88.9	570	985	9.66	2172	10	9	135	5.31	60			2.7	26	5.9
RY3-80-3-570	88.9	570	2125	20.8	4684	15	12	141	5.55	50	50	198	6.8	67	15.0
RY4-80-3-570	88.9	570	2125	20.8	4684	15	12	153	6.02	51	50	250	9.5	93	21.0
RP5-80-3-570	88.9	570	2125	20.8	4684	15	12	140	5.51	80			5.9	58	13.0
RY3-80-4-570	88.9	570	4293	42.1	9465	20	16	152	5.98	60	70	219	10.6	104	23.5
RP5-80-4-570	88.9	570	4293	42.1	9465	20	16	150	5.91	100			10.4	102	22.8
RY3-80-5-570	88.9	570	6324	62	13942	25	20	159	6.26	70	80	244	15.8	155	34.8
RP5-80-5-570	88.9	570	6324	62	13942	25	20	165	6.50	100			11.6	114	25.5

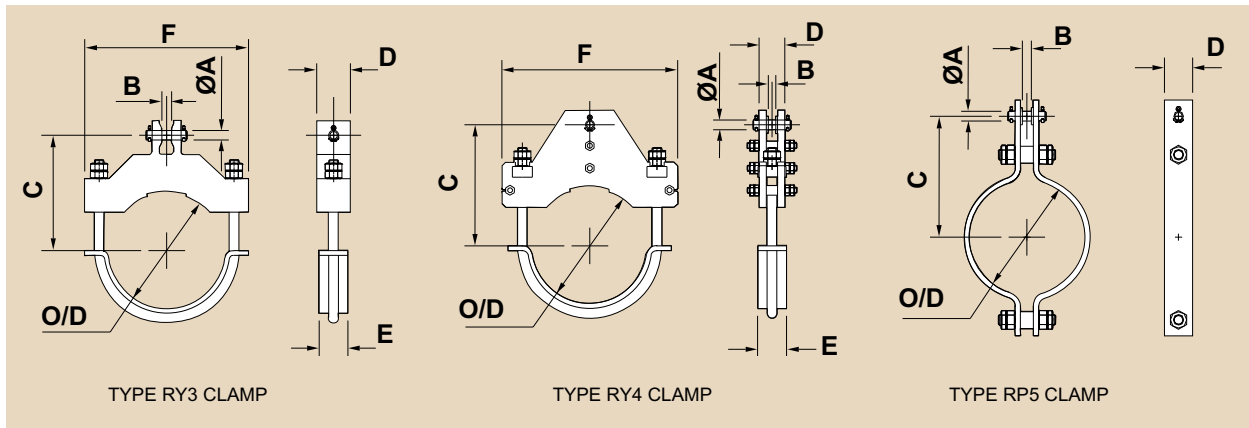


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-90-1-400	101.6	400	423	4.15	933	10	9	140	5.51	20	20	146	1.7	16	3.7
RY4-90-1-400	101.6	400	423	4.15	933	10	9	140	5.51	36	20	192	2.6	25	5.6
RP5-90-1-400	101.6	400	423	4.15	933	10	9	140	5.51	40			1.2	12	2.6
RY3-90-2-400	101.6	400	985	9.66	2172	10	9	140	5.51	20	30	153	2.0	19	4.3
RY4-90-2-400	101.6	400	985	9.66	2172	10	9	140	5.51	39	30	202	2.8	28	6.3
RP5-90-2-400	101.6	400	985	9.66	2172	10	9	140	5.51	50			2.4	23	5.3
RY3-90-3-400	101.6	400	2125	20.8	4684	15	12	147	5.79	30	40	178	3.8	37	8.4
RY4-90-3-400	101.6	400	2125	20.8	4684	15	12	146	5.75	47	40	250	5.9	58	13.1
RP5-90-3-400	101.6	400	2125	20.8	4684	15	12	145	5.71	70			4.3	42	9.6
RY3-90-4-400	101.6	400	4293	42.1	9465	20	16	158	6.22	40	50	192	5.9	58	13.1
RP5-90-4-400	101.6	400	4293	42.1	9465	20	16	155	6.10	80			6.9	67	15.1
RY3-90-5-400	101.6	400	6324	62	13942	25	20	165	6.50	50	50	210	8.8	86	19.3
RP5-90-5-400	101.6	400	6324	62	13942	25	20	175	6.89	100			9.6	95	21.3
RY3-90-1-490	101.6	490	423	4.15	933	10	9	140	5.51	20	20	146	1.7	16	3.7
RY4-90-1-490	101.6	490	423	4.15	933	10	9	140	5.51	36	20	192	2.6	25	5.7
RP5-90-1-490	101.6	490	423	4.15	933	10	9	140	5.51	40			1.2	12	2.6
RY3-90-2-490	101.6	490	985	9.66	2172	10	9	140	5.51	20	30	153	2.0	19	4.3
RY4-90-2-490	101.6	490	985	9.66	2172	10	9	140	5.51	39	30	202	2.9	28	6.3
RP5-90-2-490	101.6	490	985	9.66	2172	10	9	140	5.51	50			2.4	23	5.3
RY3-90-3-490	101.6	490	2125	20.8	4684	15	12	147	5.79	30	40	178	3.8	37	8.4
RY4-90-3-490	101.6	490	2125	20.8	4684	15	12	146	5.75	47	40	250	5.9	58	13.1
RP5-90-3-490	101.6	490	2125	20.8	4684	15	12	145	5.71	70			4.2	41	9.2
RY3-90-4-490	101.6	490	4293	42.1	9465	20	16	158	6.22	40	50	192	5.9	58	13.1
RP5-90-4-490	101.6	490	4293	42.1	9465	20	16	155	6.10	80			6.6	64	14.4
RY3-90-5-490	101.6	490	6324	62	13942	25	20	165	6.50	50	50	210	8.7	85	19.2
RP5-90-5-490	101.6	490	6324	62	13942	25	20	165	6.50	100			9.0	88	19.8
RY3-90-1-530	101.6	530	423	4.15	933	10	9	140	5.51	20	30	153	1.9	19	4.2
RY4-90-1-530	101.6	530	423	4.15	933	10	9	140	5.51	36	30	194	2.9	29	6.5
RP5-90-1-530	101.6	530	423	4.15	933	10	9	140	5.51	50			2.4	23	5.3
RY3-90-2-530	101.6	530	985	9.66	2172	10	9	140	5.51	25	30	164	2.6	26	5.8
RY4-90-2-530	101.6	530	985	9.66	2172	10	9	140	5.51	39	30	208	3.4	34	7.5
RP5-90-2-530	101.6	530	985	9.66	2172	10	9	140	5.51	50			2.4	23	5.3
RY3-90-3-530	101.6	530	2125	20.8	4684	15	12	147	5.79	40	50	192	5.3	52	11.7
RY4-90-3-530	101.6	530	2125	20.8	4684	15	12	147	5.79	47	50	254	6.6	65	14.6
RP5-90-3-530	101.6	530	2125	20.8	4684	15	12	145	5.71	70			4.3	42	9.6
RY3-90-4-530	101.6	530	4293	42.1	9465	20	16	158	6.22	50	50	210	8.1	79	17.9
RP5-90-4-530	101.6	530	4293	42.1	9465	20	16	155	6.10	80			6.6	64	14.4
RY3-90-5-530	101.6	530	6324	62	13942	25	20	165	6.50	60	70	231	12.1	118	26.6
RP5-90-5-530	101.6	530	6324	62	13942	25	20	170	6.69	100			12.1	118	26.6
RY3-90-1-570	101.6	570	423	4.15	933	10	9	140	5.51	25	30	164	2.5	25	5.6
RY4-90-1-570	101.6	570	423	4.15	933	10	9	140	5.51	36	30	200	3.2	31	7.1
RP5-90-1-570	101.6	570	423	4.15	933	10	9	140	5.51	50			2.4	23	5.3
RY3-90-2-570	101.6	570	985	9.66	2172	10	9	140	5.51	30	40	178	3.6	35	7.9
RY4-90-2-570	101.6	570	985	9.66	2172	10	9	140	5.51	39	40	212	3.6	36	8.0
RP5-90-2-570	101.6	570	985	9.66	2172	10	9	140	5.51	70			4.0	39	8.8
RY3-90-3-570	101.6	570	2125	20.8	4684	15	12	147	5.79	50	50	210	7.4	73	16.4
RY4-90-3-570	101.6	570	2125	20.8	4684	15	12	159	6.26	51	50	262	10.1	99	22.2
RP5-90-3-570	101.6	570	2125	20.8	4684	15	12	145	5.71	80			6.2	60	13.6
RY3-90-4-570	101.6	570	4293	42.1	9465	20	16	158	6.22	60	70	231	11.4	112	25.2
RP5-90-4-570	101.6	570	4293	42.1	9465	20	16	160	6.30	100			11.1	109	24.6
RY3-90-5-570	101.6	570	6324	62	13942	25	20	165	6.50	70	80	256	16.8	165	37.0
RP5-90-5-570	101.6	570	6324	62	13942	25	20	170	6.69	100			12.1	118	26.6

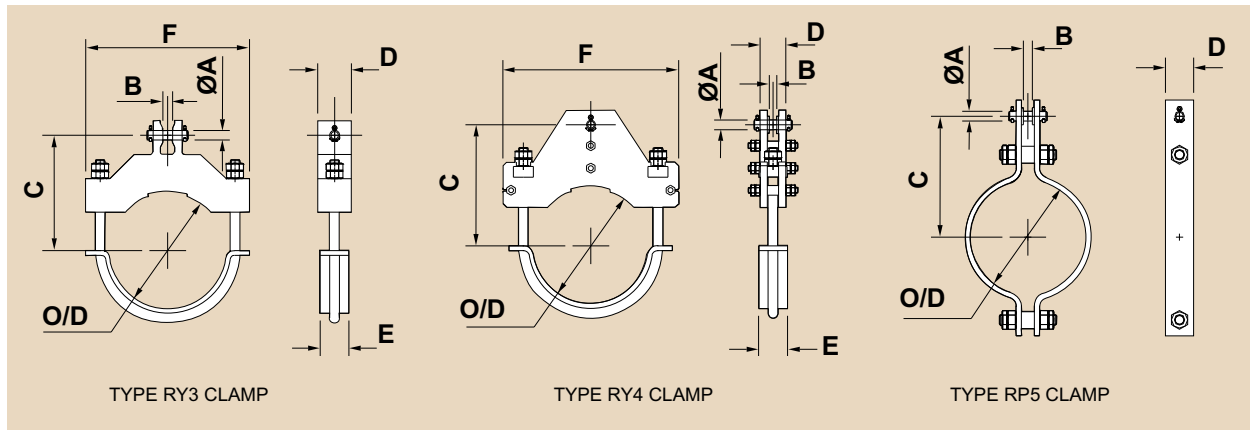


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-100-1-400	114.3	400	423	4.15	933	10	9	147	5.79	20	20	160	1.9	18	4.2
RY4-100-1-400	114.3	400	423	4.15	933	10	9	146	5.75	36	20	206	2.7	27	6.0
RP5-100-1-400	114.3	400	423	4.15	933	10	9	145	5.71	50			2.6	25	5.6
RY3-100-2-400	114.3	400	985	9.66	2172	10	9	147	5.79	20	30	167	2.2	22	4.9
RY4-100-2-400	114.3	400	985	9.66	2172	10	9	146	5.75	39	30	216	3.1	31	6.9
RP5-100-2-400	114.3	400	985	9.66	2172	10	9	145	5.71	50			2.6	25	5.6
RY3-100-3-400	114.3	400	2125	20.8	4684	15	12	154	6.06	30	40	192	4.2	42	9.3
RY4-100-3-400	114.3	400	2125	20.8	4684	15	12	154	6.06	47	40	264	5.5	54	12.1
RP5-100-3-400	114.3	400	2125	20.8	4684	15	12	155	6.10	70			4.7	46	10.3
RY3-100-4-400	114.3	400	4293	42.1	9465	20	16	165	6.50	40	50	206	6.6	64	14.4
RY4-100-4-400	114.3	400	4293	42.1	9465	20	16	177	6.97	57	50	284	10.2	100	22.5
RP5-100-4-400	114.3	400	4293	42.1	9465	20	16	170	6.69	80			7.7	76	17.0
RY3-100-5-400	114.3	400	6324	62	13942	25	20	172	6.77	50	50	224	9.6	94	21.2
RP5-100-5-400	114.3	400	6324	62	13942	25	20	190	7.48	100			13.7	134	30.2
RP5-100-6-400	114.3	400	12754	125	28117	35	25	220	8.66	90			19.3	189	42.5
RY3-100-1-490	114.3	490	423	4.15	933	10	9	147	5.79	20	20	160	1.9	18	4.2
RY4-100-1-490	114.3	490	423	4.15	933	10	9	146	5.75	36	20	206	2.7	27	6.0
RP5-100-1-490	114.3	490	423	4.15	933	10	9	145	5.71	50			2.6	25	5.6
RY3-100-2-490	114.3	490	985	9.66	2172	10	9	147	5.79	20	30	167	2.2	22	4.9
RY4-100-2-490	114.3	490	985	9.66	2172	10	9	146	5.75	39	30	216	3.2	31	6.9
RP5-100-2-490	114.3	490	985	9.66	2172	10	9	145	5.71	50			2.6	25	5.6
RY3-100-3-490	114.3	490	2125	20.8	4684	15	12	154	6.06	30	40	192	4.2	42	9.3
RY4-100-3-490	114.3	490	2125	20.8	4684	15	12	154	6.06	47	40	264	5.5	54	12.1
RP5-100-3-490	114.3	490	2125	20.8	4684	15	12	155	6.10	70			4.7	46	10.3
RY3-100-4-490	114.3	490	4293	42.1	9465	20	16	165	6.50	40	50	206	6.6	64	14.4
RY4-100-4-490	114.3	490	4293	42.1	9465	20	16	175	6.89	57	50	284	10.2	100	22.5
RP5-100-4-490	114.3	490	4293	42.1	9465	20	16	165	6.50	80			7.4	72	16.2
RY3-100-5-490	114.3	490	6324	62	13942	25	20	172	6.77	50	50	224	9.5	93	21.0
RP5-100-5-490	114.3	490	6324	62	13942	25	20	170	6.69	100			9.4	92	20.6
RP5-100-6-490	114.3	490	12754	125	28117	35	25	215	8.46	90			18.1	177	39.8

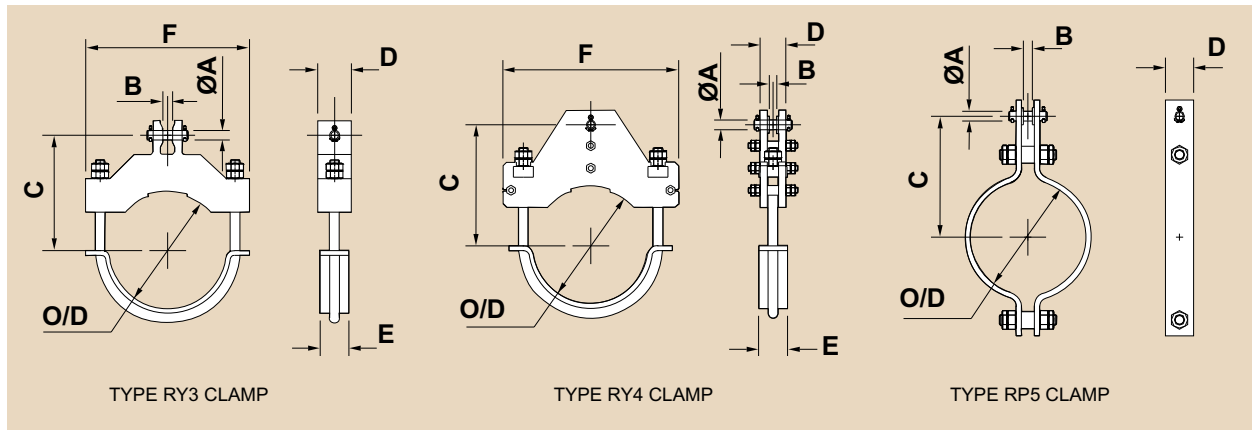


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-100-1-530	114.3	530	423	4.15	933	10	9	147	5.79	20	30	167	2.1	21	4.7
RY4-100-1-530	114.3	530	423	4.15	933	10	9	146	5.75	36	30	208	2.8	28	6.2
RP5-100-1-530	114.3	530	423	4.15	933	10	9	145	5.71	50			2.6	25	5.6
RY3-100-2-530	114.3	530	985	9.66	2172	10	9	147	5.79	25	30	178	3.0	29	6.5
RY4-100-2-530	114.3	530	985	9.66	2172	10	9	146	5.75	39	30	222	3.0	29	6.5
RP5-100-2-530	114.3	530	985	9.66	2172	10	9	145	5.71	50			2.6	25	5.6
RY3-100-3-530	114.3	530	2125	20.8	4684	15	12	154	6.06	40	50	206	5.9	58	13.0
RY4-100-3-530	114.3	530	2125	20.8	4684	15	12	154	6.06	47	50	268	7.5	74	16.6
RP5-100-3-530	114.3	530	2125	20.8	4684	15	12	155	6.10	80			5.3	52	11.8
RY3-100-4-530	114.3	530	4293	42.1	9465	20	16	165	6.50	50	50	224	8.9	87	19.6
RY4-100-4-530	114.3	530	4293	42.1	9465	20	16	169	6.65	63	50	292	13.3	130	29.3
RP5-100-4-530	114.3	530	4293	42.1	9465	20	16	165	6.50	100			9.1	89	20.1
RY3-100-5-530	114.3	530	6324	62	13942	25	20	172	6.77	60	70	245	13.0	128	28.7
RP5-100-5-530	114.3	530	6324	62	13942	25	20	180	7.09	100			12.9	126	28.4
RP5-100-6-530	114.3	530	12754	125	28117	35	25	205	8.07	90			16.7	163	36.7
RY3-100-1-570	114.3	570	423	4.15	933	10	9	147	5.79	25	30	178	2.9	28	6.3
RY4-100-1-570	114.3	570	423	4.15	933	10	9	146	5.75	36	30	214	2.8	27	6.1
RP5-100-1-570	114.3	570	423	4.15	933	10	9	145	5.71	50			2.6	25	5.6
RY3-100-2-570	114.3	570	985	9.66	2172	10	9	147	5.79	30	40	192	4.0	39	8.9
RY4-100-2-570	114.3	570	985	9.66	2172	10	9	146	5.75	39	40	226	4.2	41	9.3
RP5-100-2-570	114.3	570	985	9.66	2172	10	9	145	5.71	70			4.2	41	9.3
RY3-100-3-570	114.3	570	2125	20.8	4684	15	12	154	6.06	50	50	224	8.2	80	18.1
RY4-100-3-570	114.3	570	2125	20.8	4684	15	12	167	6.57	51	50	276	10.8	106	23.7
RP5-100-3-570	114.3	570	2125	20.8	4684	15	12	155	6.10	80			6.7	65	14.7
RY3-100-4-570	114.3	570	4293	42.1	9465	20	16	165	6.50	60	70	245	12.4	122	27.3
RY4-100-4-570	114.3	570	4293	42.1	9465	20	16	193	7.60	63	70	298	18.0	177	39.8
RP5-100-4-570	114.3	570	4293	42.1	9465	20	16	170	6.69	100			12.3	120	27.0
RY3-100-5-570	114.3	570	6324	62	13942	25	20	172	6.77	70	80	270	18.1	178	39.9
RP5-100-5-570	114.3	570	6324	62	13942	25	20	180	7.09	110			14.1	138	31.1
RP5-100-6-570	114.3	570	12754	125	28117	35	25	215	8.46	100			22.7	223	50.1

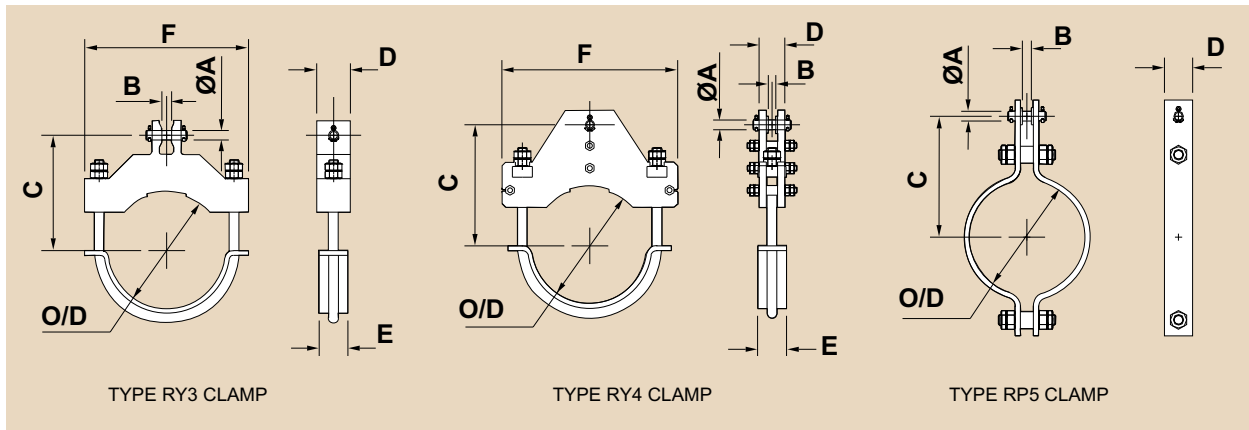


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-125-1-400	141.3	400	423	4.15	933	10	9	160	6.30	20	20	186	2.3	23	5.1
RY4-125-1-400	141.3	400	423	4.15	933	10	9	159	6.26	36	20	232	2.7	27	6.0
RP5-125-1-400	141.3	400	423	4.15	933	10	9	160	6.30	50			2.9	28	6.3
RY3-125-2-400	141.3	400	985	9.66	2172	10	9	160	6.30	20	30	193	2.7	27	6.0
RY4-125-2-400	141.3	400	985	9.66	2172	10	9	159	6.26	39	30	242	3.1	30	6.8
RP5-125-2-400	141.3	400	985	9.66	2172	10	9	160	6.30	50			3.0	30	6.6
RY3-125-3-400	141.3	400	2125	20.8	4684	15	12	167	6.57	30	40	218	5.1	50	11.2
RY4-125-3-400	141.3	400	2125	20.8	4684	15	12	167	6.57	47	40	290	6.5	64	14.4
RP5-125-3-400	141.3	400	2125	20.8	4684	15	12	165	6.50	70			5.4	53	12.0
RY3-125-4-400	141.3	400	4293	42.1	9465	20	16	178	7.01	40	50	232	7.7	76	17.1
RY4-125-4-400	141.3	400	4293	42.1	9465	20	16	185	7.28	57	50	310	11.0	108	24.2
RP5-125-4-400	141.3	400	4293	42.1	9465	20	16	185	7.28	100			10.5	103	23.2
RY3-125-5-400	141.3	400	6324	62	13942	25	20	185	7.28	50	50	250	11.2	109	24.6
RY4-125-5-400	141.3	400	6324	62	13942	25	20	210	8.27	69	50	344	18.2	179	40.2
RP5-125-5-400	141.3	400	6324	62	13942	25	20	210	8.27	100			16.0	157	35.2
RP5-125-6-400	141.3	400	12754	125	28117	35	25	235	9.25	100			22.8	224	50.3
RY3-125-1-490	141.3	490	423	4.15	933	10	9	160	6.30	20	20	186	2.3	23	5.1
RY4-125-1-490	141.3	490	423	4.15	933	10	9	159	6.26	36	20	232	2.8	27	6.1
RP5-125-1-490	141.3	490	423	4.15	933	10	9	160	6.30	50			2.9	28	6.3
RY3-125-2-490	141.3	490	985	9.66	2172	10	9	160	6.30	20	30	193	2.7	27	6.0
RY4-125-2-490	141.3	490	985	9.66	2172	10	9	159	6.26	39	30	242	3.1	31	6.9
RP5-125-2-490	141.3	490	985	9.66	2172	10	9	160	6.30	50			2.9	28	6.3
RY3-125-3-490	141.3	490	2125	20.8	4684	15	12	167	6.57	30	40	218	5.1	50	11.2
RY4-125-3-490	141.3	490	2125	20.8	4684	15	12	167	6.57	47	40	290	6.6	65	14.6
RP5-125-3-490	141.3	490	2125	20.8	4684	15	12	165	6.50	70			5.2	51	11.4
RY3-125-4-490	141.3	490	4293	42.1	9465	20	16	178	7.01	40	50	232	7.7	76	17.1
RY4-125-4-490	141.3	490	4293	42.1	9465	20	16	184	7.24	57	50	310	10.9	107	24.1
RP5-125-4-490	141.3	490	4293	42.1	9465	20	16	180	7.09	100			10.1	99	22.3
RY3-125-5-490	141.3	490	6324	62	13942	25	20	185	7.28	50	50	250	11.2	109	24.6
RY4-125-5-490	141.3	490	6324	62	13942	25	20	208	8.19	69	50	344	18.2	178	40.0
RP5-125-5-490	141.3	490	6324	62	13942	25	20	195	7.68	100			14.2	139	31.3
RP5-125-6-490	141.3	490	12754	125	28117	35	25	230	9.06	100			21.5	211	47.4



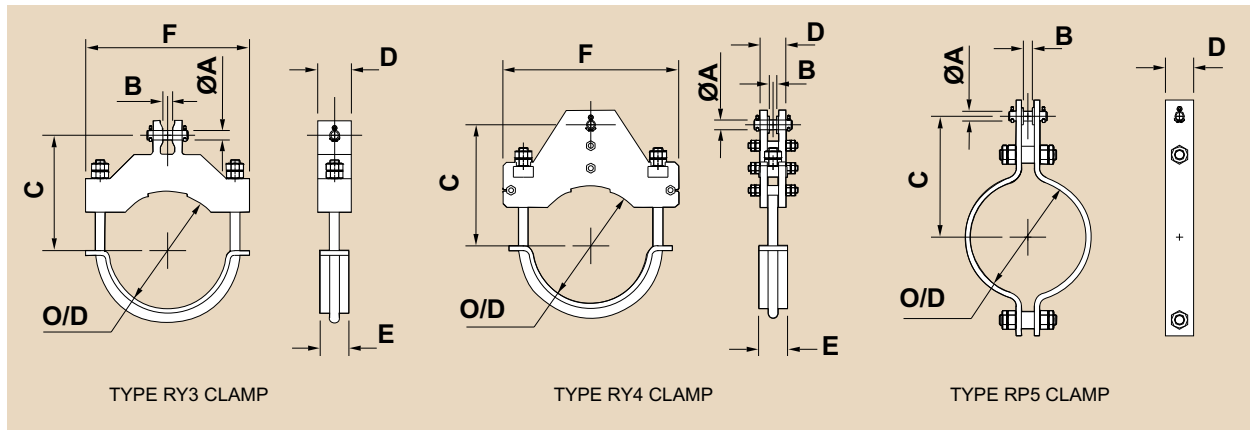
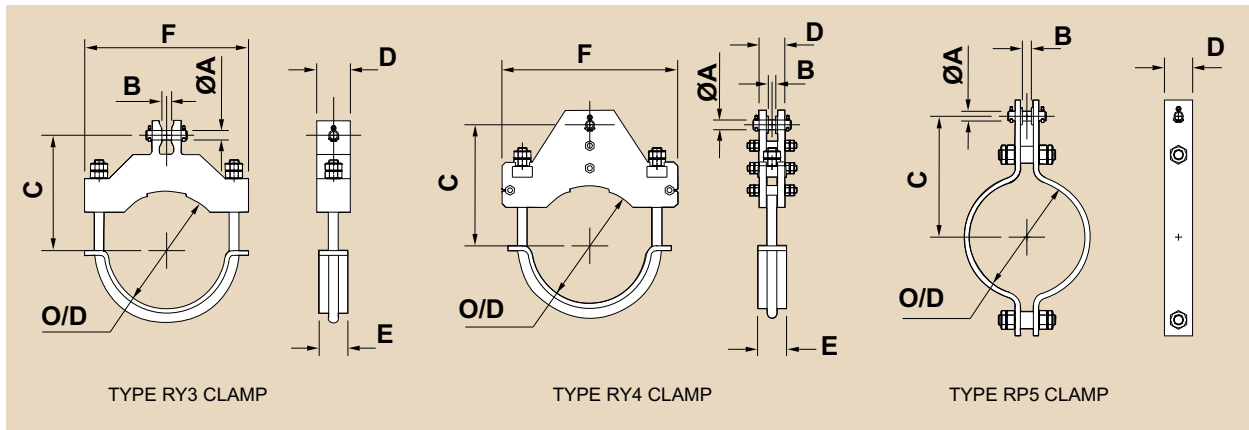


Fig. No.	Pipe O/D	Max. Pipe Temp °C	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-125-1-530	141.3	530	423	4.15	933	10	9	160	6.30	20	30	193	2.6	26	5.8
RY4-125-1-530	141.3	530	423	4.15	933	10	9	159	6.26	36	30	234	3.3	32	7.2
RP5-125-1-530	141.3	530	423	4.15	933	10	9	160	6.30	50			2.9	28	6.3
RY3-125-2-530	141.3	530	985	9.66	2172	10	9	160	6.30	25	30	204	3.6	36	8.0
RY4-125-2-530	141.3	530	985	9.66	2172	10	9	159	6.26	39	30	248	4.1	40	9.1
RP5-125-2-530	141.3	530	985	9.66	2172	10	9	160	6.30	60			3.4	33	7.5
RY3-125-3-530	141.3	530	2125	20.8	4684	15	12	167	6.57	40	50	232	7.0	69	15.5
RY4-125-3-530	141.3	530	2125	20.8	4684	15	12	167	6.57	47	50	294	7.2	71	15.9
RP5-125-3-530	141.3	530	2125	20.8	4684	15	12	165	6.50	80			7.4	72	16.3
RY3-125-4-530	141.3	530	4293	42.1	9465	20	16	178	7.01	50	50	250	10.4	102	23.0
RY4-125-4-530	141.3	530	4293	42.1	9465	20	16	194	7.64	57	50	318	14.1	138	31.1
RP5-125-4-530	141.3	530	4293	42.1	9465	20	16	185	7.28	100			13.6	133	30.0
RY3-125-5-530	141.3	530	6324	62	13942	25	20	185	7.28	60	70	271	15.1	148	33.4
RY4-125-5-530	141.3	530	6324	62	13942	25	20	218	8.58	69	70	350	24.0	236	53.0
RP5-125-5-530	141.3	530	6324	62	13942	25	20	195	7.68	100			14.2	139	31.3
RP5-125-6-530	141.3	530	12754	125	28117	35	25	230	9.06	120			25.5	250	56.2
RY3-125-1-570	141.3	570	423	4.15	933	10	9	160	6.30	25	30	204	3.5	35	7.8
RY4-125-1-570	141.3	570	423	4.15	933	10	9	159	6.26	36	30	240	4.1	40	9.1
RP5-125-1-570	141.3	570	423	4.15	933	10	9	160	6.30	50			2.9	28	6.3
RY3-125-2-570	141.3	570	985	9.66	2172	10	9	160	6.30	30	40	218	4.9	48	10.8
RY4-125-2-570	141.3	570	985	9.66	2172	10	9	159	6.26	39	40	252	4.6	45	10.2
RP5-125-2-570	141.3	570	985	9.66	2172	10	9	160	6.30	70			4.8	47	10.6
RY3-125-3-570	141.3	570	2125	20.8	4684	15	12	167	6.57	50	50	250	9.7	95	21.4
RY4-125-3-570	141.3	570	2125	20.8	4684	15	12	180	7.09	51	50	302	11.2	110	24.6
RP5-125-3-570	141.3	570	2125	20.8	4684	15	12	165	6.50	80			7.4	72	16.3
RY3-125-4-570	141.3	570	4293	42.1	9465	20	16	178	7.01	60	70	271	14.4	142	31.9
RY4-125-4-570	141.3	570	4293	42.1	9465	20	16	206	8.11	63	70	324	20.3	199	44.6
RP5-125-4-570	141.3	570	4293	42.1	9465	20	16	185	7.28	100			13.6	133	30.0
RY3-125-5-570	141.3	570	6324	62	13942	25	20	185	7.28	70	80	296	20.6	202	45.4
RY4-125-5-570	141.3	570	6324	62	13942	25	20	233	9.17	79	80	360	34.1	334	75.2
RP5-125-5-570	141.3	570	6324	62	13942	25	20	200	7.87	90			16.2	159	35.7
RP5-125-6-570	141.3	570	12754	125	28117	35	25	235	9.25	110			28.3	278	62.4



	mm	°C	kgf	kN	lbs	mm	mm	mm	in	mm	mm	mm	kgf	N	lbs
RY3-150-1-400	168.3	400	423	4.15	933	10	9	184	7.24	20	20	214	3.0	29	6.6
RY4-150-1-400	168.3	400	423	4.15	933	10	9	184	7.24	36	20	260	4.0	40	8.9
RP5-150-1-400	168.3	400	423	4.15	933	10	9	185	7.28	50			3.3	32	7.3
RY3-150-2-400	168.3	400	985	9.66	2172	10	9	184	7.24	20	30	221	3.5	35	7.8
RY4-150-2-400	168.3	400	985	9.66	2172	10	9	184	7.24	39	30	270	4.5	44	9.8
RP5-150-2-400	168.3	400	985	9.66	2172	10	9	185	7.28	50			3.4	34	7.6
RY3-150-3-400	168.3	400	2125	20.8	4684	15	12	191	7.52	30	40	246	6.4	62	14.0
RY4-150-3-400	168.3	400	2125	20.8	4684	15	12	190	7.48	47	40	318	6.2	61	13.6
RP5-150-3-400	168.3	400	2125	20.8	4684	15	12	190	7.48	80			7.0	69	15.4
RY3-150-4-400	168.3	400	4293	42.1	9465	20	16	202	7.95	40	50	260	9.5	94	21.0
RY4-150-4-400	168.3	400	4293	42.1	9465	20	16	200	7.87	57	50	338	10.7	105	23.5
RP5-150-4-400	168.3	400	4293	42.1	9465	20	16	210	8.27	100			15.8	154	34.7
RY3-150-5-400	168.3	400	6324	62	13942	25	20	209	8.23	50	50	278	13.5	133	29.8
RY4-150-5-400	168.3	400	6324	62	13942	25	20	218	8.58	69	50	372	18.6	183	41.0
RP5-150-5-400	168.3	400	6324	62	13942	25	20	225	8.86	100			17.3	170	38.2
RY4-150-6-400	168.3	400	12754	125	28117	35	25	279	10.98	86	80	414	43.6	428	96.2
RP5-150-6-400	168.3	400	12754	125	28117	35	25	250	9.84	120			28.9	284	63.8
RP5-150-7-400	168.3	400	18132	178	39974	40	28	280	11.02	120			38.7	379	85.3
RY3-150-1-490	168.3	490	423	4.15	933	10	9	184	7.24	20	20	214	3.0	29	6.6
RY4-150-1-490	168.3	490	423	4.15	933	10	9	184	7.24	36	20	260	4.1	40	9.0
RP5-150-1-490	168.3	490	423	4.15	933	10	9	185	7.28	50			3.3	32	7.3
RY3-150-2-490	168.3	490	985	9.66	2172	10	9	184	7.24	20	30	221	3.5	35	7.8
RY4-150-2-490	168.3	490	985	9.66	2172	10	9	184	7.24	39	30	270	4.5	44	9.9
RP5-150-2-490	168.3	490	985	9.66	2172	10	9	185	7.28	50			3.3	32	7.3
RY3-150-3-490	168.3	490	2125	20.8	4684	15	12	191	7.52	30	40	246	6.4	62	14.0
RY4-150-3-490	168.3	490	2125	20.8	4684	15	12	190	7.48	47	40	318	6.2	61	13.6
RP5-150-3-490	168.3	490	2125	20.8	4684	15	12	190	7.48	80			6.7	66	14.9
RY3-150-4-490	168.3	490	4293	42.1	9465	20	16	202	7.95	40	50	260	9.5	93	20.9
RY4-150-4-490	168.3	490	4293	42.1	9465	20	16	200	7.87	57	50	338	10.7	105	23.6
RP5-150-4-490	168.3	490	4293	42.1	9465	20	16	200	7.87	100			14.9	146	32.9
RY3-150-5-490	168.3	490	6324	62	13942	25	20	209	8.23	50	50	278	13.5	132	29.7
RY4-150-5-490	168.3	490	6324	62	13942	25	20	217	8.54	69	50	372	18.6	182	41.0
RP5-150-5-490	168.3	490	6324	62	13942	25	20	220	8.66	100			16.4	161	36.1
RY4-150-6-490	168.3	490	12754	125	28117	35	25	277	10.91	86	70	404	39.9	392	88.0
RP5-150-6-490	168.3	490	12754	125	28117	35	25	245	9.65	110			25.3	248	55.8
RP5-150-7-490	168.3	490	18132	178	39974	40	28	265	10.43	110			33.2	326	73.2

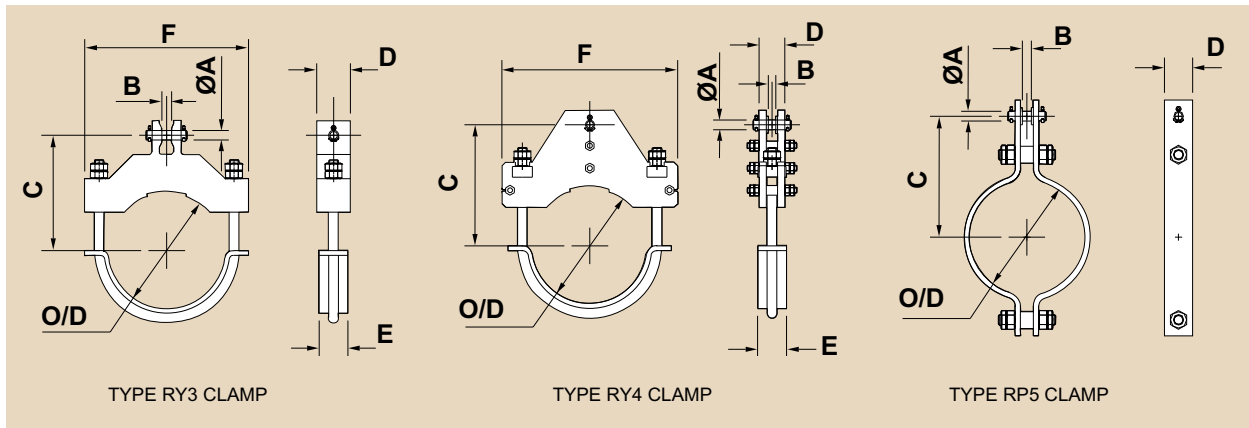


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-150-1-530	168.3	530	423	4.15	933	10	9	184	7.24	20	30	221	3.3	33	7.4
RY4-150-1-530	168.3	530	423	4.15	933	10	9	184	7.24	36	30	262	4.5	44	10.0
RP5-150-1-530	168.3	530	423	4.15	933	10	9	185	7.28	50			3.3	32	7.3
RY3-150-2-530	168.3	530	985	9.66	2172	10	9	184	7.24	25	30	232	4.7	46	10.3
RY4-150-2-530	168.3	530	985	9.66	2172	10	9	184	7.24	39	30	276	5.1	50	11.3
RP5-150-2-530	168.3	530	985	9.66	2172	10	9	185	7.28	60			3.9	39	8.7
RY3-150-3-530	168.3	530	2125	20.8	4684	15	12	191	7.52	40	50	260	8.7	86	19.3
RY4-150-3-530	168.3	530	2125	20.8	4684	15	12	191	7.52	51	50	322	8.1	79	17.9
RP5-150-3-530	168.3	530	2125	20.8	4684	15	12	190	7.48	80			8.4	82	18.5
RY3-150-4-530	168.3	530	4293	42.1	9465	20	16	202	7.95	50	50	278	12.7	124	27.9
RY4-150-4-530	168.3	530	4293	42.1	9465	20	16	203	7.99	57	50	346	13.7	134	30.2
RP5-150-4-530	168.3	530	4293	42.1	9465	20	16	200	7.87	100			14.9	146	32.9
RY3-150-5-530	168.3	530	6324	62	13942	25	20	209	8.23	60	70	299	18.0	177	39.7
RY4-150-5-530	168.3	530	6324	62	13942	25	20	227	8.94	69	70	378	25.4	249	55.9
RP5-150-5-530	168.3	530	6324	62	13942	25	20	220	8.66	110			17.9	176	39.6
RY4-150-6-530	168.3	530	12754	125	28117	35	25	288	11.34	86	80	414	45.2	443	99.7
RP5-150-6-530	168.3	530	12754	125	28117	35	25	255	10.04	100			28.3	278	62.5
RP5-150-7-530	168.3	530	18132	178	39974	40	28	260	10.24	120			34.3	337	75.7
RY3-150-1-570	168.3	570	423	4.15	933	10	9	184	7.24	25	30	232	4.4	43	9.8
RY4-150-1-570	168.3	570	423	4.15	933	10	9	184	7.24	36	30	268	4.9	48	10.9
RP5-150-1-570	168.3	570	423	4.15	933	10	9	185	7.28	50			3.3	32	7.3
RY3-150-2-570	168.3	570	985	9.66	2172	10	9	184	7.24	30	40	246	6.1	60	13.5
RY4-150-2-570	168.3	570	985	9.66	2172	10	9	184	7.24	39	40	280	5.0	49	10.9
RP5-150-2-570	168.3	570	985	9.66	2172	10	9	185	7.28	70			5.5	54	12.2
RY3-150-3-570	168.3	570	2125	20.8	4684	15	12	191	7.52	50	50	278	11.9	117	26.2
RY4-150-3-570	168.3	570	2125	20.8	4684	15	12	194	7.64	51	50	330	13.2	130	29.1
RP5-150-3-570	168.3	570	2125	20.8	4684	15	12	190	7.48	100			10.5	103	23.1
RY3-150-4-570	168.3	570	4293	42.1	9465	20	16	202	7.95	60	70	299	17.2	168	37.8
RY4-150-4-570	168.3	570	4293	42.1	9465	20	16	220	8.66	63	70	352	21.3	209	47.0
RP5-150-4-570	168.3	570	4293	42.1	9465	20	16	200	7.87	100			14.9	146	32.9
RY3-150-5-570	168.3	570	6324	62	13942	25	20	209	8.23	70	80	324	24.1	237	53.2
RY4-150-5-570	168.3	570	6324	62	13942	25	20	247	9.72	79	80	388	34.8	341	76.7
RP5-150-5-570	168.3	570	6324	62	13942	25	20	220	8.66	90			18.0	177	39.7
RY4-150-6-570	168.3	570	12754	125	28117	35	25	288	11.34	96	90	420	59.4	582	130.8
RP5-150-6-570	168.3	570	12754	125	28117	35	25	255	10.04	130			36.4	357	80.2
RP5-150-7-570	168.3	570	18132	178	39974	40	28	275	10.83	120			47.2	463	104.0

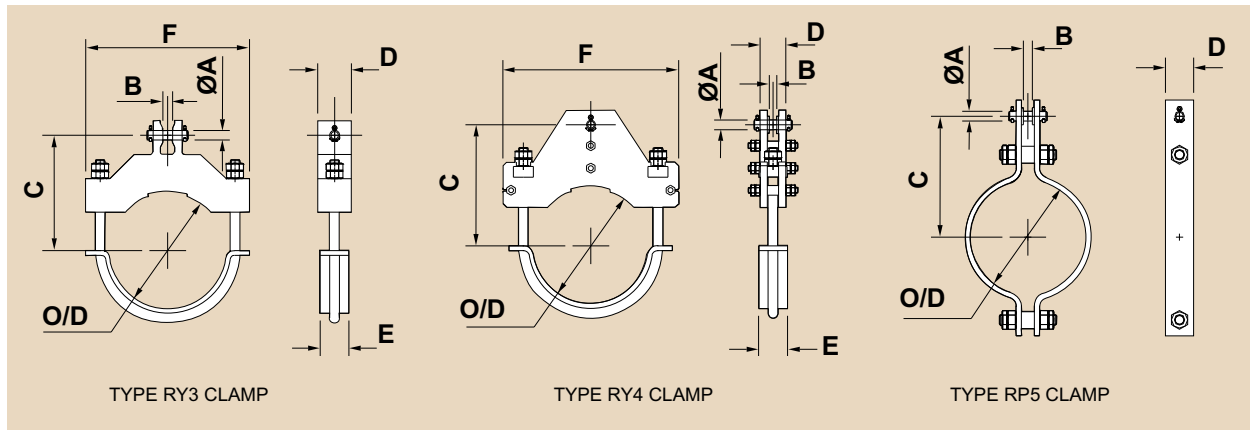


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				mm	kgf	N
	mm	°C				mm	mm	mm	in	mm	mm	mm	kgf	N	lbs
RY3-175-1-400	193.7	400	423	4.15	933	10	9	197	7.76	20	20	240	3.5	35	7.8
RY4-175-1-400	193.7	400	423	4.15	933	10	9	197	7.76	36	20	286	4.1	40	9.0
RP5-175-1-400	193.7	400	423	4.15	933	10	9	195	7.68	50			3.6	35	7.9
RY3-175-2-400	193.7	400	985	9.66	2172	10	9	197	7.76	20	30	247	4.3	42	9.4
RY4-175-2-400	193.7	400	985	9.66	2172	10	9	197	7.76	39	30	296	4.6	45	10.0
RP5-175-2-400	193.7	400	985	9.66	2172	10	9	195	7.68	60			4.5	44	9.9
RY3-175-3-400	193.7	400	2125	20.8	4684	15	12	204	8.03	30	40	272	7.6	75	16.8
RY4-175-3-400	193.7	400	2125	20.8	4684	15	12	203	7.99	47	40	344	8.2	81	18.2
RP5-175-3-400	193.7	400	2125	20.8	4684	15	12	200	7.87	80			9.4	93	20.8
RY3-175-4-400	193.7	400	4293	42.1	9465	20	16	215	8.46	40	50	286	11.2	110	24.6
RY4-175-4-400	193.7	400	4293	42.1	9465	20	16	213	8.39	57	50	364	12.1	119	26.7
RP5-175-4-400	193.7	400	4293	42.1	9465	20	16	230	9.06	100			18.0	177	39.8
RY3-175-5-400	193.7	400	6324	62	13942	25	20	222	8.74	50	50	304	15.5	152	34.3
RY4-175-5-400	193.7	400	6324	62	13942	25	20	226	8.90	69	50	398	19.9	195	43.8
RP5-175-5-400	193.7	400	6324	62	13942	25	20	240	9.45	100			18.7	183	41.2
RY4-175-6-400	193.7	400	12754	125	28117	35	25	287	11.30	86	80	440	49.1	482	108.3
RP5-175-6-400	193.7	400	12754	125	28117	35	25	275	10.83	100			31.7	311	70.0
RY4-175-7-400	193.7	400	18132	178	39974	40	28	316	12.44	102	90	462	68.7	674	151.5
RP5-175-7-400	193.7	400	18132	178	39974	40	28	295	11.61	130			44.2	433	97.4
RP5-175-8-400	193.7	400	25524	250	56269	50	35	325	12.80	130			64.9	637	143.1
RY3-175-1-490	193.7	490	423	4.15	933	10	9	197	7.76	20	20	240	3.5	35	7.8
RY4-175-1-490	193.7	490	423	4.15	933	10	9	197	7.76	36	20	286	4.1	40	9.0
RP5-175-1-490	193.7	490	423	4.15	933	10	9	195	7.68	50			3.6	35	7.9
RY3-175-2-490	193.7	490	985	9.66	2172	10	9	197	7.76	20	30	247	4.3	42	9.4
RY4-175-2-490	193.7	490	985	9.66	2172	10	9	197	7.76	39	30	296	4.6	45	10.1
RP5-175-2-490	193.7	490	985	9.66	2172	10	9	195	7.68	60			4.3	42	9.5
RY3-175-3-490	193.7	490	2125	20.8	4684	15	12	204	8.03	30	40	272	7.6	74	16.7
RY4-175-3-490	193.7	490	2125	20.8	4684	15	12	203	7.99	47	40	344	8.1	79	17.8
RP5-175-3-490	193.7	490	2125	20.8	4684	15	12	200	7.87	80			9.1	90	20.1
RY3-175-4-490	193.7	490	4293	42.1	9465	20	16	215	8.46	40	50	286	11.2	110	24.6
RY4-175-4-490	193.7	490	4293	42.1	9465	20	16	213	8.39	57	50	364	12.5	123	27.6
RP5-175-4-490	193.7	490	4293	42.1	9465	20	16	215	8.46	100			16.3	160	35.9
RY3-175-5-490	193.7	490	6324	62	13942	25	20	222	8.74	50	50	304	15.5	152	34.3
RY4-175-5-490	193.7	490	6324	62	13942	25	20	226	8.90	69	50	398	20.1	197	44.3
RP5-175-5-490	193.7	490	6324	62	13942	25	20	235	9.25	100			17.7	174	39.1
RY4-175-6-490	193.7	490	12754	125	28117	35	25	287	11.30	86	70	430	40.0	392	88.1
RP5-175-6-490	193.7	490	12754	125	28117	35	25	260	10.24	120			29.5	289	65.0
RY4-175-7-490	193.7	490	18132	178	39974	40	28	313	12.32	102	80	456	56.8	557	125.1
RP5-175-7-490	193.7	490	18132	178	39974	40	28	285	11.22	130			42.0	412	92.5
RP5-175-8-490	193.7	490	25524	250	56269	50	35	305	12.01	130			59.2	580	130.5

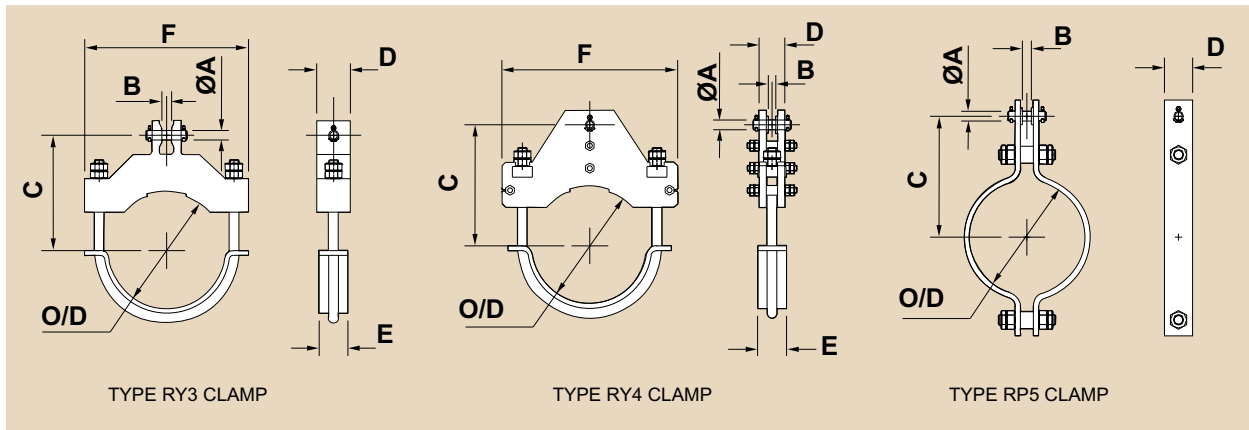


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-175-1-530	193.7	530	423	4.15	933	10	9	197	7.76	20	30	247	3.9	38	8.6
RY4-175-1-530	193.7	530	423	4.15	933	10	9	197	7.76	36	30	288	4.1	41	9.1
RP5-175-1-530	193.7	530	423	4.15	933	10	9	195	7.68	50			3.6	35	7.9
RY3-175-2-530	193.7	530	985	9.66	2172	10	9	197	7.76	25	30	258	5.6	55	12.4
RY4-175-2-530	193.7	530	985	9.66	2172	10	9	197	7.76	39	30	302	4.1	40	9.0
RP5-175-2-530	193.7	530	985	9.66	2172	10	9	195	7.68	70			6.0	59	13.3
RY3-175-3-530	193.7	530	2125	20.8	4684	15	12	204	8.03	40	50	286	10.3	101	22.7
RY4-175-3-530	193.7	530	2125	20.8	4684	15	12	204	8.03	51	50	348	10.7	105	23.5
RP5-175-3-530	193.7	530	2125	20.8	4684	15	12	200	7.87	80			9.1	90	20.1
RY3-175-4-530	193.7	530	4293	42.1	9465	20	16	215	8.46	50	50	304	14.7	144	32.5
RY4-175-4-530	193.7	530	4293	42.1	9465	20	16	213	8.39	57	50	372	14.3	140	31.4
RP5-175-4-530	193.7	530	4293	42.1	9465	20	16	215	8.46	100			16.3	160	35.9
RY3-175-5-530	193.7	530	6324	62	13942	25	20	222	8.74	60	70	325	20.5	201	45.1
RY4-175-5-530	193.7	530	6324	62	13942	25	20	236	9.29	69	70	404	24.1	236	53.1
RP5-175-5-530	193.7	530	6324	62	13942	25	20	245	9.65	90			20.5	201	45.1
RY4-175-6-530	193.7	530	12754	125	28117	35	25	297	11.69	86	80	440	50.9	499	112.1
RP5-175-6-530	193.7	530	12754	125	28117	35	25	270	10.63	100			30.3	297	66.8
RY4-175-7-530	193.7	530	18132	178	39974	40	28	324	12.76	102	90	462	70.7	694	155.9
RP5-175-7-530	193.7	530	18132	178	39974	40	28	285	11.22	150			48.0	471	105.9
RP5-175-8-530	193.7	530	25524	250	56269	50	35	305	12.01	130			59.2	580	130.5
RY3-175-1-570	193.7	570	423	4.15	933	10	9	197	7.76	25	30	258	5.2	51	11.5
RY4-175-1-570	193.7	570	423	4.15	933	10	9	197	7.76	36	30	294	3.7	37	8.2
RP5-175-1-570	193.7	570	423	4.15	933	10	9	195	7.68	50			3.6	35	7.9
RY3-175-2-570	193.7	570	985	9.66	2172	10	9	197	7.76	30	40	272	7.3	72	16.2
RY4-175-2-570	193.7	570	985	9.66	2172	10	9	197	7.76	39	40	306	5.6	55	12.3
RP5-175-2-570	193.7	570	985	9.66	2172	10	9	195	7.68	80			6.9	67	15.2
RY3-175-3-570	193.7	570	2125	20.8	4684	15	12	204	8.03	50	50	304	13.9	136	30.6
RY4-175-3-570	193.7	570	2125	20.8	4684	15	12	207	8.15	51	50	356	14.4	141	31.7
RP5-175-3-570	193.7	570	2125	20.8	4684	15	12	205	8.07	100			15.4	151	34.0
RY3-175-4-570	193.7	570	4293	42.1	9465	20	16	215	8.46	60	70	325	19.8	194	43.6
RY4-175-4-570	193.7	570	4293	42.1	9465	20	16	233	9.17	63	70	378	23.9	234	52.7
RP5-175-4-570	193.7	570	4293	42.1	9465	20	16	215	8.46	110			17.9	175	39.4
RY3-175-5-570	193.7	570	6324	62	13942	25	20	222	8.74	70	80	350	27.3	268	60.2
RY4-175-5-570	193.7	570	6324	62	13942	25	20	260	10.24	79	80	414	38.3	375	84.4
RP5-175-5-570	193.7	570	6324	62	13942	25	20	245	9.65	110			24.8	244	54.8
RY4-175-6-570	193.7	570	12754	125	28117	35	25	301	11.85	96	90	446	66.7	654	147.1
RP5-175-6-570	193.7	570	12754	125	28117	35	25	270	10.63	140			41.8	410	92.2
RY4-175-7-570	193.7	570	18132	178	39974	40	28	346	13.62	102	100	474	86.3	847	190.3
RP5-175-7-570	193.7	570	18132	178	39974	40	28	295	11.61	120			52.3	513	115.2
RP5-175-8-570	193.7	570	25524	250	56269	50	35	305	12.01	150			67.7	664	149.3

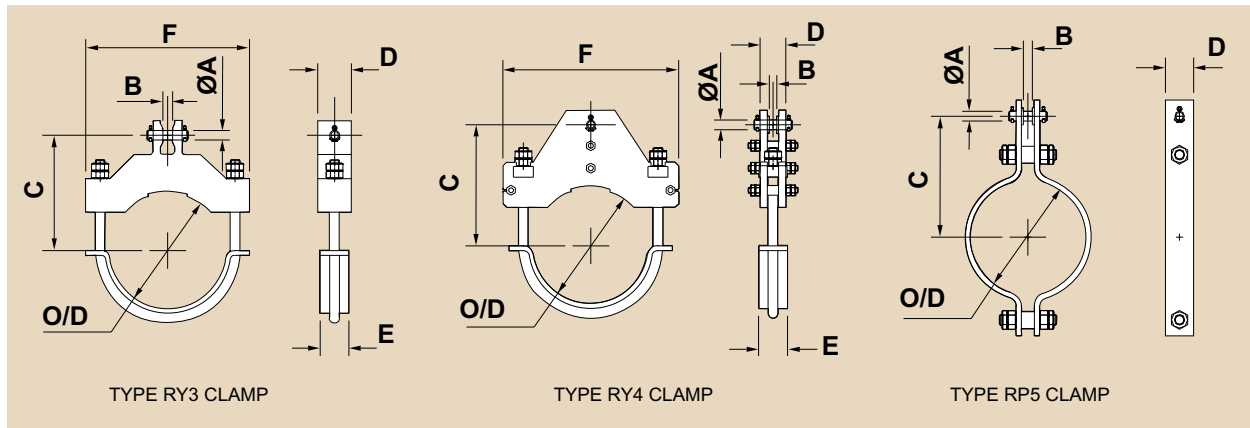


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-200-1-400	219.1	400	423	4.15	933	10	9	210	8.27	20	20	266	4.2	41	9.2
RY4-200-1-400	219.1	400	423	4.15	933	10	9	208	8.19	36	20	312	4.3	42	9.4
RP5-200-1-400	219.1	400	423	4.15	933	10	9	210	8.27	50			3.9	39	8.7
RY3-200-2-400	219.1	400	985	9.66	2172	10	9	210	8.27	20	30	273	5.1	50	11.2
RY4-200-2-400	219.1	400	985	9.66	2172	10	9	208	8.19	39	30	322	5.0	49	11.0
RP5-200-2-400	219.1	400	985	9.66	2172	10	9	210	8.27	70			6.8	66	14.9
RY3-200-3-400	219.1	400	2125	20.8	4684	15	12	217	8.54	30	40	298	9.0	88	19.8
RY4-200-3-400	219.1	400	2125	20.8	4684	15	12	217	8.54	47	40	370	9.2	90	20.2
RP5-200-3-400	219.1	400	2125	20.8	4684	15	12	215	8.46	80			10.2	100	22.4
RY3-200-4-400	219.1	400	4293	42.1	9465	20	16	228	8.98	40	50	312	13.0	128	28.7
RY4-200-4-400	219.1	400	4293	42.1	9465	20	16	226	8.90	57	50	390	12.2	120	27.0
RP5-200-4-400	219.1	400	4293	42.1	9465	20	16	240	9.45	100			18.5	181	40.7
RY3-200-5-400	219.1	400	6324	62	13942	25	20	235	9.25	50	50	330	17.9	175	39.4
RY4-200-5-400	219.1	400	6324	62	13942	25	20	235	9.25	69	50	424	19.5	191	42.9
RP5-200-5-400	219.1	400	6324	62	13942	25	20	255	10.04	110			21.9	215	48.3
RY4-200-6-400	219.1	400	12754	125	28117	35	25	297	11.69	86	80	466	46.7	458	103.0
RP5-200-6-400	219.1	400	12754	125	28117	35	25	300	11.81	110			38.9	381	85.7
RY4-200-7-400	219.1	400	18132	178	39974	40	28	324	12.76	102	90	488	69.8	684	153.8
RP5-200-7-400	219.1	400	18132	178	39974	40	28	310	12.20	150			53.4	524	117.7
RP5-200-8-400	219.1	400	25524	250	56269	50	35	340	13.39	130			68.3	670	150.5
RY3-200-1-490	219.1	490	423	4.15	933	10	9	210	8.27	20	20	266	4.2	41	9.2
RY4-200-1-490	219.1	490	423	4.15	933	10	9	208	8.19	36	20	312	4.3	42	9.4
RP5-200-1-490	219.1	490	423	4.15	933	10	9	210	8.27	50			3.9	39	8.7
RY3-200-2-490	219.1	490	985	9.66	2172	10	9	210	8.27	20	30	273	5.1	50	11.2
RY4-200-2-490	219.1	490	985	9.66	2172	10	9	208	8.19	39	30	322	5.0	49	11.0
RP5-200-2-490	219.1	490	985	9.66	2172	10	9	210	8.27	60			4.7	46	10.4
RY3-200-3-490	219.1	490	2125	20.8	4684	15	12	217	8.54	30	40	298	8.9	87	19.7
RY4-200-3-490	219.1	490	2125	20.8	4684	15	12	217	8.54	47	40	370	9.3	91	20.4
RP5-200-3-490	219.1	490	2125	20.8	4684	15	12	215	8.46	80			10.0	98	22.0
RY3-200-4-490	219.1	490	4293	42.1	9465	20	16	228	8.98	40	50	312	13.0	128	28.7
RY4-200-4-490	219.1	490	4293	42.1	9465	20	16	226	8.90	57	50	390	12.4	122	27.4
RP5-200-4-490	219.1	490	4293	42.1	9465	20	16	230	9.06	100			17.6	173	38.9
RY3-200-5-490	219.1	490	6324	62	13942	25	20	235	9.25	50	50	330	17.9	175	39.4
RY4-200-5-490	219.1	490	6324	62	13942	25	20	233	9.17	69	50	424	19.3	190	42.6
RP5-200-5-490	219.1	490	6324	62	13942	25	20	250	9.84	110			20.9	205	46.1
RY4-200-6-490	219.1	490	12754	125	28117	35	25	295	11.61	86	70	456	40.9	401	90.2
RP5-200-6-490	219.1	490	12754	125	28117	35	25	285	11.22	100			32.3	317	71.2
RY4-200-7-490	219.1	490	18132	178	39974	40	28	322	12.68	102	80	482	64.0	628	141.2
RP5-200-7-490	219.1	490	18132	178	39974	40	28	300	11.81	140			47.7	468	105.2
RP5-200-8-490	219.1	490	25524	250	56269	50	35	335	13.19	130			65.7	644	144.9



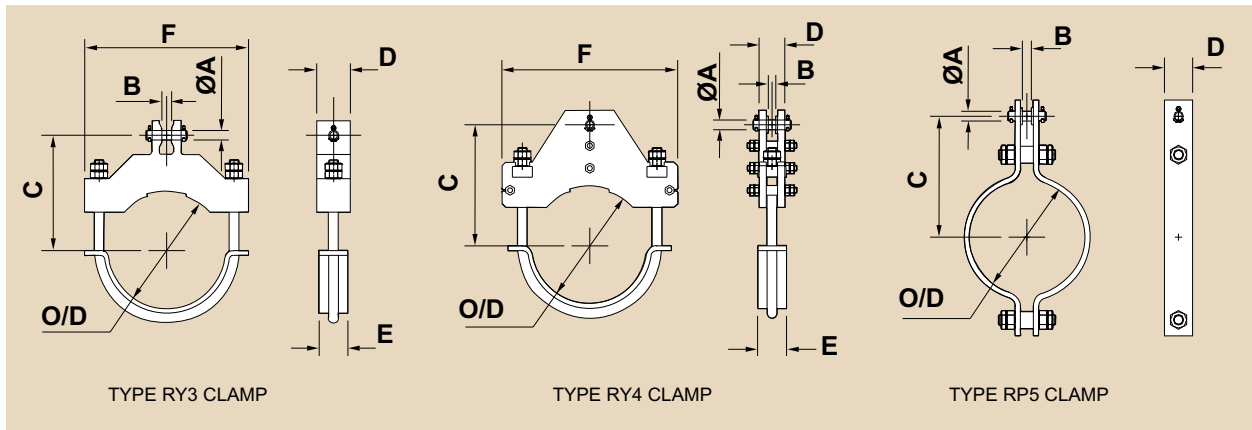


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
	mm	°C				mm	mm	mm	in	mm	mm	mm	kgf	N	lbs
RY3-200-1-530	219.1	530	423	4.15	933	10	9	210	8.27	20	30	273	4.7	46	10.3
RY4-200-1-530	219.1	530	423	4.15	933	10	9	208	8.19	36	30	314	4.7	46	10.3
RP5-200-1-530	219.1	530	423	4.15	933	10	9	210	8.27	50			3.9	39	8.7
RY3-200-2-530	219.1	530	985	9.66	2172	10	9	210	8.27	25	30	284	6.6	64	14.5
RY4-200-2-530	219.1	530	985	9.66	2172	10	9	208	8.19	39	30	328	5.5	54	12.2
RP5-200-2-530	219.1	530	985	9.66	2172	10	9	210	8.27	70			6.6	65	14.6
RY3-200-3-530	219.1	530	2125	20.8	4684	15	12	217	8.54	40	50	312	12.1	119	26.7
RY4-200-3-530	219.1	530	2125	20.8	4684	15	12	217	8.54	47	50	374	11.4	112	25.2
RP5-200-3-530	219.1	530	2125	20.8	4684	15	12	215	8.46	80			10.0	98	22.0
RY3-200-4-530	219.1	530	4293	42.1	9465	20	16	228	8.98	50	50	330	17.0	167	37.6
RY4-200-4-530	219.1	530	4293	42.1	9465	20	16	226	8.90	57	50	398	15.7	154	34.5
RP5-200-4-530	219.1	530	4293	42.1	9465	20	16	230	9.06	100			17.6	173	38.9
RY3-200-5-530	219.1	530	6324	62	13942	25	20	235	9.25	60	70	351	23.3	229	51.4
RY4-200-5-530	219.1	530	6324	62	13942	25	20	250	9.84	69	70	430	26.1	256	57.6
RP5-200-5-530	219.1	530	6324	62	13942	25	20	255	10.04	90			21.6	212	47.7
RY4-200-6-530	219.1	530	12754	125	28117	35	25	306	12.05	86	80	466	48.4	475	106.7
RP5-200-6-530	219.1	530	12754	125	28117	35	25	285	11.22	110			35.4	347	78.0
RY4-200-7-530	219.1	530	18132	178	39974	40	28	333	13.11	102	90	488	72.3	709	159.4
RP5-200-7-530	219.1	530	18132	178	39974	40	28	300	11.81	160			54.2	531	119.4
RP5-200-8-530	219.1	530	25524	250	56269	50	35	320	12.60	130			62.5	613	137.9
RY3-200-1-570	219.1	570	423	4.15	933	10	9	210	8.27	25	30	284	6.2	61	13.7
RY4-200-1-570	219.1	570	423	4.15	933	10	9	208	8.19	36	30	320	5.2	51	11.6
RP5-200-1-570	219.1	570	423	4.15	933	10	9	210	8.27	50			3.9	39	8.7
RY3-200-2-570	219.1	570	985	9.66	2172	10	9	210	8.27	30	40	298	8.7	85	19.1
RY4-200-2-570	219.1	570	985	9.66	2172	10	9	208	8.19	39	40	332	7.9	77	17.4
RP5-200-2-570	219.1	570	985	9.66	2172	10	9	210	8.27	80			7.5	74	16.6
RY3-200-3-570	219.1	570	2125	20.8	4684	15	12	217	8.54	50	50	330	16.1	158	35.6
RY4-200-3-570	219.1	570	2125	20.8	4684	15	12	221	8.70	51	50	382	15.5	152	34.1
RP5-200-3-570	219.1	570	2125	20.8	4684	15	12	215	8.46	100			16.5	162	36.4
RY3-200-4-570	219.1	570	4293	42.1	9465	20	16	228	8.98	60	70	351	22.7	222	50.0
RY4-200-4-570	219.1	570	4293	42.1	9465	20	16	247	9.72	63	70	404	24.7	242	54.5
RP5-200-4-570	219.1	570	4293	42.1	9465	20	16	240	9.45	90			20.4	200	45.0
RY3-200-5-570	219.1	570	6324	62	13942	25	20	235	9.25	70	80	376	30.7	301	67.7
RY4-200-5-570	219.1	570	6324	62	13942	25	20	274	10.79	79	80	440	36.3	356	80.1
RP5-200-5-570	219.1	570	6324	62	13942	25	20	255	10.04	110			26.3	258	57.9
RY4-200-6-570	219.1	570	12754	125	28117	35	25	315	12.40	96	90	472	65.1	639	143.5
RP5-200-6-570	219.1	570	12754	125	28117	35	25	285	11.22	160			50.7	498	111.9
RY4-200-7-570	219.1	570	18132	178	39974	40	28	356	14.02	102	100	500	85.0	834	187.5
RP5-200-7-570	219.1	570	18132	178	39974	40	28	315	12.40	120			56.1	550	123.7
RP5-200-8-570	219.1	570	25524	250	56269	50	35	320	12.60	160			76.1	747	167.9

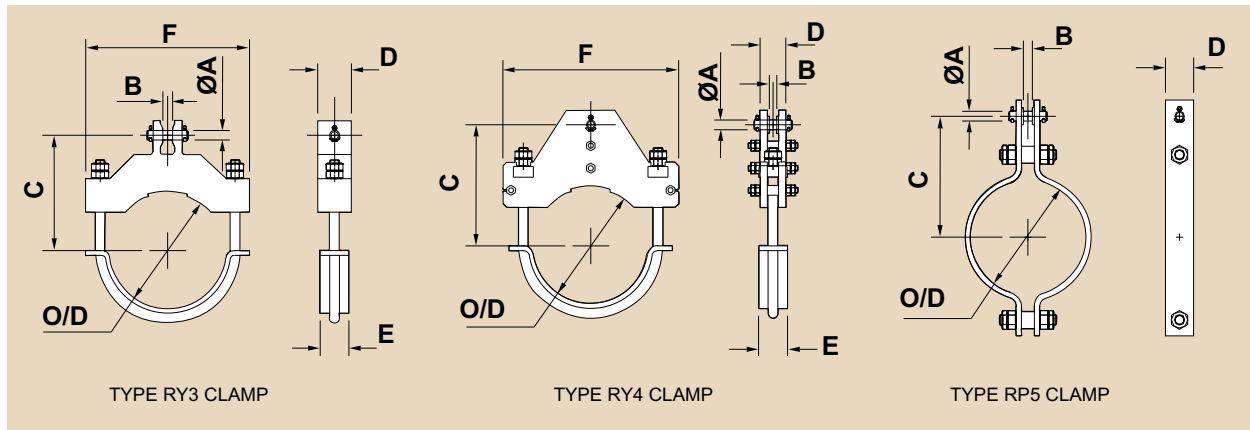


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			mm	°C	kgf			kN	lbs				mm	in	mm
RY3-225-1-400	244.5	400	423	4.15	933	10	9	222	8.74	20	20	290	4.8	47	10.6
RY4-225-1-400	244.5	400	423	4.15	933	10	9	220	8.66	36	20	336	5.7	56	12.6
RP5-225-1-400	244.5	400	423	4.15	933	10	9	220	8.66	50			4.2	41	9.3
RY3-225-2-400	244.5	400	985	9.66	2172	10	9	222	8.74	20	30	297	5.9	57	12.9
RY4-225-2-400	244.5	400	985	9.66	2172	10	9	220	8.66	39	30	346	6.6	65	14.6
RP5-225-2-400	244.5	400	985	9.66	2172	10	9	220	8.66	70			7.3	71	16.0
RY3-225-3-400	244.5	400	2125	20.8	4684	15	12	229	9.02	30	40	322	10.3	101	22.6
RY4-225-3-400	244.5	400	2125	20.8	4684	15	12	229	9.02	47	40	394	10.5	103	23.2
RP5-225-3-400	244.5	400	2125	20.8	4684	15	12	230	9.06	80			11.0	108	24.2
RY3-225-4-400	244.5	400	4293	42.1	9465	20	16	240	9.45	40	50	336	14.8	145	32.5
RY4-225-4-400	244.5	400	4293	42.1	9465	20	16	238	9.37	57	50	414	12.7	124	27.9
RP5-225-4-400	244.5	400	4293	42.1	9465	20	16	260	10.24	100			20.7	203	45.7
RY3-225-5-400	244.5	400	6324	62	13942	25	20	247	9.72	50	50	354	20.2	198	44.5
RY4-225-5-400	244.5	400	6324	62	13942	25	20	245	9.65	69	50	448	20.7	203	45.7
RP5-225-5-400	244.5	400	6324	62	13942	25	20	275	10.83	90			24.1	237	53.2
RY4-225-6-400	244.5	400	12754	125	28117	35	25	303	11.93	86	80	490	54.5	535	120.3
RP5-225-6-400	244.5	400	12754	125	28117	35	25	315	12.40	120			44.5	436	98.0
RY4-225-7-400	244.5	400	18132	178	39974	40	28	332	13.07	102	90	512	75.8	743	167.1
RP5-225-7-400	244.5	400	18132	178	39974	40	28	325	12.80	160			59.9	587	132.0
RY4-225-8-400	244.5	400	25524	250	56269	50	35	375	14.76	120	100	566	107.0	1049	235.9
RP5-225-8-400	244.5	400	25524	250	56269	50	35	370	14.57	140			81.6	800	179.9
RY3-225-1-490	244.5	490	423	4.15	933	10	9	222	8.74	20	20	290	4.8	47	10.6
RY4-225-1-490	244.5	490	423	4.15	933	10	9	220	8.66	36	20	336	5.7	56	12.6
RP5-225-1-490	244.5	490	423	4.15	933	10	9	220	8.66	50			4.2	41	9.3
RY3-225-2-490	244.5	490	985	9.66	2172	10	9	222	8.74	20	30	297	5.9	57	12.9
RY4-225-2-490	244.5	490	985	9.66	2172	10	9	220	8.66	39	30	346	6.7	65	14.7
RP5-225-2-490	244.5	490	985	9.66	2172	10	9	220	8.66	60			5.0	49	11.1
RY3-225-3-490	244.5	490	2125	20.8	4684	15	12	229	9.02	30	40	322	10.2	100	22.5
RY4-225-3-490	244.5	490	2125	20.8	4684	15	12	229	9.02	47	40	394	10.4	102	22.9
RP5-225-3-490	244.5	490	2125	20.8	4684	15	12	230	9.06	80			10.7	105	23.5
RY3-225-4-490	244.5	490	4293	42.1	9465	20	16	240	9.45	40	50	336	14.8	145	32.5
RY4-225-4-490	244.5	490	4293	42.1	9465	20	16	238	9.37	57	50	414	12.7	124	27.9
RP5-225-4-490	244.5	490	4293	42.1	9465	20	16	245	9.65	100			19.0	186	41.9
RY3-225-5-490	244.5	490	6324	62	13942	25	20	247	9.72	50	50	354	20.1	197	44.3
RY4-225-5-490	244.5	490	6324	62	13942	25	20	245	9.65	69	50	448	20.2	198	44.5
RP5-225-5-490	244.5	490	6324	62	13942	25	20	260	10.24	110			22.1	216	48.6
RY4-225-6-490	244.5	490	12754	125	28117	35	25	302	11.89	86	70	480	45.8	449	100.9
RP5-225-6-490	244.5	490	12754	125	28117	35	25	300	11.81	110			37.5	368	82.7
RY4-225-7-490	244.5	490	18132	178	39974	40	28	329	12.95	102	80	506	62.4	612	137.6
RP5-225-7-490	244.5	490	18132	178	39974	40	28	310	12.20	150			53.2	522	117.3
RY4-225-8-490	244.5	490	25524	250	56269	50	35	373	14.69	120	90	554	100.5	986	221.7
RP5-225-8-490	244.5	490	25524	250	56269	50	35	350	13.78	130			69.0	676	152.1

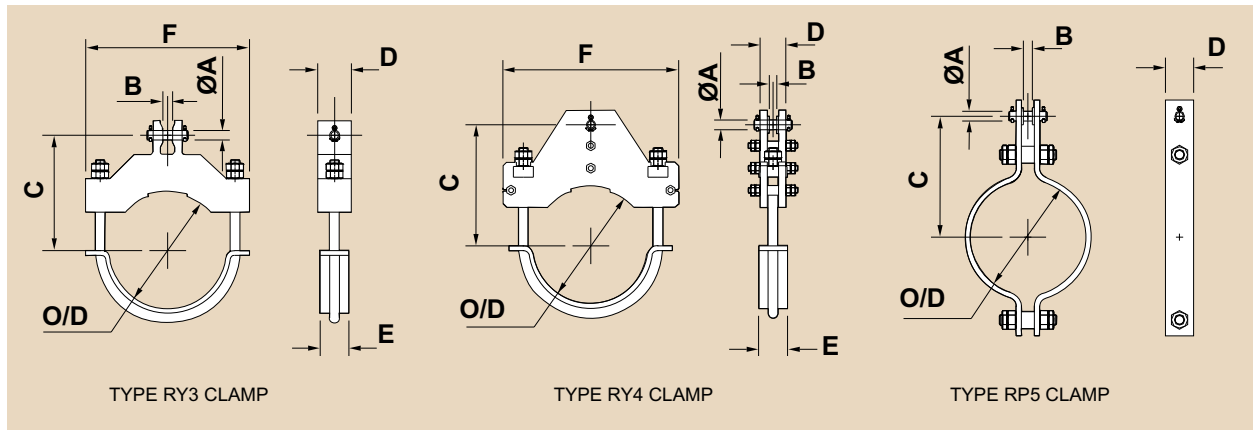


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			mm	°C	kgf			kN	lbs				mm	in	mm
RY3-225-1-530	244.5	530	423	4.15	933	10	9	222	8.74	20	30	297	5.4	53	11.8
RY4-225-1-530	244.5	530	423	4.15	933	10	9	220	8.66	36	30	338	6.2	60	13.6
RP5-225-1-530	244.5	530	423	4.15	933	10	9	220	8.66	50			4.2	41	9.3
RY3-225-2-530	244.5	530	985	9.66	2172	10	9	222	8.74	25	30	308	7.5	74	16.6
RY4-225-2-530	244.5	530	985	9.66	2172	10	9	220	8.66	39	30	352	7.5	73	16.4
RP5-225-2-530	244.5	530	985	9.66	2172	10	9	220	8.66	70			7.0	69	15.5
RY3-225-3-530	244.5	530	2125	20.8	4684	15	12	229	9.02	40	50	336	13.9	136	30.5
RY4-225-3-530	244.5	530	2125	20.8	4684	15	12	229	9.02	47	50	398	12.3	121	27.1
RP5-225-3-530	244.5	530	2125	20.8	4684	15	12	230	9.06	80			10.7	105	23.5
RY3-225-4-530	244.5	530	4293	42.1	9465	20	16	240	9.45	50	50	354	19.2	189	42.4
RY4-225-4-530	244.5	530	4293	42.1	9465	20	16	238	9.37	57	50	422	16.4	161	36.1
RP5-225-4-530	244.5	530	4293	42.1	9465	20	16	245	9.65	100			19.0	186	41.9
RY3-225-5-530	244.5	530	6324	62	13942	25	20	247	9.72	60	70	375	26.1	256	57.5
RY4-225-5-530	244.5	530	6324	62	13942	25	20	262	10.31	69	70	454	26.8	263	59.0
RP5-225-5-530	244.5	530	6324	62	13942	25	20	270	10.63	90			23.1	227	50.9
RY4-225-6-530	244.5	530	12754	125	28117	35	25	312	12.28	86	80	490	56.2	551	124.0
RP5-225-6-530	244.5	530	12754	125	28117	35	25	300	11.81	120			40.8	400	89.9
RY4-225-7-530	244.5	530	18132	178	39974	40	28	341	13.43	102	90	512	77.7	762	171.4
RP5-225-7-530	244.5	530	18132	178	39974	40	28	325	12.80	120			58.5	573	128.9
RY4-225-8-530	244.5	530	25524	250	56269	50	35	380	14.96	120	100	566	108.4	1063	238.9
RP5-225-8-530	244.5	530	25524	250	56269	50	35	350	13.78	140			73.9	725	163.0
RY3-225-1-570	244.5	570	423	4.15	933	10	9	222	8.74	25	30	308	7.1	69	15.6
RY4-225-1-570	244.5	570	423	4.15	933	10	9	220	8.66	36	30	344	6.7	66	14.9
RP5-225-1-570	244.5	570	423	4.15	933	10	9	220	8.66	60			5.0	49	11.1
RY3-225-2-570	244.5	570	985	9.66	2172	10	9	222	8.74	30	40	322	10.0	98	22.0
RY4-225-2-570	244.5	570	985	9.66	2172	10	9	220	8.66	39	40	356	9.2	91	20.4
RP5-225-2-570	244.5	570	985	9.66	2172	10	9	220	8.66	80			10.1	99	22.2
RY3-225-3-570	244.5	570	2125	20.8	4684	15	12	229	9.02	50	50	354	18.4	180	40.5
RY4-225-3-570	244.5	570	2125	20.8	4684	15	12	233	9.17	51	50	406	16.1	157	35.4
RP5-225-3-570	244.5	570	2125	20.8	4684	15	12	230	9.06	100			17.8	175	39.3
RY3-225-4-570	244.5	570	4293	42.1	9465	20	16	240	9.45	60	70	375	25.5	250	56.2
RY4-225-4-570	244.5	570	4293	42.1	9465	20	16	259	10.20	63	70	428	25.3	249	55.9
RP5-225-4-570	244.5	570	4293	42.1	9465	20	16	250	9.84	90			21.5	211	47.5
RY3-225-5-570	244.5	570	6324	62	13942	25	20	247	9.72	70	80	400	34.1	334	75.2
RY4-225-5-570	244.5	570	6324	62	13942	25	20	286	11.26	79	80	464	42.3	414	93.2
RP5-225-5-570	244.5	570	6324	62	13942	25	20	280	11.02	100			31.3	307	69.1
RY4-225-6-570	244.5	570	12754	125	28117	35	25	327	12.87	96	90	496	75.4	739	166.1
RP5-225-6-570	244.5	570	12754	125	28117	35	25	315	12.40	120			55.7	546	122.9
RY4-225-7-570	244.5	570	18132	178	39974	40	28	363	14.29	102	100	524	95.3	935	210.2
RP5-225-7-570	244.5	570	18132	178	39974	40	28	325	12.80	130			63.1	619	139.1
RY4-225-8-570	244.5	570	25524	250	56269	50	35	402	15.83	120	120	574	137.9	1352	304.0
RP5-225-8-570	244.5	570	25524	250	56269	50	35	350	13.78	180			93.8	920	206.8

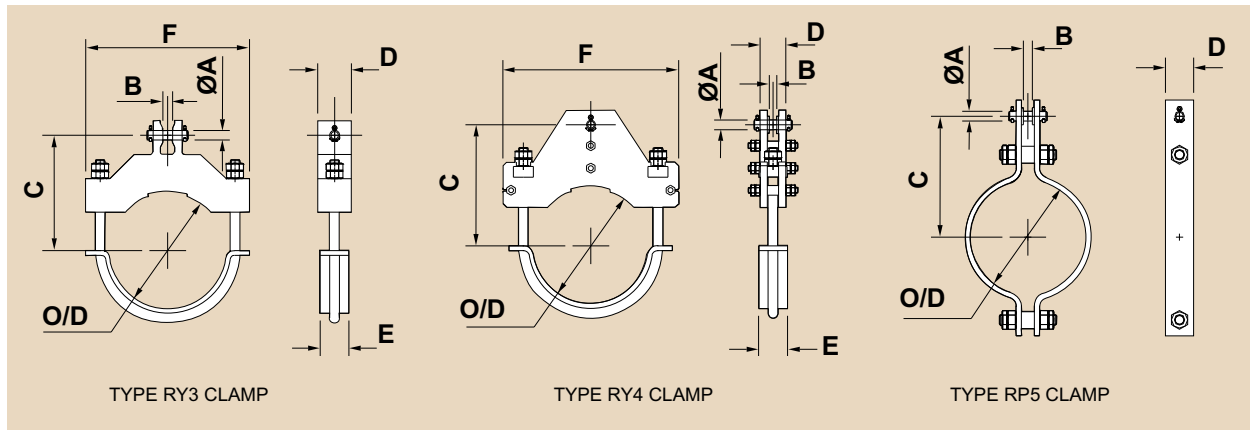


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-250-1-400	273	400	423	4.15	933	10	9	237	9.33	20	20	320	5.8	56	12.7
RY4-250-1-400	273	400	423	4.15	933	10	9	235	9.25	36	20	366	7.7	75	16.9
RP5-250-1-400	273	400	423	4.15	933	10	9	235	9.25	50			4.6	45	10.1
RY3-250-2-400	273	400	985	9.66	2172	10	9	237	9.33	20	30	327	6.9	67	15.1
RY4-250-2-400	273	400	985	9.66	2172	10	9	235	9.25	39	30	376	8.4	82	18.5
RP5-250-2-400	273	400	985	9.66	2172	10	9	235	9.25	70			7.9	77	17.4
RY3-250-3-400	273	400	2125	20.8	4684	15	12	244	9.61	30	40	352	12.0	118	26.4
RY4-250-3-400	273	400	2125	20.8	4684	15	12	244	9.61	47	40	424	11.9	116	26.1
RP5-250-3-400	273	400	2125	20.8	4684	15	12	240	9.45	80			11.8	115	25.9
RY3-250-4-400	273	400	4293	42.1	9465	20	16	255	10.04	40	50	366	17.2	168	37.8
RY4-250-4-400	273	400	4293	42.1	9465	20	16	253	9.96	57	50	444	13.1	128	28.8
RP5-250-4-400	273	400	4293	42.1	9465	20	16	275	10.83	100			22.2	217	48.8
RY3-250-5-400	273	400	6324	62	13942	25	20	263	10.35	50	50	384	23.2	228	51.2
RY4-250-5-400	273	400	6324	62	13942	25	20	260	10.24	69	50	478	21.8	214	48.2
RP5-250-5-400	273	400	6324	62	13942	25	20	295	11.61	90			26.1	256	57.5
RY4-250-6-400	273	400	12754	125	28117	35	25	313	12.32	86	80	520	49.2	483	108.5
RP5-250-6-400	273	400	12754	125	28117	35	25	330	12.99	120			47.0	461	103.6
RY4-250-7-400	273	400	18132	178	39974	40	28	344	13.54	102	90	542	77.4	759	170.7
RP5-250-7-400	273	400	18132	178	39974	40	28	360	14.17	120			67.4	661	148.6
RY4-250-8-400	273	400	25524	250	56269	50	35	386	15.20	120	100	596	122.7	1203	270.4
RP5-250-8-400	273	400	25524	250	56269	50	35	390	15.35	140			86.4	847	190.4
RY4-250-9-400	273	400	55135	541	121552	70	49	537	21.14	148	130	660	258.0	2530	568.7
RY3-250-1-490	273	490	423	4.15	933	10	9	237	9.33	20	20	320	5.8	56	12.7
RY4-250-1-490	273	490	423	4.15	933	10	9	235	9.25	36	20	366	7.7	75	16.9
RP5-250-1-490	273	490	423	4.15	933	10	9	235	9.25	50			4.6	45	10.1
RY3-250-2-490	273	490	985	9.66	2172	10	9	237	9.33	20	30	327	6.9	67	15.1
RY4-250-2-490	273	490	985	9.66	2172	10	9	235	9.25	39	30	376	8.4	83	18.6
RP5-250-2-490	273	490	985	9.66	2172	10	9	235	9.25	70			7.7	75	16.9
RY3-250-3-490	273	490	2125	20.8	4684	15	12	244	9.61	30	40	352	11.9	117	26.3
RY4-250-3-490	273	490	2125	20.8	4684	15	12	244	9.61	47	40	424	11.9	116	26.2
RP5-250-3-490	273	490	2125	20.8	4684	15	12	240	9.45	80			11.4	112	25.2
RY3-250-4-490	273	490	4293	42.1	9465	20	16	255	10.04	40	50	366	17.2	168	37.8
RY4-250-4-490	273	490	4293	42.1	9465	20	16	253	9.96	57	50	444	13.2	129	29.0
RP5-250-4-490	273	490	4293	42.1	9465	20	16	270	10.63	100			21.2	208	46.8
RY3-250-5-490	273	490	6324	62	13942	25	20	262	10.31	50	50	384	23.2	227	51.1
RY4-250-5-490	273	490	6324	62	13942	25	20	260	10.24	69	50	478	21.4	210	47.1
RP5-250-5-490	273	490	6324	62	13942	25	20	295	11.61	90			26.1	256	57.5
RY4-250-6-490	273	490	12754	125	28117	35	25	312	12.28	86	70	510	44.2	433	97.4
RP5-250-6-490	273	490	12754	125	28117	35	25	320	12.60	120			44.9	441	99.0
RY4-250-7-490	273	490	18132	178	39974	40	28	340	13.39	102	80	536	71.2	699	157.0
RP5-250-7-490	273	490	18132	178	39974	40	28	330	12.99	160			60.6	595	133.7
RY4-250-8-490	273	490	25524	250	56269	50	35	384	15.12	120	90	584	110.8	1087	244.3
RP5-250-8-490	273	490	25524	250	56269	50	35	370	14.57	130			73.4	720	161.8
RY4-250-9-490	273	490	55135	541	121552	70	49	528	20.79	148	130	660	254.4	2495	560.8

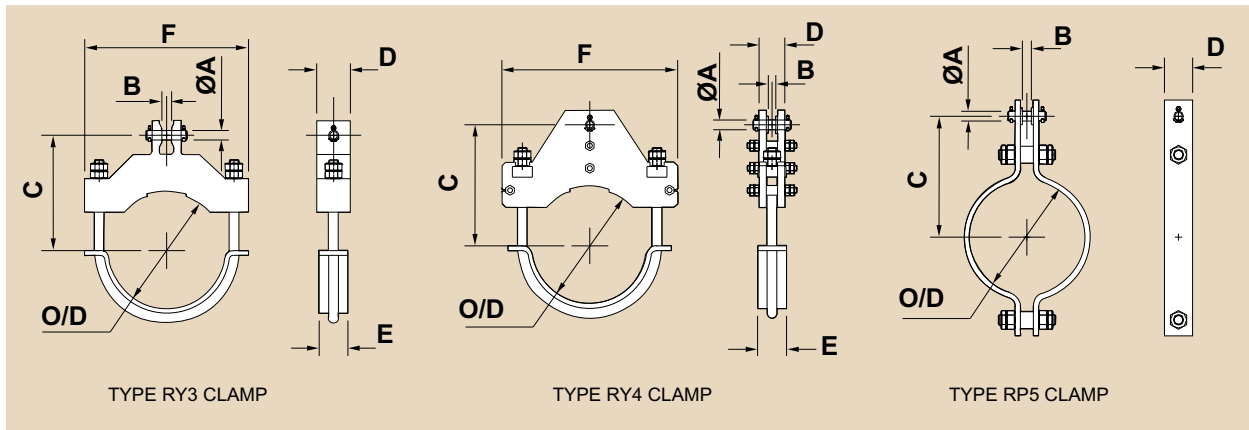


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-250-1-530	273	530	423	4.15	933	10	9	237	9.33	20	30	327	6.3	62	14.0
RY4-250-1-530	273	530	423	4.15	933	10	9	235	9.25	36	30	368	8.2	80	18.0
RP5-250-1-530	273	530	423	4.15	933	10	9	235	9.25	50			4.6	45	10.1
RY3-250-2-530	273	530	985	9.66	2172	10	9	237	9.33	25	30	338	8.8	86	19.4
RY4-250-2-530	273	530	985	9.66	2172	10	9	235	9.25	39	30	382	9.2	90	20.3
RP5-250-2-530	273	530	985	9.66	2172	10	9	235	9.25	70			7.7	75	16.9
RY3-250-3-530	273	530	2125	20.8	4684	15	12	244	9.61	40	50	366	16.1	158	35.6
RY4-250-3-530	273	530	2125	20.8	4684	15	12	244	9.61	47	50	428	12.8	126	28.3
RP5-250-3-530	273	530	2125	20.8	4684	15	12	240	9.45	100			14.3	140	31.4
RY3-250-4-530	273	530	4293	42.1	9465	20	16	255	10.04	50	50	384	22.2	218	49.0
RY4-250-4-530	273	530	4293	42.1	9465	20	16	253	9.96	57	50	452	17.7	173	39.0
RP5-250-4-530	273	530	4293	42.1	9465	20	16	270	10.63	110			23.3	228	51.4
RY3-250-5-530	273	530	6324	62	13942	25	20	262	10.31	60	70	405	29.8	292	65.6
RY4-250-5-530	273	530	6324	62	13942	25	20	277	10.91	69	70	484	27.9	273	61.4
RP5-250-5-530	273	530	6324	62	13942	25	20	285	11.22	90			24.7	242	54.5
RY4-250-6-530	273	530	12754	125	28117	35	25	322	12.68	86	80	520	51.3	503	113.2
RP5-250-6-530	273	530	12754	125	28117	35	25	320	12.60	140			52.1	511	114.8
RY4-250-7-530	273	530	18132	178	39974	40	28	351	13.82	102	90	542	79.2	776	174.5
RP5-250-7-530	273	530	18132	178	39974	40	28	345	13.58	120			62.5	612	137.7
RY4-250-8-530	273	530	25524	250	56269	50	35	390	15.35	120	100	596	124.4	1220	274.2
RP5-250-8-530	273	530	25524	250	56269	50	35	370	14.57	150			84.0	824	185.2
RY4-250-9-530	273	530	55135	541	121552	70	49	533	20.98	148	130	660	256.7	2518	566.0
RY3-250-1-570	273	570	423	4.15	933	10	9	237	9.33	25	30	338	8.3	82	18.4
RY4-250-1-570	273	570	423	4.15	933	10	9	235	9.25	36	30	374	8.8	86	19.4
RP5-250-1-570	273	570	423	4.15	933	10	9	235	9.25	60			5.5	54	12.1
RY3-250-2-570	273	570	985	9.66	2172	10	9	237	9.33	30	40	352	11.5	113	25.3
RY4-250-2-570	273	570	985	9.66	2172	10	9	235	9.25	39	40	386	10.0	98	22.0
RP5-250-2-570	273	570	985	9.66	2172	10	9	235	9.25	80			10.9	107	24.1
RY3-250-3-570	273	570	2125	20.8	4684	15	12	244	9.61	50	50	384	21.2	208	46.7
RY4-250-3-570	273	570	2125	20.8	4684	15	12	248	9.76	51	50	436	16.2	158	35.6
RP5-250-3-570	273	570	2125	20.8	4684	15	12	245	9.65	100			19.3	189	42.5
RY3-250-4-570	273	570	4293	42.1	9465	20	16	255	10.04	60	70	405	29.1	286	64.2
RY4-250-4-570	273	570	4293	42.1	9465	20	16	274	10.79	63	70	458	26.7	262	58.8
RP5-250-4-570	273	570	4293	42.1	9465	20	16	270	10.63	90			23.5	230	51.8
RY3-250-5-570	273	570	6324	62	13942	25	20	264	10.39	70	80	430	38.7	380	85.4
RY4-250-5-570	273	570	6324	62	13942	25	20	301	11.85	79	80	494	47.6	467	105.0
RP5-250-5-570	273	570	6324	62	13942	25	20	295	11.61	100			33.5	328	73.8
RY4-250-6-570	273	570	12754	125	28117	35	25	342	13.46	96	90	526	71.5	701	157.6
RP5-250-6-570	273	570	12754	125	28117	35	25	335	13.19	120			61.0	598	134.5
RY4-250-7-570	273	570	18132	178	39974	40	28	373	14.69	102	100	554	89.8	881	198.0
RP5-250-7-570	273	570	18132	178	39974	40	28	345	13.58	140			72.4	710	159.7
RY4-250-8-570	273	570	25524	250	56269	50	35	412	16.22	120	120	604	143.9	1411	317.2
RP5-250-8-570	273	570	25524	250	56269	50	35	370	14.57	200			110.5	1084	243.7
RY4-250-9-570	273	570	55135	541	121552	70	49	532	20.94	158	130	660	276.6	2713	609.9

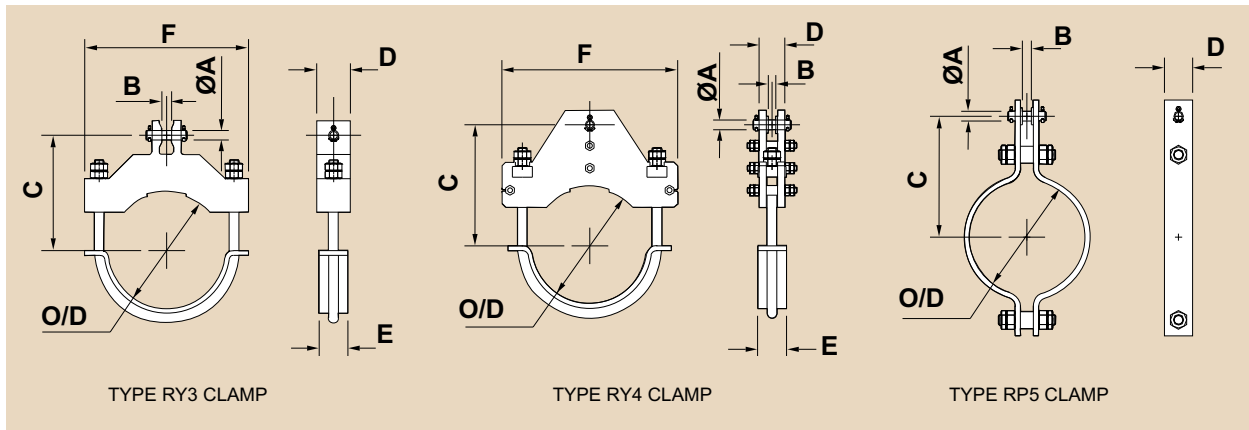


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-300-1-400	323.9	400	423	4.15	933	10	9	263	10.35	20	20	372	7.4	73	16.4
RY4-300-1-400	323.9	400	423	4.15	933	10	9	262	10.31	36	20	418	9.9	97	21.7
RP5-300-1-400	323.9	400	423	4.15	933	10	9	260	10.24	50			5.2	51	11.5
RY3-300-2-400	323.9	400	985	9.66	2172	10	9	263	10.35	20	30	379	8.7	86	19.3
RY4-300-2-400	323.9	400	985	9.66	2172	10	9	262	10.31	39	30	428	10.3	101	22.8
RP5-300-2-400	323.9	400	985	9.66	2172	10	9	260	10.24	70			8.9	87	19.6
RY3-300-3-400	323.9	400	2125	20.8	4684	15	12	270	10.63	30	40	404	15.1	148	33.3
RY4-300-3-400	323.9	400	2125	20.8	4684	15	12	269	10.59	47	40	476	11.9	116	26.2
RP5-300-3-400	323.9	400	2125	20.8	4684	15	12	275	10.83	100			17.1	168	37.7
RY3-300-4-400	323.9	400	4293	42.1	9465	20	16	284	11.18	40	50	418	21.8	213	48.0
RY4-300-4-400	323.9	400	4293	42.1	9465	20	16	279	10.98	57	50	496	13.9	137	30.7
RP5-300-4-400	323.9	400	4293	42.1	9465	20	16	300	11.81	100			24.6	241	54.2
RY3-300-5-400	323.9	400	6324	62	13942	25	20	296	11.65	50	50	436	29.4	288	64.8
RY4-300-5-400	323.9	400	6324	62	13942	25	20	287	11.30	63	50	530	28.7	282	63.3
RP5-300-5-400	323.9	400	6324	62	13942	25	20	325	12.80	100			33.1	325	73.0
RY4-300-6-400	323.9	400	12754	125	28117	35	25	333	13.11	86	80	572	53.6	525	118.1
RP5-300-6-400	323.9	400	12754	125	28117	35	25	360	14.17	140			60.0	589	132.4
RY4-300-7-400	323.9	400	18132	178	39974	40	28	371	14.61	102	90	594	86.6	850	191.0
RP5-300-7-400	323.9	400	18132	178	39974	40	28	390	15.35	120			73.8	724	162.8
RY4-300-8-400	323.9	400	25524	250	56269	50	35	402	15.83	120	100	648	133.0	1304	293.2
RP5-300-8-400	323.9	400	25524	250	56269	50	35	415	16.34	160			105.1	1031	231.8
RY4-300-9-400	323.9	400	55135	541	121552	70	49	555	21.85	148	130	712	287.2	2816	633.1
RY4-300-10-400	323.9	400	70330	690	155050	80	55	611	24.06	166	150	746	371.1	3639	818.1
RY3-300-1-490	323.9	490	423	4.15	933	10	9	263	10.35	20	20	372	7.4	73	16.4
RY4-300-1-490	323.9	490	423	4.15	933	10	9	262	10.31	36	20	418	9.9	97	21.8
RP5-300-1-490	323.9	490	423	4.15	933	10	9	260	10.24	50			5.2	51	11.5
RY3-300-2-490	323.9	490	985	9.66	2172	10	9	263	10.35	20	30	379	8.7	86	19.3
RY4-300-2-490	323.9	490	985	9.66	2172	10	9	262	10.31	39	30	428	10.4	102	22.8
RP5-300-2-490	323.9	490	985	9.66	2172	10	9	260	10.24	70			8.9	87	19.6
RY3-300-3-490	323.9	490	2125	20.8	4684	15	12	270	10.63	30	40	404	15.1	148	33.3
RY4-300-3-490	323.9	490	2125	20.8	4684	15	12	269	10.59	47	40	476	12.2	120	26.9
RP5-300-3-490	323.9	490	2125	20.8	4684	15	12	265	10.43	80			13.0	128	28.7
RY3-300-4-490	323.9	490	4293	42.1	9465	20	16	283	11.14	40	50	418	21.6	212	47.7
RY4-300-4-490	323.9	490	4293	42.1	9465	20	16	279	10.98	57	50	496	14.2	139	31.3
RP5-300-4-490	323.9	490	4293	42.1	9465	20	16	295	11.61	100			23.7	232	52.2
RY3-300-5-490	323.9	490	6324	62	13942	25	20	295	11.61	50	50	436	29.2	286	64.4
RY4-300-5-490	323.9	490	6324	62	13942	25	20	285	11.22	63	50	530	28.6	280	63.0
RP5-300-5-490	323.9	490	6324	62	13942	25	20	320	12.60	100			31.9	313	70.3
RY4-300-6-490	323.9	490	12754	125	28117	35	25	326	12.83	86	70	562	44.2	433	97.4
RP5-300-6-490	323.9	490	12754	125	28117	35	25	350	13.78	140			57.7	566	127.3
RY4-300-7-490	323.9	490	18132	178	39974	40	28	354	13.94	102	80	588	68.1	668	150.2
RP5-300-7-490	323.9	490	18132	178	39974	40	28	385	15.16	120			71.4	701	157.5
RY4-300-8-490	323.9	490	25524	250	56269	50	35	401	15.79	120	90	636	110.1	1080	242.8
RP5-300-8-490	323.9	490	25524	250	56269	50	35	400	15.75	150			91.9	902	202.7
RY4-300-9-490	323.9	490	55135	541	121552	70	49	546	21.50	148	130	712	283.7	2782	625.5
RY4-300-10-490	323.9	490	70330	690	155050	80	55	602	23.70	166	150	746	367.0	3599	809.0

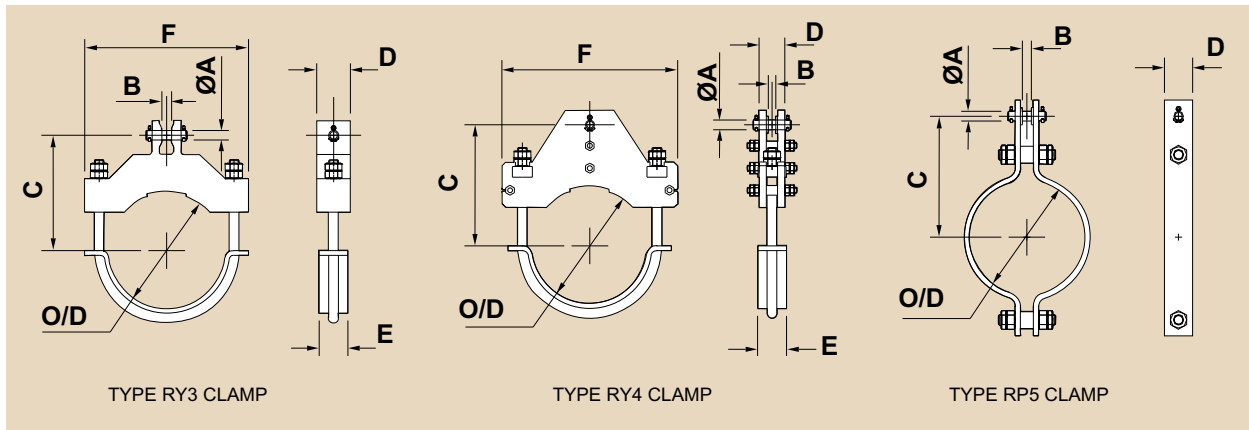


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-300-1-530	323.9	530	423	4.15	933	10	9	263	10.35	20	30	379	8.1	79	17.9
RY4-300-1-530	323.9	530	423	4.15	933	10	9	262	10.31	36	30	420	10.4	102	23.0
RP5-300-1-530	323.9	530	423	4.15	933	10	9	260	10.24	50			5.2	51	11.5
RY3-300-2-530	323.9	530	985	9.66	2172	10	9	263	10.35	25	30	390	11.2	110	24.7
RY4-300-2-530	323.9	530	985	9.66	2172	10	9	262	10.31	39	30	434	10.5	103	23.2
RP5-300-2-530	323.9	530	985	9.66	2172	10	9	260	10.24	70			8.9	87	19.6
RY3-300-3-530	323.9	530	2125	20.8	4684	15	12	270	10.63	40	50	418	20.3	199	44.7
RY4-300-3-530	323.9	530	2125	20.8	4684	15	12	269	10.59	47	50	480	12.6	124	27.8
RP5-300-3-530	323.9	530	2125	20.8	4684	15	12	265	10.43	100			16.2	159	35.8
RY3-300-4-530	323.9	530	4293	42.1	9465	20	16	281	11.06	50	50	436	27.8	272	61.2
RY4-300-4-530	323.9	530	4293	42.1	9465	20	16	280	11.02	57	50	504	18.0	177	39.8
RP5-300-4-530	323.9	530	4293	42.1	9465	20	16	305	12.01	90			27.1	266	59.7
RY3-300-5-530	323.9	530	6324	62	13942	25	20	293	11.54	60	70	457	37.1	363	81.7
RY4-300-5-530	323.9	530	6324	62	13942	25	20	304	11.97	69	70	536	30.1	295	66.3
RP5-300-5-530	323.9	530	6324	62	13942	25	20	320	12.60	110			35.0	343	77.1
RY4-300-6-530	323.9	530	12754	125	28117	35	25	336	13.23	86	80	572	54.0	530	119.1
RP5-300-6-530	323.9	530	12754	125	28117	35	25	350	13.78	160			65.7	644	144.8
RY4-300-7-530	323.9	530	18132	178	39974	40	28	371	14.61	102	90	594	86.2	845	190.0
RP5-300-7-530	323.9	530	18132	178	39974	40	28	375	14.76	120			68.9	675	151.8
RY4-300-8-530	323.9	530	25524	250	56269	50	35	406	15.98	120	100	648	134.8	1322	297.2
RP5-300-8-530	323.9	530	25524	250	56269	50	35	400	15.75	170			103.6	1016	228.4
RY4-300-9-530	323.9	530	55135	541	121552	70	49	552	21.73	148	130	712	286.2	2807	631.0
RY4-300-10-530	323.9	530	70330	690	155050	80	55	603	23.74	166	150	746	367.5	3604	810.2
RY3-300-1-570	323.9	570	423	4.15	933	10	9	263	10.35	25	30	390	10.6	104	23.3
RY4-300-1-570	323.9	570	423	4.15	933	10	9	262	10.31	36	30	426	11.1	109	24.5
RP5-300-1-570	323.9	570	423	4.15	933	10	9	260	10.24	70			8.7	85	19.2
RY3-300-2-570	323.9	570	985	9.66	2172	10	9	263	10.35	30	40	404	14.4	142	31.8
RY4-300-2-570	323.9	570	985	9.66	2172	10	9	262	10.31	39	40	438	9.6	94	21.2
RP5-300-2-570	323.9	570	985	9.66	2172	10	9	260	10.24	80			12.5	123	27.6
RY3-300-3-570	323.9	570	2125	20.8	4684	15	12	270	10.63	50	50	436	26.6	261	58.7
RY4-300-3-570	323.9	570	2125	20.8	4684	15	12	275	10.83	51	50	488	16.4	161	36.2
RP5-300-3-570	323.9	570	2125	20.8	4684	15	12	275	10.83	100			22.0	216	48.6
RY3-300-4-570	323.9	570	4293	42.1	9465	20	16	282	11.10	60	70	457	35.9	352	79.2
RY4-300-4-570	323.9	570	4293	42.1	9465	20	16	301	11.85	63	70	510	29.2	286	64.3
RP5-300-4-570	323.9	570	4293	42.1	9465	20	16	305	12.01	110			33.0	324	72.8
RY3-300-5-570	323.9	570	6324	62	13942	25	20	296	11.65	70	80	482	47.5	466	104.7
RY4-300-5-570	323.9	570	6324	62	13942	25	20	328	12.91	79	80	546	54.0	529	119.0
RP5-300-5-570	323.9	570	6324	62	13942	25	20	325	12.80	100			37.5	368	82.7
RY4-300-6-570	323.9	570	12754	125	28117	35	25	369	14.53	86	90	578	71.5	701	157.6
RP5-300-6-570	323.9	570	12754	125	28117	35	25	365	14.37	120			67.4	661	148.7
RY4-300-7-570	323.9	570	18132	178	39974	40	28	389	15.31	102	100	606	98.6	967	217.5
RP5-300-7-570	323.9	570	18132	178	39974	40	28	375	14.76	160			91.0	892	200.6
RY4-300-8-570	323.9	570	25524	250	56269	50	35	430	16.93	120	120	656	163.8	1607	361.2
RP5-300-8-570	323.9	570	25524	250	56269	50	35	400	15.75	220			132.8	1302	292.7
RY4-300-9-570	323.9	570	55135	541	121552	70	49	548	21.57	158	130	712	308.0	3020	679.0
RY4-300-10-570	323.9	570	70330	690	155050	80	55	600	23.62	176	150	746	390.4	3829	860.8



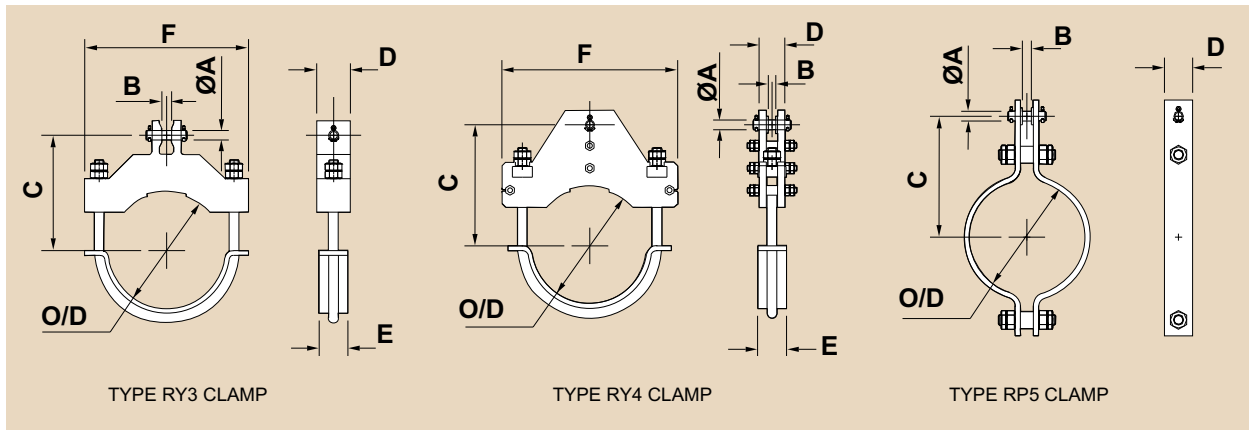


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-350-1-400	355.6	400	423	4.15	933	10	9	279	10.98	20	20	404	8.7	85	19.2
RY4-350-1-400	355.6	400	423	4.15	933	10	9	278	10.94	36	20	450	10.1	99	22.2
RP5-350-1-400	355.6	400	423	4.15	933	10	9	275	10.83	50			5.6	55	12.4
RY3-350-2-400	355.6	400	985	9.66	2172	10	9	279	10.98	20	30	411	10.1	99	22.2
RY4-350-2-400	355.6	400	985	9.66	2172	10	9	278	10.94	39	30	460	10.0	98	22.1
RP5-350-2-400	355.6	400	985	9.66	2172	10	9	275	10.83	70			9.6	94	21.2
RY3-350-3-400	355.6	400	2125	20.8	4684	15	12	286	11.26	30	40	436	17.2	169	37.9
RY4-350-3-400	355.6	400	2125	20.8	4684	15	12	285	11.22	47	40	508	10.8	106	23.9
RP5-350-3-400	355.6	400	2125	20.8	4684	15	12	290	11.42	100			18.2	179	40.2
RY3-350-4-400	355.6	400	4293	42.1	9465	20	16	303	11.93	40	50	450	25.0	245	55.1
RY4-350-4-400	355.6	400	4293	42.1	9465	20	16	295	11.61	57	50	528	14.5	142	31.9
RP5-350-4-400	355.6	400	4293	42.1	9465	20	16	320	12.60	110			29.0	284	63.8
RY3-350-5-400	355.6	400	6324	62	13942	25	20	316	12.44	50	50	468	33.5	329	73.9
RY4-350-5-400	355.6	400	6324	62	13942	25	20	301	11.85	63	50	562	30.2	296	66.6
RP5-350-5-400	355.6	400	6324	62	13942	25	20	345	13.58	110			38.7	380	85.4
RY4-350-6-400	355.6	400	12754	125	28117	35	25	349	13.74	86	80	604	54.7	537	120.7
RP5-350-6-400	355.6	400	12754	125	28117	35	25	375	14.76	150			67.5	662	148.7
RY4-350-7-400	355.6	400	18132	178	39974	40	28	387	15.24	102	90	626	91.9	901	202.6
RP5-350-7-400	355.6	400	18132	178	39974	40	28	410	16.14	120			78.1	765	172.1
RY4-350-8-400	355.6	400	25524	250	56269	50	35	413	16.26	120	100	680	126.3	1239	278.5
RP5-350-8-400	355.6	400	25524	250	56269	50	35	435	17.13	180			123.7	1213	272.8
RY4-350-9-400	355.6	400	55135	541	121552	70	49	566	22.28	148	130	744	277.5	2722	611.9
RY4-350-10-400	355.6	400	70330	690	155050	80	55	623	24.53	166	150	778	385.1	3776	848.9
RY4-350-11-400	355.6	400	90785	890	200144	90	60	641	25.24	214	190	856	563.3	5524	1241.8
RY3-350-1-490	355.6	490	423	4.15	933	10	9	279	10.98	20	20	404	8.7	85	19.2
RY4-350-1-490	355.6	490	423	4.15	933	10	9	278	10.94	36	20	450	10.1	99	22.2
RP5-350-1-490	355.6	490	423	4.15	933	10	9	275	10.83	50			5.6	55	12.4
RY3-350-2-490	355.6	490	985	9.66	2172	10	9	279	10.98	20	30	411	10.0	98	22.0
RY4-350-2-490	355.6	490	985	9.66	2172	10	9	278	10.94	39	30	460	10.1	99	22.2
RP5-350-2-490	355.6	490	985	9.66	2172	10	9	275	10.83	70			9.6	94	21.2
RY3-350-3-490	355.6	490	2125	20.8	4684	15	12	286	11.26	30	40	436	17.2	169	37.9
RY4-350-3-490	355.6	490	2125	20.8	4684	15	12	285	11.22	47	40	508	10.8	106	23.9
RP5-350-3-490	355.6	490	2125	20.8	4684	15	12	285	11.22	100			17.8	175	39.3
RY3-350-4-490	355.6	490	4293	42.1	9465	20	16	302	11.89	40	50	450	24.8	243	54.7
RY4-350-4-490	355.6	490	4293	42.1	9465	20	16	295	11.61	57	50	528	14.5	142	31.9
RP5-350-4-490	355.6	490	4293	42.1	9465	20	16	310	12.20	100			25.2	247	55.5
RY3-350-5-490	355.6	490	6324	62	13942	25	20	315	12.40	50	50	468	33.3	327	73.5
RY4-350-5-490	355.6	490	6324	62	13942	25	20	301	11.85	63	50	562	31.3	307	69.1
RP5-350-5-490	355.6	490	6324	62	13942	25	20	335	13.19	100			33.7	331	74.4
RY4-350-6-490	355.6	490	12754	125	28117	35	25	335	13.19	86	70	594	51.2	502	112.8
RP5-350-6-490	355.6	490	12754	125	28117	35	25	365	14.37	140			60.8	597	134.1
RY4-350-7-490	355.6	490	18132	178	39974	40	28	363	14.29	102	80	620	68.4	671	150.9
RP5-350-7-490	355.6	490	18132	178	39974	40	28	405	15.94	120			75.7	742	166.8
RY4-350-8-490	355.6	490	25524	250	56269	50	35	410	16.14	120	90	668	127.5	1251	281.2
RP5-350-8-490	355.6	490	25524	250	56269	50	35	415	16.34	160			102.4	1004	225.7
RY4-350-9-490	355.6	490	55135	541	121552	70	49	557	21.93	148	130	744	273.2	2679	602.2
RY4-350-10-490	355.6	490	70330	690	155050	80	55	613	24.13	166	150	778	379.8	3725	837.3
RY4-350-11-490	355.6	490	90785	890	200144	90	60	634	24.96	214	170	846	526.7	5165	1161.2

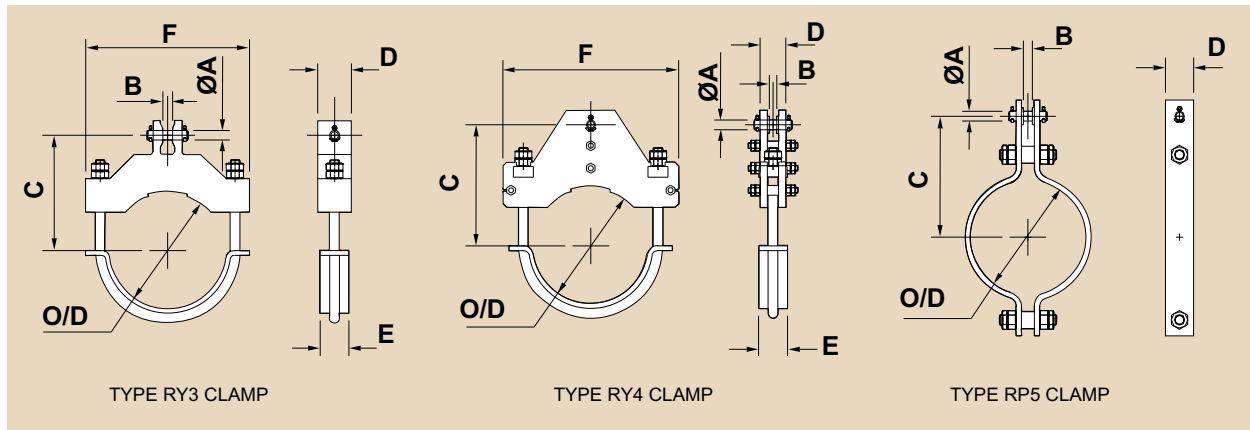


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			mm	°C	kgf			kN	lbs				mm	in	mm
RY3-350-1-530	355.6	530	423	4.15	933	10	9	279	10.98	20	30	411	9.4	92	20.7
RY4-350-1-530	355.6	530	423	4.15	933	10	9	278	10.94	36	30	452	10.7	105	23.5
RP5-350-1-530	355.6	530	423	4.15	933	10	9	275	10.83	50			5.6	55	12.4
RY3-350-2-530	355.6	530	985	9.66	2172	10	9	279	10.98	25	30	422	12.8	125	28.2
RY4-350-2-530	355.6	530	985	9.66	2172	10	9	278	10.94	39	30	466	9.3	92	20.6
RP5-350-2-530	355.6	530	985	9.66	2172	10	9	275	10.83	80			11.0	107	24.2
RY3-350-3-530	355.6	530	2125	20.8	4684	15	12	286	11.26	40	50	450	23.1	226	50.9
RY4-350-3-530	355.6	530	2125	20.8	4684	15	12	285	11.22	47	50	512	11.9	116	26.2
RP5-350-3-530	355.6	530	2125	20.8	4684	15	12	295	11.61	100			24.1	237	53.2
RY3-350-4-530	355.6	530	4293	42.1	9465	20	16	299	11.77	50	50	468	31.7	311	69.8
RY4-350-4-530	355.6	530	4293	42.1	9465	20	16	296	11.65	57	50	536	20.4	200	45.0
RP5-350-4-530	355.6	530	4293	42.1	9465	20	16	320	12.60	90			28.8	282	63.4
RY3-350-5-530	355.6	530	6324	62	13942	25	20	312	12.28	60	70	489	42.1	413	92.8
RY4-350-5-530	355.6	530	6324	62	13942	25	20	320	12.60	69	70	568	30.8	302	67.8
RP5-350-5-530	355.6	530	6324	62	13942	25	20	335	13.19	120			40.3	395	88.8
RY4-350-6-530	355.6	530	12754	125	28117	35	25	349	13.74	86	80	604	58.6	575	129.2
RP5-350-6-530	355.6	530	12754	125	28117	35	25	385	15.16	120			71.7	703	158.0
RY4-350-7-530	355.6	530	18132	178	39974	40	28	387	15.24	102	90	626	86.7	850	191.0
RP5-350-7-530	355.6	530	18132	178	39974	40	28	405	15.94	130			81.7	801	180.1
RY4-350-8-530	355.6	530	25524	250	56269	50	35	417	16.42	120	100	680	128.2	1257	282.6
RP5-350-8-530	355.6	530	25524	250	56269	50	35	415	16.34	180			114.6	1124	252.7
RY4-350-9-530	355.6	530	55135	541	121552	70	49	562	22.13	148	130	744	275.8	2704	608.0
RY4-350-10-530	355.6	530	70330	690	155050	80	55	616	24.25	166	150	778	381.8	3744	841.8
RY4-350-11-530	355.6	530	90785	890	200144	90	60	634	24.96	214	170	846	526.7	5165	1161.2
RY3-350-1-570	355.6	570	423	4.15	933	10	9	279	10.98	25	30	422	12.2	120	27.0
RY4-350-1-570	355.6	570	423	4.15	933	10	9	278	10.94	36	30	458	11.4	112	25.2
RP5-350-1-570	355.6	570	423	4.15	933	10	9	275	10.83	70			9.4	92	20.7
RY3-350-2-570	355.6	570	985	9.66	2172	10	9	279	10.98	30	40	436	16.4	161	36.2
RY4-350-2-570	355.6	570	985	9.66	2172	10	9	278	10.94	39	40	470	8.6	85	19.0
RP5-350-2-570	355.6	570	985	9.66	2172	10	9	275	10.83	80			13.7	134	30.2
RY3-350-3-570	355.6	570	2125	20.8	4684	15	12	286	11.26	50	50	468	30.2	296	66.5
RY4-350-3-570	355.6	570	2125	20.8	4684	15	12	291	11.46	51	50	520	16.3	160	35.9
RP5-350-3-570	355.6	570	2125	20.8	4684	15	12	290	11.42	100			23.5	231	51.8
RY3-350-4-570	355.6	570	4293	42.1	9465	20	16	301	11.85	60	70	489	40.9	401	90.1
RY4-350-4-570	355.6	570	4293	42.1	9465	20	16	317	12.48	63	70	542	28.9	283	63.6
RP5-350-4-570	355.6	570	4293	42.1	9465	20	16	320	12.60	110			35.0	344	77.2
RY3-350-5-570	355.6	570	6324	62	13942	25	20	315	12.40	70	80	514	53.5	525	118.0
RY4-350-5-570	355.6	570	6324	62	13942	25	20	344	13.54	79	80	578	58.5	574	129.0
RP5-350-5-570	355.6	570	6324	62	13942	25	20	345	13.58	110			45.0	441	99.1
RY4-350-6-570	355.6	570	12754	125	28117	35	25	385	15.16	86	90	610	73.0	716	160.9
RP5-350-6-570	355.6	570	12754	125	28117	35	25	385	15.16	120			71.7	703	158.0
RY4-350-7-570	355.6	570	18132	178	39974	40	28	398	15.67	102	100	638	99.2	973	218.7
RP5-350-7-570	355.6	570	18132	178	39974	40	28	405	15.94	170			105.8	1038	233.3
RY4-350-8-570	355.6	570	25524	250	56269	50	35	440	17.32	120	120	688	149.8	1469	330.2
RP5-350-8-570	355.6	570	25524	250	56269	50	35	435	17.13	180			147.0	1442	324.1
RY4-350-9-570	355.6	570	55135	541	121552	70	49	587	23.11	148	130	744	289.0	2834	637.1
RY4-350-10-570	355.6	570	70330	690	155050	80	55	611	24.06	176	150	778	405.6	3978	894.2
RY4-350-11-570	355.6	570	90785	890	200144	90	60	649	25.55	214	170	846	539.8	5294	1190.1

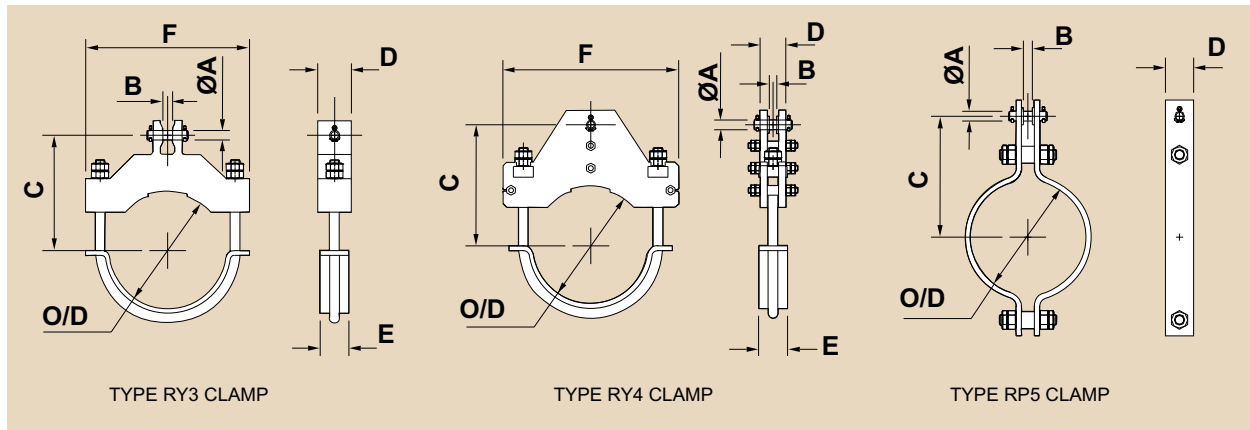


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-400-1-400	406.4	400	423	4.15	933	10	9	304	11.97	20	20	454	10.7	104	23.5
RY4-400-1-400	406.4	400	423	4.15	933	10	9	303	11.93	36	20	500	9.1	89	20.0
RP5-400-1-400	406.4	400	423	4.15	933	10	9	300	11.81	50			6.2	61	13.7
RY3-400-2-400	406.4	400	985	9.66	2172	10	9	304	11.97	20	30	461	12.2	119	26.8
RY4-400-2-400	406.4	400	985	9.66	2172	10	9	303	11.93	39	30	510	8.0	79	17.7
RP5-400-2-400	406.4	400	985	9.66	2172	10	9	300	11.81	70			10.6	104	23.5
RY3-400-3-400	406.4	400	2125	20.8	4684	15	12	311	12.24	30	40	486	20.6	202	45.5
RY4-400-3-400	406.4	400	2125	20.8	4684	15	12	310	12.20	47	40	558	10.1	99	22.4
RP5-400-3-400	406.4	400	2125	20.8	4684	15	12	315	12.40	100			20.1	197	44.3
RY3-400-4-400	406.4	400	4293	42.1	9465	20	16	333	13.11	40	50	500	30.3	297	66.9
RY4-400-4-400	406.4	400	4293	42.1	9465	20	16	320	12.60	57	50	578	16.3	160	35.9
RP5-400-4-400	406.4	400	4293	42.1	9465	20	16	355	13.98	90			32.8	322	72.4
RY3-400-5-400	406.4	400	6324	62	13942	25	20	347	13.66	50	50	518	40.5	397	89.3
RY4-400-5-400	406.4	400	6324	62	13942	25	20	326	12.83	63	50	612	35.6	349	78.4
RP5-400-5-400	406.4	400	6324	62	13942	25	20	370	14.57	120			45.7	448	100.8
RY4-400-6-400	406.4	400	12754	125	28117	35	25	374	14.72	86	80	654	57.9	567	127.5
RP5-400-6-400	406.4	400	12754	125	28117	35	25	430	16.93	120			82.9	813	182.9
RY4-400-7-400	406.4	400	18132	178	39974	40	28	412	16.22	102	90	676	96.0	941	211.6
RP5-400-7-400	406.4	400	18132	178	39974	40	28	435	17.13	140			97.0	951	213.8
RY4-400-8-400	406.4	400	25524	250	56269	50	35	427	16.81	120	100	730	127.9	1254	282.0
RP5-400-8-400	406.4	400	25524	250	56269	50	35	465	18.31	200			147.4	1445	324.9
RY4-400-9-400	406.4	400	55135	541	121552	70	49	582	22.91	148	130	794	318.3	3122	701.8
RY4-400-10-400	406.4	400	70330	690	155050	80	55	639	25.16	166	150	828	399.6	3919	881.0
RY4-400-11-400	406.4	400	90785	890	200144	90	60	659	25.94	214	190	906	646.4	6339	1425.1
RY3-400-1-490	406.4	490	423	4.15	933	10	9	304	11.97	20	20	454	10.7	104	23.5
RY4-400-1-490	406.4	490	423	4.15	933	10	9	303	11.93	36	20	500	9.1	89	20.1
RP5-400-1-490	406.4	490	423	4.15	933	10	9	300	11.81	50			6.2	61	13.7
RY3-400-2-490	406.4	490	985	9.66	2172	10	9	304	11.97	20	30	461	12.2	119	26.8
RY4-400-2-490	406.4	490	985	9.66	2172	10	9	303	11.93	39	30	510	8.0	79	17.7
RP5-400-2-490	406.4	490	985	9.66	2172	10	9	300	11.81	70			10.6	104	23.5
RY3-400-3-490	406.4	490	2125	20.8	4684	15	12	311	12.24	30	40	486	20.5	201	45.2
RY4-400-3-490	406.4	490	2125	20.8	4684	15	12	310	12.20	47	40	558	10.2	100	22.4
RP5-400-3-490	406.4	490	2125	20.8	4684	15	12	310	12.20	100			19.7	193	43.4
RY3-400-4-490	406.4	490	4293	42.1	9465	20	16	332	13.07	40	50	500	30.2	296	66.5
RY4-400-4-490	406.4	490	4293	42.1	9465	20	16	320	12.60	57	50	578	15.9	156	35.1
RP5-400-4-490	406.4	490	4293	42.1	9465	20	16	350	13.78	90			31.8	312	70.2
RY3-400-5-490	406.4	490	6324	62	13942	25	20	345	13.58	50	50	518	40.3	396	89.0
RY4-400-5-490	406.4	490	6324	62	13942	25	20	326	12.83	63	50	612	35.9	352	79.1
RP5-400-5-490	406.4	490	6324	62	13942	25	20	365	14.37	110			40.7	399	89.8
RY4-400-6-490	406.4	490	12754	125	28117	35	25	350	13.78	86	70	644	64.4	632	142.0
RP5-400-6-490	406.4	490	12754	125	28117	35	25	395	15.55	160			75.7	743	167.0
RY4-400-7-490	406.4	490	18132	178	39974	40	28	376	14.80	102	80	670	85.5	839	188.5
RP5-400-7-490	406.4	490	18132	178	39974	40	28	430	16.93	130			87.8	861	193.6
RY4-400-8-490	406.4	490	25524	250	56269	50	35	461	18.15	110	90	718	114.1	1119	251.6
RP5-400-8-490	406.4	490	25524	250	56269	50	35	450	17.72	180			127.4	1250	280.9
RY4-400-9-490	406.4	490	55135	541	121552	70	49	573	22.56	148	130	794	314.9	3088	694.3
RY4-400-10-490	406.4	490	70330	690	155050	80	55	630	24.80	166	150	828	395.0	3873	870.7
RY4-400-11-490	406.4	490	90785	890	200144	90	60	710	27.95	194	170	896	575.2	5641	1268.1

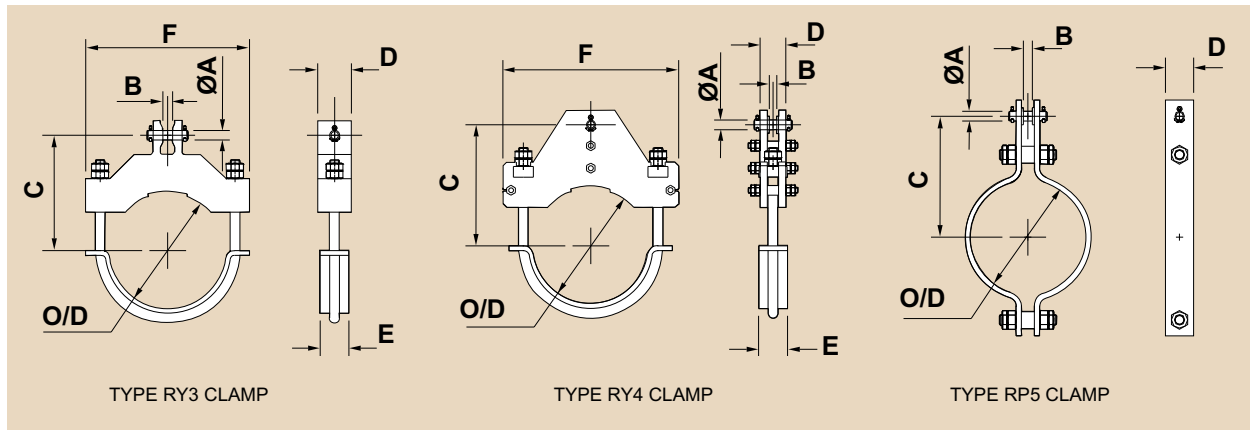


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-400-1-530	406.4	530	423	4.15	933	10	9	304	11.97	20	30	461	11.4	112	25.2
RY4-400-1-530	406.4	530	423	4.15	933	10	9	303	11.93	36	30	502	9.8	96	21.5
RP5-400-1-530	406.4	530	423	4.15	933	10	9	300	11.81	50			6.2	61	13.7
RY3-400-2-530	406.4	530	985	9.66	2172	10	9	304	11.97	25	30	472	15.5	152	34.2
RY4-400-2-530	406.4	530	985	9.66	2172	10	9	303	11.93	39	30	516	7.5	74	16.6
RP5-400-2-530	406.4	530	985	9.66	2172	10	9	300	11.81	80			15.2	149	33.4
RY3-400-3-530	406.4	530	2125	20.8	4684	15	12	311	12.24	40	50	500	27.5	270	60.6
RY4-400-3-530	406.4	530	2125	20.8	4684	15	12	310	12.20	47	50	562	15.8	154	34.7
RP5-400-3-530	406.4	530	2125	20.8	4684	15	12	320	12.60	100			26.5	260	58.5
RY3-400-4-530	406.4	530	4293	42.1	9465	20	16	328	12.91	50	50	518	38.3	376	84.4
RY4-400-4-530	406.4	530	4293	42.1	9465	20	16	321	12.64	57	50	586	24.8	244	54.8
RP5-400-4-530	406.4	530	4293	42.1	9465	20	16	350	13.78	90			31.8	312	70.2
RY3-400-5-530	406.4	530	6324	62	13942	25	20	342	13.46	60	70	539	50.4	494	111.2
RY4-400-5-530	406.4	530	6324	62	13942	25	20	345	13.58	69	70	618	32.5	319	71.7
RP5-400-5-530	406.4	530	6324	62	13942	25	20	375	14.76	100			45.0	442	99.3
RY4-400-6-530	406.4	530	12754	125	28117	35	25	374	14.72	86	80	654	63.2	620	139.3
RP5-400-6-530	406.4	530	12754	125	28117	35	25	410	16.14	120			77.3	758	170.4
RY4-400-7-530	406.4	530	18132	178	39974	40	28	412	16.22	102	90	676	90.1	884	198.7
RP5-400-7-530	406.4	530	18132	178	39974	40	28	430	16.93	150			100.8	989	222.3
RY4-400-8-530	406.4	530	25524	250	56269	50	35	431	16.97	120	100	730	129.8	1273	286.3
RP5-400-8-530	406.4	530	25524	250	56269	50	35	450	17.72	210			147.8	1449	325.8
RY4-400-9-530	406.4	530	55135	541	121552	70	49	579	22.80	148	130	794	317.2	3111	699.3
RY4-400-10-530	406.4	530	70330	690	155050	80	55	632	24.88	166	150	828	395.0	3873	870.8
RY4-400-11-530	406.4	530	90785	890	200144	90	60	710	27.95	194	170	896	575.2	5641	1268.1
RY3-400-1-570	406.4	570	423	4.15	933	10	9	304	11.97	25	30	472	14.8	145	32.7
RY4-400-1-570	406.4	570	423	4.15	933	10	9	303	11.93	36	30	508	10.6	104	23.3
RP5-400-1-570	406.4	570	423	4.15	933	10	9	300	11.81	70			10.4	102	23.0
RY3-400-2-570	406.4	570	985	9.66	2172	10	9	304	11.97	30	40	486	19.8	194	43.6
RY4-400-2-570	406.4	570	985	9.66	2172	10	9	303	11.93	39	40	520	8.7	86	19.3
RP5-400-2-570	406.4	570	985	9.66	2172	10	9	300	11.81	80			15.2	149	33.4
RY3-400-3-570	406.4	570	2125	20.8	4684	15	12	311	12.24	50	50	518	35.8	351	78.9
RY4-400-3-570	406.4	570	2125	20.8	4684	15	12	316	12.44	51	50	570	17.5	172	38.7
RP5-400-3-570	406.4	570	2125	20.8	4684	15	12	320	12.60	100			26.5	260	58.5
RY3-400-4-570	406.4	570	4293	42.1	9465	20	16	330	12.99	60	70	539	48.9	480	107.9
RY4-400-4-570	406.4	570	4293	42.1	9465	20	16	342	13.46	63	70	592	29.6	291	65.3
RP5-400-4-570	406.4	570	4293	42.1	9465	20	16	360	14.17	100			43.0	422	94.8
RY3-400-5-570	406.4	570	6324	62	13942	25	20	344	13.54	70	80	564	63.6	623	140.2
RY4-400-5-570	406.4	570	6324	62	13942	25	20	369	14.53	79	80	628	62.5	613	137.8
RP5-400-5-570	406.4	570	6324	62	13942	25	20	375	14.76	130			58.2	571	128.4
RY4-400-6-570	406.4	570	12754	125	28117	35	25	410	16.14	86	90	660	76.9	754	169.5
RP5-400-6-570	406.4	570	12754	125	28117	35	25	410	16.14	130			83.6	820	184.3
RY4-400-7-570	406.4	570	18132	178	39974	40	28	412	16.22	102	100	688	116.6	1144	257.1
RP5-400-7-570	406.4	570	18132	178	39974	40	28	430	16.93	190			126.8	1244	279.6
RY4-400-8-570	406.4	570	25524	250	56269	50	35	453	17.83	120	120	738	158.4	1554	349.3
RP5-400-8-570	406.4	570	25524	250	56269	50	35	465	18.31	180			161.2	1581	355.3
RY4-400-9-570	406.4	570	55135	541	121552	70	49	603	23.74	148	130	794	331.4	3250	730.6
RY4-400-10-570	406.4	570	70330	690	155050	80	55	655	25.79	166	150	828	411.2	4032	906.5
RY4-400-11-570	406.4	570	90785	890	200144	90	60	666	26.22	214	170	896	610.9	5991	1346.9

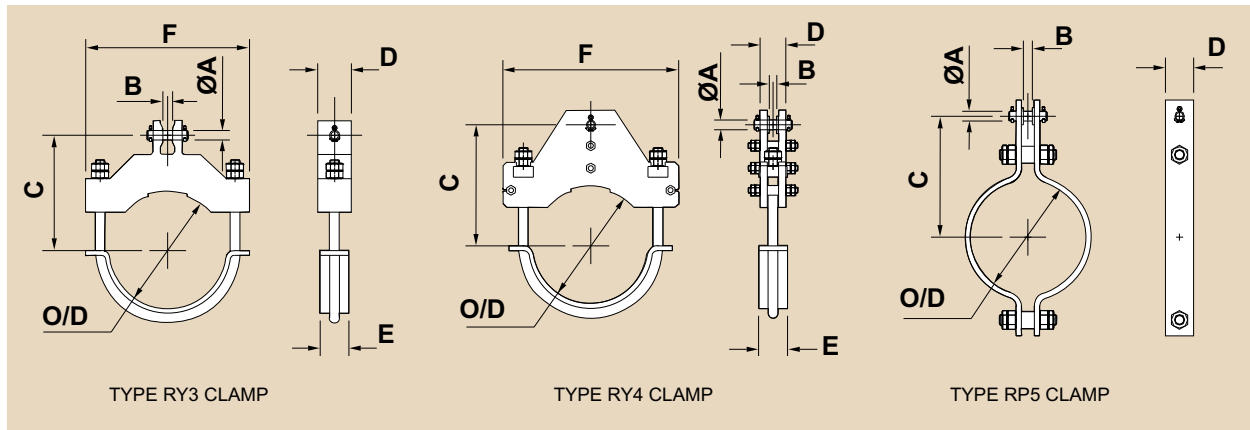


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-450-1-400	457.2	400	423	4.15	933	10	9	330	12.99	20	20	506	12.9	127	28.5
RY4-450-1-400	457.2	400	423	4.15	933	10	9	329	12.95	36	20	552	7.5	74	16.6
RP5-450-1-400	457.2	400	423	4.15	933	10	9	325	12.80	50			6.8	67	15.1
RY3-450-2-400	457.2	400	985	9.66	2172	10	9	330	12.99	20	30	513	14.7	144	32.3
RY4-450-2-400	457.2	400	985	9.66	2172	10	9	329	12.95	39	30	562	6.6	64	14.5
RP5-450-2-400	457.2	400	985	9.66	2172	10	9	325	12.80	80			13.6	133	30.0
RY3-450-3-400	457.2	400	2125	20.8	4684	15	12	337	13.27	30	40	538	24.4	240	53.9
RY4-450-3-400	457.2	400	2125	20.8	4684	15	12	336	13.23	47	40	610	12.4	121	27.3
RP5-450-3-400	457.2	400	2125	20.8	4684	15	12	355	13.98	100			29.8	293	65.8
RY3-450-4-400	457.2	400	4293	42.1	9465	20	16	364	14.33	40	50	552	36.4	357	80.3
RY4-450-4-400	457.2	400	4293	42.1	9465	20	16	346	13.62	57	50	630	20.2	198	44.5
RP5-450-4-400	457.2	400	4293	42.1	9465	20	16	380	14.96	90			35.6	349	78.5
RY3-450-5-400	457.2	400	6324	62	13942	25	20	378	14.88	50	50	570	48.6	477	107.1
RY4-450-5-400	457.2	400	6324	62	13942	25	20	352	13.86	63	50	664	40.4	397	89.2
RP5-450-5-400	457.2	400	6324	62	13942	25	20	405	15.94	100			50.1	491	110.4
RY4-450-6-400	457.2	400	12754	125	28117	35	25	400	15.75	86	80	706	60.6	595	133.7
RP5-450-6-400	457.2	400	12754	125	28117	35	25	455	17.91	120			88.8	870	195.7
RY4-450-7-400	457.2	400	18132	178	39974	40	28	438	17.24	92	90	728	109.0	1069	240.3
RP5-450-7-400	457.2	400	18132	178	39974	40	28	485	19.09	160			124.8	1224	275.2
RY4-450-8-400	457.2	400	25524	250	56269	50	35	478	18.82	110	100	782	133.2	1306	293.6
RP5-450-8-400	457.2	400	25524	250	56269	50	35	500	19.69	220			178.5	1751	393.6
RY4-450-9-400	457.2	400	55135	541	121552	70	49	598	23.54	148	130	846	301.0	2951	663.5
RY4-450-10-400	457.2	400	70330	690	155050	80	55	656	25.83	166	150	880	426.6	4183	940.4
RY4-450-11-400	457.2	400	90785	890	200144	90	60	736	28.98	194	190	958	601.2	5895	1325.3
513-450-1-490	457.2	490	423	4.15	933	10	9	330	12.99	20	20	506	12.9	127	28.5
RY4-450-1-490	457.2	490	423	4.15	933	10	9	329	12.95	36	20	552	7.5	74	16.6
RP5-450-1-490	457.2	490	423	4.15	933	10	9	325	12.80	50			6.8	67	15.1
RY3-450-2-490	457.2	490	985	9.66	2172	10	9	330	12.99	20	30	513	14.6	143	32.1
RY4-450-2-490	457.2	490	985	9.66	2172	10	9	329	12.95	39	30	562	6.6	65	14.5
RP5-450-2-490	457.2	490	985	9.66	2172	10	9	325	12.80	70			11.7	115	25.8
RY3-450-3-490	457.2	490	2125	20.8	4684	15	12	337	13.27	30	40	538	24.4	240	53.9
RY4-450-3-490	457.2	490	2125	20.8	4684	15	12	336	13.23	47	40	610	12.4	121	27.3
RP5-450-3-490	457.2	490	2125	20.8	4684	15	12	335	13.19	100			21.5	211	47.5
RY3-450-4-490	457.2	490	4293	42.1	9465	20	16	363	14.29	40	50	552	36.2	355	79.7
RY4-450-4-490	457.2	490	4293	42.1	9465	20	16	346	13.62	57	50	630	19.4	190	42.8
RP5-450-4-490	457.2	490	4293	42.1	9465	20	16	375	14.76	90			34.6	339	76.3
RY3-450-5-490	457.2	490	6324	62	13942	25	20	376	14.80	50	50	570	48.3	473	106.4
RY4-450-5-490	457.2	490	6324	62	13942	25	20	352	13.86	63	50	664	40.5	397	89.2
RP5-450-5-490	457.2	490	6324	62	13942	25	20	390	15.35	120			48.0	471	105.8
RY4-450-6-490	457.2	490	12754	125	28117	35	25	376	14.80	86	70	696	70.9	695	156.3
RP5-450-6-490	457.2	490	12754	125	28117	35	25	440	17.32	120			83.9	823	184.9
RY4-450-7-490	457.2	490	18132	178	39974	40	28	429	16.89	92	80	722	99.9	979	220.2
RP5-450-7-490	457.2	490	18132	178	39974	40	28	460	18.11	140			102.0	1000	224.8
RY4-450-8-490	457.2	490	25524	250	56269	50	35	475	18.70	110	90	770	119.6	1173	263.7
RP5-450-8-490	457.2	490	25524	250	56269	50	35	480	18.90	200			151.8	1489	334.7
RY4-450-9-490	457.2	490	55135	541	121552	70	49	590	23.23	148	130	846	297.1	2913	655.0
RY4-450-10-490	457.2	490	70330	690	155050	80	55	648	25.51	166	150	880	423.3	4151	933.3
RY4-450-11-490	457.2	490	90785	890	200144	90	60	728	28.66	194	170	948	553.5	5428	1220.2

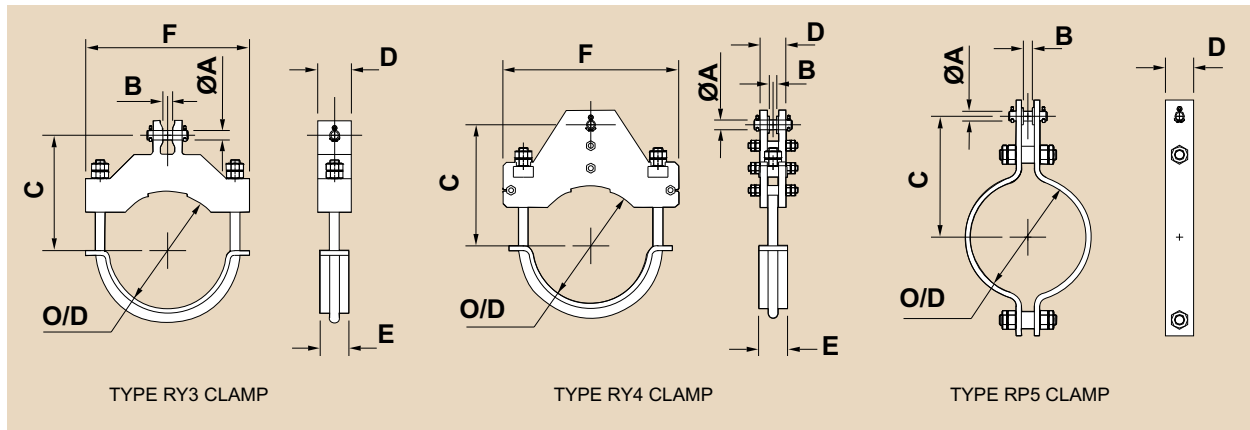


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			mm	°C	kgf			kN	lbs				mm	in	mm
RY3-450-1-530	457.2	530	423	4.15	933	10	9	330	12.99	20	30	513	13.8	135	30.4
RY4-450-1-530	457.2	530	423	4.15	933	10	9	329	12.95	36	30	554	8.3	81	18.2
RP5-450-1-530	457.2	530	423	4.15	933	10	9	325	12.80	50			6.8	67	15.1
RY3-450-2-530	457.2	530	985	9.66	2172	10	9	330	12.99	25	30	524	18.5	182	40.9
RY4-450-2-530	457.2	530	985	9.66	2172	10	9	329	12.95	39	30	568	7.4	72	16.3
RP5-450-2-530	457.2	530	985	9.66	2172	10	9	325	12.80	80			16.6	163	36.7
RY3-450-3-530	457.2	530	2125	20.8	4684	15	12	337	13.27	40	50	552	32.6	320	71.9
RY4-450-3-530	457.2	530	2125	20.8	4684	15	12	336	13.23	47	50	614	20.5	201	45.2
RP5-450-3-530	457.2	530	2125	20.8	4684	15	12	345	13.58	100			29.0	285	64.0
RY3-450-4-530	457.2	530	4293	42.1	9465	20	16	358	14.09	50	50	570	45.3	445	99.9
RY4-450-4-530	457.2	530	4293	42.1	9465	20	16	347	13.66	57	50	638	30.9	303	68.1
RP5-450-4-530	457.2	530	4293	42.1	9465	20	16	375	14.76	90			34.6	339	76.3
RY3-450-5-530	457.2	530	6324	62	13942	25	20	372	14.65	60	70	591	60.0	588	132.3
RY4-450-5-530	457.2	530	6324	62	13942	25	20	371	14.61	69	70	670	36.0	353	79.4
RP5-450-5-530	457.2	530	6324	62	13942	25	20	400	15.75	100			48.7	478	107.4
RY4-450-6-530	457.2	530	12754	125	28117	35	25	400	15.75	86	80	706	68.4	671	150.8
RP5-450-6-530	457.2	530	12754	125	28117	35	25	440	17.32	120			83.9	823	184.9
RY4-450-7-530	457.2	530	18132	178	39974	40	28	438	17.24	92	90	728	113.9	1117	251.1
RP5-450-7-530	457.2	530	18132	178	39974	40	28	460	18.11	160			116.1	1138	255.9
RY4-450-8-530	457.2	530	25524	250	56269	50	35	479	18.86	110	100	782	133.9	1313	295.2
RP5-450-8-530	457.2	530	25524	250	56269	50	35	495	19.49	180			173.4	1700	382.2
RY4-450-9-530	457.2	530	55135	541	121552	70	49	594	23.39	148	130	846	298.8	2931	658.8
RY4-450-10-530	457.2	530	70330	690	155050	80	55	649	25.55	166	150	880	423.9	4157	934.6
RY4-450-11-530	457.2	530	90785	890	200144	90	60	728	28.66	194	170	948	553.5	5428	1220.2
RY3-450-1-570	457.2	570	423	4.15	933	10	9	330	12.99	25	30	524	17.7	173	39.0
RY4-450-1-570	457.2	570	423	4.15	933	10	9	329	12.95	36	30	560	8.0	79	17.7
RP5-450-1-570	457.2	570	423	4.15	933	10	9	325	12.80	70			11.5	112	25.3
RY3-450-2-570	457.2	570	985	9.66	2172	10	9	330	12.99	30	40	538	23.5	231	51.9
RY4-450-2-570	457.2	570	985	9.66	2172	10	9	329	12.95	39	40	572	12.2	120	27.0
RP5-450-2-570	457.2	570	985	9.66	2172	10	9	325	12.80	100			20.8	204	45.8
RY3-450-3-570	457.2	570	2125	20.8	4684	15	12	337	13.27	50	50	570	42.3	414	93.2
RY4-450-3-570	457.2	570	2125	20.8	4684	15	12	342	13.46	51	50	622	22.4	220	49.4
RP5-450-3-570	457.2	570	2125	20.8	4684	15	12	345	13.58	100			29.0	285	64.0
RY3-450-4-570	457.2	570	4293	42.1	9465	20	16	359	14.13	60	70	591	58.2	571	128.3
RY4-450-4-570	457.2	570	4293	42.1	9465	20	16	368	14.49	63	70	644	32.5	318	71.6
RP5-450-4-570	457.2	570	4293	42.1	9465	20	16	385	15.16	100			46.6	457	102.8
RY3-450-5-570	457.2	570	6324	62	13942	25	20	374	14.72	70	80	616	74.8	734	164.9
RY4-450-5-570	457.2	570	6324	62	13942	25	20	395	15.55	79	80	680	62.5	613	137.7
RP5-450-5-570	457.2	570	6324	62	13942	25	20	400	15.75	140			67.8	665	149.4
RY4-450-6-570	457.2	570	12754	125	28117	35	25	436	17.17	86	90	712	81.2	797	179.1
RP5-450-6-570	457.2	570	12754	125	28117	35	25	440	17.32	150			104.3	1023	230.0
RY4-450-7-570	457.2	570	18132	178	39974	40	28	438	17.24	102	100	740	128.0	1255	282.2
RP5-450-7-570	457.2	570	18132	178	39974	40	28	460	18.11	210			151.3	1484	333.6
RY4-450-8-570	457.2	570	25524	250	56269	50	35	479	18.86	120	120	790	164.7	1615	363.1
RP5-450-8-570	457.2	570	25524	250	56269	50	35	495	19.49	180			173.4	1700	382.2
RY4-450-9-570	457.2	570	55135	541	121552	70	49	620	24.41	148	130	846	313.9	3079	692.1
RY4-450-10-570	457.2	570	70330	690	155050	80	55	674	26.54	166	150	880	441.1	4326	972.4
RY4-450-11-570	457.2	570	90785	890	200144	90	60	682	26.85	214	170	948	578.7	5675	1275.7

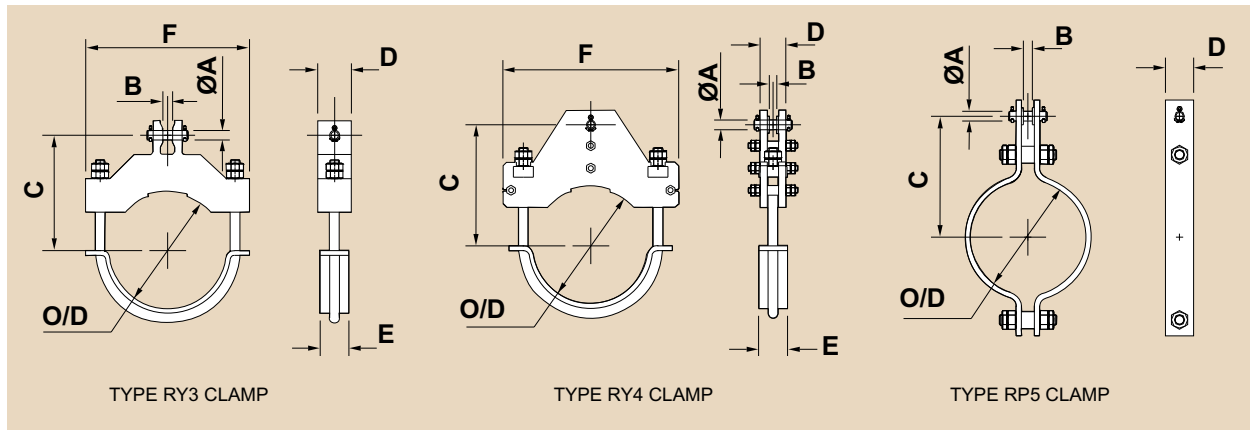


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-500-1-400	508	400	423	4.15	933	10	9	356	14.02	25	20	558	18.4	181	40.6
RY4-500-1-400	508	400	423	4.15	933	10	9	356	14.02	40	20	604	7.5	73	16.4
RP5-500-1-400	508	400	423	4.15	933	10	9	355	13.98	50			7.5	74	16.6
RY3-500-2-400	508	400	985	9.66	2172	10	9	356	14.02	25	30	565	20.6	202	45.5
RY4-500-2-400	508	400	985	9.66	2172	10	9	356	14.02	43	30	614	7.3	71	16.0
RP5-500-2-400	508	400	985	9.66	2172	10	9	355	13.98	80			14.9	146	32.8
RY3-500-3-400	508	400	2125	20.8	4684	15	12	369	14.53	30	40	590	28.9	284	63.8
RY4-500-3-400	508	400	2125	20.8	4684	15	12	362	14.25	51	40	662	15.5	152	34.2
RP5-500-3-400	508	400	2125	20.8	4684	15	12	380	14.96	100			32.3	317	71.2
RY3-500-4-400	508	400	4293	42.1	9465	20	16	397	15.63	40	50	604	42.8	420	94.4
RY4-500-4-400	508	400	4293	42.1	9465	20	16	373	14.69	57	50	682	28.5	280	62.9
RP5-500-4-400	508	400	4293	42.1	9465	20	16	410	16.14	90			38.7	380	85.4
RY3-500-5-400	508	400	6324	62	13942	25	20	411	16.18	50	50	622	57.3	562	126.4
RY4-500-5-400	508	400	6324	62	13942	25	20	378	14.88	63	50	716	39.4	386	86.8
RP5-500-5-400	508	400	6324	62	13942	25	20	435	17.13	100			54.2	532	119.6
RY4-500-6-400	508	400	12754	125	28117	35	25	428	16.85	86	80	758	64.1	629	141.4
RP5-500-6-400	508	400	12754	125	28117	35	25	485	19.09	120			95.3	935	210.1
RY4-500-7-400	508	400	18132	178	39974	40	28	466	18.35	92	90	780	115.0	1128	253.5
RP5-500-7-400	508	400	18132	178	39974	40	28	510	20.08	170			140.5	1378	309.7
RY4-500-8-400	508	400	25524	250	56269	50	35	494	19.45	110	100	834	156.7	1537	345.4
RP5-500-8-400	508	400	25524	250	56269	50	35	545	21.46	180			197.8	1940	436.1
RY4-500-9-400	508	400	55135	541	121552	70	49	613	24.13	148	130	898	348.1	3414	767.4
RY4-500-10-400	508	400	70330	690	155050	80	55	672	26.46	166	150	932	423.2	4151	933.1
RY4-500-11-400	508	400	90785	890	200144	90	60	752	29.61	194	190	1010	699.5	6860	1542.1
RY3-500-1-490	508	490	423	4.15	933	10	9	356	14.02	25	20	558	18.4	181	40.6
RY4-500-1-490	508	490	423	4.15	933	10	9	356	14.02	40	20	604	7.5	73	16.5
RP5-500-1-490	508	490	423	4.15	933	10	9	355	13.98	50			7.5	74	16.6
RY3-500-2-490	508	490	985	9.66	2172	10	9	356	14.02	25	30	565	20.6	202	45.5
RY4-500-2-490	508	490	985	9.66	2172	10	9	356	14.02	43	30	614	7.3	71	16.0
RP5-500-2-490	508	490	985	9.66	2172	10	9	355	13.98	80			14.6	143	32.2
RY3-500-3-490	508	490	2125	20.8	4684	15	12	368	14.49	30	40	590	28.9	283	63.7
RY4-500-3-490	508	490	2125	20.8	4684	15	12	362	14.25	51	40	662	15.5	152	34.3
RP5-500-3-490	508	490	2125	20.8	4684	15	12	370	14.57	100			31.5	309	69.5
RY3-500-4-490	508	490	4293	42.1	9465	20	16	395	15.55	40	50	604	42.5	417	93.6
RY4-500-4-490	508	490	4293	42.1	9465	20	16	373	14.69	57	50	682	28.5	280	62.9
RP5-500-4-490	508	490	4293	42.1	9465	20	16	400	15.75	90			37.4	366	82.4
RY3-500-5-490	508	490	6324	62	13942	25	20	409	16.10	50	50	622	56.9	558	125.4
RY4-500-5-490	508	490	6324	62	13942	25	20	378	14.88	63	50	716	38.3	375	84.4
RP5-500-5-490	508	490	6324	62	13942	25	20	430	16.93	100			52.9	518	116.5
RY4-500-6-490	508	490	12754	125	28117	35	25	404	15.91	86	70	748	71.5	701	157.5
RP5-500-6-490	508	490	12754	125	28117	35	25	480	18.90	120			93.0	912	205.0
RY4-500-7-490	508	490	18132	178	39974	40	28	444	17.48	92	80	774	104.5	1025	230.3
RP5-500-7-490	508	490	18132	178	39974	40	28	485	19.09	150			116.3	1140	256.4
RY4-500-8-490	508	490	25524	250	56269	50	35	490	19.29	110	90	822	144.5	1417	318.5
RP5-500-8-490	508	490	25524	250	56269	50	35	505	19.88	220			177.1	1737	390.4
RY4-500-9-490	508	490	55135	541	121552	70	49	605	23.82	148	130	898	341.9	3353	753.7
RY4-500-10-490	508	490	70330	690	155050	80	55	663	26.10	166	150	932	417.9	4098	921.3
RY4-500-11-490	508	490	90785	890	200144	90	60	745	29.33	194	170	1000	639.3	6269	1409.3



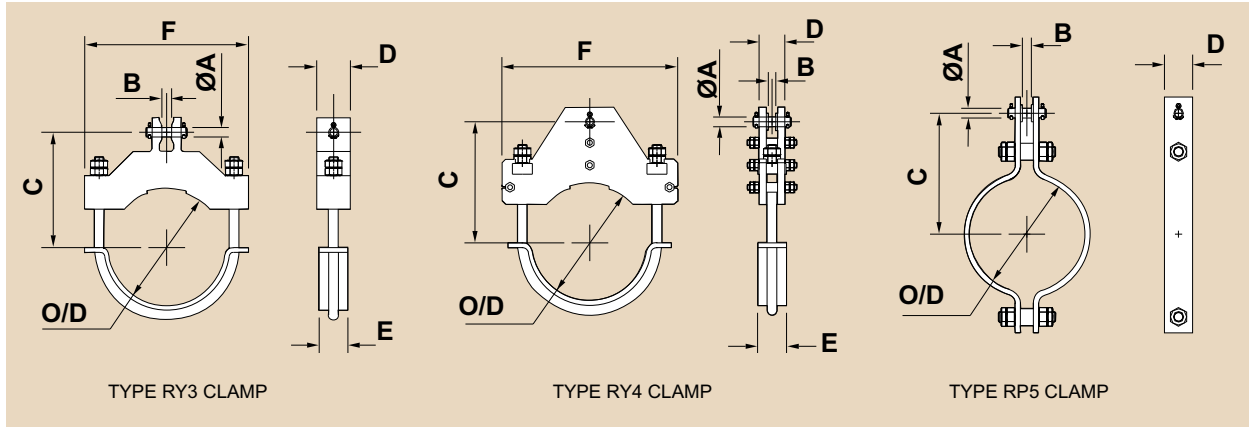


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-500-1-530	508	530	423	4.15	933	10	9	356	14.02	25	30	565	19.4	191	42.9
RY4-500-1-530	508	530	423	4.15	933	10	9	356	14.02	40	30	606	8.3	81	18.2
RP5-500-1-530	508	530	423	4.15	933	10	9	355	13.98	60			9.0	88	19.8
RY3-500-2-530	508	530	985	9.66	2172	10	9	356	14.02	25	30	576	21.7	213	47.9
RY4-500-2-530	508	530	985	9.66	2172	10	9	356	14.02	43	30	620	8.9	87	19.6
RP5-500-2-530	508	530	985	9.66	2172	10	9	355	13.98	80			18.3	180	40.4
RY3-500-3-530	508	530	2125	20.8	4684	15	12	363	14.29	40	50	604	38.1	374	84.1
RY4-500-3-530	508	530	2125	20.8	4684	15	12	362	14.25	51	50	666	25.1	246	55.2
RP5-500-3-530	508	530	2125	20.8	4684	15	12	370	14.57	100			31.5	309	69.5
RY3-500-4-530	508	530	4293	42.1	9465	20	16	390	15.35	50	50	622	53.2	522	117.3
RY4-500-4-530	508	530	4293	42.1	9465	20	16	372	14.65	57	50	690	36.2	355	79.8
RP5-500-4-530	508	530	4293	42.1	9465	20	16	400	15.75	100			41.4	406	91.4
RY3-500-5-530	508	530	6324	62	13942	25	20	405	15.94	60	70	643	70.6	692	155.5
RY4-500-5-530	508	530	6324	62	13942	25	20	399	15.71	69	70	722	38.9	381	85.7
RP5-500-5-530	508	530	6324	62	13942	25	20	430	16.93	110			58.0	569	128.0
RY4-500-6-530	508	530	12754	125	28117	35	25	428	16.85	86	80	758	69.3	680	152.8
RP5-500-6-530	508	530	12754	125	28117	35	25	465	18.31	120			89.7	880	197.7
RY4-500-7-530	508	530	18132	178	39974	40	28	466	18.35	92	90	780	121.7	1193	268.3
RP5-500-7-530	508	530	18132	178	39974	40	28	485	19.09	170			131.4	1288	289.6
RY4-500-8-530	508	530	25524	250	56269	50	35	494	19.45	110	100	834	157.1	1541	346.4
RP5-500-8-530	508	530	25524	250	56269	50	35	525	20.67	180			185.5	1819	409.0
RY4-500-9-530	508	530	55135	541	121552	70	49	610	24.02	148	130	898	345.0	3383	760.5
RY4-500-10-530	508	530	70330	690	155050	80	55	665	26.18	166	150	932	417.3	4092	919.9
RY4-500-11-530	508	530	90785	890	200144	90	60	745	29.33	194	170	1000	639.3	6269	1409.3
RY3-500-1-570	508	570	423	4.15	933	10	9	356	14.02	25	30	576	20.8	204	45.9
RY4-500-1-570	508	570	423	4.15	933	10	9	356	14.02	40	30	612	9.0	88	19.7
RP5-500-1-570	508	570	423	4.15	933	10	9	355	13.98	70			12.6	123	27.7
RY3-500-2-570	508	570	985	9.66	2172	10	9	356	14.02	30	40	590	27.5	270	60.6
RY4-500-2-570	508	570	985	9.66	2172	10	9	356	14.02	43	40	624	15.3	150	33.7
RP5-500-2-570	508	570	985	9.66	2172	10	9	355	13.98	100			22.9	224	50.4
RY3-500-3-570	508	570	2125	20.8	4684	15	12	364	14.33	50	50	622	49.1	481	108.2
RY4-500-3-570	508	570	2125	20.8	4684	15	12	370	14.57	51	50	674	35.6	350	78.6
RP5-500-3-570	508	570	2125	20.8	4684	15	12	370	14.57	110			34.6	340	76.4
RY3-500-4-570	508	570	4293	42.1	9465	20	16	390	15.35	60	70	643	67.5	662	148.9
RY4-500-4-570	508	570	4293	42.1	9465	20	16	396	15.59	63	70	696	35.6	349	78.5
RP5-500-4-570	508	570	4293	42.1	9465	20	16	410	16.14	100			50.3	494	111.0
RY3-500-5-570	508	570	6324	62	13942	25	20	406	15.98	70	80	668	87.2	855	192.2
RY4-500-5-570	508	570	6324	62	13942	25	20	423	16.65	79	80	732	64.9	636	143.0
RP5-500-5-570	508	570	6324	62	13942	25	20	430	16.93	150			78.8	773	173.7
RY4-500-6-570	508	570	12754	125	28117	35	25	464	18.27	86	90	764	85.0	833	187.4
RP5-500-6-570	508	570	12754	125	28117	35	25	465	18.31	150			111.6	1094	246.0
RY4-500-7-570	508	570	18132	178	39974	40	28	466	18.35	102	100	792	129.4	1268	285.2
RP5-500-7-570	508	570	18132	178	39974	40	28	485	19.09	220			169.0	1658	372.6
RY4-500-8-570	508	570	25524	250	56269	50	35	516	20.31	110	120	842	187.8	1842	414.1
RP5-500-8-570	508	570	25524	250	56269	50	35	525	20.67	190			195.5	1917	431.1
RY4-500-9-570	508	570	55135	541	121552	70	49	636	25.04	148	130	898	360.9	3539	795.6
RY4-500-10-570	508	570	70330	690	155050	80	55	688	27.09	166	150	932	436.0	4275	961.1
RY4-500-11-570	508	570	90785	890	200144	90	60	757	29.80	194	170	1000	651.1	6385	1435.3

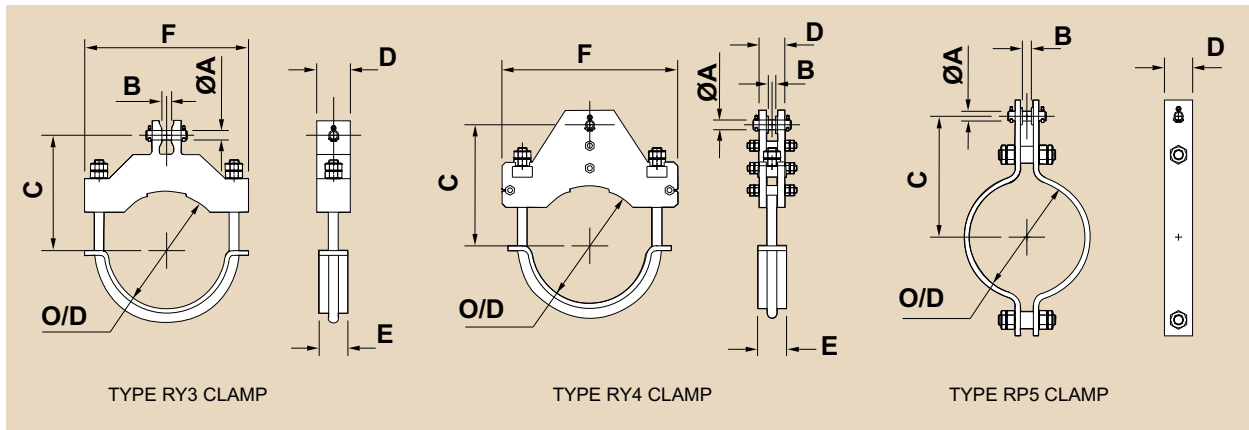


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			mm	°C	kgf			kN	lbs				mm	in	mm
RY3-550-1-400	558.8	400	423	4.15	933	10	9	381	15.00	25	20	608	21.7	213	47.8
RY4-550-1-400	558.8	400	423	4.15	933	10	9	381	15.00	40	20	654	6.3	62	14.0
RP5-550-1-400	558.8	400	423	4.15	933	10	9	380	14.96	50			8.3	81	18.2
RY3-550-2-400	558.8	400	985	9.66	2172	10	9	381	15.00	25	30	615	24.0	236	53.0
RY4-550-2-400	558.8	400	985	9.66	2172	10	9	381	15.00	43	30	664	8.2	81	18.1
RP5-550-2-400	558.8	400	985	9.66	2172	10	9	380	14.96	80			20.0	196	44.1
RY3-550-3-400	558.8	400	2125	20.8	4684	15	12	398	15.67	30	40	640	33.7	331	74.4
RY4-550-3-400	558.8	400	2125	20.8	4684	15	12	387	15.24	51	40	712	22.1	216	48.6
RP5-550-3-400	558.8	400	2125	20.8	4684	15	12	405	15.94	100			34.7	341	76.6
RY3-550-4-400	558.8	400	4293	42.1	9465	20	16	426	16.77	40	50	654	49.6	486	109.2
RY4-550-4-400	558.8	400	4293	42.1	9465	20	16	398	15.67	57	50	732	34.8	341	76.7
RP5-550-4-400	558.8	400	4293	42.1	9465	20	16	435	17.13	100			46.0	451	101.4
RY3-550-5-400	558.8	400	6324	62	13942	25	20	441	17.36	50	50	672	66.2	649	145.8
RY4-550-5-400	558.8	400	6324	62	13942	25	20	403	15.87	63	50	766	42.4	416	93.6
RP5-550-5-400	558.8	400	6324	62	13942	25	20	460	18.11	100			57.9	568	127.6
RY4-550-6-400	558.8	400	12754	125	28117	35	25	453	17.83	86	80	808	69.6	682	153.3
RP5-550-6-400	558.8	400	12754	125	28117	35	25	510	20.08	120			101.1	992	222.9
RY4-550-7-400	558.8	400	18132	178	39974	40	28	491	19.33	92	90	830	124.3	1219	274.1
RP5-550-7-400	558.8	400	18132	178	39974	40	28	535	21.06	180			157.0	1540	346.1
RY4-550-8-400	558.8	400	25524	250	56269	50	35	508	20.00	110	100	884	185.5	1819	409.0
RP5-550-8-400	558.8	400	25524	250	56269	50	35	570	22.44	180			208.4	2044	459.5
RY4-550-9-400	558.8	400	55135	541	121552	70	49	628	24.72	148	130	948	352.6	3458	777.3
RY4-550-10-400	558.8	400	70330	690	155050	80	55	688	27.09	166	150	982	492.2	4827	1085.2
RY4-550-11-400	558.8	400	90785	890	200144	90	60	768	30.24	194	190	1060	654.0	6413	1441.8
RY3-550-1-490	558.8	490	423	4.15	933	10	9	381	15.00	25	20	608	21.7	213	47.8
RY4-550-1-490	558.8	490	423	4.15	933	10	9	381	15.00	40	20	654	6.3	62	14.0
RP5-550-1-490	558.8	490	423	4.15	933	10	9	380	14.96	50			8.1	80	17.9
RY3-550-2-490	558.8	490	985	9.66	2172	10	9	381	15.00	25	30	615	24.0	236	53.0
RY4-550-2-490	558.8	490	985	9.66	2172	10	9	381	15.00	43	30	664	8.2	81	18.1
RP5-550-2-490	558.8	490	985	9.66	2172	10	9	380	14.96	80			15.8	155	34.8
RY3-550-3-490	558.8	490	2125	20.8	4684	15	12	397	15.63	30	40	640	33.5	329	73.9
RY4-550-3-490	558.8	490	2125	20.8	4684	15	12	387	15.24	51	40	712	22.1	217	48.7
RP5-550-3-490	558.8	490	2125	20.8	4684	15	12	400	15.75	100			34.2	336	75.5
RY3-550-4-490	558.8	490	4293	42.1	9465	20	16	424	16.69	40	50	654	49.1	482	108.3
RY4-550-4-490	558.8	490	4293	42.1	9465	20	16	398	15.67	57	50	732	34.8	341	76.7
RP5-550-4-490	558.8	490	4293	42.1	9465	20	16	425	16.73	90			40.1	393	88.4
RY3-550-5-490	558.8	490	6324	62	13942	25	20	439	17.28	50	50	672	65.6	643	144.6
RY4-550-5-490	558.8	490	6324	62	13942	25	20	403	15.87	63	50	766	41.2	404	90.9
RP5-550-5-490	558.8	490	6324	62	13942	25	20	455	17.91	100			56.5	554	124.5
RY4-550-6-490	558.8	490	12754	125	28117	35	25	434	17.09	76	70	798	54.9	538	121.0
RP5-550-6-490	558.8	490	12754	125	28117	35	25	505	19.88	120			98.8	969	217.8
RY4-550-7-490	558.8	490	18132	178	39974	40	28	455	17.91	92	80	824	89.8	881	198.1
RP5-550-7-490	558.8	490	18132	178	39974	40	28	515	20.28	170			140.6	1378	309.9
RY4-550-8-490	558.8	490	25524	250	56269	50	35	505	19.88	110	90	872	170.7	1674	376.4
RP5-550-8-490	558.8	490	25524	250	56269	50	35	550	21.65	180			196.1	1923	432.4
RY4-550-9-490	558.8	490	55135	541	121552	70	49	619	24.37	148	130	948	345.3	3387	761.3
RY4-550-10-490	558.8	490	70330	690	155050	80	55	679	26.73	166	150	982	486.6	4772	1072.7
RY4-550-11-490	558.8	490	90785	890	200144	90	60	761	29.96	194	170	1050	628.4	6163	1385.4

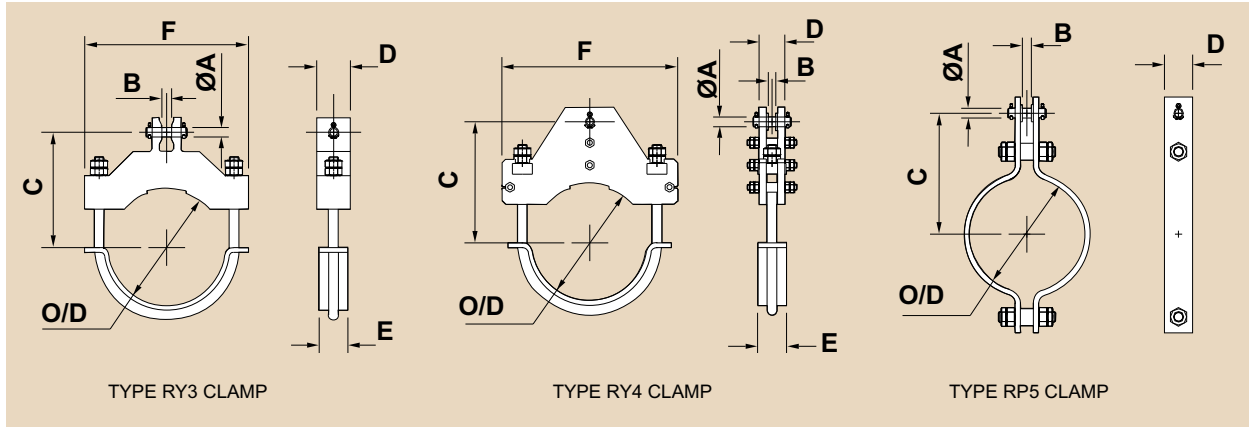


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			mm	°C	kgf			kN	lbs				mm	in	mm
RY3-550-1-530	558.8	530	423	4.15	933	10	9	381	15.00	25	30	615	22.7	223	50.2
RY4-550-1-530	558.8	530	423	4.15	933	10	9	381	15.00	40	30	656	7.2	71	15.9
RP5-550-1-530	558.8	530	423	4.15	933	10	9	380	14.96	60			9.7	95	21.5
RY3-550-2-530	558.8	530	985	9.66	2172	10	9	381	15.00	25	30	626	25.2	247	55.6
RY4-550-2-530	558.8	530	985	9.66	2172	10	9	381	15.00	43	30	670	12.0	118	26.5
RP5-550-2-530	558.8	530	985	9.66	2172	10	9	380	14.96	80			19.8	194	43.6
RY3-550-3-530	558.8	530	2125	20.8	4684	15	12	390	15.35	40	50	654	44.1	432	97.1
RY4-550-3-530	558.8	530	2125	20.8	4684	15	12	387	15.24	51	50	716	33.4	328	73.7
RP5-550-3-530	558.8	530	2125	20.8	4684	15	12	400	15.75	100			34.2	336	75.5
RY3-550-4-530	558.8	530	4293	42.1	9465	20	16	418	16.46	50	50	672	61.2	600	134.8
RY4-550-4-530	558.8	530	4293	42.1	9465	20	16	397	15.63	57	50	740	39.2	384	86.4
RP5-550-4-530	558.8	530	4293	42.1	9465	20	16	425	16.73	110			48.9	480	107.8
RY3-550-5-530	558.8	530	6324	62	13942	25	20	433	17.05	60	70	693	80.6	790	177.6
RY4-550-5-530	558.8	530	6324	62	13942	25	20	424	16.69	69	70	772	45.6	447	100.5
RP5-550-5-530	558.8	530	6324	62	13942	25	20	455	17.91	120			67.6	663	149.0
RY4-550-6-530	558.8	530	12754	125	28117	35	25	453	17.83	86	80	808	79.7	782	175.7
RP5-550-6-530	558.8	530	12754	125	28117	35	25	495	19.49	130			104.1	1021	229.5
RY4-550-7-530	558.8	530	18132	178	39974	40	28	491	19.33	92	90	830	131.6	1291	290.1
RP5-550-7-530	558.8	530	18132	178	39974	40	28	515	20.28	190			156.7	1537	345.5
RY4-550-8-530	558.8	530	25524	250	56269	50	35	508	20.00	110	100	884	185.9	1823	409.9
RP5-550-8-530	558.8	530	25524	250	56269	50	35	550	21.65	180			196.1	1923	432.4
RY4-550-9-530	558.8	530	55135	541	121552	70	49	624	24.57	148	130	948	348.6	3418	768.5
RY4-550-10-530	558.8	530	70330	690	155050	80	55	679	26.73	166	150	982	484.8	4755	1068.9
RY4-550-11-530	558.8	530	90785	890	200144	90	60	761	29.96	194	170	1050	628.4	6163	1385.4
RY3-550-1-570	558.8	570	423	4.15	933	10	9	381	15.00	25	30	626	24.2	238	53.4
RY4-550-1-570	558.8	570	423	4.15	933	10	9	381	15.00	40	30	662	8.4	83	18.6
RP5-550-1-570	558.8	570	423	4.15	933	10	9	380	14.96	70			13.6	134	30.0
RY3-550-2-570	558.8	570	985	9.66	2172	10	9	381	15.00	30	40	640	31.7	311	70.0
RY4-550-2-570	558.8	570	985	9.66	2172	10	9	381	15.00	43	40	674	21.3	209	47.1
RP5-550-2-570	558.8	570	985	9.66	2172	10	9	380	14.96	100			24.7	242	54.5
RY3-550-3-570	558.8	570	2125	20.8	4684	15	12	391	15.39	50	50	672	56.6	555	124.8
RY4-550-3-570	558.8	570	2125	20.8	4684	15	12	395	15.55	51	50	724	43.7	428	96.2
RP5-550-3-570	558.8	570	2125	20.8	4684	15	12	410	16.14	90			39.0	382	85.9
RY3-550-4-570	558.8	570	4293	42.1	9465	20	16	418	16.46	60	70	693	77.3	758	170.5
RY4-550-4-570	558.8	570	4293	42.1	9465	20	16	421	16.57	63	70	746	41.2	404	90.9
RP5-550-4-570	558.8	570	4293	42.1	9465	20	16	440	17.32	100			54.4	534	120.0
RY3-550-5-570	558.8	570	6324	62	13942	25	20	434	17.09	70	80	718	99.8	979	220.0
RY4-550-5-570	558.8	570	6324	62	13942	25	20	448	17.64	79	80	782	62.2	610	137.0
RP5-550-5-570	558.8	570	6324	62	13942	25	20	455	17.91	160			89.8	880	197.9
RY4-550-6-570	558.8	570	12754	125	28117	35	25	489	19.25	86	90	814	88.8	870	195.7
RP5-550-6-570	558.8	570	12754	125	28117	35	25	495	19.49	170			135.5	1329	298.7
RY4-550-7-570	558.8	570	18132	178	39974	40	28	491	19.33	92	100	842	129.9	1274	286.4
RP5-550-7-570	558.8	570	18132	178	39974	40	28	530	20.87	180			187.9	1843	414.3
RY4-550-8-570	558.8	570	25524	250	56269	50	35	532	20.94	110	120	892	216.5	2123	477.3
RP5-550-8-570	558.8	570	25524	250	56269	50	35	550	21.65	200			217.3	2131	479.1
RY4-550-9-570	558.8	570	55135	541	121552	70	49	649	25.55	148	130	948	364.7	3577	804.1
RY4-550-10-570	558.8	570	70330	690	155050	80	55	703	27.68	166	150	982	503.1	4934	1109.1
RY4-550-11-570	558.8	570	90785	890	200144	90	60	772	30.39	194	170	1050	635.0	6228	1400.0

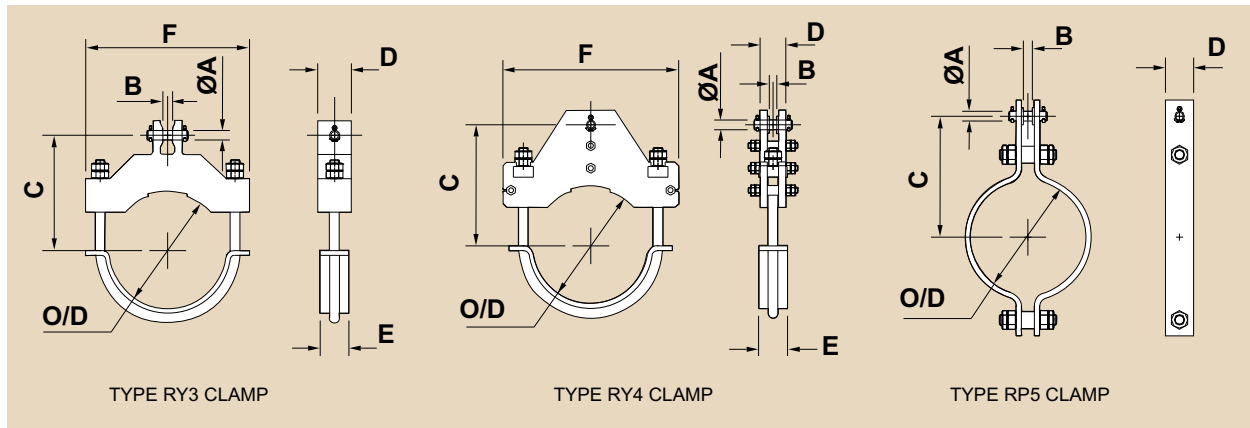


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-600-1-400	609.6	400	423	4.15	933	10	9	407	16.02	25	20	660	25.1	246	55.4
RY4-600-1-400	609.6	400	423	4.15	933	10	9	407	16.02	46	20	706	8.1	80	17.9
RP5-600-1-400	609.6	400	423	4.15	933	10	9	405	15.94	50			8.9	87	19.6
RY3-600-2-400	609.6	400	985	9.66	2172	10	9	407	16.02	25	30	667	27.6	271	60.9
RY4-600-2-400	609.6	400	985	9.66	2172	10	9	407	16.02	49	30	716	10.9	107	24.1
RP5-600-2-400	609.6	400	985	9.66	2172	10	9	410	16.14	80			21.7	213	47.8
RY3-600-3-400	609.6	400	2125	20.8	4684	15	12	427	16.81	30	40	692	38.6	379	85.1
RY4-600-3-400	609.6	400	2125	20.8	4684	15	12	413	16.26	57	40	764	28.0	275	61.7
RP5-600-3-400	609.6	400	2125	20.8	4684	15	12	435	17.13	100			37.5	368	82.8
RY3-600-4-400	609.6	400	4293	42.1	9465	20	16	456	17.95	40	50	706	56.7	556	125.0
RY4-600-4-400	609.6	400	4293	42.1	9465	20	16	424	16.69	63	50	784	42.6	418	94.0
RP5-600-4-400	609.6	400	4293	42.1	9465	20	16	470	18.50	110			55.4	544	122.2
RY3-600-5-400	609.6	400	6324	62	13942	25	20	471	18.54	50	50	724	75.3	739	166.1
RY4-600-5-400	609.6	400	6324	62	13942	25	20	429	16.89	69	50	818	64.3	630	141.7
RP5-600-5-400	609.6	400	6324	62	13942	25	20	485	19.09	110			67.6	663	149.1
RY4-600-6-400	609.6	400	12754	125	28117	35	25	479	18.86	86	80	860	77.3	758	170.4
RP5-600-6-400	609.6	400	12754	125	28117	35	25	535	21.06	130			115.5	1133	254.7
RY4-600-7-400	609.6	400	18132	178	39974	40	28	517	20.35	92	90	882	129.6	1271	285.7
RP5-600-7-400	609.6	400	18132	178	39974	40	28	565	22.24	190			175.9	1725	387.8
RY4-600-8-400	609.6	400	25524	250	56269	50	35	522	20.55	110	100	936	198.8	1950	438.4
RP5-600-8-400	609.6	400	25524	250	56269	50	35	600	23.62	180			220.7	2165	486.6
RY4-600-9-400	609.6	400	55135	541	121552	70	49	642	25.28	148	130	1000	336.7	3302	742.3
RY4-600-10-400	609.6	400	70330	690	155050	80	55	704	27.72	166	150	1034	481.9	4725	1062.3
RY4-600-11-400	609.6	400	90785	890	200144	90	60	785	30.91	194	190	1112	712.1	6983	1569.8
RY3-600-1-490	609.6	490	423	4.15	933	10	9	407	16.02	25	20	660	25.1	246	55.4
RY4-600-1-490	609.6	490	423	4.15	933	10	9	407	16.02	46	20	706	8.1	80	17.9
RP5-600-1-490	609.6	490	423	4.15	933	10	9	405	15.94	50			8.8	86	19.4
RY3-600-2-490	609.6	490	985	9.66	2172	10	9	407	16.02	25	30	667	27.6	271	60.9
RY4-600-2-490	609.6	490	985	9.66	2172	10	9	407	16.02	49	30	716	10.9	107	24.1
RP5-600-2-490	609.6	490	985	9.66	2172	10	9	405	15.94	80			17.0	167	37.4
RY3-600-3-490	609.6	490	2125	20.8	4684	15	12	426	16.77	30	40	692	38.6	378	85.0
RY4-600-3-490	609.6	490	2125	20.8	4684	15	12	413	16.26	57	40	764	29.6	290	65.2
RP5-600-3-490	609.6	490	2125	20.8	4684	15	12	425	16.73	100			36.7	360	81.0
RY3-600-4-490	609.6	490	4293	42.1	9465	20	16	455	17.91	40	50	706	56.4	553	124.3
RY4-600-4-490	609.6	490	4293	42.1	9465	20	16	424	16.69	63	50	784	42.7	418	94.1
RP5-600-4-490	609.6	490	4293	42.1	9465	20	16	460	18.11	100			49.1	481	108.2
RY3-600-5-490	609.6	490	6324	62	13942	25	20	470	18.50	50	50	724	74.9	734	165.1
RY4-600-5-490	609.6	490	6324	62	13942	25	20	429	16.89	69	50	818	64.3	631	141.8
RP5-600-5-490	609.6	490	6324	62	13942	25	20	480	18.90	100			60.2	591	132.8
RY4-600-6-490	609.6	490	12754	125	28117	35	25	455	17.91	86	70	850	96.3	944	212.2
RP5-600-6-490	609.6	490	12754	125	28117	35	25	530	20.87	120			104.6	1026	230.6
RY4-600-7-490	609.6	490	18132	178	39974	40	28	481	18.94	92	80	876	105.9	1039	233.5
RP5-600-7-490	609.6	490	18132	178	39974	40	28	545	21.46	180			160.6	1575	354.0
RY4-600-8-490	609.6	490	25524	250	56269	50	35	522	20.55	110	90	924	185.5	1819	408.8
RP5-600-8-490	609.6	490	25524	250	56269	50	35	590	23.23	180			214.0	2099	471.8
RY4-600-9-490	609.6	490	55135	541	121552	70	49	633	24.92	148	130	1000	331.2	3248	730.2
RY4-600-10-490	609.6	490	70330	690	155050	80	55	693	27.28	166	150	1034	471.6	4625	1039.8
RY4-600-11-490	609.6	490	90785	890	200144	90	60	777	30.59	194	170	1102	626.1	6140	1380.3

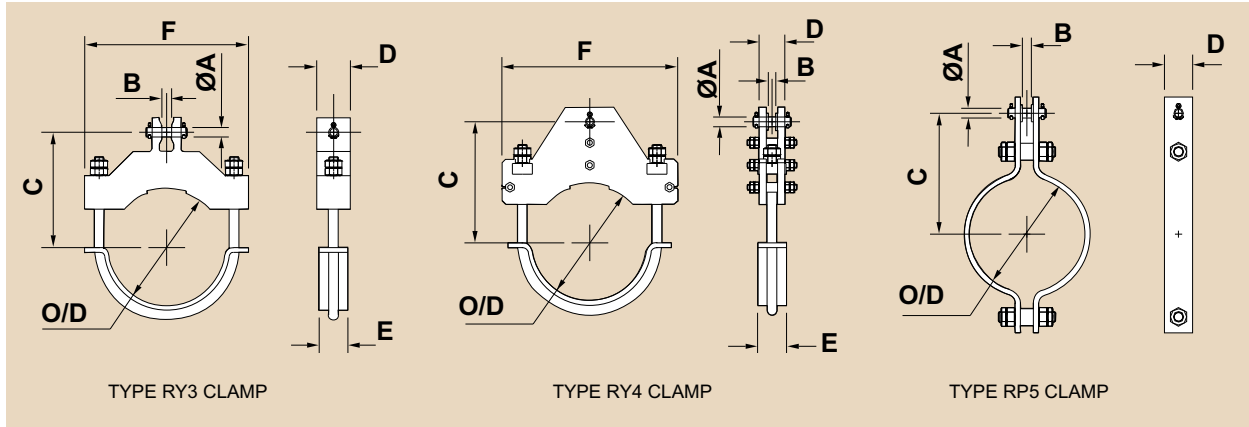


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-600-1-530	609.6	530	423	4.15	933	10	9	407	16.02	25	30	667	26.3	258	57.9
RY4-600-1-530	609.6	530	423	4.15	933	10	9	407	16.02	46	30	708	9.1	89	20.0
RP5-600-1-530	609.6	530	423	4.15	933	10	9	405	15.94	70			14.7	144	32.5
RY3-600-2-530	609.6	530	985	9.66	2172	10	9	407	16.02	25	30	678	28.9	283	63.7
RY4-600-2-530	609.6	530	985	9.66	2172	10	9	407	16.02	49	30	722	17.4	171	38.5
RP5-600-2-530	609.6	530	985	9.66	2172	10	9	405	15.94	80			21.3	209	46.9
RY3-600-3-530	609.6	530	2125	20.8	4684	15	12	419	16.50	40	50	706	50.5	495	111.3
RY4-600-3-530	609.6	530	2125	20.8	4684	15	12	413	16.26	57	50	768	42.7	419	94.1
RP5-600-3-530	609.6	530	2125	20.8	4684	15	12	425	16.73	100			36.7	360	81.0
RY3-600-4-530	609.6	530	4293	42.1	9465	20	16	448	17.64	50	50	724	70.0	687	154.4
RY4-600-4-530	609.6	530	4293	42.1	9465	20	16	423	16.65	63	50	792	61.4	602	135.3
RP5-600-4-530	609.6	530	4293	42.1	9465	20	16	460	18.11	120			58.7	576	129.5
RY3-600-5-530	609.6	530	6324	62	13942	25	20	463	18.23	60	70	745	91.7	899	202.1
RY4-600-5-530	609.6	530	6324	62	13942	25	20	450	17.72	69	70	824	76.2	747	167.9
RP5-600-5-530	609.6	530	6324	62	13942	25	20	480	18.90	120			72.1	707	158.9
RY4-600-6-530	609.6	530	12754	125	28117	35	25	479	18.86	86	80	860	91.0	892	200.6
RP5-600-6-530	609.6	530	12754	125	28117	35	25	530	20.87	140			121.6	1192	268.0
RY4-600-7-530	609.6	530	18132	178	39974	40	28	517	20.35	92	90	882	138.5	1358	305.3
RP5-600-7-530	609.6	530	18132	178	39974	40	28	545	21.46	200			177.9	1745	392.3
RY4-600-8-530	609.6	530	25524	250	56269	50	35	522	20.55	110	100	936	198.4	1945	437.3
RP5-600-8-530	609.6	530	25524	250	56269	50	35	590	23.23	180			214.0	2099	471.8
RY4-600-9-530	609.6	530	55135	541	121552	70	49	638	25.12	148	130	1000	334.6	3281	737.6
RY4-600-10-530	609.6	530	70330	690	155050	80	55	695	27.36	166	150	1034	475.9	4667	1049.1
RY4-600-11-530	609.6	530	90785	890	200144	90	60	777	30.59	194	170	1102	626.1	6140	1380.3
RY3-600-1-570	609.6	570	423	4.15	933	10	9	407	16.02	25	30	678	27.9	273	61.4
RY4-600-1-570	609.6	570	423	4.15	933	10	9	407	16.02	46	30	714	10.3	101	22.8
RP5-600-1-570	609.6	570	423	4	933	10	9	405	15.94	70			14.7	144.5	32.5
RY3-600-2-570	609.6	570	985	9.66	2172	10	9	407	16.02	30	40	692	36.3	356	79.9
RY4-600-2-570	609.6	570	985	9.66	2172	10	9	407	16.02	49	40	726	28.9	283	63.7
RP5-600-2-570	609.6	570	985	10	2172	10	9	405	15.94	100			26.6	260.6	58.6
RY3-600-3-570	609.6	570	2125	20.8	4684	15	12	420	16.54	50	50	724	64.7	635	142.7
RY4-600-3-570	609.6	570	2125	20.8	4684	15	12	421	16.57	57	50	776	54.4	534	120.0
RP5-600-3-570	609.6	570	2125	21	4684	15	12	435	17.13	90			41.7	409.4	92.0
RY3-600-4-570	609.6	570	4293	42.1	9465	20	16	448	17.64	60	70	745	87.8	861	193.6
RY4-600-4-570	609.6	570	4293	42.1	9465	20	16	447	17.60	63	70	798	69.1	678	152.4
RP5-600-4-570	609.6	570	4293	42	9465	20	16	465	18.31	110			63.9	626.4	140.8
RY3-600-5-570	609.6	570	6324	62	13942	25	20	464	18.27	70	80	770	112.6	1105	248.3
RY4-600-5-570	609.6	570	6324	62	13942	25	20	474	18.66	79	80	834	61.7	605	136.1
RP5-600-5-570	609.6	570	6324	62	13942	25	20	480	18.90	160			95.7	938.8	211.0
RY4-600-6-570	609.6	570	12754	125	28117	35	25	515	20.28	86	90	866	95.1	933	209.8
RP5-600-6-570	609.6	570	12754	125	28117	35	25	530	20.87	180			155.5	1525	342.8
RY4-600-7-570	609.6	570	18132	178	39974	40	28	517	20.35	92	100	894	146.4	1435	322.7
RP5-600-7-570	609.6	570	18132	178	39974	40	28	565	22.24	180			203.9	1999	449.5
RY4-600-8-570	609.6	570	25524	250	56269	50	35	558	21.97	110	120	944	229.3	2248	505.4
RP5-600-8-570	609.6	570	25524	250	56269	50	35	580	22.83	210			242.3	2376	534.1
RY4-600-9-570	609.6	570	55135	541	121552	70	49	664	26.14	148	130	1000	352.4	3456	777.0
RY4-600-10-570	609.6	570	70330	690	155050	80	55	720	28.35	166	150	1034	495.7	4861	1092.9
RY4-600-11-570	609.6	570	90785	890	200144	90	60	789	31.06	194	170	1102	640.3	6279	1411.5

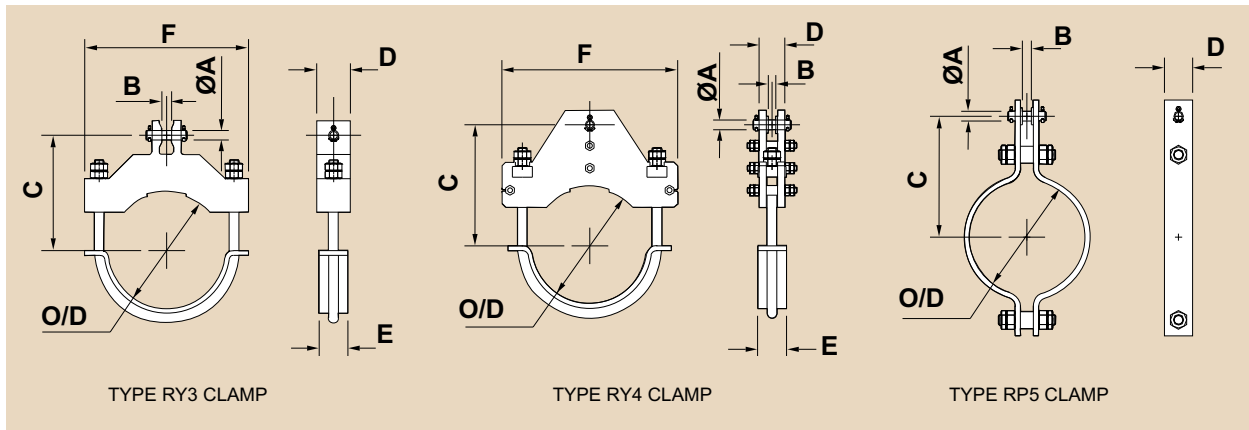


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-650-1-400	660.4	400	423	4.15	933	10	9	457	17.99	30	20	710	35.2	345	77.6
RY4-650-1-400	660.4	400	423	4.15	933	10	9	457	17.99	46	20	756	16.8	165	37.0
RP5-650-1-400	660.4	400	423	4.15	933	10	9	455	17.91	50			9.7	95	21.4
RY3-650-2-400	660.4	400	985	9.66	2172	10	9	457	17.99	30	30	717	38.3	376	84.5
RY4-650-2-400	660.4	400	985	9.66	2172	10	9	457	17.99	49	30	766	14.6	144	32.3
RP5-650-2-400	660.4	400	985	9.66	2172	10	9	455	17.91	80			23.5	231	51.9
RY3-650-3-400	660.4	400	2125	20.8	4684	15	12	464	18.27	30	40	742	44.7	439	98.6
RY4-650-3-400	660.4	400	2125	20.8	4684	15	12	463	18.23	57	40	814	18.9	185	41.7
RP5-650-3-400	660.4	400	2125	20.8	4684	15	12	460	18.11	100			40.0	392	88.2
RY3-650-4-400	660.4	400	4293	42.1	9465	20	16	485	19.09	40	50	756	64.4	631	141.9
RY4-650-4-400	660.4	400	4293	42.1	9465	20	16	474	18.66	63	50	834	28.6	280	63.0
RP5-650-4-400	660.4	400	4293	42.1	9465	20	16	495	19.49	110			58.8	576	129.5
RY3-650-5-400	660.4	400	6324	62	13942	25	20	500	19.69	50	50	774	85.2	835	187.8
RY4-650-5-400	660.4	400	6324	62	13942	25	20	479	18.86	69	50	868	47.5	466	104.7
RP5-650-5-400	660.4	400	6324	62	13942	25	20	510	20.08	110			71.6	702	157.9
RY4-650-6-400	660.4	400	12754	125	28117	35	25	504	19.84	86	80	910	89.0	873	196.3
RP5-650-6-400	660.4	400	12754	125	28117	35	25	565	22.24	140			131.8	1293	290.6
RY4-650-7-400	660.4	400	18132	178	39974	40	28	542	21.34	92	90	932	139.5	1368	307.5
RP5-650-7-400	660.4	400	18132	178	39974	40	28	590	23.23	200			194.4	1907	428.6
RY4-650-8-400	660.4	400	25524	250	56269	50	35	547	21.54	110	100	986	214.5	2104	472.9
RP5-650-8-400	660.4	400	25524	250	56269	50	35	625	24.61	190			243.8	2391	537.5
RY4-650-9-400	660.4	400	55135	541	121552	70	49	656	25.83	148	130	1050	344.6	3379	759.7
RY4-650-10-400	660.4	400	70330	690	155050	80	55	717	28.23	166	150	1084	462.0	4531	1018.5
RY4-650-11-400	660.4	400	90785	890	200144	90	60	800	31.50	194	190	1162	763.7	7489	1683.6
RY3-650-1-490	660.4	490	423	4.15	933	10	9	457	17.99	30	20	710	35.2	345	77.6
RY4-650-1-490	660.4	490	423	4.15	933	10	9	457	17.99	46	20	756	16.8	165	37.1
RP5-650-1-490	660.4	490	423	4.15	933	10	9	455	17.91	50			9.6	94	21.2
RY3-650-2-490	660.4	490	985	9.66	2172	10	9	457	17.99	30	30	717	38.3	376	84.5
RY4-650-2-490	660.4	490	985	9.66	2172	10	9	457	17.99	49	30	766	14.7	144	32.3
RP5-650-2-490	660.4	490	985	9.66	2172	10	9	455	17.91	80			23.2	228	51.2
RY3-650-3-490	660.4	490	2125	20.8	4684	15	12	464	18.27	30	40	742	44.5	437	98.2
RY4-650-3-490	660.4	490	2125	20.8	4684	15	12	463	18.23	57	40	814	18.9	186	41.7
RP5-650-3-490	660.4	490	2125	20.8	4684	15	12	460	18.11	100			39.5	387	87.1
RY3-650-4-490	660.4	490	4293	42.1	9465	20	16	484	19.06	40	50	756	64.0	628	141.1
RY4-650-4-490	660.4	490	4293	42.1	9465	20	16	474	18.66	63	50	834	28.6	280	63.0
RP5-650-4-490	660.4	490	4293	42.1	9465	20	16	485	19.09	110			57.2	561	126.2
RY3-650-5-490	660.4	490	6324	62	13942	25	20	499	19.65	50	50	774	84.7	831	186.8
RY4-650-5-490	660.4	490	6324	62	13942	25	20	479	18.86	69	50	868	47.6	466	104.9
RP5-650-5-490	660.4	490	6324	62	13942	25	20	505	19.88	110			70.1	688	154.6
RY4-650-6-490	660.4	490	12754	125	28117	35	25	494	19.45	86	70	900	87.7	860	193.3
RP5-650-6-490	660.4	490	12754	125	28117	35	25	555	21.85	130			119.4	1171	263.2
RY4-650-7-490	660.4	490	18132	178	39974	40	28	506	19.92	92	80	926	120.4	1180	265.3
RP5-650-7-490	660.4	490	18132	178	39974	40	28	570	22.44	190			178.3	1749	393.2
RY4-650-8-490	660.4	490	25524	250	56269	50	35	547	21.54	110	90	974	200.0	1962	441.0
RP5-650-8-490	660.4	490	25524	250	56269	50	35	620	24.41	180			226.2	2218	498.6
RY4-650-9-490	660.4	490	55135	541	121552	70	49	689	27.13	138	130	1050	338.8	3323	747.0
RY4-650-10-490	660.4	490	70330	690	155050	80	55	708	27.87	166	150	1084	455.5	4466	1004.1
RY4-650-11-490	660.4	490	90785	890	200144	90	60	793	31.22	194	170	1152	710.6	6968	1566.6

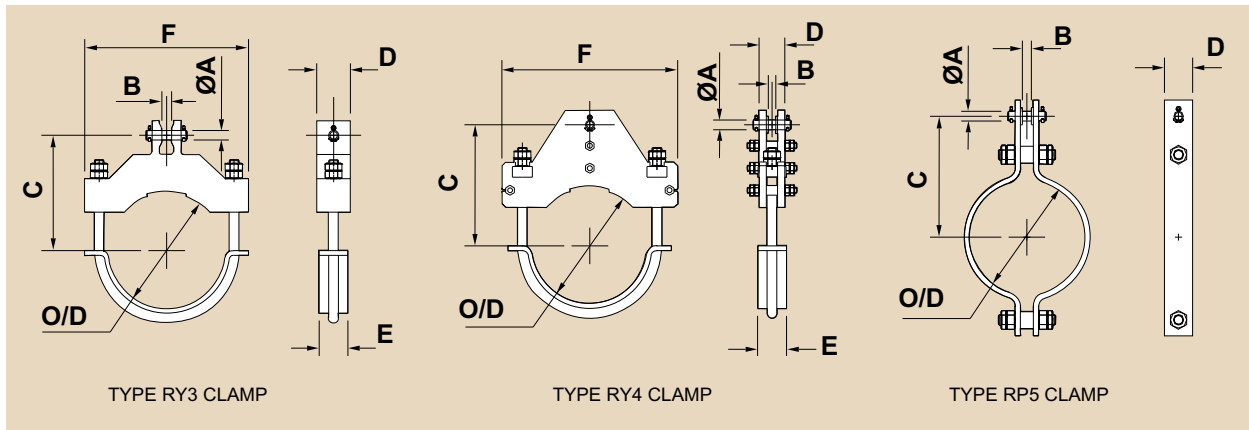


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-650-1-530	660.4	530	423	4.15	933	10	9	457	17.99	30	30	717	36.6	359	80.6
RY4-650-1-530	660.4	530	423	4.15	933	10	9	457	17.99	46	30	758	17.8	175	39.3
RP5-650-1-530	660.4	530	423	4.15	933	10	9	455	17.91	70			16.1	158	35.5
RY3-650-2-530	660.4	530	985	9.66	2172	10	9	457	17.99	30	30	728	39.8	390	87.7
RY4-650-2-530	660.4	530	985	9.66	2172	10	9	457	17.99	49	30	772	13.9	136	30.6
RP5-650-2-530	660.4	530	985	9.66	2172	10	9	455	17.91	80			23.2	228	51.2
RY3-650-3-530	660.4	530	2125	20.8	4684	15	12	464	18.27	40	50	756	59.0	579	130.1
RY4-650-3-530	660.4	530	2125	20.8	4684	15	12	462	18.19	57	50	818	27.3	268	60.3
RP5-650-3-530	660.4	530	2125	20.8	4684	15	12	460	18.11	100			39.5	387	87.1
RY3-650-4-530	660.4	530	4293	42.1	9465	20	16	476	18.74	50	50	774	79.1	775	174.3
RY4-650-4-530	660.4	530	4293	42.1	9465	20	16	473	18.62	63	50	842	49.0	481	108.1
RP5-650-4-530	660.4	530	4293	42.1	9465	20	16	495	19.49	100			63.0	618	138.9
RY3-650-5-530	660.4	530	6324	62	13942	25	20	492	19.37	60	70	795	103.1	1011	227.3
RY4-650-5-530	660.4	530	6324	62	13942	25	20	479	18.86	69	70	874	85.7	841	189.0
RP5-650-5-530	660.4	530	6324	62	13942	25	20	505	19.88	130			82.7	811	182.3
RY4-650-6-530	660.4	530	12754	125	28117	35	25	504	19.84	86	80	910	104.1	1021	229.4
RP5-650-6-530	660.4	530	12754	125	28117	35	25	555	21.85	150			137.3	1346	302.7
RY4-650-7-530	660.4	530	18132	178	39974	40	28	542	21.34	92	90	932	147.0	1442	324.1
RP5-650-7-530	660.4	530	18132	178	39974	40	28	570	22.44	210			196.7	1929	433.5
RY4-650-8-530	660.4	530	25524	250	56269	50	35	547	21.54	110	100	986	215.0	2108	473.9
RP5-650-8-530	660.4	530	25524	250	56269	50	35	620	24.41	190			238.3	2337	525.4
RY4-650-9-530	660.4	530	55135	541	121552	70	49	691	27.20	138	130	1050	340.0	3334	749.5
RY4-650-10-530	660.4	530	70330	690	155050	80	55	708	27.87	166	150	1084	455.7	4469	1004.6
RY4-650-11-530	660.4	530	90785	890	200144	90	60	793	31.22	194	170	1152	710.6	6968	1566.6
RY3-650-1-570	660.4	570	423	4.15	933	10	9	457	17.99	30	30	728	38.3	376	84.4
RY4-650-1-570	660.4	570	423	4.15	933	10	9	457	17.99	46	30	764	18.4	180	40.5
RP5-650-1-570	660.4	570	423	4	933	10	9	455	17.91	70			16.1	157.8	35.5
RY3-650-2-570	660.4	570	985	9.66	2172	10	9	457	17.99	30	40	742	42.9	420	94.5
RY4-650-2-570	660.4	570	985	9.66	2172	10	9	457	17.99	49	40	776	16.9	166	37.3
RP5-650-2-570	660.4	570	985	10	2172	10	9	455	17.91	100			38.7	379.4	85.3
RY3-650-3-570	660.4	570	2125	20.8	4684	15	12	464	18.27	50	50	774	75.4	739	166.2
RY4-650-3-570	660.4	570	2125	20.8	4684	15	12	463	18.23	57	50	826	47.5	466	104.8
RP5-650-3-570	660.4	570	2125	21	4684	15	12	460	18.11	90			44.5	436.4	98.1
RY3-650-4-570	660.4	570	4293	42.1	9465	20	16	476	18.74	60	70	795	99.3	974	219.0
RY4-650-4-570	660.4	570	4293	42.1	9465	20	16	472	18.58	63	70	848	74.4	729	163.9
RP5-650-4-570	660.4	570	4293	42	9465	20	16	490	19.29	110			67.9	666.1	149.7
RY3-650-5-570	660.4	570	6324	62	13942	25	20	492	19.37	70	80	820	126.2	1238	278.2
RY4-650-5-570	660.4	570	6324	62	13942	25	20	499	19.65	79	80	884	63.8	625	140.6
RP5-650-5-570	660.4	570	6324	62	13942	25	20	525	20.67	120			103.7	1016	228.5
RY4-650-6-570	660.4	570	12754	125	28117	35	25	540	21.26	86	90	916	105.1	1031	231.8
RP5-650-6-570	660.4	570	12754	125	28117	35	25	555	21.85	190			173.2	1698	381.8
RY4-650-7-570	660.4	570	18132	178	39974	40	28	542	21.34	92	100	944	161.8	1587	356.7
RP5-650-7-570	660.4	570	18132	178	39974	40	28	590	23.23	180			214.6	2105	473.2
RY4-650-8-570	660.4	570	25524	250	56269	50	35	583	22.95	110	120	994	244.4	2396	538.7
RP5-650-8-570	660.4	570	25524	250	56269	50	35	620	24.41	240			299.2	2934	659.5
RY4-650-9-570	660.4	570	55135	541	121552	70	49	679	26.73	148	130	1050	359.7	3527	792.9
RY4-650-10-570	660.4	570	70330	690	155050	80	55	734	28.90	166	150	1084	477.0	4677	1051.5
RY4-650-11-570	660.4	570	90785	890	200144	90	60	805	31.69	194	170	1152	719.6	7056	1586.3



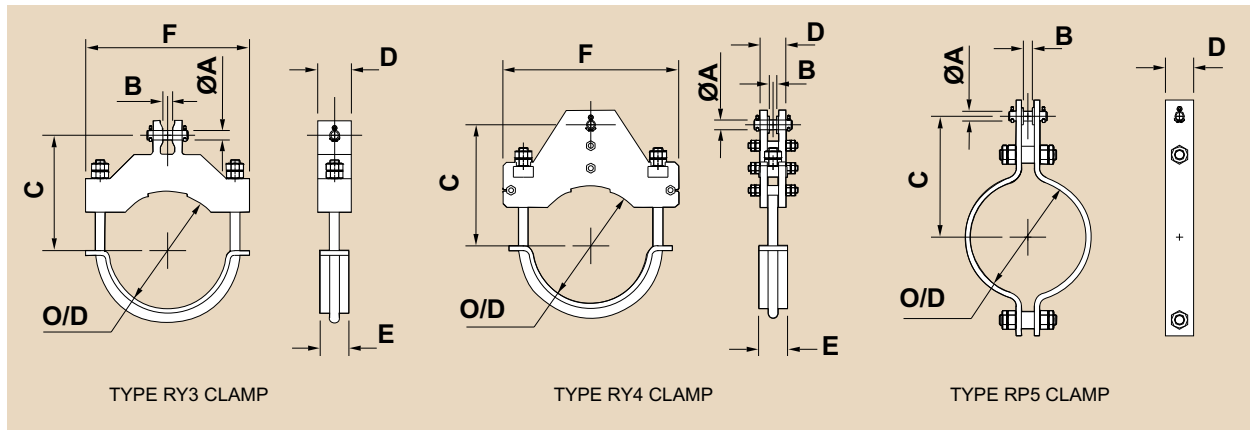


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-700-1-400	711.2	400	423	4.15	933	10	9	482	18.98	30	20	760	39.9	392	88.0
RY4-700-1-400	711.2	400	423	4.15	933	10	9	482	18.98	46	20	806	13.4	132	29.6
RP5-700-1-400	711.2	400	423	4.15	933	10	9	480	18.90	60			12.4	121	27.3
RY3-700-2-400	711.2	400	985	9.66	2172	10	9	482	18.98	30	30	767	43.2	423	95.1
RY4-700-2-400	711.2	400	985	9.66	2172	10	9	482	18.98	49	30	816	12.4	121	27.3
RP5-700-2-400	711.2	400	985	9.66	2172	10	9	480	18.90	80			25.0	245	55.1
RY3-700-3-400	711.2	400	2125	20.8	4684	15	12	489	19.25	30	40	792	49.9	490	110.1
RY4-700-3-400	711.2	400	2125	20.8	4684	15	12	488	19.21	57	40	864	22.0	215	48.4
RP5-700-3-400	711.2	400	2125	20.8	4684	15	12	485	19.09	100			42.4	416	93.6
RY3-700-4-400	711.2	400	4293	42.1	9465	20	16	514	20.24	40	50	806	72.0	706	158.8
RY4-700-4-400	711.2	400	4293	42.1	9465	20	16	499	19.65	63	50	884	35.7	350	78.8
RP5-700-4-400	711.2	400	4293	42.1	9465	20	16	520	20.47	120			67.7	663	149.1
RY3-700-5-400	711.2	400	6324	62	13942	25	20	530	20.87	50	50	824	95.5	937	210.6
RY4-700-5-400	711.2	400	6324	62	13942	25	20	504	19.84	69	50	918	60.5	593	133.3
RP5-700-5-400	711.2	400	6324	62	13942	25	20	550	21.65	130			91.9	901	202.6
RY4-700-6-400	711.2	400	12754	125	28117	35	25	529	20.83	86	80	960	126.0	1235	277.7
RP5-700-6-400	711.2	400	12754	125	28117	35	25	590	23.23	150			148.2	1453	326.8
RY4-700-7-400	711.2	400	18132	178	39974	40	28	567	22.32	92	90	982	170.9	1676	376.8
RP5-700-7-400	711.2	400	18132	178	39974	40	28	615	24.21	210			214.0	2099	471.8
RY4-700-8-400	711.2	400	25524	250	56269	50	35	572	22.52	110	100	1036	230.4	2260	508.0
RP5-700-8-400	711.2	400	25524	250	56269	50	35	655	25.79	200			269.8	2646	594.9
RY4-700-9-400	711.2	400	55135	541	121552	70	49	714	28.11	138	130	1100	377.8	3705	832.9
RY4-700-10-400	711.2	400	70330	690	155050	80	55	732	28.82	166	150	1134	473.1	4639	1043.0
RY4-700-11-400	711.2	400	90785	890	200144	90	60	816	32.13	194	190	1212	748.3	7338	1649.7
RY3-700-1-490	711.2	490	423	4.15	933	10	9	482	18.98	30	20	760	39.7	389	87.5
RY4-700-1-490	711.2	490	423	4.15	933	10	9	482	18.98	46	20	806	13.4	132	29.6
RP5-700-1-490	711.2	490	423	4.15	933	10	9	480	18.90	60			12.2	120	27.0
RY3-700-2-490	711.2	490	985	9.66	2172	10	9	482	18.98	30	30	767	43.2	423	95.1
RY4-700-2-490	711.2	490	985	9.66	2172	10	9	482	18.98	49	30	816	12.4	121	27.3
RP5-700-2-490	711.2	490	985	9.66	2172	10	9	480	18.90	80			24.7	242	54.5
RY3-700-3-490	711.2	490	2125	20.8	4684	15	12	489	19.25	30	40	792	49.7	488	109.6
RY4-700-3-490	711.2	490	2125	20.8	4684	15	12	488	19.21	57	40	864	22.0	215	48.4
RP5-700-3-490	711.2	490	2125	20.8	4684	15	12	485	19.09	100			41.9	411	92.5
RY3-700-4-490	711.2	490	4293	42.1	9465	20	16	512	20.16	40	50	806	71.8	704	158.3
RY4-700-4-490	711.2	490	4293	42.1	9465	20	16	499	19.65	63	50	884	35.8	351	78.8
RP5-700-4-490	711.2	490	4293	42.1	9465	20	16	510	20.08	110			60.6	594	133.6
RY3-700-5-490	711.2	490	6324	62	13942	25	20	528	20.79	50	50	824	94.9	930	209.1
RY4-700-5-490	711.2	490	6324	62	13942	25	20	504	19.84	69	50	918	60.5	594	133.5
RP5-700-5-490	711.2	490	6324	62	13942	25	20	530	20.87	110			74.2	727	163.5
RY4-700-6-490	711.2	490	12754	125	28117	35	25	519	20.43	86	70	950	101.2	992	223.0
RP5-700-6-490	711.2	490	12754	125	28117	35	25	585	23.03	140			136.0	1334	299.8
RY4-700-7-490	711.2	490	18132	178	39974	40	28	531	20.91	92	80	976	96.5	946	212.7
RP5-700-7-490	711.2	490	18132	178	39974	40	28	600	23.62	200			198.4	1946	437.5
RY4-700-8-490	711.2	490	25524	250	56269	50	35	572	22.52	110	90	1024	213.7	2096	471.1
RP5-700-8-490	711.2	490	25524	250	56269	50	35	645	25.39	190			249.8	2450	550.8
RY4-700-9-490	711.2	490	55135	541	121552	70	49	704	27.72	138	130	1100	371.9	3647	819.9
RY4-700-10-490	711.2	490	70330	690	155050	80	55	763	30.04	156	150	1134	465.1	4562	1025.5
RY4-700-11-490	711.2	490	90785	890	200144	90	60	806	31.73	194	170	1202	684.4	6712	1508.8

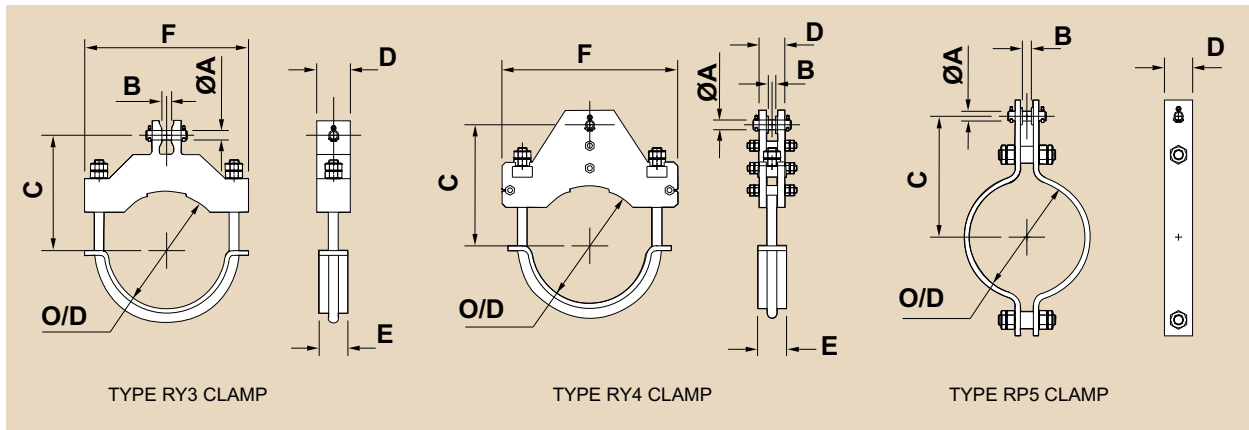


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-700-1-530	711.2	530	423	4.15	933	10	9	482	18.98	30	30	767	41.1	403	90.7
RY4-700-1-530	711.2	530	423	4.15	933	10	9	482	18.98	46	30	808	14.5	143	32.0
RP5-700-1-530	711.2	530	423	4.15	933	10	9	480	18.90	70			17.1	168	37.7
RY3-700-2-530	711.2	530	985	9.66	2172	10	9	482	18.98	30	30	778	44.7	439	98.6
RY4-700-2-530	711.2	530	985	9.66	2172	10	9	482	18.98	49	30	822	14.1	138	31.1
RP5-700-2-530	711.2	530	985	9.66	2172	10	9	480	18.90	80			24.7	242	54.5
RY3-700-3-530	711.2	530	2125	20.8	4684	15	12	489	19.25	40	50	806	65.9	646	145.3
RY4-700-3-530	711.2	530	2125	20.8	4684	15	12	487	19.17	57	50	868	36.7	360	80.8
RP5-700-3-530	711.2	530	2125	20.8	4684	15	12	485	19.09	100			41.9	411	92.5
RY3-700-4-530	711.2	530	4293	42.1	9465	20	16	504	19.84	50	50	824	88.7	870	195.6
RY4-700-4-530	711.2	530	4293	42.1	9465	20	16	498	19.61	63	50	892	62.6	614	137.9
RP5-700-4-530	711.2	530	4293	42.1	9465	20	16	520	20.47	100			66.7	654	147.0
RY3-700-5-530	711.2	530	6324	62	13942	25	20	520	20.47	60	70	845	115.2	1129	253.9
RY4-700-5-530	711.2	530	6324	62	13942	25	20	504	19.84	69	70	924	92.5	907	204.0
RP5-700-5-530	711.2	530	6324	62	13942	25	20	530	20.87	130			87.5	858	192.8
RY4-700-6-530	711.2	530	12754	125	28117	35	25	529	20.83	86	80	960	92.2	904	203.3
RP5-700-6-530	711.2	530	12754	125	28117	35	25	585	23.03	160			155.0	1520	341.8
RY4-700-7-530	711.2	530	18132	178	39974	40	28	567	22.32	102	90	982	121.0	1187	266.8
RP5-700-7-530	711.2	530	18132	178	39974	40	28	620	24.41	180			227.0	2226	500.3
RY4-700-8-530	711.2	530	25524	250	56269	50	35	572	22.52	110	100	1036	230.9	2264	509.0
RP5-700-8-530	711.2	530	25524	250	56269	50	35	645	25.39	200			262.6	2575	578.9
RY4-700-9-530	711.2	530	55135	541	121552	70	49	705	27.76	138	130	1100	372.8	3656	821.8
RY4-700-10-530	711.2	530	70330	690	155050	80	55	763	30.04	156	150	1134	465.1	4562	1025.5
RY4-700-11-530	711.2	530	90785	890	200144	90	60	806	31.73	194	170	1202	684.4	6712	1508.8
RY3-700-1-570	711.2	570	423	4.15	933	10	9	482	18.98	30	30	778	43.2	423	95.2
RY4-700-1-570	711.2	570	423	4.15	933	10	9	482	18.98	46	30	814	15.4	151	33.9
RP5-700-1-570	711.2	570	423	4	933	10	9	480	18.9	80			19.6	191.8	43.1
RY3-700-2-570	711.2	570	985	9.66	2172	10	9	482	18.98	30	40	792	48.0	471	105.8
RY4-700-2-570	711.2	570	985	9.66	2172	10	9	482	18.98	49	40	826	21.3	208	46.8
RP5-700-2-570	711.2	570	985	10	2172	10	9	480	18.9	100			41.2	403.7	90.8
RY3-700-3-570	711.2	570	2125	20.8	4684	15	12	489	19.25	50	50	824	84.1	825	185.4
RY4-700-3-570	711.2	570	2125	20.8	4684	15	12	488	19.21	57	50	876	59.1	580	130.3
RP5-700-3-570	711.2	570	2125	21	4684	15	12	485	19.09	90			47.3	463.5	104.2
RY3-700-4-570	711.2	570	4293	42.1	9465	20	16	503	19.80	60	70	845	110.6	1084	243.8
RY4-700-4-570	711.2	570	4293	42.1	9465	20	16	497	19.57	63	70	898	79.4	779	175.1
RP5-700-4-570	711.2	570	4293	42	9465	20	16	520	20.47	120			79.8	782.7	176.0
RY3-700-5-570	711.2	570	6324	62	13942	25	20	520	20.47	70	80	870	140.6	1378	309.9
RY4-700-5-570	711.2	570	6324	62	13942	25	20	524	20.63	79	80	934	134.9	1323	297.4
RP5-700-5-570	711.2	570	6324	62	13942	25	20	550	21.65	120			109.5	1073	241.3
RY4-700-6-570	711.2	570	12754	125	28117	35	25	565	22.24	96	90	966	110.4	1083	243.4
RP5-700-6-570	711.2	570	12754	125	28117	35	25	585	23.03	210			202.6	1987	446.6
RY4-700-7-570	711.2	570	18132	178	39974	40	28	567	22.32	102	100	994	187.5	1838	413.3
RP5-700-7-570	711.2	570	18132	178	39974	40	28	620	24.41	180			227.0	2226	500.3
RY4-700-8-570	711.2	570	25524	250	56269	50	35	608	23.94	110	120	1044	255.2	2503	562.7
RP5-700-8-570	711.2	570	25524	250	56269	50	35	645	25.39	250			326.5	3201	719.7
RY4-700-9-570	711.2	570	55135	541	121552	70	49	692	27.24	148	130	1100	401.6	3938	885.3
RY4-700-10-570	711.2	570	70330	690	155050	80	55	748	29.45	166	150	1134	488.8	4794	1077.7
RY4-700-11-570	711.2	570	90785	890	200144	90	60	820	32.28	194	170	1202	698.8	6853	1540.5

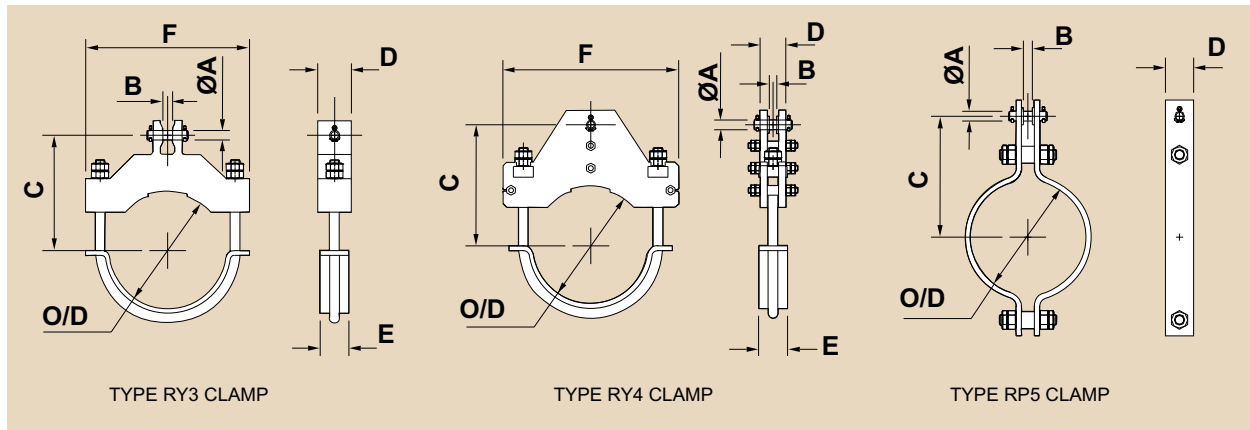


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-750-1-400	762	400	423	4.15	933	10	9	508	20.00	35	20	812	51.9	509	114.4
RY4-750-1-400	762	400	423	4.15	933	10	9	508	20.00	56	20	858	14.1	138	31.0
RP5-750-1-400	762	400	423	4.15	933	10	9	505	19.88	60			13.2	129	29.0
RY3-750-2-400	762	400	985	9.66	2172	10	9	508	20.00	35	30	819	55.7	546	122.8
RY4-750-2-400	762	400	985	9.66	2172	10	9	508	20.00	59	30	868	15.0	147	33.0
RP5-750-2-400	762	400	985	9.66	2172	10	9	505	19.88	80			26.5	260	58.5
RY3-750-3-400	762	400	2125	20.8	4684	15	12	515	20.28	35	40	844	63.3	620	139.5
RY4-750-3-400	762	400	2125	20.8	4684	15	12	514	20.24	67	40	916	27.9	274	61.5
RP5-750-3-400	762	400	2125	20.8	4684	15	12	515	20.28	100			45.9	450	101.1
RY3-750-4-400	762	400	4293	42.1	9465	20	16	544	21.42	40	50	858	80.9	793	178.3
RY4-750-4-400	762	400	4293	42.1	9465	20	16	525	20.67	73	50	936	42.0	412	92.7
RP5-750-4-400	762	400	4293	42.1	9465	20	16	560	22.05	100			72.5	711	159.7
RY3-750-5-400	762	400	6324	62	13942	25	20	560	22.05	50	50	876	106.5	1045	234.8
RY4-750-5-400	762	400	6324	62	13942	25	20	530	20.87	79	50	970	68.1	668	150.1
RP5-750-5-400	762	400	6324	62	13942	25	20	575	22.64	130			96.7	948	213.1
RY4-750-6-400	762	400	12754	125	28117	35	25	555	21.85	86	80	1012	142.7	1400	314.6
RP5-750-6-400	762	400	12754	125	28117	35	25	635	25.00	160			171.5	1682	378.1
RY4-750-7-400	762	400	18132	178	39974	40	28	593	23.35	92	90	1034	182.9	1794	403.3
RP5-750-7-400	762	400	18132	178	39974	40	28	665	26.18	180			245.6	2408	541.4
RY4-750-8-400	762	400	25524	250	56269	50	35	598	23.54	110	100	1088	246.4	2417	543.3
RP5-750-8-400	762	400	25524	250	56269	50	35	680	26.77	210			295.7	2900	652.0
RY4-750-9-400	762	400	55135	541	121552	70	49	728	28.66	138	130	1152	439.6	4311	969.2
RY4-750-10-400	762	400	70330	690	155050	80	55	789	31.06	156	150	1186	518.7	5087	1143.6
RY4-750-11-400	762	400	90785	890	200144	90	60	831	32.72	194	190	1264	732.1	7180	1614.1
RY3-750-1-490	762	490	423	4.15	933	10	9	508	20.00	35	20	812	51.6	506	113.8
RY4-750-1-490	762	490	423	4.15	933	10	9	508	20.00	56	20	858	14.1	138	31.0
RP5-750-1-490	762	490	423	4.15	933	10	9	505	19.88	60			13.0	127	28.6
RY3-750-2-490	762	490	985	9.66	2172	10	9	508	20.00	35	30	819	55.7	546	122.8
RY4-750-2-490	762	490	985	9.66	2172	10	9	508	20.00	59	30	868	15.0	147	33.0
RP5-750-2-490	762	490	985	9.66	2172	10	9	505	19.88	80			26.2	257	57.8
RY3-750-3-490	762	490	2125	20.8	4684	15	12	515	20.28	35	40	844	63.0	618	138.9
RY4-750-3-490	762	490	2125	20.8	4684	15	12	514	20.24	67	40	916	27.9	274	61.5
RP5-750-3-490	762	490	2125	20.8	4684	15	12	510	20.08	100			44.5	436	98.0
RY3-750-4-490	762	490	4293	42.1	9465	20	16	542	21.34	40	50	858	80.4	788	177.2
RY4-750-4-490	762	490	4293	42.1	9465	20	16	525	20.67	73	50	936	42.1	413	92.7
RP5-750-4-490	762	490	4293	42.1	9465	20	16	535	21.06	120			69.8	684	153.8
RY3-750-5-490	762	490	6324	62	13942	25	20	558	21.97	50	50	876	105.8	1038	233.3
RY4-750-5-490	762	490	6324	62	13942	25	20	530	20.87	79	50	970	68.1	668	150.2
RP5-750-5-490	762	490	6324	62	13942	25	20	560	22.05	120			85.8	841	189.2
RY4-750-6-490	762	490	12754	125	28117	35	25	545	21.46	86	70	1002	140.6	1379	309.9
RP5-750-6-490	762	490	12754	125	28117	35	25	610	24.02	150			152.9	1499	337.0
RY4-750-7-490	762	490	18132	178	39974	40	28	557	21.93	92	80	1028	97.9	960	215.9
RP5-750-7-490	762	490	18132	178	39974	40	28	625	24.61	210			218.6	2143	481.9
RY4-750-8-490	762	490	25524	250	56269	50	35	598	23.54	110	90	1076	228.8	2244	504.4
RP5-750-8-490	762	490	25524	250	56269	50	35	670	26.38	190			261.5	2564	576.4
RY4-750-9-490	762	490	55135	541	121552	70	49	717	28.23	138	130	1152	434.1	4257	956.9
RY4-750-10-490	762	490	70330	690	155050	80	55	778	30.63	156	150	1186	511.1	5012	1126.8
RY4-750-11-490	762	490	90785	890	200144	90	60	822	32.36	194	170	1254	670.7	6577	1478.5

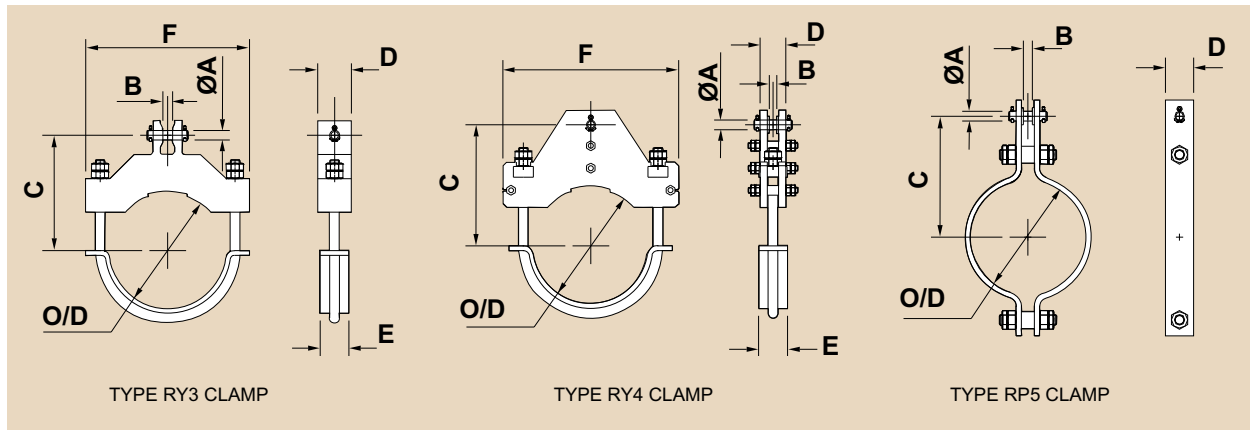


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
	mm	°C				mm	mm	mm	in	mm	mm	mm	kgf	N	lbs
RY3-750-1-530	762	530	423	4.15	933	10	9	508	20.00	35	30	819	53.2	522	117.3
RY4-750-1-530	762	530	423	4.15	933	10	9	508	20.00	56	30	860	15.3	150	33.7
RP5-750-1-530	762	530	423	4.15	933	10	9	505	19.88	70			18.2	178	40.1
RY3-750-2-530	762	530	985	9.66	2172	10	9	508	20.00	35	30	830	57.5	564	126.7
RY4-750-2-530	762	530	985	9.66	2172	10	9	508	20.00	59	30	874	18.0	176	39.6
RP5-750-2-530	762	530	985	9.66	2172	10	9	505	19.88	80			26.2	257	57.8
RY3-750-3-530	762	530	2125	20.8	4684	15	12	515	20.28	40	50	858	73.6	722	162.4
RY4-750-3-530	762	530	2125	20.8	4684	15	12	513	20.20	67	50	920	43.4	426	95.8
RP5-750-3-530	762	530	2125	20.8	4684	15	12	510	20.08	100			44.5	436	98.0
RY3-750-4-530	762	530	4293	42.1	9465	20	16	533	20.98	50	50	876	99.1	972	218.6
RY4-750-4-530	762	530	4293	42.1	9465	20	16	524	20.63	73	50	944	74.0	726	163.2
RP5-750-4-530	762	530	4293	42.1	9465	20	16	550	21.65	100			70.9	695	156.2
RY3-750-5-530	762	530	6324	62	13942	25	20	550	21.65	60	70	897	128.3	1258	282.9
RY4-750-5-530	762	530	6324	62	13942	25	20	530	20.87	79	70	976	108.5	1064	239.1
RP5-750-5-530	762	530	6324	62	13942	25	20	560	22.05	140			99.9	980	220.3
RY4-750-6-530	762	530	12754	125	28117	35	25	555	21.85	86	80	1012	97.1	952	214.1
RP5-750-6-530	762	530	12754	125	28117	35	25	610	24.02	160			162.9	1597	359.1
RY4-750-7-530	762	530	18132	178	39974	40	28	593	23.35	102	90	1034	133.6	1310	294.4
RP5-750-7-530	762	530	18132	178	39974	40	28	645	25.39	180			238.0	2334	524.7
RY4-750-8-530	762	530	25524	250	56269	50	35	598	23.54	110	100	1088	246.9	2421	544.3
RP5-750-8-530	762	530	25524	250	56269	50	35	670	26.38	210			288.2	2827	635.5
RY4-750-9-530	762	530	55135	541	121552	70	49	718	28.27	138	130	1152	434.7	4263	958.3
RY4-750-10-530	762	530	70330	690	155050	80	55	778	30.63	156	150	1186	511.1	5012	1128.8
RY4-750-11-530	762	530	90785	890	200144	90	60	822	32.36	194	170	1254	670.7	6577	1478.5
RY3-750-1-570	762	570	423	4.15	933	10	9	508	20.00	35	30	830	55.5	545	122.5
RY4-750-1-570	762	570	423	4.15	933	10	9	508	20.00	56	30	866	16.9	166	37.3
RP5-750-1-570	762	570	423	4	933	10	9	505	19.88	80			20.8	203.6	45.8
RY3-750-2-570	762	570	985	9.66	2172	10	9	508	20.00	35	40	844	60.8	597	134.1
RY4-750-2-570	762	570	985	9.66	2172	10	9	508	20.00	59	40	878	27.4	268	60.3
RP5-750-2-570	762	570	985	10	2172	10	9	505	19.88	100			43.7	428.1	96.2
RY3-750-3-570	762	570	2125	20.8	4684	15	12	515	20.28	50	50	876	93.8	920	206.9
RY4-750-3-570	762	570	2125	20.8	4684	15	12	514	20.24	67	50	928	70.1	688	154.6
RP5-750-3-570	762	570	2125	21	4684	15	12	510	20.08	90			50.1	490.9	110.4
RY3-750-4-570	762	570	4293	42.1	9465	20	16	532	20.94	60	70	897	123.3	1209	271.8
RY4-750-4-570	762	570	4293	42.1	9465	20	16	523	20.59	73	70	950	117.5	1152	259.0
RP5-750-4-570	762	570	4293	42	9465	20	16	550	21.65	130			91.9	900.8	202.5
RY3-750-5-570	762	570	6324	62	13942	25	20	549	21.61	70	80	922	156.0	1530	344.0
RY4-750-5-570	762	570	6324	62	13942	25	20	550	21.65	79	80	986	147.3	1444	324.6
RP5-750-5-570	762	570	6324	62	13942	25	20	580	22.83	120			116.2	1139	256.1
RY4-750-6-570	762	570	12754	125	28117	35	25	591	23.27	96	90	1018	113.9	1117	251.2
RP5-750-6-570	762	570	12754	125	28117	35	25	610	24.02	210			212.9	2088	469.3
RY4-750-7-570	762	570	18132	178	39974	40	28	593	23.35	102	100	1046	207.8	2038	458.1
RP5-750-7-570	762	570	18132	178	39974	40	28	645	25.39	180			238.0	2334	524.7
RY4-750-8-570	762	570	25524	250	56269	50	35	634	24.96	110	120	1096	270.2	2650	595.8
RP5-750-8-570	762	570	25524	250	56269	50	35	670	26.38	260			355.2	3483	783.0
RY4-750-9-570	762	570	55135	541	121552	70	49	707	27.83	148	130	1152	467.2	4581	1029.9
RY4-750-10-570	762	570	70330	690	155050	80	55	762	30.00	166	150	1186	543.0	5325	1197.2
RY4-750-11-570	762	570	90785	890	200144	90	60	835	32.87	194	170	1254	683.9	6706	1507.7

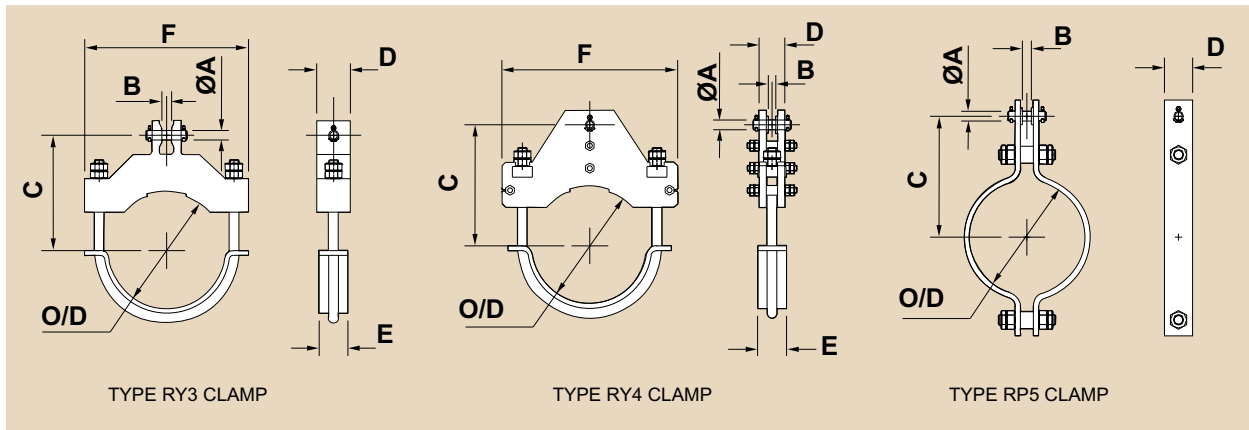


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-800-1-400	812.8	400	423	4.15	933	10	9	534	21.02	35	20	864	57.8	567	127.5
RY4-800-1-400	812.8	400	423	4.15	933	10	9	534	21.02	56	20	910	13.7	135	30.3
RP5-800-1-400	812.8	400	423	4.15	933	10	9	530	20.87	60			13.9	136	30.7
RY3-800-2-400	812.8	400	985	9.66	2172	10	9	534	21.02	35	30	871	62.2	610	137.1
RY4-800-2-400	812.8	400	985	9.66	2172	10	9	534	21.02	59	30	920	15.9	156	35.1
RP5-800-2-400	812.8	400	985	9.66	2172	10	9	530	20.87	80			28.0	275	61.7
RY3-800-3-400	812.8	400	2125	20.8	4684	15	12	541	21.30	35	40	896	70.1	688	154.6
RY4-800-3-400	812.8	400	2125	20.8	4684	15	12	541	21.30	67	40	968	34.5	339	76.1
RP5-800-3-400	812.8	400	2125	20.8	4684	15	12	540	21.26	100			48.4	474	106.6
RY3-800-4-400	812.8	400	4293	42.1	9465	20	16	575	22.64	40	50	910	90.1	883	198.6
RY4-800-4-400	812.8	400	4293	42.1	9465	20	16	551	21.69	73	50	988	53.9	529	118.9
RP5-800-4-400	812.8	400	4293	42.1	9465	20	16	585	23.03	100			76.2	747	168.0
RY3-800-5-400	812.8	400	6324	62	13942	25	20	592	23.31	50	50	928	118.5	1162	261.2
RY4-800-5-400	812.8	400	6324	62	13942	25	20	557	21.93	79	50	1022	83.8	821	184.6
RP5-800-5-400	812.8	400	6324	62	13942	25	20	600	23.62	140			109.1	1070	240.6
RY4-800-6-400	812.8	400	12754	125	28117	35	25	583	22.95	86	80	1064	153.7	1507	338.8
RP5-800-6-400	812.8	400	12754	125	28117	35	25	660	25.98	170			190.3	1866	419.6
RY4-800-7-400	812.8	400	18132	178	39974	40	28	621	24.45	92	90	1086	197.2	1934	434.7
RP5-800-7-400	812.8	400	18132	178	39974	40	28	700	27.56	180			263.1	2580	580.1
RY4-800-8-400	812.8	400	25524	250	56269	50	35	626	24.65	110	100	1140	263.9	2588	581.7
RP5-800-8-400	812.8	400	25524	250	56269	50	35	705	27.76	220			322.7	3165	711.4
RY4-800-9-400	812.8	400	55135	541	121552	70	49	740	29.13	138	130	1204	497.0	4874	1095.8
RY4-800-10-400	812.8	400	70330	690	155050	80	55	802	31.57	156	150	1238	593.5	5820	1308.4
RY4-800-11-400	812.8	400	90785	890	200144	90	60	845	33.27	194	190	1316	751.2	7367	1656.2
RY3-800-1-490	812.8	490	423	4.15	933	10	9	534	21.02	35	20	864	57.8	567	127.5
RY4-800-1-490	812.8	490	423	4.15	933	10	9	534	21.02	56	20	910	13.8	135	30.3
RP5-800-1-490	812.8	490	423	4.15	933	10	9	530	20.87	60			13.7	135	30.3
RY3-800-2-490	812.8	490	985	9.66	2172	10	9	534	21.02	35	30	871	61.9	607	136.5
RY4-800-2-490	812.8	490	985	9.66	2172	10	9	534	21.02	59	30	920	15.9	156	35.1
RP5-800-2-490	812.8	490	985	9.66	2172	10	9	530	20.87	80			27.7	272	61.1
RY3-800-3-490	812.8	490	2125	20.8	4684	15	12	541	21.30	35	40	896	69.9	685	154.0
RY4-800-3-490	812.8	490	2125	20.8	4684	15	12	541	21.30	67	40	968	34.5	339	76.2
RP5-800-3-490	812.8	490	2125	20.8	4684	15	12	535	21.06	100			46.9	460	103.5
RY3-800-4-490	812.8	490	4293	42.1	9465	20	16	574	22.60	40	50	910	89.7	879	197.7
RY4-800-4-490	812.8	490	4293	42.1	9465	20	16	551	21.69	73	50	988	53.9	529	118.9
RP5-800-4-490	812.8	490	4293	42.1	9465	20	16	565	22.24	120			74.0	725	163.1
RY3-800-5-490	812.8	490	6324	62	13942	25	20	590	23.23	50	50	928	117.7	1154	259.5
RY4-800-5-490	812.8	490	6324	62	13942	25	20	557	21.93	79	50	1022	83.8	822	184.8
RP5-800-5-490	812.8	490	6324	62	13942	25	20	585	23.03	120			90.3	885	199.0
RY4-800-6-490	812.8	490	12754	125	28117	35	25	571	22.48	86	70	1054	153.1	1501	337.4
RP5-800-6-490	812.8	490	12754	125	28117	35	25	635	25.00	150			160.3	1572	353.4
RY4-800-7-490	812.8	490	18132	178	39974	40	28	585	23.03	92	80	1080	102.1	1001	225.0
RP5-800-7-490	812.8	490	18132	178	39974	40	28	650	25.59	220			239.6	2349	528.2
RY4-800-8-490	812.8	490	25524	250	56269	50	35	626	24.65	110	90	1128	239.9	2353	528.9
RP5-800-8-490	812.8	490	25524	250	56269	50	35	700	27.56	200			288.5	2830	636.1
RY4-800-9-490	812.8	490	55135	541	121552	70	49	731	28.78	138	130	1204	487.8	4784	1075.4
RY4-800-10-490	812.8	490	70330	690	155050	80	55	792	31.18	156	150	1238	580.4	5692	1279.6
RY4-800-11-490	812.8	490	90785	890	200144	90	60	837	32.95	194	170	1306	689.0	6757	1519.0

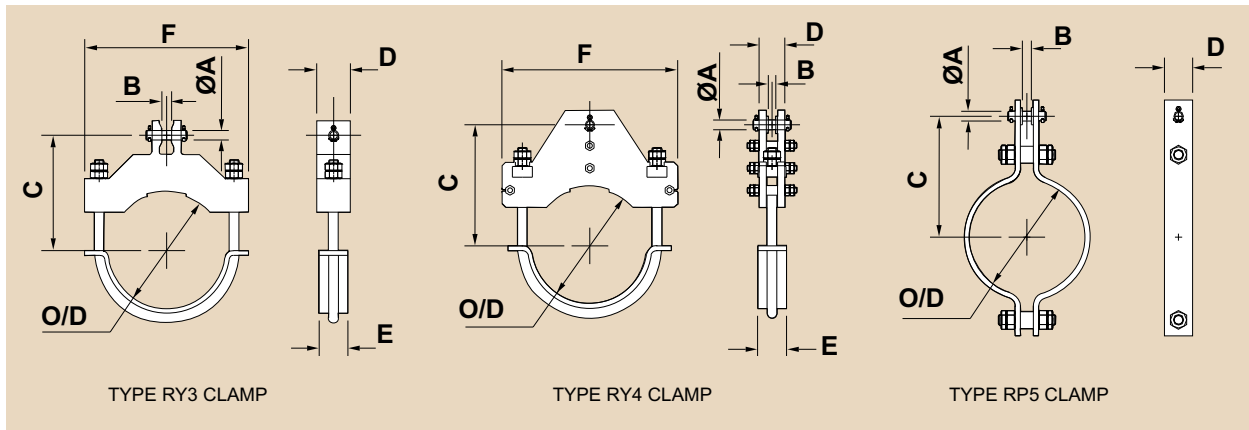


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-800-1-530	812.8	530	423	4.15	933	10	9	534	21.02	35	30	871	59.6	584	131.4
RY4-800-1-530	812.8	530	423	4.15	933	10	9	534	21.02	56	30	912	15.0	147	33.1
RP5-800-1-530	812.8	530	423	4.15	933	10	9	530	20.87	70			19.2	189	42.4
RY3-800-2-530	812.8	530	985	9.66	2172	10	9	534	21.02	35	30	882	64.0	628	141.2
RY4-800-2-530	812.8	530	985	9.66	2172	10	9	534	21.02	59	30	926	21.5	211	47.4
RP5-800-2-530	812.8	530	985	9.66	2172	10	9	530	20.87	80			27.7	272	61.1
RY3-800-3-530	812.8	530	2125	20.8	4684	15	12	541	21.30	40	50	910	81.9	803	180.5
RY4-800-3-530	812.8	530	2125	20.8	4684	15	12	541	21.30	67	50	972	51.8	508	114.3
RP5-800-3-530	812.8	530	2125	20.8	4684	15	12	535	21.06	100			46.9	460	103.5
RY3-800-4-530	812.8	530	4293	42.1	9465	20	16	564	22.20	50	50	928	110.1	1080	242.8
RY4-800-4-530	812.8	530	4293	42.1	9465	20	16	550	21.65	73	50	996	90.2	885	198.9
RP5-800-4-530	812.8	530	4293	42.1	9465	20	16	575	22.64	100			74.6	731	164.4
RY3-800-5-530	812.8	530	6324	62	13942	25	20	581	22.87	60	70	949	142.5	1397	314.1
RY4-800-5-530	812.8	530	6324	62	13942	25	20	557	21.93	79	70	1028	125.6	1232	276.9
RP5-800-5-530	812.8	530	6324	62	13942	25	20	585	23.03	140			105.2	1031	231.8
RY4-800-6-530	812.8	530	12754	125	28117	35	25	583	22.95	86	80	1064	112.0	1099	247.0
RP5-800-6-530	812.8	530	12754	125	28117	35	25	635	25.00	170			181.3	1778	399.7
RY4-800-7-530	812.8	530	18132	178	39974	40	28	621	24.45	102	90	1086	143.2	1404	315.6
RP5-800-7-530	812.8	530	18132	178	39974	40	28	675	26.57	180			250.3	2455	551.8
RY4-800-8-530	812.8	530	25524	250	56269	50	35	626	24.65	110	100	1140	264.3	2592	582.7
RP5-800-8-530	812.8	530	25524	250	56269	50	35	700	27.56	220			316.7	3105	698.1
RY4-800-9-530	812.8	530	55135	541	121552	70	49	731	28.78	138	130	1204	491.2	4817	1083.0
RY4-800-10-530	812.8	530	70330	690	155050	80	55	792	31.18	156	150	1238	580.4	5692	1279.6
RY4-800-11-530	812.8	530	90785	890	200144	90	60	837	32.95	194	170	1306	689.0	6757	1519.0
RY3-800-1-570	812.8	570	423	4.15	933	10	9	534	21.02	35	30	882	62.0	608	136.8
RY4-800-1-570	812.8	570	423	4.15	933	10	9	534	21.02	56	30	918	16.8	164	36.9
RP5-800-1-570	812.8	570	423	4	933	10	9	530	20.87	80			22.0	215.3	48.4
RY3-800-2-570	812.8	570	985	9.66	2172	10	9	534	21.02	35	40	896	67.6	663	149.0
RY4-800-2-570	812.8	570	985	9.66	2172	10	9	534	21.02	59	40	930	36.8	361	81.2
RP5-800-2-570	812.8	570	985	10	2172	10	9	530	20.87	100			46.3	454	102.1
RY3-800-3-570	812.8	570	2125	20.8	4684	15	12	541	21.30	50	50	928	103.8	1018	228.8
RY4-800-3-570	812.8	570	2125	20.8	4684	15	12	541	21.30	67	50	980	86.5	848	190.7
RP5-800-3-570	812.8	570	2125	21	4684	15	12	540	21.26	90			53.2	521.8	117.3
RY3-800-4-570	812.8	570	4293	42.1	9465	20	16	563	22.17	60	70	949	136.7	1341	301.4
RY4-800-4-570	812.8	570	4293	42.1	9465	20	16	551	21.69	73	70	1002	131.2	1287	289.3
RP5-800-4-570	812.8	570	4293	42	9465	20	16	575	22.64	130			96.7	948.2	213.2
RY3-800-5-570	812.8	570	6324	62	13942	25	20	580	22.83	70	80	974	172.3	1690	379.9
RY4-800-5-570	812.8	570	6324	62	13942	25	20	578	22.76	79	80	1038	159.9	1568	352.5
RP5-800-5-570	812.8	570	6324	62	13942	25	20	605	23.82	120			122.1	1197	269.1
RY4-800-6-570	812.8	570	12754	125	28117	35	25	619	24.37	96	90	1070	119.0	1167	262.3
RP5-800-6-570	812.8	570	12754	125	28117	35	25	635	25	210			223.3	2190	492.3
RY4-800-7-570	812.8	570	18132	178	39974	40	28	621	24.45	102	100	1098	222.5	2182	490.6
RP5-800-7-570	812.8	570	18132	178	39974	40	28	675	26.57	190			264.0	2589	581.9
RY4-800-8-570	812.8	570	25524	250	56269	50	35	662	26.06	110	120	1148	276.3	2710	609.2
RP5-800-8-570	812.8	570	25524	250	56269	50	35	700	27.56	270			387.0	3795	853.2
RY4-800-9-570	812.8	570	55135	541	121552	70	49	759	29.88	138	130	1204	507.6	4978	1119.0
RY4-800-10-570	812.8	570	70330	690	155050	80	55	813	32.01	156	150	1238	598.0	5865	1318.4
RY4-800-11-570	812.8	570	90785	890	200144	90	60	850	33.46	194	170	1306	703.5	6899	1551.0

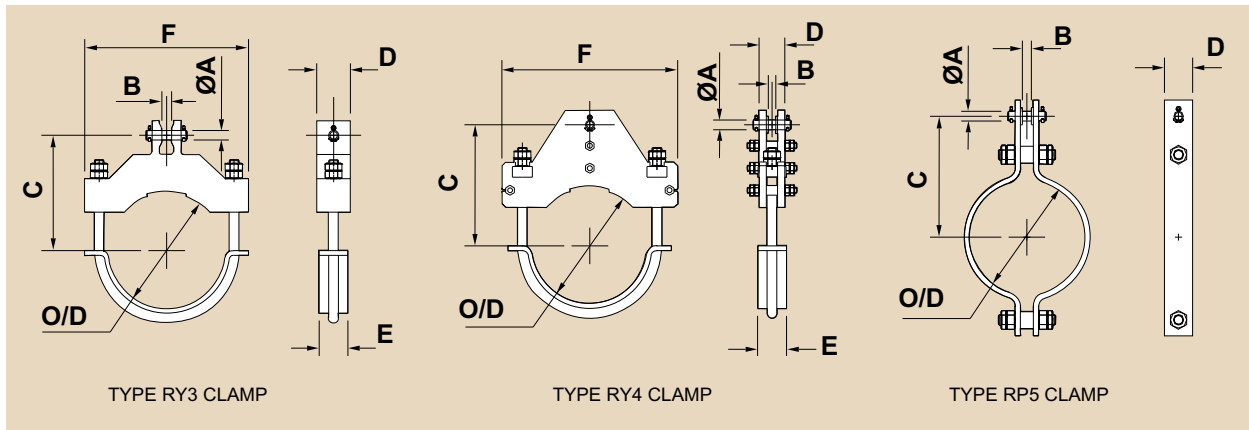


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-850-1-400	863.6	400	423	4.15	933	10	9	559	22.01	35	20	914	64.5	633	142.3
RY4-850-1-400	863.6	400	423	4.15	933	10	9	559	22.01	56	20	960	16.0	157	35.3
RP5-850-1-400	863.6	400	423	4.15	933	10	9	555	21.85	70			20.5	201	45.1
RY3-850-2-400	863.6	400	985	9.66	2172	10	9	559	22.01	35	30	921	68.8	674	151.6
RY4-850-2-400	863.6	400	985	9.66	2172	10	9	559	22.01	59	30	970	20.9	205	46.0
RP5-850-2-400	863.6	400	985	9.66	2172	10	9	555	21.85	80			29.5	289	65.0
RY3-850-3-400	863.6	400	2125	20.8	4684	15	12	566	22.28	35	40	946	77.4	759	170.5
RY4-850-3-400	863.6	400	2125	20.8	4684	15	12	566	22.28	67	40	1018	45.9	450	101.3
RP5-850-3-400	863.6	400	2125	20.8	4684	15	12	565	22.24	100			50.8	498	112.0
RY3-850-4-400	863.6	400	4293	42.1	9465	20	16	604	23.78	40	50	960	99.4	975	219.1
RY4-850-4-400	863.6	400	4293	42.1	9465	20	16	576	22.68	73	50	1038	71.0	697	156.6
RP5-850-4-400	863.6	400	4293	42.1	9465	20	16	610	24.02	100			79.9	783	176.1
RY3-850-5-400	863.6	400	6324	62	13942	25	20	620	24.41	50	50	978	130.6	1280	287.8
RY4-850-5-400	863.6	400	6324	62	13942	25	20	582	22.91	79	50	1072	104.6	1026	230.6
RP5-850-5-400	863.6	400	6324	62	13942	25	20	625	24.61	140			114.3	1121	252.0
RY4-850-6-400	863.6	400	12754	125	28117	35	25	608	23.94	86	80	1114	170.0	1668	374.9
RP5-850-6-400	863.6	400	12754	125	28117	35	25	685	26.97	170			198.6	1947	437.7
RY4-850-7-400	863.6	400	18132	178	39974	40	28	646	25.43	92	90	1136	209.6	2055	462.1
RP5-850-7-400	863.6	400	18132	178	39974	40	28	725	28.54	180			274.0	2687	604.1
RY4-850-8-400	863.6	400	25524	250	56269	50	35	651	25.63	110	100	1190	283.3	2779	624.6
RP5-850-8-400	863.6	400	25524	250	56269	50	35	745	29.33	230			360.3	3533	794.3
RY4-850-9-400	863.6	400	55135	541	121552	70	49	753	29.65	138	130	1254	535.0	5247	1179.6
RY4-850-10-400	863.6	400	70330	690	155050	80	55	817	32.17	156	150	1288	664.8	6520	1465.7
RY4-850-11-400	863.6	400	90785	890	200144	90	60	858	33.78	194	190	1366	825.5	8095	1819.8
RY3-850-1-490	863.6	490	423	4.15	933	10	9	559	22.01	35	20	914	64.5	633	142.3
RY4-850-1-490	863.6	490	423	4.15	933	10	9	559	22.01	56	20	960	16.0	157	35.3
RP5-850-1-490	863.6	490	423	4.15	933	10	9	555	21.85	60			14.5	142	31.9
RY3-850-2-490	863.6	490	985	9.66	2172	10	9	559	22.01	35	30	921	68.8	674	151.6
RY4-850-2-490	863.6	490	985	9.66	2172	10	9	559	22.01	59	30	970	20.9	205	46.1
RP5-850-2-490	863.6	490	985	9.66	2172	10	9	555	21.85	80			29.2	286	64.4
RY3-850-3-490	863.6	490	2125	20.8	4684	15	12	566	22.28	35	40	946	77.4	759	170.5
RY4-850-3-490	863.6	490	2125	20.8	4684	15	12	566	22.28	67	40	1018	45.9	451	101.3
RP5-850-3-490	863.6	490	2125	20.8	4684	15	12	560	22.05	100			49.9	489	110.0
RY3-850-4-490	863.6	490	4293	42.1	9465	20	16	602	23.70	40	50	960	98.8	969	217.8
RY4-850-4-490	863.6	490	4293	42.1	9465	20	16	576	22.68	73	50	1038	71.8	704	158.2
RP5-850-4-490	863.6	490	4293	42.1	9465	20	16	600	23.62	100			78.3	767	172.5
RY3-850-5-490	863.6	490	6324	62	13942	25	20	619	24.37	50	50	978	130.0	1275	286.6
RY4-850-5-490	863.6	490	6324	62	13942	25	20	582	22.91	79	50	1072	104.7	1026	230.7
RP5-850-5-490	863.6	490	6324	62	13942	25	20	615	24.21	130			104.2	1021	229.6
RY4-850-6-490	863.6	490	12754	125	28117	35	25	596	23.46	86	70	1104	165.8	1626	365.4
RP5-850-6-490	863.6	490	12754	125	28117	35	25	665	26.18	160			179.6	1761	395.9
RY4-850-7-490	863.6	490	18132	178	39974	40	28	610	24.02	92	80	1130	106.1	1041	234.0
RP5-850-7-490	863.6	490	18132	178	39974	40	28	700	27.56	180			261.2	2561	575.8
RY4-850-8-490	863.6	490	25524	250	56269	50	35	651	25.63	110	90	1178	261.3	2563	576.2
RP5-850-8-490	863.6	490	25524	250	56269	50	35	725	28.54	210			315.3	3092	695.1
RY4-850-9-490	863.6	490	55135	541	121552	70	49	743	29.25	138	130	1254	528.3	5181	1164.7
RY4-850-10-490	863.6	490	70330	690	155050	80	55	805	31.69	156	150	1288	655.4	6427	1444.9
RY4-850-11-490	863.6	490	90785	890	200144	90	60	893	35.16	184	170	1356	749.5	7350	1652.2



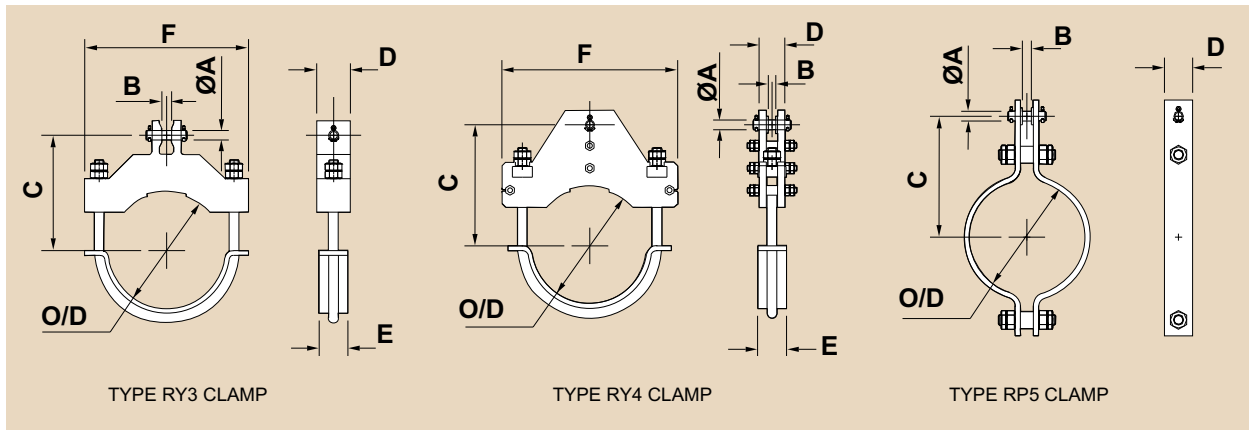


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-850-1-530	863.6	530	423	4.15	933	10	9	559	22.01	35	30	921	66.1	648	145.6
RY4-850-1-530	863.6	530	423	4.15	933	10	9	559	22.01	56	30	962	17.3	170	38.2
RP5-850-1-530	863.6	530	423	4.15	933	10	9	555	21.85	70			20.3	199	44.7
RY3-850-2-530	863.6	530	985	9.66	2172	10	9	559	22.01	35	30	932	70.7	693	155.9
RY4-850-2-530	863.6	530	985	9.66	2172	10	9	559	22.01	59	30	976	29.7	291	65.5
RP5-850-2-530	863.6	530	985	9.66	2172	10	9	555	21.85	80			29.2	286	64.4
RY3-850-3-530	863.6	530	2125	20.8	4684	15	12	566	22.28	40	50	960	90.2	885	198.9
RY4-850-3-530	863.6	530	2125	20.8	4684	15	12	566	22.28	67	50	1022	67.0	657	147.7
RP5-850-3-530	863.6	530	2125	20.8	4684	15	12	560	22.05	110			54.8	538	120.9
RY3-850-4-530	863.6	530	4293	42.1	9465	20	16	592	23.31	50	50	978	121.9	1195	268.6
RY4-850-4-530	863.6	530	4293	42.1	9465	20	16	575	22.64	73	50	1046	109.0	1069	240.2
RP5-850-4-530	863.6	530	4293	42.1	9465	20	16	600	23.62	100			78.3	767	172.5
RY3-850-5-530	863.6	530	6324	62	13942	25	20	609	23.98	60	70	999	156.6	1536	345.2
RY4-850-5-530	863.6	530	6324	62	13942	25	20	582	22.91	79	70	1078	144.7	1419	318.9
RP5-850-5-530	863.6	530	6324	62	13942	25	20	615	24.21	160			127.8	1254	281.8
RY4-850-6-530	863.6	530	12754	125	28117	35	25	608	23.94	86	80	1114	117.6	1153	259.2
RP5-850-6-530	863.6	530	12754	125	28117	35	25	665	26.18	180			201.7	1978	444.6
RY4-850-7-530	863.6	530	18132	178	39974	40	28	646	25.43	92	90	1136	217.0	2128	478.3
RP5-850-7-530	863.6	530	18132	178	39974	40	28	700	27.56	180			261.2	2561	575.8
RY4-850-8-530	863.6	530	25524	250	56269	50	35	651	25.63	110	100	1190	283.8	2783	625.6
RP5-850-8-530	863.6	530	25524	250	56269	50	35	725	28.54	230			344.7	3380	759.8
RY4-850-9-530	863.6	530	55135	541	121552	70	49	744	29.29	138	130	1254	529.2	5190	1166.8
RY4-850-10-530	863.6	530	70330	690	155050	80	55	805	31.69	156	150	1288	655.4	6427	1444.9
RY4-850-11-530	863.6	530	90785	890	200144	90	60	893	35.16	184	170	1356	749.5	7350	1652.2
RY3-850-1-570	863.6	570	423	4.15	933	10	9	559	22.01	35	30	932	68.6	673	151.3
RY4-850-1-570	863.6	570	423	4.15	933	10	9	559	22.01	56	30	968	19.2	188	42.2
RP5-850-1-570	863.6	570	423	4	933	10	9	555	21.85	80			23.2	227	51.0
RY3-850-2-570	863.6	570	985	9.66	2172	10	9	559	22.01	35	40	946	74.4	730	164.1
RY4-850-2-570	863.6	570	985	9.66	2172	10	9	559	22.01	59	40	980	50.0	490	110.2
RP5-850-2-570	863.6	570	985	10	2172	10	9	555	21.85	100			48.7	478	107.5
RY3-850-3-570	863.6	570	2125	20.8	4684	15	12	566	22.28	50	50	978	113.9	1117	251.1
RY4-850-3-570	863.6	570	2125	20.8	4684	15	12	566	22.28	67	50	1030	104.3	1023	230.0
RP5-850-3-570	863.6	570	2125	21	4684	15	12	565	22.24	100			62.1	609.5	137.0
RY3-850-4-570	863.6	570	4293	42.1	9465	20	16	590	23.23	60	70	999	150.3	1474	331.3
RY4-850-4-570	863.6	570	4293	42.1	9465	20	16	576	22.68	73	70	1052	146.1	1433	322.2
RP5-850-4-570	863.6	570	4293	42	9465	20	16	600	23.62	140			109.2	1071	240.8
RY3-850-5-570	863.6	570	6324	62	13942	25	20	608	23.94	70	80	1024	188.9	1852	416.5
RY4-850-5-570	863.6	570	6324	62	13942	25	20	603	23.74	79	80	1088	172.9	1696	381.2
RP5-850-5-570	863.6	570	6324	62	13942	25	20	630	24.8	120			127.9	1255	282.1
RY4-850-6-570	863.6	570	12754	125	28117	35	25	644	25.35	86	90	1120	227.2	2228	500.9
RP5-850-6-570	863.6	570	12754	125	28117	35	25	685	26.97	180			255.3	2504	562.9
RY4-850-7-570	863.6	570	18132	178	39974	40	28	646	25.43	102	100	1148	247.1	2423	544.8
RP5-850-7-570	863.6	570	18132	178	39974	40	28	700	27.56	200			289.7	2841	638.8
RY4-850-8-570	863.6	570	25524	250	56269	50	35	687	27.05	110	120	1198	300.5	2947	662.5
RP5-850-8-570	863.6	570	25524	250	56269	50	35	725	28.54	280			418.0	4100	921.6
RY4-850-9-570	863.6	570	55135	541	121552	70	49	771	30.35	138	130	1254	549.1	5385	1210.6
RY4-850-10-570	863.6	570	70330	690	155050	80	55	826	32.52	156	150	1288	678.5	6654	1495.9
RY4-850-11-570	863.6	570	90785	890	200144	90	60	863	33.98	194	170	1356	776.2	7612	1711.2

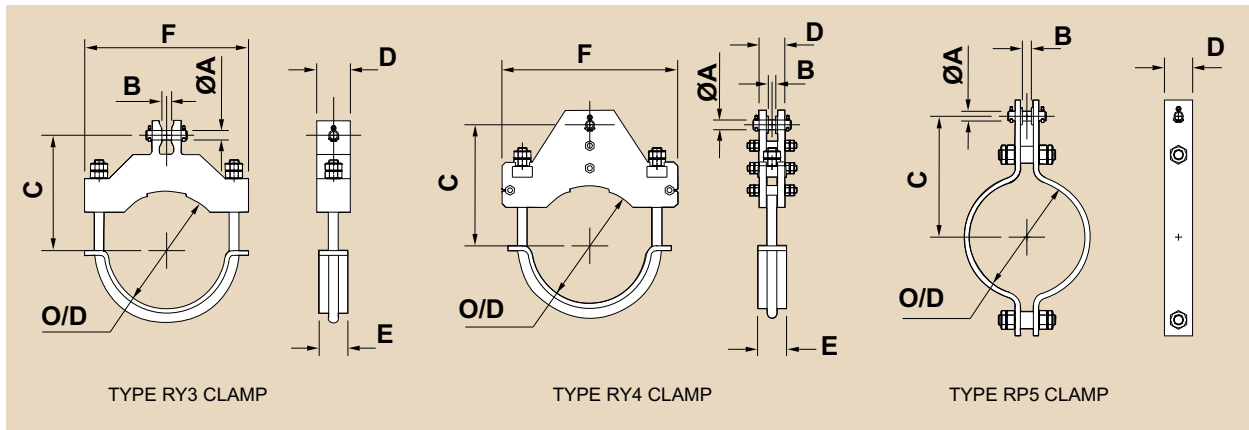


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-900-1-400	914.4	400	423	4.15	933	10	9	585	23.03	40	20	966	80.6	791	177.8
RY4-900-1-400	914.4	400	423	4.15	933	10	9	585	23.03	56	20	1012	20.5	201	45.2
RP5-900-1-400	914.4	400	423	4.15	933	10	9	580	22.83	70			21.5	211	47.4
RY3-900-2-400	914.4	400	985	9.66	2172	10	9	585	23.03	40	30	973	85.5	839	188.5
RY4-900-2-400	914.4	400	985	9.66	2172	10	9	585	23.03	59	30	1022	29.3	288	64.7
RP5-900-2-400	914.4	400	985	9.66	2172	10	9	580	22.83	80			31.0	304	68.3
RY3-900-3-400	914.4	400	2125	20.8	4684	15	12	592	23.31	40	40	998	95.0	931	209.3
RY4-900-3-400	914.4	400	2125	20.8	4684	15	12	592	23.31	67	40	1070	63.0	617	138.8
RP5-900-3-400	914.4	400	2125	20.8	4684	15	12	595	23.43	100			53.6	526	118.2
RY3-900-4-400	914.4	400	4293	42.1	9465	20	16	633	24.92	40	50	1012	109.3	1072	240.9
RY4-900-4-400	914.4	400	4293	42.1	9465	20	16	602	23.70	73	50	1090	88.8	871	195.8
RP5-900-4-400	914.4	400	4293	42.1	9465	20	16	635	25.00	100			83.6	820	184.3
RY3-900-5-400	914.4	400	6324	62	13942	25	20	650	25.59	50	50	1030	143.4	1406	316.2
RY4-900-5-400	914.4	400	6324	62	13942	25	20	608	23.94	79	50	1124	123.9	1215	273.1
RP5-900-5-400	914.4	400	6324	62	13942	25	20	655	25.79	150			128.6	1261	283.5
RY4-900-6-400	914.4	400	12754	125	28117	35	25	634	24.96	86	80	1166	186.4	1828	411.0
RP5-900-6-400	914.4	400	12754	125	28117	35	25	715	28.15	180			220.0	2157	485.0
RY4-900-7-400	914.4	400	18132	178	39974	40	28	672	26.46	92	90	1188	222.5	2182	490.5
RP5-900-7-400	914.4	400	18132	178	39974	40	28	750	29.53	180			285.2	2797	628.7
RY4-900-8-400	914.4	400	25524	250	56269	50	35	677	26.65	110	100	1242	302.6	2968	667.1
RP5-900-8-400	914.4	400	25524	250	56269	50	35	775	30.51	250			407.9	4000	899.2
RY4-900-9-400	914.4	400	55135	541	121552	70	49	768	30.24	138	130	1306	547.2	5366	1206.4
RY4-900-10-400	914.4	400	70330	690	155050	80	55	829	32.64	156	150	1340	719.8	7058	1586.8
RY4-900-11-400	914.4	400	90785	890	200144	90	60	916	36.06	184	190	1418	913.1	8955	2013.1
RY3-900-1-490	914.4	490	423	4.15	933	10	9	585	23.03	40	20	966	80.6	791	177.8
RY4-900-1-490	914.4	490	423	4.15	933	10	9	585	23.03	56	20	1012	20.5	201	45.3
RP5-900-1-490	914.4	490	423	4.15	933	10	9	580	22.83	60			15.2	149	33.6
RY3-900-2-490	914.4	490	985	9.66	2172	10	9	585	23.03	40	30	973	85.5	839	188.5
RY4-900-2-490	914.4	490	985	9.66	2172	10	9	585	23.03	59	30	1022	29.4	288	64.7
RP5-900-2-490	914.4	490	985	9.66	2172	10	9	580	22.83	80			30.8	302	67.8
RY3-900-3-490	914.4	490	2125	20.8	4684	15	12	592	23.31	40	40	998	95.0	931	209.3
RY4-900-3-490	914.4	490	2125	20.8	4684	15	12	592	23.31	67	40	1070	63.0	618	138.8
RP5-900-3-490	914.4	490	2125	20.8	4684	15	12	590	23.23	100			52.7	517	116.2
RY3-900-4-490	914.4	490	4293	42.1	9465	20	16	631	24.84	40	50	1012	108.7	1066	239.5
RY4-900-4-490	914.4	490	4293	42.1	9465	20	16	602	23.70	73	50	1090	88.8	871	195.8
RP5-900-4-490	914.4	490	4293	42.1	9465	20	16	625	24.61	100			82.0	804	180.7
RY3-900-5-490	914.4	490	6324	62	13942	25	20	648	25.51	50	50	1030	142.6	1399	314.4
RY4-900-5-490	914.4	490	6324	62	13942	25	20	608	23.94	79	50	1124	123.9	1215	273.2
RP5-900-5-490	914.4	490	6324	62	13942	25	20	640	25.20	140			117.3	1150	258.5
RY4-900-6-490	914.4	490	12754	125	28117	35	25	622	24.49	86	70	1156	178.6	1751	393.7
RP5-900-6-490	914.4	490	12754	125	28117	35	25	690	27.17	160			187.5	1839	413.4
RY4-900-7-490	914.4	490	18132	178	39974	40	28	636	25.04	92	80	1182	109.9	1078	242.3
RP5-900-7-490	914.4	490	18132	178	39974	40	28	725	28.54	180			272.4	2671	600.5
RY4-900-8-490	914.4	490	25524	250	56269	50	35	677	26.65	110	90	1230	281.3	2759	620.2
RP5-900-8-490	914.4	490	25524	250	56269	50	35	750	29.53	220			343.5	3368	757.2
RY4-900-9-490	914.4	490	55135	541	121552	70	49	756	29.76	138	130	1306	535.5	5252	1180.7
RY4-900-10-490	914.4	490	70330	690	155050	80	55	818	32.20	156	150	1340	711.1	6973	1567.7
RY4-900-11-490	914.4	490	90785	890	200144	90	60	907	35.71	184	170	1408	838.8	8226	1849.3

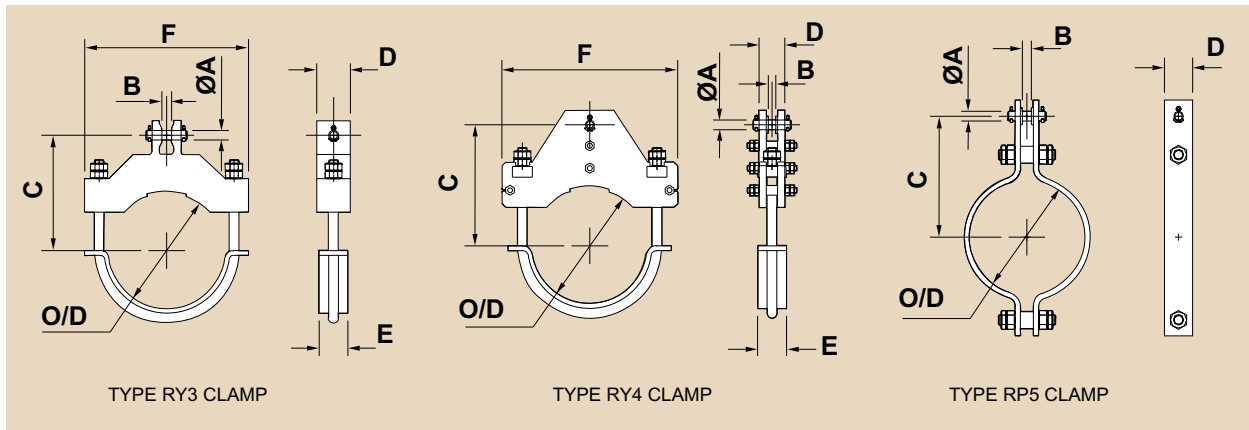


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-900-1-530	914.4	530	423	4.15	933	10	9	585	23.03	40	30	973	82.6	810	182.2
RY4-900-1-530	914.4	530	423	4.15	933	10	9	585	23.03	56	30	1014	21.9	215	48.4
RP5-900-1-530	914.4	530	423	4.15	933	10	9	580	22.83	70			21.3	209	47.0
RY3-900-2-530	914.4	530	985	9.66	2172	10	9	585	23.03	40	30	984	87.7	860	193.2
RY4-900-2-530	914.4	530	985	9.66	2172	10	9	585	23.03	59	30	1028	41.0	402	90.5
RP5-900-2-530	914.4	530	985	9.66	2172	10	9	580	22.83	100			38.4	377	84.7
RY3-900-3-530	914.4	530	2125	20.8	4684	15	12	592	23.31	40	50	1012	98.9	970	218.1
RY4-900-3-530	914.4	530	2125	20.8	4684	15	12	592	23.31	67	50	1074	87.0	853	191.8
RP5-900-3-530	914.4	530	2125	20.8	4684	15	12	600	23.62	90			59.6	585	131.5
RY3-900-4-530	914.4	530	4293	42.1	9465	20	16	621	24.45	50	50	1030	133.7	1311	294.7
RY4-900-4-530	914.4	530	4293	42.1	9465	20	16	601	23.66	73	50	1098	129.6	1271	285.7
RP5-900-4-530	914.4	530	4293	42.1	9465	20	16	625	24.61	110			90.1	884	198.6
RY3-900-5-530	914.4	530	6324	62	13942	25	20	638	25.12	60	70	1051	171.7	1684	378.6
RY4-900-5-530	914.4	530	6324	62	13942	25	20	608	23.94	79	70	1130	162.1	1590	357.4
RP5-900-5-530	914.4	530	6324	62	13942	25	20	640	25.20	160			133.8	1312	295.0
RY4-900-6-530	914.4	530	12754	125	28117	35	25	634	24.96	86	80	1166	122.0	1197	269.0
RP5-900-6-530	914.4	530	12754	125	28117	35	25	690	27.17	180			210.6	2065	464.3
RY4-900-7-530	914.4	530	18132	178	39974	40	28	672	26.46	92	90	1188	211.2	2071	465.6
RP5-900-7-530	914.4	530	18132	178	39974	40	28	725	28.54	180			272.4	2671	600.5
RY4-900-8-530	914.4	530	25524	250	56269	50	35	677	26.65	110	100	1242	303.1	2972	668.1
RP5-900-8-530	914.4	530	25524	250	56269	50	35	750	29.53	240			374.1	3668	824.6
RY4-900-9-530	914.4	530	55135	541	121552	70	49	758	29.84	138	130	1306	540.2	5297	1190.9
RY4-900-10-530	914.4	530	70330	690	155050	80	55	818	32.20	156	150	1340	711.1	6973	1567.7
RY4-900-11-530	914.4	530	90785	890	200144	90	60	907	35.71	184	170	1408	838.8	8226	1849.3
RY3-900-1-570	914.4	570	423	4.15	933	10	9	585	23.03	40	30	984	85.1	835	187.7
RY4-900-1-570	914.4	570	423	4.15	933	10	9	585	23.03	56	30	1020	25.4	249	56.1
RP5-900-1-570	914.4	570	423	4	933	10	9	580	22.83	80			24.3	238.7	53.7
RY3-900-2-570	914.4	570	985	9.66	2172	10	9	585	23.03	40	40	998	91.8	900	202.3
RY4-900-2-570	914.4	570	985	9.66	2172	10	9	585	23.03	59	40	1032	65.3	641	144.0
RP5-900-2-570	914.4	570	985	10	2172	10	9	580	22.83	100			51.3	502.7	113.0
RY3-900-3-570	914.4	570	2125	20.8	4684	15	12	592	23.31	50	50	1030	124.8	1224	275.2
RY4-900-3-570	914.4	570	2125	20.8	4684	15	12	592	23.31	67	50	1082	124.8	1223	275.0
RP5-900-3-570	914.4	570	2125	21	4684	15	12	590	23.23	100			65.3	639.9	143.9
RY3-900-4-570	914.4	570	4293	42.1	9465	20	16	619	24.37	60	70	1051	164.6	1614	362.9
RY4-900-4-570	914.4	570	4293	42.1	9465	20	16	602	23.70	73	70	1104	158.9	1559	350.4
RP5-900-4-570	914.4	570	4293	42	9465	20	16	625	24.61	140			114.4	1122	252.3
RY3-900-5-570	914.4	570	6324	62	13942	25	20	636	25.04	70	80	1076	206.1	2021	454.3
RY4-900-5-570	914.4	570	6324	62	13942	25	20	629	24.76	79	80	1140	186.2	1826	410.4
RP5-900-5-570	914.4	570	6324	62	13942	25	20	660	25.98	120			134.6	1320	296.7
RY4-900-6-570	914.4	570	12754	125	28117	35	25	670	26.38	86	90	1172	239.9	2353	529.0
RP5-900-6-570	914.4	570	12754	125	28117	35	25	710	27.95	180			266.5	2614	587.6
RY4-900-7-570	914.4	570	18132	178	39974	40	28	672	26.46	102	100	1200	269.5	2643	594.2
RP5-900-7-570	914.4	570	18132	178	39974	40	28	725	28.54	200			302.2	2963	666.1
RY4-900-8-570	914.4	570	25524	250	56269	50	35	713	28.07	110	120	1250	324.9	3187	716.4
RP5-900-8-570	914.4	570	25524	250	56269	50	35	750	29.53	290			450.5	4418	993.1
RY4-900-9-570	914.4	570	55135	541	121552	70	49	786	30.94	138	130	1306	561.8	5509	1238.5
RY4-900-10-570	914.4	570	70330	690	155050	80	55	841	33.11	156	150	1340	730.4	7163	1610.2
RY4-900-11-570	914.4	570	90785	890	200144	90	60	916	36.06	184	170	1408	856.0	8395	1887.2

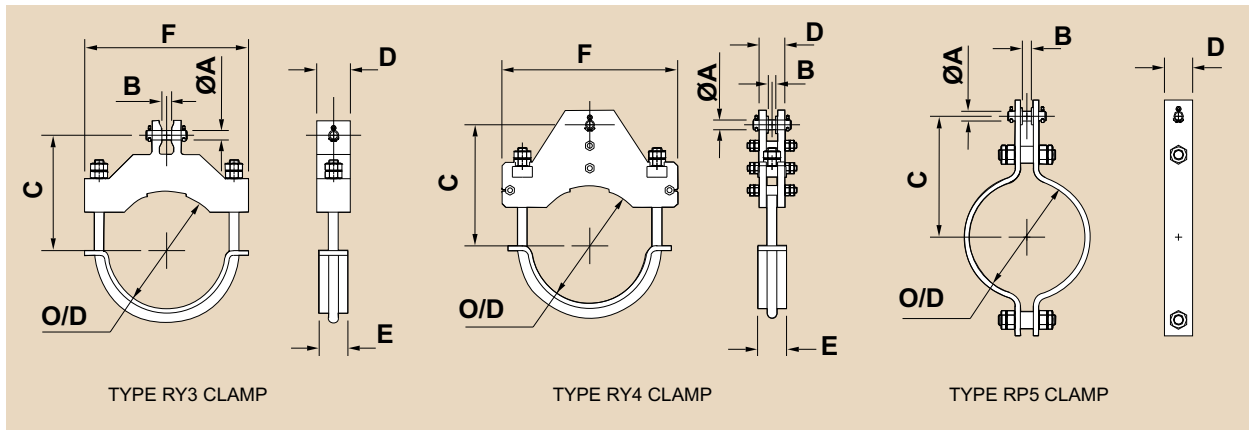


Fig. No.	Pipe O/D	Max. Pipe Temp °C	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-950-1-400	965	400	423	4.15	933	10	9	611	24.06	40	20	1018	88.9	871	195.9
RY4-950-1-400	965	400	423	4.15	933	10	9	611	24.06	56	20	1064	29.2	286	64.3
RP5-950-1-400	965	400	423	4.15	933	10	9	605	23.82	70			22.6	221	49.8
RY3-950-2-400	965	400	985	9.66	2172	10	9	611	24.06	40	30	1025	94.3	925	207.9
RY4-950-2-400	965	400	985	9.66	2172	10	9	611	24.06	59	30	1074	40.7	399	89.8
RP5-950-2-400	965	400	985	9.66	2172	10	9	605	23.82	80			32.6	320	71.8
RY3-950-3-400	965	400	2125	20.8	4684	15	12	618	24.33	40	40	1050	104.2	1022	229.7
RY4-950-3-400	965	400	2125	20.8	4684	15	12	618	24.33	67	40	1122	80.1	786	176.6
RP5-950-3-400	965	400	2125	20.8	4684	15	12	620	24.41	110			61.7	605	135.9
RY3-950-4-400	965	400	4293	42.1	9465	20	16	663	26.10	40	50	1064	120.1	1178	264.8
RY4-950-4-400	965	400	4293	42.1	9465	20	16	628	24.72	73	50	1142	111.1	1089	244.9
RP5-950-4-400	965	400	4293	42.1	9465	20	16	665	26.18	100			87.8	861	193.5
RY3-950-5-400	965	400	6324	62	13942	25	20	680	26.77	50	50	1082	156.8	1538	345.8
RY4-950-5-400	965	400	6324	62	13942	25	20	634	24.96	79	50	1176	148.0	1451	326.3
RP5-950-5-400	965	400	6324	62	13942	25	20	680	26.77	150			134.2	1316	295.8
RY4-950-6-400	965	400	12754	125	28117	35	25	660	25.98	86	80	1218	204.5	2006	450.9
RP5-950-6-400	965	400	12754	125	28117	35	25	740	29.13	190			241.4	2367	532.1
RY4-950-7-400	965	400	18132	178	39974	40	28	698	27.48	102	90	1240	229.3	2249	505.5
RP5-950-7-400	965	400	18132	178	39974	40	28	780	30.71	180			297.6	2919	656.2
RY4-950-8-400	965	400	25524	250	56269	50	35	703	27.68	110	100	1294	282.5	2770	622.8
RP5-950-8-400	965	400	25524	250	56269	50	35	800	31.50	250			423.4	4152	933.4
RY4-950-9-400	965	400	55135	541	121552	70	49	780	30.71	138	130	1358	524.7	5145	1156.7
RY4-950-10-400	965	400	70330	690	155050	80	55	844	33.23	156	150	1392	744.4	7300	1641.1
RY4-950-11-400	965	400	90785	890	200144	90	60	931	36.65	184	190	1470	1010.3	9907	2227.2
RY3-950-1-490	965	490	423	4.15	933	10	9	611	24.06	40	20	1018	88.9	871	195.9
RY4-950-1-490	965	490	423	4.15	933	10	9	611	24.06	56	20	1064	29.2	286	64.4
RP5-950-1-490	965	490	423	4.15	933	10	9	605	23.82	70			22.4	220	49.5
RY3-950-2-490	965	490	985	9.66	2172	10	9	611	24.06	40	30	1025	94.3	925	207.9
RY4-950-2-490	965	490	985	9.66	2172	10	9	611	24.06	59	30	1074	40.8	400	89.8
RP5-950-2-490	965	490	985	9.66	2172	10	9	605	23.82	80			32.3	317	71.2
RY3-950-3-490	965	490	2125	20.8	4684	15	12	618	24.33	40	40	1050	104.2	1022	229.7
RY4-950-3-490	965	490	2125	20.8	4684	15	12	618	24.33	67	40	1122	80.1	786	176.6
RP5-950-3-490	965	490	2125	20.8	4684	15	12	615	24.21	100			55.2	541	121.7
RY3-950-4-490	965	490	4293	42.1	9465	20	16	661	26.02	40	50	1064	119.5	1172	263.4
RY4-950-4-490	965	490	4293	42.1	9465	20	16	628	24.72	73	50	1142	111.1	1089	244.9
RP5-950-4-490	965	490	4293	42.1	9465	20	16	655	25.79	100			86.2	845	190.0
RY3-950-5-490	965	490	6324	62	13942	25	20	678	26.69	50	50	1082	156.0	1530	343.9
RY4-950-5-490	965	490	6324	62	13942	25	20	634	24.96	79	50	1176	148.1	1452	326.5
RP5-950-5-490	965	490	6324	62	13942	25	20	670	26.38	150			131.8	1293	290.6
RY4-950-6-490	965	490	12754	125	28117	35	25	648	25.51	86	70	1208	191.3	1876	421.8
RP5-950-6-490	965	490	12754	125	28117	35	25	715	28.15	170			207.5	2035	457.5
RY4-950-7-490	965	490	18132	178	39974	40	28	662	26.06	92	80	1234	114.5	1123	252.5
RP5-950-7-490	965	490	18132	178	39974	40	28	750	29.53	180			283.4	2779	624.8
RY4-950-8-490	965	490	25524	250	56269	50	35	703	27.68	110	90	1282	263.3	2582	580.5
RP5-950-8-490	965	490	25524	250	56269	50	35	780	30.71	230			374.9	3676	826.4
RY4-950-9-490	965	490	55135	541	121552	70	49	772	30.39	138	130	1358	518.8	5088	1143.8
RY4-950-10-490	965	490	70330	690	155050	80	55	832	32.76	156	150	1392	734.5	7203	1619.3
RY4-950-11-490	965	490	90785	890	200144	90	60	922	36.30	184	170	1460	935.6	9175	2062.7

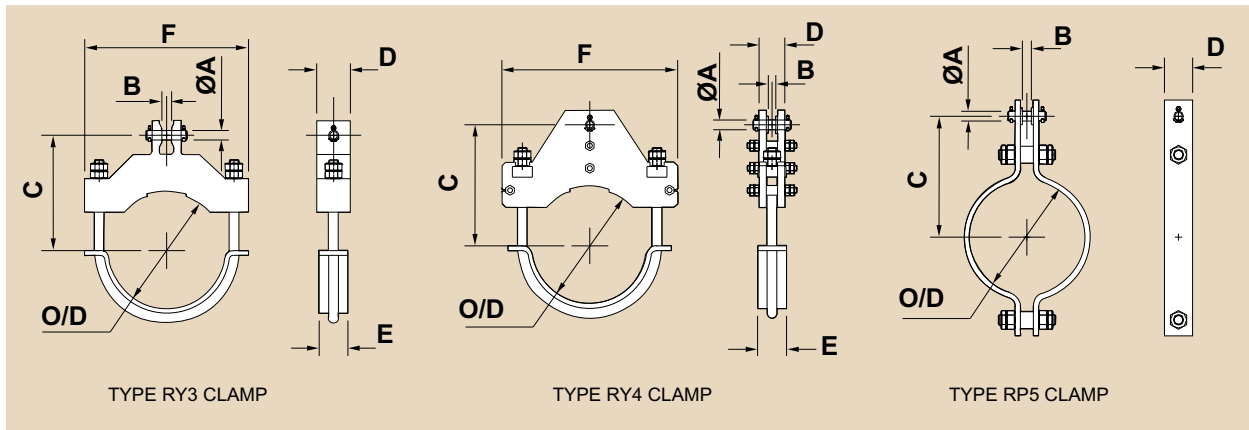


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-950-1-530	965	530	423	4.15	933	10	9	611	24.06	40	30	1025	90.9	892	200.5
RY4-950-1-530	965	530	423	4.15	933	10	9	611	24.06	56	30	1066	30.7	301	67.6
RP5-950-1-530	965	530	423	4.15	933	10	9	605	23.82	70			22.4	220	49.5
RY3-950-2-530	965	530	985	9.66	2172	10	9	611	24.06	40	30	1036	96.6	947	212.9
RY4-950-2-530	965	530	985	9.66	2172	10	9	611	24.06	59	30	1080	55.5	545	122.5
RP5-950-2-530	965	530	985	9.66	2172	10	9	605	23.82	100			40.3	395	88.9
RY3-950-3-530	965	530	2125	20.8	4684	15	12	618	24.33	40	50	1064	108.3	1062	238.8
RY4-950-3-530	965	530	2125	20.8	4684	15	12	618	24.33	67	50	1126	105.9	1038	233.4
RP5-950-3-530	965	530	2125	20.8	4684	15	12	625	24.61	90			62.5	613	137.7
RY3-950-4-530	965	530	4293	42.1	9465	20	16	650	25.59	50	50	1082	146.4	1436	322.7
RY4-950-4-530	965	530	4293	42.1	9465	20	16	627	24.69	73	50	1150	150.1	1472	331.0
RP5-950-4-530	965	530	4293	42.1	9465	20	16	655	25.79	110			94.7	929	208.8
RY3-950-5-530	965	530	6324	62	13942	25	20	668	26.30	60	70	1103	187.7	1841	413.9
RY4-950-5-530	965	530	6324	62	13942	25	20	634	24.96	79	70	1182	178.2	1747	392.8
RP5-950-5-530	965	530	6324	62	13942	25	20	690	27.17	120			142.5	1397	314.1
RY4-950-6-530	965	530	12754	125	28117	35	25	660	25.98	86	80	1218	128.7	1262	283.7
RP5-950-6-530	965	530	12754	125	28117	35	25	715	28.15	190			231.6	2271	510.6
RY4-950-7-530	965	530	18132	178	39974	40	28	698	27.48	102	90	1240	229.9	2255	506.9
RP5-950-7-530	965	530	18132	178	39974	40	28	750	29.53	180			283.4	2779	624.8
RY4-950-8-530	965	530	25524	250	56269	50	35	726	28.58	110	100	1294	319.0	3129	703.3
RP5-950-8-530	965	530	25524	250	56269	50	35	780	30.71	250			406.8	3990	896.9
RY4-950-9-530	965	530	55135	541	121552	70	49	772	30.39	138	130	1358	517.5	5075	1140.8
RY4-950-10-530	965	530	70330	690	155050	80	55	832	32.76	156	150	1392	734.5	7203	1619.3
RY4-950-11-530	965	530	90785	890	200144	90	60	922	36.30	184	170	1460	935.6	9175	2062.7
RY3-950-1-570	965	570	423	4.15	933	10	9	611	24.06	40	30	1036	93.9	921	207.1
RY4-950-1-570	965	570	423	4.15	933	10	9	611	24.06	56	30	1072	34.9	342	77.0
RP5-950-1-570	965	570	423	4	933	10	9	605	23.82	80			32.0	313.9	70.6
RY3-950-2-570	965	570	985	9.66	2172	10	9	611	24.06	40	40	1050	100.9	989	222.4
RY4-950-2-570	965	570	985	9.66	2172	10	9	611	24.06	59	40	1084	85.6	839	188.7
RP5-950-2-570	965	570	985	10	2172	10	9	605	23.82	100			53.7	527.1	118.5
RY3-950-3-570	965	570	2125	20.8	4684	15	12	618	24.33	50	50	1082	136.6	1340	301.2
RY4-950-3-570	965	570	2125	20.8	4684	15	12	618	24.33	67	50	1134	145.0	1422	319.7
RP5-950-3-570	965	570	2125	21	4684	15	12	615	24.21	100			68.4	670.7	150.8
RY3-950-4-570	965	570	4293	42.1	9465	20	16	647	25.47	60	70	1103	179.9	1764	396.7
RY4-950-4-570	965	570	4293	42.1	9465	20	16	628	24.72	73	70	1156	168.9	1656	372.4
RP5-950-4-570	965	570	4293	42	9465	20	16	655	25.79	150			128.8	1263	284.0
RY3-950-5-570	965	570	6324	62	13942	25	20	665	26.18	70	80	1128	225.4	2210	496.9
RY4-950-5-570	965	570	6324	62	13942	25	20	655	25.79	79	80	1192	199.2	1953	439.1
RP5-950-5-570	965	570	6324	62	13942	25	20	685	26.97	120			140.5	1378	309.9
RY4-950-6-570	965	570	12754	125	28117	35	25	696	27.40	96	90	1224	197.1	1933	434.4
RP5-950-6-570	965	570	12754	125	28117	35	25	735	28.94	180			277.6	2722	611.9
RY4-950-7-570	965	570	18132	178	39974	40	28	718	28.27	102	100	1252	326.6	3202	719.9
RP5-950-7-570	965	570	18132	178	39974	40	28	750	29.53	200			314.4	3083	693.2
RY4-950-8-570	965	570	25524	250	56269	50	35	739	29.09	120	120	1302	287.9	2824	634.8
RP5-950-8-570	965	570	25524	250	56269	50	35	780	30.71	300			486.8	4774	1073.1
RY4-950-9-570	965	570	55135	541	121552	70	49	799	31.46	138	130	1358	540.2	5298	1191.0
RY4-950-10-570	965	570	70330	690	155050	80	55	855	33.66	156	150	1392	755.9	7413	1666.5
RY4-950-11-570	965	570	90785	890	200144	90	60	931	36.65	184	170	1460	952.2	9338	2099.3

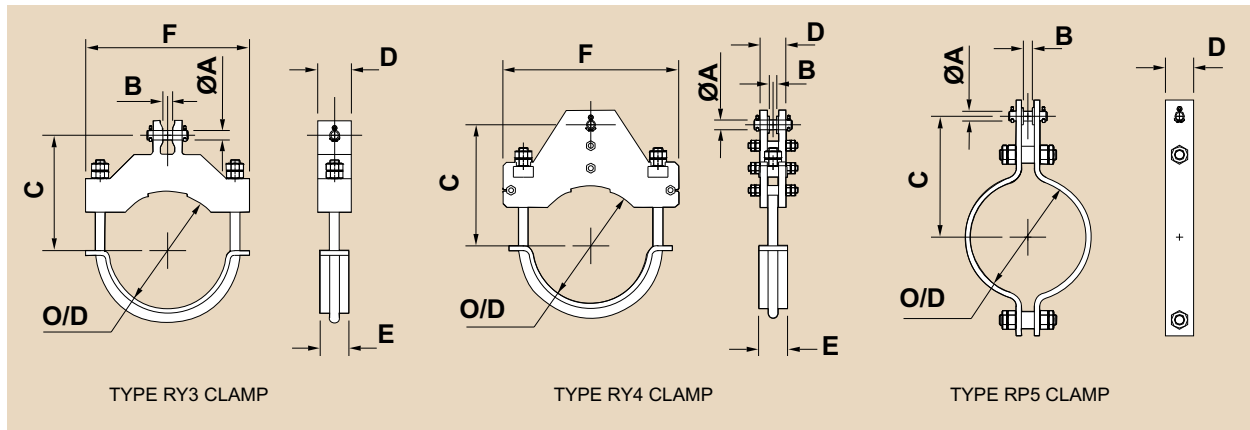


Fig. No.	Pipe O/D	Max. Pipe Temp	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
	mm	°C				mm	mm	mm	in	mm	mm	mm	kgf	N	lbs
RY3-1000-1-400	1016	400	423	4.15	933	10	9	636	25.04	45	20	1068	108.7	1066	239.7
RY4-1000-1-400	1016	400	423	4.15	933	10	9	636	25.04	66	20	1114	48.2	473	106.4
RP5-1000-1-400	1016	400	423	4.15	933	10	9	630	24.80	70			23.6	231	52.0
RY3-1000-2-400	1016	400	985	9.66	2172	10	9	636	25.04	45	30	1075	114.5	1123	252.5
RY4-1000-2-400	1016	400	985	9.66	2172	10	9	636	25.04	69	30	1124	57.4	563	126.6
RP5-1000-2-400	1016	400	985	9.66	2172	10	9	630	24.80	80			34.1	334	75.1
RY3-1000-3-400	1016	400	2125	20.8	4684	15	12	643	25.31	45	40	1100	125.5	1231	276.7
RY4-1000-3-400	1016	400	2125	20.8	4684	15	12	643	25.31	77	40	1172	103.2	1012	227.5
RP5-1000-3-400	1016	400	2125	20.8	4684	15	12	645	25.39	110			64.4	631	141.9
RY3-1000-4-400	1016	400	4293	42.1	9465	20	16	683	26.89	45	50	1114	142.1	1394	313.3
RY4-1000-4-400	1016	400	4293	42.1	9465	20	16	653	25.71	83	50	1192	137.1	1345	302.3
RP5-1000-4-400	1016	400	4293	42.1	9465	20	16	690	27.17	110			100.5	985	221.5
RY3-1000-5-400	1016	400	6324	62	13942	25	20	708	27.87	50	50	1132	170.3	1670	375.5
RY4-1000-5-400	1016	400	6324	62	13942	25	20	659	25.94	89	50	1226	178.4	1749	393.3
RP5-1000-5-400	1016	400	6324	62	13942	25	20	705	27.76	160			148.9	1460	328.2
RY4-1000-6-400	1016	400	12754	125	28117	35	25	685	26.97	96	80	1268	234.5	2300	517.0
RP5-1000-6-400	1016	400	12754	125	28117	35	25	765	30.12	190			250.6	2457	552.4
RY4-1000-7-400	1016	400	18132	178	39974	40	28	723	28.46	102	90	1290	253.6	2486	559.0
RP5-1000-7-400	1016	400	18132	178	39974	40	28	805	31.69	180			308.5	3026	680.2
RY4-1000-8-400	1016	400	25524	250	56269	50	35	728	28.66	110	100	1344	294.6	2889	649.4
RP5-1000-8-400	1016	400	25524	250	56269	50	35	825	32.48	260			455.6	4468	1004.4
RY4-1000-9-400	1016	400	55135	541	121552	70	49	797	31.38	138	130	1408	495.2	4857	1091.8
RY4-1000-10-400	1016	400	70330	690	155050	80	55	857	33.74	156	150	1442	732.4	7182	1614.7
RY4-1000-11-400	1016	400	90785	890	200144	90	60	944	37.17	184	190	1520	1086.5	10655	2395.4
RY3-1000-1-490	1016	490	423	4.15	933	10	9	636	25.04	45	20	1068	108.7	1066	239.7
RY4-1000-1-490	1016	490	423	4.15	933	10	9	636	25.04	66	20	1114	48.3	473	106.4
RP5-1000-1-490	1016	490	423	4.15	933	10	9	630	24.80	70			23.5	230	51.7
RY3-1000-2-490	1016	490	985	9.66	2172	10	9	636	25.04	45	30	1075	114.5	1123	252.5
RY4-1000-2-490	1016	490	985	9.66	2172	10	9	636	25.04	69	30	1124	57.4	563	126.6
RP5-1000-2-490	1016	490	985	9.66	2172	10	9	630	24.80	80			33.8	331	74.4
RY3-1000-3-490	1016	490	2125	20.8	4684	15	12	643	25.31	45	40	1100	125.1	1227	275.8
RY4-1000-3-490	1016	490	2125	20.8	4684	15	12	643	25.31	77	40	1172	103.2	1012	227.5
RP5-1000-3-490	1016	490	2125	20.8	4684	15	12	640	25.20	100			57.7	565	127.1
RY3-1000-4-490	1016	490	4293	42.1	9465	20	16	682	26.85	45	50	1114	141.6	1388	312.1
RY4-1000-4-490	1016	490	4293	42.1	9465	20	16	653	25.71	83	50	1192	137.1	1345	302.3
RP5-1000-4-490	1016	490	4293	42.1	9465	20	16	680	26.77	100			89.9	881	198.1
RY3-1000-5-490	1016	490	6324	62	13942	25	20	706	27.80	50	50	1132	169.5	1662	373.6
RY4-1000-5-490	1016	490	6324	62	13942	25	20	659	25.94	89	50	1226	178.5	1750	393.4
RP5-1000-5-490	1016	490	6324	62	13942	25	20	695	27.36	150			137.3	1347	302.8
RY4-1000-6-490	1016	490	12754	125	28117	35	25	673	26.50	96	70	1258	238.6	2339	525.9
RP5-1000-6-490	1016	490	12754	125	28117	35	25	740	29.13	170			215.7	2116	475.6
RY4-1000-7-490	1016	490	18132	178	39974	40	28	687	27.05	102	80	1284	260.5	2555	574.4
RP5-1000-7-490	1016	490	18132	178	39974	40	28	795	31.30	180			301.9	2960	665.5
RY4-1000-8-490	1016	490	25524	250	56269	50	35	728	28.66	110	90	1332	274.8	2695	605.9
RP5-1000-8-490	1016	490	25524	250	56269	50	35	805	31.69	240			405.4	3975	893.7
RY4-1000-9-490	1016	490	55135	541	121552	70	49	788	31.02	138	130	1408	481.5	4722	1061.5
RY4-1000-10-490	1016	490	70330	690	155050	80	55	845	33.27	156	150	1442	721.8	7079	1591.3
RY4-1000-11-490	1016	490	90785	890	200144	90	60	935	36.81	184	170	1510	1016.8	9971	2241.6

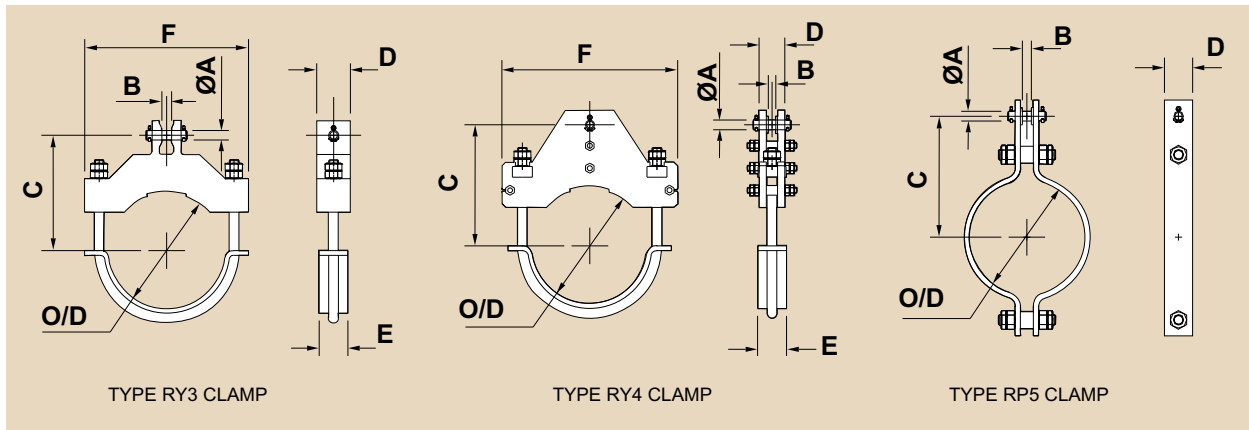


Fig. No.	Pipe O/D	Max. Pipe Temp °C	Max. Load			Dia. A	B	C		D	E	F	Clamp Weight		
			kgf	kN	lbs			mm	in				kgf	N	lbs
RY3-1000-1-530	1016	530	423	4.15	933	10	9	636	25.04	45	30	1075	110.6	1084	243.8
RY4-1000-1-530	1016	530	423	4.15	933	10	9	636	25.04	66	30	1116	49.9	489	109.9
RP5-1000-1-530	1016	530	423	4.15	933	10	9	630	24.80	70			23.5	230	51.7
RY3-1000-2-530	1016	530	985	9.66	2172	10	9	636	25.04	45	30	1086	117.0	1147	257.9
RY4-1000-2-530	1016	530	985	9.66	2172	10	9	636	25.04	69	30	1130	76.1	747	167.9
RP5-1000-2-530	1016	530	985	9.66	2172	10	9	630	24.80	100			42.2	413	92.9
RY3-1000-3-530	1016	530	2125	20.8	4684	15	12	643	25.31	45	50	1114	129.5	1270	285.6
RY4-1000-3-530	1016	530	2125	20.8	4684	15	12	643	25.31	77	50	1176	131.6	1290	290.1
RP5-1000-3-530	1016	530	2125	20.8	4684	15	12	650	25.59	90			65.2	640	143.8
RY3-1000-4-530	1016	530	4293	42.1	9465	20	16	677	26.65	50	50	1132	159.3	1562	351.2
RY4-1000-4-530	1016	530	4293	42.1	9465	20	16	652	25.67	83	50	1200	186.4	1828	410.9
RP5-1000-4-530	1016	530	4293	42.1	9465	20	16	680	26.77	120			107.7	1056	237.3
RY3-1000-5-530	1016	530	6324	62	13942	25	20	695	27.36	60	70	1153	203.7	1997	449.0
RY4-1000-5-530	1016	530	6324	62	13942	25	20	659	25.94	89	70	1232	225.4	2211	497.0
RP5-1000-5-530	1016	530	6324	62	13942	25	20	715	28.15	120			148.4	1455	327.1
RY4-1000-6-530	1016	530	12754	125	28117	35	25	685	26.97	96	80	1268	269.4	2642	593.9
RP5-1000-6-530	1016	530	12754	125	28117	35	25	740	29.13	190			240.8	2361	530.8
RY4-1000-7-530	1016	530	18132	178	39974	40	28	723	28.46	102	90	1290	239.9	2352	528.8
RP5-1000-7-530	1016	530	18132	178	39974	40	28	795	31.30	190			318.3	3122	701.8
RY4-1000-8-530	1016	530	25524	250	56269	50	35	738	29.06	110	100	1344	364.0	3570	802.5
RP5-1000-8-530	1016	530	25524	250	56269	50	35	805	31.69	260			438.5	4301	966.8
RY4-1000-9-530	1016	530	55135	541	121552	70	49	790	31.10	138	130	1408	490.2	4807	1080.7
RY4-1000-10-530	1016	530	70330	690	155050	80	55	845	33.27	156	150	1442	721.8	7079	1591.3
RY4-1000-11-530	1016	530	90785	890	200144	90	60	935	36.81	184	170	1510	1016.8	9971	2241.6
RY3-1000-1-570	1016	570	423	4.15	933	10	9	636	25.04	45	30	1086	113.9	1117	251.1
RY4-1000-1-570	1016	570	423	4.15	933	10	9	636	25.04	66	30	1122	52.1	511	114.8
RP5-1000-1-570	1016	570	423	4	933	10	9	630	24.8	80			33.5	328.4	73.8
RY3-1000-2-570	1016	570	985	9.66	2172	10	9	636	25.04	45	40	1100	121.7	1193	268.2
RY4-1000-2-570	1016	570	985	9.66	2172	10	9	636	25.04	69	40	1134	107.3	1052	236.5
RP5-1000-2-570	1016	570	985	10	2172	10	9	630	24.8	100			56.2	551.1	123.9
RY3-1000-3-570	1016	570	2125	20.8	4684	15	12	643	25.31	50	50	1132	148.2	1453	326.6
RY4-1000-3-570	1016	570	2125	20.8	4684	15	12	643	25.31	77	50	1184	183.3	1798	404.2
RP5-1000-3-570	1016	570	2125	21	4684	15	12	650	25.59	110			79.6	780.9	175.6
RY3-1000-4-570	1016	570	4293	42.1	9465	20	16	674	26.54	60	70	1153	194.9	1911	429.7
RY4-1000-4-570	1016	570	4293	42.1	9465	20	16	653	25.71	83	70	1206	224.2	2198	494.2
RP5-1000-4-570	1016	570	4293	42	9465	20	16	680	26.77	160			143.3	1405	315.8
RY3-1000-5-570	1016	570	6324	62	13942	25	20	693	27.28	70	80	1178	243.9	2392	537.7
RY4-1000-5-570	1016	570	6324	62	13942	25	20	680	26.77	89	80	1242	252.0	2471	555.5
RP5-1000-5-570	1016	570	6324	62	13942	25	20	715	28.15	120			148.4	1455	327.1
RY4-1000-6-570	1016	570	12754	125	28117	35	25	721	28.39	96	90	1274	205.6	2016	453.2
RP5-1000-6-570	1016	570	12754	125	28117	35	25	765	30.12	180			289.9	2843	639.0
RY4-1000-7-570	1016	570	18132	178	39974	40	28	734	28.90	102	100	1302	313.9	3079	692.1
RP5-1000-7-570	1016	570	18132	178	39974	40	28	780	30.71	220			360.5	3535	794.7
RY4-1000-8-570	1016	570	25524	250	56269	50	35	764	30.08	120	120	1352	315.4	3093	695.3
RP5-1000-8-570	1016	570	25524	250	56269	50	35	805	31.69	310			521.5	5114	1149.7
RY4-1000-9-570	1016	570	55135	541	121552	70	49	811	31.93	138	130	1408	500.5	4909	1103.5
RY4-1000-10-570	1016	570	70330	690	155050	80	55	866	34.09	156	150	1442	736.1	7219	1622.8
RY4-1000-11-570	1016	570	90785	890	200144	90	60	946	37.24	184	170	1510	1025.6	10057	2260.9



## PIPE CLAMPS AND ANCILLARIES — LOAD GROUP BASIS

Hanger / Support accessories like clamps, hanger rods, turn buckles, clevis etc. which form part of the spring hanger or rod hanger are designed on the Load Group Basis with standardized load bearing capacities.

Metric Hanger rods from M8 to M80 are categorized into 13 load groups as given below :

Load Group	Rod Thread Size	Load Capacity	
		kgf	KN
0	M8	230	2.3
1	M10	360	3.5
2	M12	530	5.2
3	M16	1010	9.9
4	M20	1580	15.5
5	M24	2280	22.4
6	M30	3650	35.8
7	M36	5340	52.4
8	M42	7400	72.6
9	M48	9650	94.6
10	M56	13350	130.9
11	M64	18000	176.5
12	M72	23025	225.8
13	M80	28125	275.8
14	M90	35500	348.3
15	M100	45000	441.5
16	M110	55000	539.6
17	M120	66500	652.4

As a typical example for an operating load of 3300 Kgs the selection will be load group 6. All the components that form the complete assembly like Welded Beam attachment, eye nuts, hanger rod, turnbuckle etc. (Items not covered by pipe lagging or thermal insulation and hence not exposed to pipe temperature) will have the same max load bearing capacity of Load Group 6 for M30 which is 3650 Kgs. The dimensions and design of individual components forming the assembly will fit properly without the need for an interference check or compatibility check as they belong to same load group.

The pipe clamps like 3 Bolt, riser clamps & pipe shoes have a part numbering system which contains the load group, design temperature and description.

Typical Example :

Part Number : PA3-500-5-530

PA3 - Three bolt pipe clamp  
 500 - 500 NB Pipe Size  
 5 - Load Group 5  
 530 - 530°C Design Temperature.

The pipe clamp is made from standard materials and components, hence the load capacity at design temperature will be slightly higher than standard load capacity for the given load group.

With reference to the part number given above the max load capacity of the clamp is 2960 Kg, whereas the max load for Load Group 5 is 2280 Kgs. Note that load capacities for this product number are provided at temperatures above and below the rated design temperature. Load capacities at intermediate temperatures can be obtained by interpolation. As a rule the clamp is not to be used at a temperature above the maximum temperature for the quoted load capacity. For example for the clamp number shown above at 560 °C do not exceed 2140 kgs operating load.

To get the most cost effective and efficient selection of pipe clamps, riser or pipe base several possible selections for a given load and temperature can be made. If the design temperature is inbetween standard design temperatures shown in the catalogue it is possible to make a cost effective economic choice by selecting a lower load group or lower temperature.

Lets us consider an example below to illustrate the selection process:

Pipe Size : 250 NB  
 Load : 1690 Kg  
 Temperature : 540 °C

The table below gives possible selections along with MOC & Weights :

Size	Catalogue Values		Load @ 540 °C by Interpolation	MOC	Weight
	Load @ 530 °C	Load @ 560 °C			
250-5-490	2100	1380	1860	P11	13.8 Kg
250-4-530	1830	1360	1673	P11	13.5 Kg
250-5-530	2480	1720	2226	P11	17.1 Kg
250-4-560	1830	1830	1830	P22	16.8 Kg
250-5-560	2720	2720	2720	P22	22.8 Kg

From the above table it is clear that 250-4-530 will not satisfy the working load criteria.

Hence amongst the balance clearly 250-5-490 is the economic choice as it is the lightest and MOC is P11 which is economic with respect to P22.

Therefore when selecting components to make up an assembly it is quite possible that the clamp load group may or may not be the same as the load group of the hanger rods or turnbuckles. This is also true when using clamps with variable effort supports as they have rod sizes designed to withstand maximum load on the spring box.

With this in mind the range of clamps have been designed carefully to be compatible with a range of rod sizes. On the clamp data table the compatible rod sizes are clearly mentioned, this is to be used with the standard catalogue pattern weldless eye nuts and clevis in the case of flat plate type riser clamps.

The clamps and all accessories like rods, eyenuts, welded beam attachments etc. are designed to withstand short time over loads of upto 2 times the rated load capacity, which typically occurs during hydrostatic tests of the pipeline.

Clamp part nos shown in bold letters in the table means they are stocked items.

For combined loading situations where load capacities are given in vertical, lateral and axial directions, the following formula should be applied:

$$\frac{P(v)}{LC(v)} + \frac{P(lat)}{LC(lat)} + \frac{P(ax)}{LC(ax)} = 1$$

Where P represents the actual applied load in the specified direction and LC is the quoted load capacity in the specified direction.

## STANDARDS

The pipe clamps and riser clamps are designed to comply with ASME B31.1 / MSS-SP58. Metric hanger rods load capacity are derived from BS-3974. Most other items are BS3974 std items with stress levels also complying with ASME B31.1 / MSS-SP58. Where components are not standard items of BS3974, they are designed in accordance with ASME B31.1 / MSS-SP58.

## MATERIALS

Pipe Hangers & Supports Private Limited supply to a number of sites worldwide. Materials are selected from the following equivalent or similar specifications suiting availability:

Carbon Steel Items manufactured from Plate or sections, Pipe Clamps to 400°C

Euro BS EN10025: S275JR

ASTM ASTM A36

IS IS:2062 E250 Gr BR

JIS JIS G3101 SS400

Carbon Steel Hanger Rods

Euro BS EN10025: S275JR/S355JR

ASTM ASTM A36

IS IS: 2062 E250 Gr BR

JIS JIS G3101 SS400

Carbon Steel for Forgings

Euro BS 970 Grade 080A27

ASTM ASTM A105

IS IS:1875 Gr.2

JIS JIS G3202 SFVC2A

Alloy Steel Plate for clamps with design temperature 401°C to 530°C

Euro BS EN10028-2 Grade 13CrMo4-5

ASTM ASTM A387 Grade 12 Class 2/Grade 11 Class 2

Alloy Steel Plate for clamps with design temperature 531°C to 600°C

Euro BS EN10028-2 Grade 10CrMo9-10

ASTM ASTM A387 Grade 22 Class 2

Carbon Steel bolts and nuts

Euro BS 4190/DIN 601 Gr. 4.6 and BS 4190/DIN 555 Gr. 4

IS IS: 1367 (Part III) Gr. 4.6 and IS: 1367 (Part VI) Gr. 4

ASTM ASTM A193B7 and A194 Gr 2H

Bolts and nuts for pipe clamps above 400°C

Euro BS 4882 Grade B16/Grade 4

ASTM ASTM A193 Grade B16/A194 Grade 4/Grade 7

JIS JISG4107 SNB16

Where required by client or to suit special operating conditions, pipe clamps, rods, accessories etc. are designed with other materials, for example Alloy steel hanger rods for Boiler Integral Pipe work, clamps with MOC of Gr91, Austenitic stainless steel, Nickel alloys like Incolloy or low temperature carbon steel grades.

Spring Material is a function of design, availability of raw material & hardenability for the given size/application. We recommend that this aspect be left to us/spring vendor

## FINISH

The std finish for pipe clamps and accessories is a coat of zinc rich metal primer, other finishes are available on request to suit site / project requirements.

Zinc Plated

Hot dip Galvanized

Zinc Silicate primer

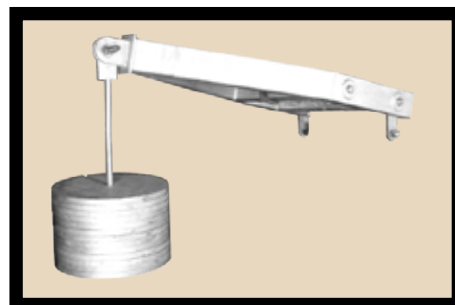
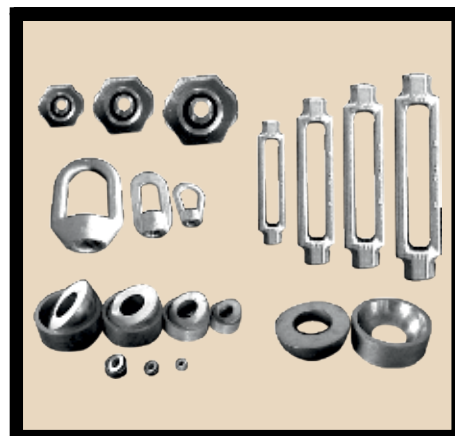
Silicone based Heat Resistant Aluminum paints

Epoxy & Polyurethane coatings

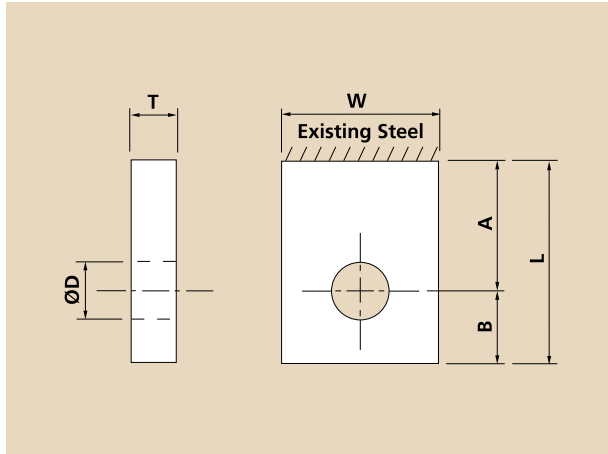
Customer specific requirements

## THREAD FORM

All components are threaded to ISO Metric Coarse pitch unless otherwise stated. Other thread forms can be provided at extra cost / additional delivery times.



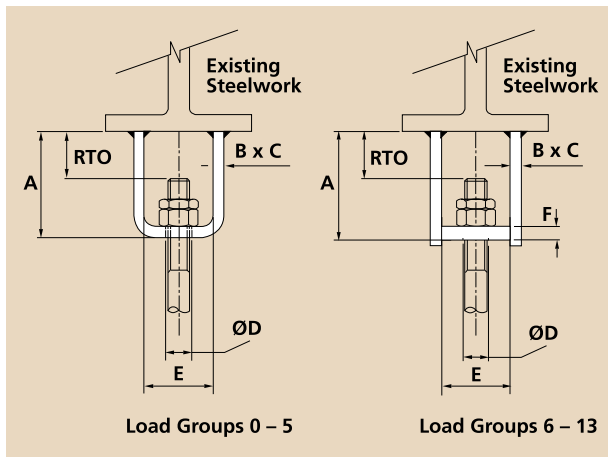
## UA1 LUG ATTACHMENT



Material: Carbon Steel

PART NUMBER	PIN DIA	D DIA	A	B	W	L	T	WEIGHT kgf	LOAD CAPACITY		LOAD GROUP
									Kgf	KN	
UA1 M08	8	10	30	20	50	50	6	0.11	230	2.3	0
UA1 M10	10	12	30	20	50	50	6	0.11	360	3.5	1
UA1 M12	12	14	30	20	50	50	8	0.15	530	5.2	2
UA1 M16	16	18	42	30	60	72	10	0.32	1010	9.9	3
UA1 M20	20	22	50	35	60	85	10	0.37	1580	15.5	4
UA1 M24	24	26	60	45	80	105	12	0.74	2280	22.4	5
UA1 M30	30	33	70	55	100	125	16	1.6	3650	35.8	6
UA1 M36	36	39	80	65	100	145	20	2.1	5340	52.4	7
UA1 M42	42	45	90	75	110	165	25	3.3	7400	72.6	8
UA1 M48	48	52	105	85	130	190	25	4.4	9650	94.6	9
UA1 M56	56	60	120	100	150	220	32	7.6	13350	130.9	10
UA1 M64	64	68	140	115	180	255	36	12.0	18000	176.5	11
UA1 M72	72	76	155	130	200	285	40	16.5	23025	225.8	12
UA1 M80	80	85	175	150	240	325	40	22.7	28125	275.8	13
UA1 M90	90	94	200	170	270	370	50	36.5	35500	348.3	14
UA1 M100	100	104	220	190	300	410	60	53.9	45000	441.5	15
UA1M110	110	116	240	210	330	450	60	65.0	55000	539.6	16
UA1M120	120	126	275	225	360	500	60	78.9	66500	652.4	17

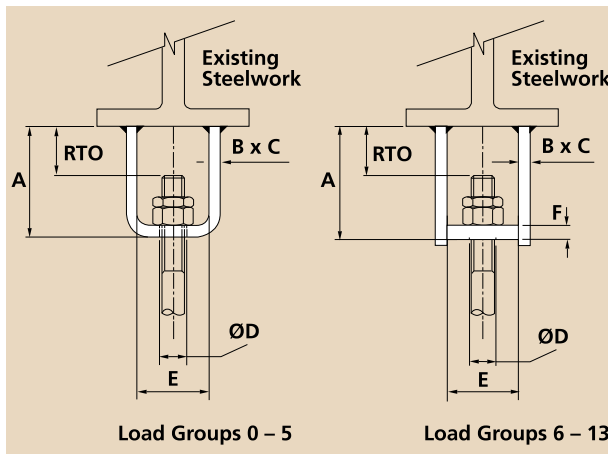
## UA2 BEAM WELDING ATTACHMENT



Material: Carbon Steel

PART NUMBER	ROD THREAD SIZE	A	B	C	D	E	F	R.T.O.	WEIGHT kgf	LOAD CAPACITY		LOAD GROUP
										Kgf	KN	
UA2M08	M8	75	50	6	10	40	—	31	0.45	230	2.3	0
UA2M10	M10	75	50	6	12	40	—	36	0.44	360	3.5	1
UA2M12	M12	75	50	6	14	40	—	33	0.44	530	5.2	2
UA2M16	M16	85	75	10	18	60	—	39	1.3	1010	9.9	3
UA2M20	M20	85	75	12	22	70	—	25	1.7	1580	15.5	4
UA2M24	M24	115	100	12	27	75	—	51	2.8	2280	22.4	5
UA2M30	M30	125	125	16	33	100	16	54	5.3	3650	35.8	6
UA2M36	M36	165	150	20	39	125	20	72	11.0	5340	52.4	7
UA2M42	M42	195	150	20	46	135	20	95	12.6	7400	72.6	8
UA2M48	M48	210	150	20	52	150	25	79	14.5	9650	94.6	9
UA2M56	M56	240	200	20	60	180	25	78	22.4	13350	130.9	10
UA2M64	M64	250	200	20	68	215	30	80	25.9	18000	176.5	11
UA2M72	M72	275	200	25	76	230	40	90	36.2	23025	225.8	12
UA2M80	M80	300	220	25	85	250	40	100	43.1	28125	275.8	13

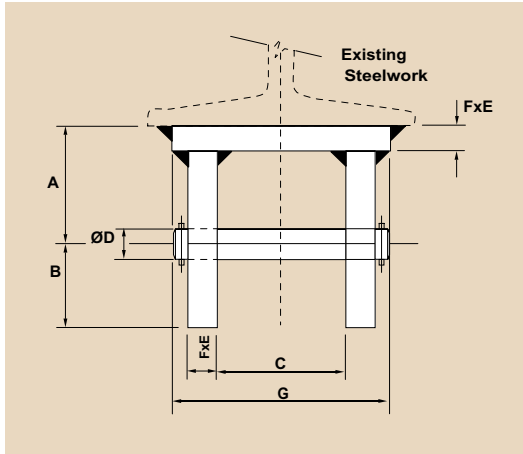
## UA3 BEAM WELDING ATTACHMENT FOR USE WITH DUAL FACED ROCKING WASHER



Material: Carbon Steel

PART NUMBER	ROD THREAD SIZE	A	B	C	D	E	F	R.T.O.	WEIGHT kgf	LOAD CAPACITY		LOAD GROUP
										Kgf	KN	
UA3M12	M12	103	50	6	38	70	10	25	0.83	530	5.2	2
UA3M16	M16	107	75	10	38	70	10	25	1.6	1010	9.9	3
UA3M20	M20	176	75	12	49	85	12	50	3.2	1580	15.5	4
UA3M24	M24	183	100	12	49	85	16	50	4.4	2280	22.4	5
UA3M30	M30	207	125	16	66	120	16	50	8.0	3650	35.8	6
UA3M36	M36	219	150	20	66	120	20	50	13.1	5340	52.4	7
UA3M42	M42	242	150	20	74	140	25	50	15.3	7400	72.6	8
UA3M48	M48	259	150	20	82	160	25	50	17.4	9650	94.6	9
UA3M56	M56	283	200	20	93	180	25	50	25.3	13350	130.9	10
UA3M64	M64	309	200	25	104	210	30	50	35.8	18000	176.5	11

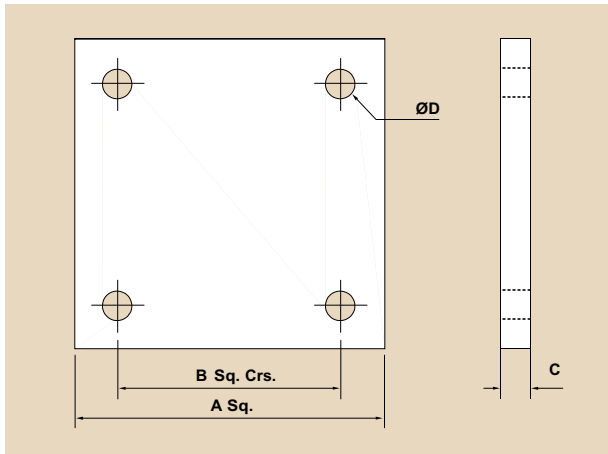
## UA4 INVERTED BEAM WELDING ATTACHMENT



Material: Carbon Steel

PART NUMBER	PIN SIZE	A	B	C	ØD	E	F	G	WEIGHT kgf	LOAD CAPACITY		LOAD GROUP
										kgf	kN	
										UA4M08	8	
UA4M10	10	36	20	30	12	50	6	54	0.39	360	3.5	1
UA4M12	12	36	20	30	14	50	6	54	0.4	530	5.2	2
UA4M16	16	42	30	30	18	50	6	54	0.51	1010	9.9	3
UA4M20	20	60	35	35	22	60	10	71	1.1	1580	15.5	4
UA4M24	24	70	45	40	26	80	10	76	2.0	2280	22.4	5
UA4M30	30	82	55	40	32	100	12	80	3.5	3650	35.8	6
UA4M36	36	95	65	55	39	110	16	101	5.8	5340	52.4	7
UA4M42	42	105	75	65	45	130	16	115	7.9	7400	72.6	8
UA4M48	48	125	85	70	51	150	20	130	13.6	9650	94.6	9
UA4M56	56	140	100	80	60	180	20	140	18.7	13350	130.9	10
UA4M64	64	160	115	90	68	200	20	154	24.2	18000	176.5	11
UA4M72	72	180	130	100	76	220	25	174	35.5	23025	225.8	12
UA4M80	80	200	150	100	84	240	25	180	43.0	28125	275.8	13
UA4M90	90	225	165	110	94	260	30	210	57.0	35500	348.3	14
UA4M100	100	250	180	120	104	280	35	230	79.0	45000	441.5	15
UA4M110	110	275	200	130	116	300	40	250	106.0	55000	539.6	16
UA4M120	120	290	230	140	126	340	40	260	130.0	66500	652.4	17

## UA5 CEILING PLATE



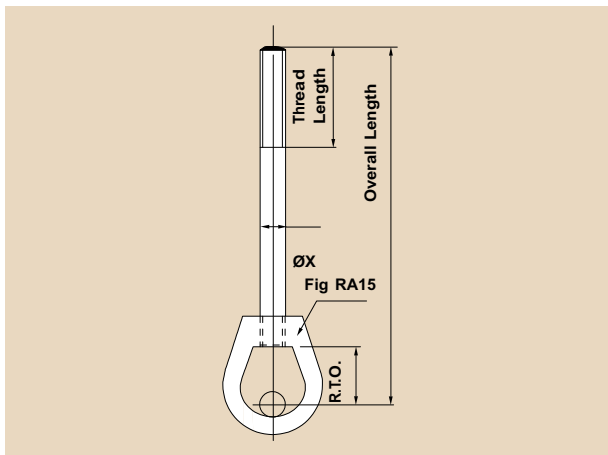
Material: Carbon Steel

PART NUMBER	ROD SIZE	A	B	C	DIA. D	RECOMMENDED FIXING BOLT	WEIGHT kgf	LOAD CAPACITY		LOAD GROUP
								kgf	kN	
UA5M08	8	130	100	8	9	F287-M8/95	1.1	230	2.3	0
UA5M10	10	130	100	8	9	F287-M8/95	1.1	360	3.5	1
UA5M12	12	150	120	8	9	F287-M8/95	1.4	530	5.2	2
UA5M16	16	170	140	12	9	F287-M8/95	2.7	1010	9.9	3
UA5M20	20	190	150	16	12	F287-M10/110	4.3	1580	15.5	4
UA5M24	24	220	180	20	14	F287-M12/145	7.6	2280	22.4	5
UA5M30	30	270	220	20	18	F287-M16/165	11.5	3650	35.8	6
UA5M36	36	320	260	25	22	F287-M20/200	20.1	5340	52.4	7
UA5M42	42	370	300	30	26	F288-M16/50	32.3	7400	72.6	8
UA5M48	48	450	360	35	31	F288-M20/60	55.7	9650	94.6	9
UA5M56	56	580	480	40	35	F288-M24/60	105.7	13350	130.9	10
UA5M64	64	580	480	45	35	F289-M20: 220/60	118.9	18000	176.5	11

FOR USE IN CONJUNCTION WITH PART NUMBER UA1, UA2, UA3 OR UA4

WHEN ORDERED WITH ONE OF THESE PARTS, THIS IS SUPPLIED AS A WELDED ASSEMBLY

## RA1 EYE ROD

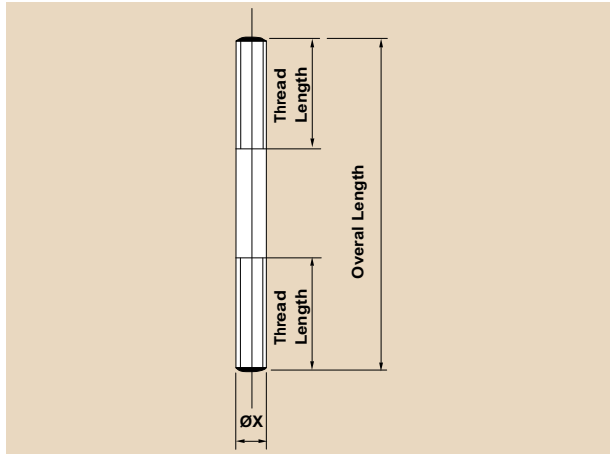


Material: Forged Steel and Carbon Steel

PART NUMBER	DIA X	R.T.O.	LOAD CAPACITY		LOAD GROUP
			kgf	kN	
RA1M08	8	34	230	2.3	0
RA1M10	10	33	360	3.5	1
RA1M12	12	45	530	5.2	2
RA1M16	16	43	1010	9.9	3
RA1M20	20	69	1580	15.5	4
RA1M24	24	67	2280	22.4	5
RA1M30	30	80	3650	35.8	6
RA1M36	36	77	5340	52.4	7
RA1M42	42	138	7400	72.6	8
RA1M48	48	135	9650	94.6	9
RA1M56	56	131	13350	130.9	10
RA1M64	64	127	18000	176.5	11
RA1M72	72	186	23025	225.8	12
RA1M80	80	182	28125	275.8	13

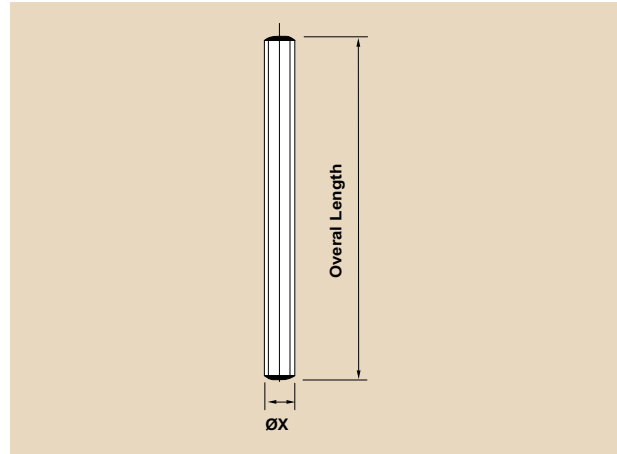
ORDER BY: PART NUMBER AND OVERALL LENGTH AS SHOWN FOR THREAD LENGTH, SEE TYPE RA2 HANGER ROD

## RA2 Hanger Rod



Material: Carbon Steel

## RA3 ALL THREAD ROD

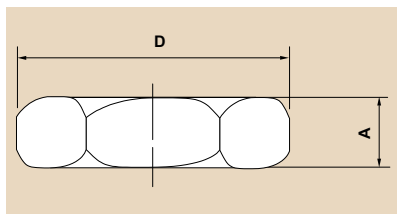


Material: Carbon Steel

HANGER ROD PART NUMBER	ALL THREAD ROD PART NUMBER	DIA X	LOAD CAPACITY		LOAD GROUP	STANDARD THREAD LENGTHS FOR TYPE RA2 HANGER RODS WHEN USED WITH COMPONENTS SHOWN						
			kgf	KN		VARIABLE EFFORT SUPPORT	TURNBUCKLE & NUT	ROD COUPLING & NUT	CLEVIS & NUT	WELDLESS EYE & NUT/SPADE END & NUT	WELDLESS EYE(ONLY)/SPADE END (ONLY)	TWO NUTS
RA2M08	RA3M08	8	230	2.3	0	-	100	23	40	24	16	64
RA2M10	RA3M10	10	360	3.5	1	-	100	24	41	25	16	66
RA2M12	RA3M12	12	530	5.2	2	182	106	29	43	28	17	70
RA2M16	RA3M16	16	1010	9.9	3	191	115	39	46	31	17	76
RA2M20	RA3M20	20	1580	15.5	4	199	123	47	49	45	28	132
RA2M24	RA3M24	24	2280	22.4	5	210	134	55	52	48	28	138
RA2M30	RA3M30	30	3650	35.8	6	228	152	70	57	72	47	148
RA2M36	RA3M36	36	5340	52.4	7	243	167	85	71	77	47	158
RA2M42	RA3M42	42	7400	72.6	8	248	172	95	79	92	57	168
RA2M48	RA3M48	48	9650	94.6	9	267	191	104	96	96	57	226
RA2M56	RA3M56	56	13350	130.9	10	293	217	126	116	103	57	240
RA2M64	RA3M64	64	18000	176.5	11	299	223	147	122	109	57	252
RA2M72	RA3M72	72	23025	225.8	12	320	244	164	149	159	101	266
RA2M80	RA3M80	80	28125	275.8	13	336	260	180	165	185	121	278
RA2M90	RA3M90	90	35500	348.3	14	357	281	256	190	240	150	330
RA2M100	RA3M100	100	45000	441.5	15	367	291	266	205	255	160	340
RA2M110	RA3M110	110	55000	539.6	16	397	321	301	230	290	180	370
RA2M120	RA3M120	120	66500	652.4	17	417	341	321	250	320	200	390

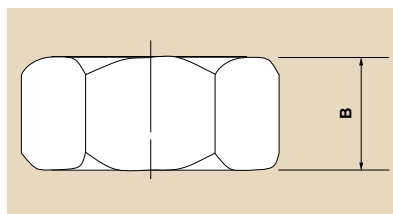
ORDER BY: PART NUMBER AND OVERALL LENGTH. HANGER ROD WILL BE SUPPLIED WITH RIGHT/RIGHT OR LEFT/RIGHT THREADS BASED ON REQUIREMENT. NORMAL SUPPLY IS ALL THREADED ROD UP TO M 36 AND HANGER ROD THEREAFTER

## RA4 LOCKNUT



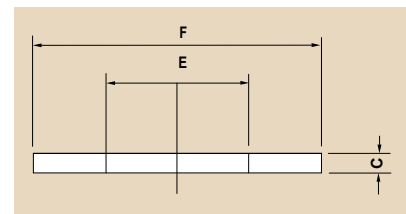
Material: Carbon Steel

## RA5 FULL NUT



Material: Carbon Steel

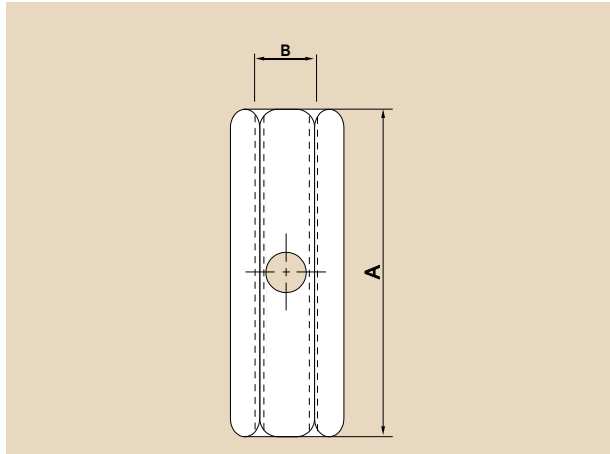
## RA6 FLAT WASHER



Material: Carbon Steel

LOCKNUT PART NUMBER	FULL NUT PART NUMBER	FLAT WASHER PART NUMBER	THREAD SIZE	A	B	C	D	E	F	LOAD GROUP	WEIGHTS kgf		
											LOCKNUT	FULL NUT	WASHER
RA4M08	RA5M08	RA6M08	M8	5	6.5	1.6	16	9	17	0	0.004	0.005	0.002
RA4M10	RA5M10	RA6M10	M10	6	8.0	2.0	20	11	21	1	0.009	0.011	0.004
RA4M12	RA5M12	RA6M12	M12	7	10.0	2.5	22	14	24	2	0.011	0.016	0.006
RA4M16	RA5M16	RA6M16	M16	8	13.0	3.0	28	18	30	3	0.019	0.031	0.011
RA4M20	RA5M20	RA6M20	M20	9	16.0	3.0	35	22	37	4	0.034	0.061	0.016
RA4M24	RA5M24	RA6M24	M24	10	19.0	4.0	42	26	44	5	0.054	0.104	0.031
RA4M30	RA5M30	RA6M30	M30	12	24.0	4.0	53	33	56	6	0.105	0.211	0.051
RA4M36	RA5M36	RA6M36	M36	14	29.0	5.0	64	39	66	7	0.181	0.374	0.088
RA4M42	RA5M42	RA6M42	M42	16	34.0	7.0	75	45	78	8	0.285	0.606	0.150
RA4M48	RA5M48	RA6M48	M48	18	38.0	8.0	87	52	92	9	0.440	0.928	0.284
RA4M56	RA5M56	RA6M56	M56	22	45.0	9.0	99	62	105	10	0.675	1.380	0.399
RA4M64	RA5M64	RA6M64	M64	24	51.0	9.0	110	70	115	11	0.876	1.861	0.463
RA4M72	RA5M72	RA6M72	M72	28	58.0	10.0	120	78	125	12	1.023	2.197	0.569
RA4M80	RA5M80	RA6M80	M80	32	64.0	12.0	131	86	140	13	1.324	2.825	0.781

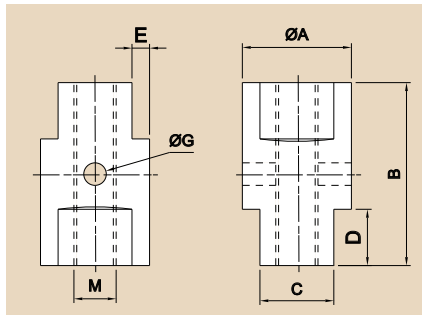
## RA7 ROD COUPLING



PART NUMBER	ROD THREAD SIZE B	LENGTH A	SIGHT HOLE Ø	WEIGHT kgf	LOAD CAPACITY		LOAD GROUP
					kgf	KN	
RA7M08	M8	30	6	0.04	230	2.3	0
RA7M10	M10	30	6	0.04	360	3.5	1
RA7M12	M12	36	6	0.06	530	5.2	2
RA7M16	M16	50	8	0.1	1010	9.9	3
RA7M20	M20	60	10	0.2	1580	15.5	4
RA7M24	M24	70	12	0.4	2280	22.4	5
RA7M30	M30	90	12	0.8	3650	35.8	6
RA7M36	M36	110	12	1.4	5340	52.4	7
RA7M42	M42	120	14	2.1	7400	72.6	8
RA7M48	M48	130	14	3.2	9650	94.6	9
RA7M56	M56	160	14	4.9	13350	130.9	10
RA7M64	M64	190	14	6.9	18000	176.5	11
RA7M72	M72	210	14	9.7	23025	225.8	12
RA7M80	M80	230	14	13.1	28125	275.8	13

Material: Carbon Steel

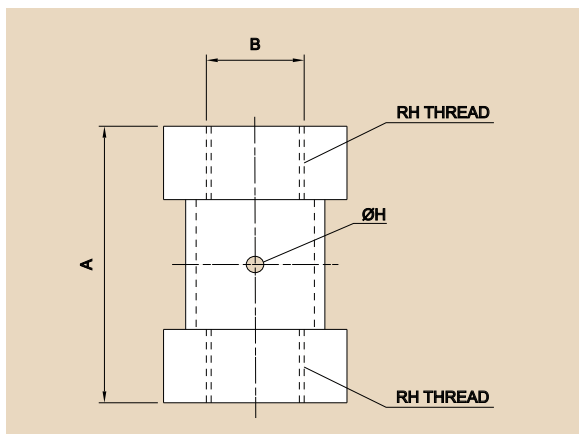
## RA7A ROUND ROD COUPLING



PART NUMBER	ROD THREAD SIZE	ROD SIZE ØA	M	LENGTH B	C	D	E	SIGHT HOLE ØG	Weight in kgf	LOAD CAPACITY		LOAD GROUP
										kgf	KN	
RA7A M12	12	28	M12	50	19	12	4.5	8	0.17	530	5.2	2
RA7A M16	16	40	M16	60	28	15	6	8	0.43	1010	9.9	3
RA7A M20	20	50	M20	70	38	17	6	10	0.82	1580	15.5	4
RA7A M24	24	50	M24	80	38	20	6	10	0.85	2280	22.4	5
RA7A M30	30	60	M30	100	47	20	6.5	12	1.54	3650	35.8	6
RA7A M36	36	70	M36	110	57	25	6.5	12	2.30	5340	52.4	7
RA7A M42	42	80	M42	120	68	40	6	14	3.26	7400	72.6	8
RA7A M48	48	90	M48	130	77	50	6.5	14	4.42	9650	94.6	9
RA7A M56	56	100	M56	160	86	50	7	14	6.54	13350	130.9	10
RA7A M64	64	120	M64	190	102	50	9	16	11.63	18000	176.5	11
RA7A M72	72	135	M72	210	115	70	10	16	16.19	23025	225.8	12
RA7A M80	80	155	M80	260	135	80	10	16	27.73	28125	275.8	13

Material: Forged Steel or Carbon Steel  
This item may be forged or profiled

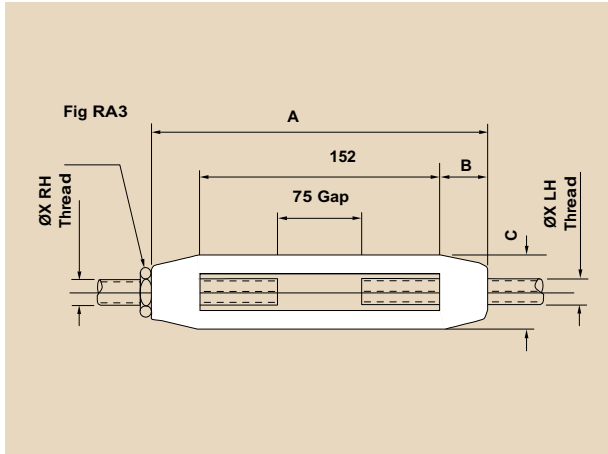
## RA7B PIPE ROD COUPLING



PART NUMBER	ROD THREAD SIZE B	LENGTH A	SIGHT HOLE ØH	WEIGHT kgf	LOAD CAPACITY		LOAD GROUP
					kgf	KN	
RA7B M90	M90	330	14	83.3	35500	348.3	14
RA7B M100	M100	340	14	88.7	45000	441.5	15
RA7B M110	M110	380	14	98.3	55000	539.6	16
RA7B M120	M120	400	14	103	66500	652.4	17

Material: Cast Iron or Carbon Steel

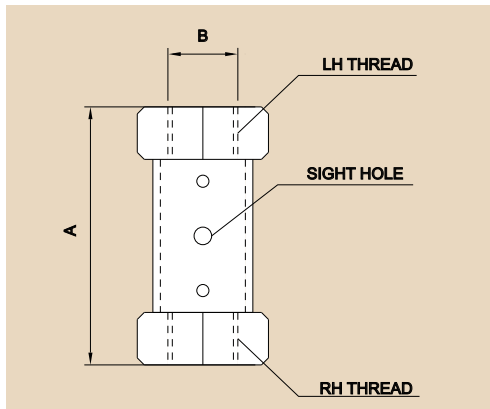
## RA8 TURNBUCKLE THREADED RIGHT HAND/LEFT HAND RA8A TURNBUCKLE THREADED RIGHT HAND BOTH ENDS



PART NUMBER RH/LH	PART NUMBER RH/RH	ROD THREAD SIZE X	A	B	C	Wt. kgf	LOAD CAPACITY		LOAD GROUP
							kgf	kN	
RA8M08	RA8AM08	M8	182	15	28	0.50	230	2.3	0
RA8M10	RA8AM10	M10	182	15	28	0.50	360	3.5	1
RA8M12	RA8AM12	M12	192	20	32	0.64	530	5.2	2
RA8M16	RA8AM16	M16	204	26	42	0.92	1010	9.9	3
RA8M20	RA8AM20	M20	214	31	50	1.4	1580	15.5	4
RA8M24	RA8AM24	M24	230	39	60	2.4	2280	22.4	5
RA8M30	RA8AM30	M30	256	52	68	4.0	3650	35.8	6
RA8M36	RA8AM36	M36	276	62	84	6.0	5340	52.4	7
RA8M42	RA8AM42	M42	276	62	84	6.0	7400	72.6	8
RA8M48	RA8AM48	M48	305	77	108	11.9	9650	94.6	9
RA8M56	RA8AM56	M56	343	96	145	17.6	13350	130.8	10
RA8M64	RA8AM64	M64	343	96	145	23.6	18000	176.5	11
RA8M72	RA8AM72	M72	372	110	156	27.3	23025	225.8	12
RA8M80	RA8AM80	M80	392	120	172	38.7	28125	275.8	13

Material: Forged Steel or Carbon Steel. This item may be forged or profiled  
NORMAL SUPPLY FORGED UP TO M42 AND PROFILED FOR LARGER SIZES

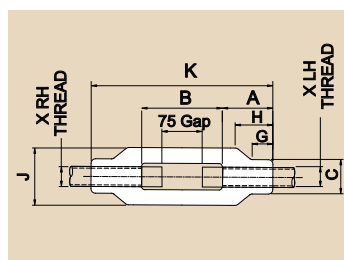
## RA8B-PIPE TURNBUCKLE THREADED RIGHT HAND / LEFT HAND RA8C-PIPE TURNBUCKLE THREADED RIGHT HAND BOTH ENDS



PART NUMBER RH/LH	PART NUMBER RH/RH	ROD THREAD SIZE B	LENGTH A	WEIGHT kgf	LOAD CAPACITY		LOAD GROUP
					kgf	KN	
RA8B M48	RA8C M48	M48	300	8.8	9650	94.6	9
RA8B M56	RA8C M56	M56	320	9.5	13350	130.9	10
RA8B M64	RA8C M64	M64	340	17.0	18000	176.5	11
RA8B M72	RA8C M72	M72	360	20.8	23025	225.8	12
RA8B M80	RA8C M80	M80	360	48.1	28125	275.8	13
RA8B M90	RA8C M90	M90	380	51.2	35500	348.3	14
RA8B M100	RA8C M100	M100	390	51.3	45000	441.5	15
RA8B M110	RA8C M110	M110	420	101.6	55000	539.6	16
RA8B M120	RA8C M120	M120	440	106.2	66500	652.4	17

Material: Carbon Steel

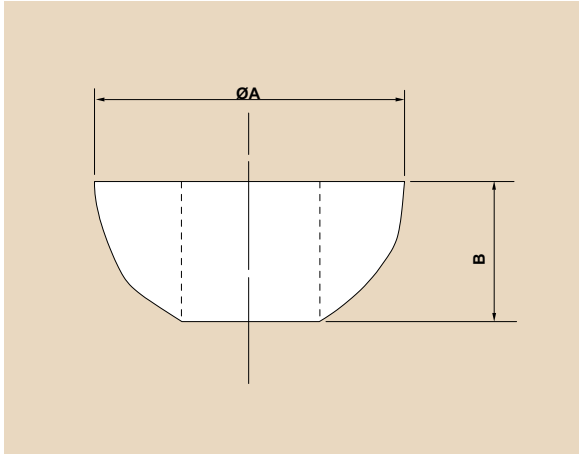
## RA8D-PROFILED TURNBUCKLE THREADED RIGHT HAND / LEFT HAND RA8E-PROFILED TURNBUCKLE THREADED RIGHT HAND BOTH ENDS



PART NUMBER RH/LH	PART NUMBER RH/RH	ROD THREAD SIZE X	A	B	C	G	H	J	K	WEIG HT kgf	LOAD CAPACITY		LOAD GROUP
											kgf	KN	
RA8D M10	RA8E M10	M10	16	152	20	8	12	28	184	0.5	360	3.5	1
RA8D M12	RA8E M12	M12	24	152	20	9	18	34	200	0.7	530	5.2	2
RA8D M16	RA8E M16	M16	26	152	25	10	18	40	204	1.0	1010	9.9	3
RA8D M20	RA8E M20	M20	32	152	30	11	24	48	216	1.6	1580	15.5	4
RA8D M24	RA8E M24	M24	38	152	40	13	28	56	228	2.6	2280	22.4	5
RA8D M30	RA8E M30	M30	50	152	50	17	37	68	252	4.4	3650	35.8	6
RA8D M36	RA8E M36	M36	62	152	60	21	46	76	276	7.0	5340	52.4	7
RA8D M42	RA8E M42	M42	77	152	65	26	57	90	306	9.6	7400	72.6	8
RA8D M48	RA8E M48	M48	77	152	75	26	57	108	306	13.3	9650	94.6	9
RA8D M56	RA8E M56	M56	96	152	85	32	72	122	344	20.0	13350	130.9	10
RA8D M64	RA8E M64	M64	96	152	100	32	72	136	344	26.7	18000	176.5	11
RA8D M72	RA8E M72	M72	110	152	110	37	82	156	372	36.7	23025	225.8	12
RA8D M80	RA8E M80	M80	120	152	130	40	90	172	392	51.7	28125	275.8	13



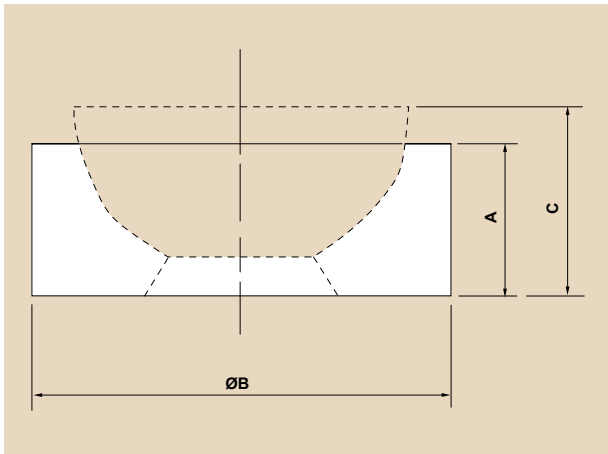
## RA9 SPHERICAL WASHER



Material: Cast Iron or Carbon Steel

PART NUMBER	ROD SIZE	ØA	B	WEIGHT kgf	LOAD CAPACITY		LOAD GROUP
					kgf	KN	
RA9M08	8	20	8	0.01	230	2.3	0
RA9M10	10	24	10	0.02	360	3.5	1
RA9M12	12	30	13	0.04	530	5.2	2
RA9M16	16	38	16	0.09	1010	9.9	3
RA9M20	20	48	21	0.18	1580	15.5	4
RA9M24	24	56	24	0.28	2280	22.4	5
RA9M30	30	70	30	0.54	3650	35.8	6
RA9M36	36	84	36	0.93	5340	52.4	7
RA9M42	42	96	42	1.4	7400	72.6	8
RA9M48	48	114	49	2.4	9650	94.6	9
RA9M56	56	134	57	3.8	13350	130.9	10
RA9M64	64	150	66	5.3	18000	176.5	11
RA9M72	72	170	74	7.7	23025	225.8	12
RA9M80	80	188	82	10.6	28125	275.8	13
RA9M90	90	206	90	13.1	35500	348.3	14
RA9M100	100	224	98	16.5	45000	441.5	15
RA9M110	110	242	106	20.9	55000	539.6	16
RA9M120	120	260	114	25.7	66500	652.4	17

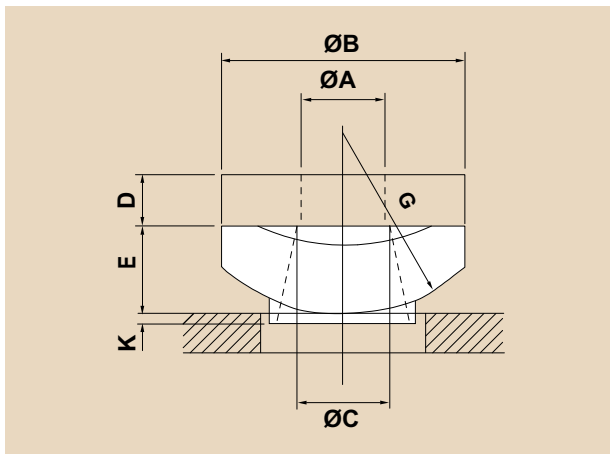
## RA 10 CUP FOR SPHERICAL WASHER



Material: Cast Iron or Carbon Steel

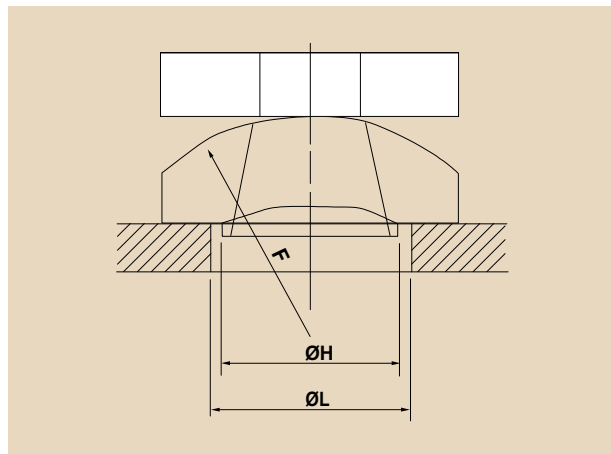
PART NUMBER	ROD SIZE	A	ØB	C	WEIGHT kgf	LOAD CAPACITY		LOAD GROUP
						kgf	KN	
RA10M08	8	10	29	13	0.05	230	2.3	0
RA10M10	10	12	32	14	0.06	360	3.5	1
RA10M12	12	13	35	16	0.06	530	5.2	2
RA10M16	16	16	41	19	0.09	1010	9.9	3
RA10M20	20	19	54	24	0.18	1580	15.5	4
RA10M24	24	25	63	32	0.37	2280	22.4	5
RA10M30	30	29	76	35	0.54	3650	35.8	6
RA10M36	36	35	95	44	1.1	5340	52.4	7
RA10M42	42	44	105	49	1.8	7400	72.6	8
RA10M48	48	48	130	58	3.0	9650	94.6	9
RA10M56	56	51	152	68	3.8	13350	130.9	10
RA10M64	64	60	172	78	6.2	18000	176.5	11
RA10M72	72	68	194	88	8.8	23025	225.8	12
RA10M80	80	76	215	98	12.1	28125	275.8	13
RA10M90	90	84	236	108	16	35500	348.3	14
RA10M100	100	92	257	118	20.5	45000	441.5	15
RA10M110	110	100	278	128	26	55000	539.6	16
RA10M120	120	108	300	138	33	66500	652.4	17

## RA11 DUAL FACED ROCKING WASHER



Material: Cast Iron

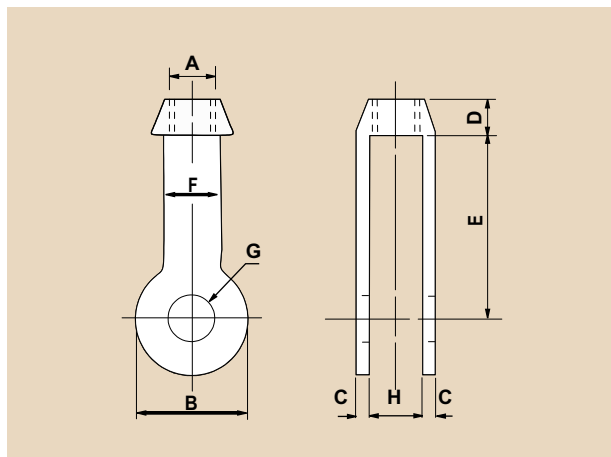
## RA12 PLATE FOR DUAL FACED ROCKING WASHER



Material: Carbon Steel

PART NUMBER ROCKING WASHER	PART NUMBER PLATE	ROD DIA	ØA	ØB	ØC	D	E	F	G	ØH	K	ØL	WEIGHT kgf		LOAD CAPACITY		LOAD GROUP
													ROCKER WASHER	PLATE	kgf	kN	
RA11M12	RA12M12	M12	13	50	20	10	16	32	32	33	5	38	0.12	0.14	530	5.2	2
RA11M16	RA12M16	M16	17	50	20	10	16	32	32	33	5	38	0.11	0.14	1010	9.9	3
RA11M20	RA12M20	M20	21	65	28	15	24	48	48	44	5	49	0.28	0.35	1580	15.5	4
RA11M24	RA12M24	M24	26	65	28	15	24	48	48	44	5	49	0.26	0.33	2280	22.4	5
RA11M30	RA12M30	M30	32	98	40	20	36	72	72	59	5	66	0.95	1.1	3650	35.8	6
RA11M36	RA12M36	M36	38	98	40	20	36	72	72	59	5	66	0.91	1.0	5340	52.4	7
RA11M42	RA12M42	M42	45	114	46	25	42	84	84	67	6	74	1.4	1.7	7400	72.6	8
RA11M48	RA12M48	M48	52	130	52	30	48	96	96	75	7	82	2.1	2.6	9650	94.6	9
RA11M56	RA12M56	M56	60	151	60	35	56	112	112	89	8	93	3.3	4.1	13350	130.9	10
RA11M64	RA12M64	M64	68	173	69	40	64	128	128	96	10	104	5.0	6.2	18000	176.5	11

## RA13 CLEVIS

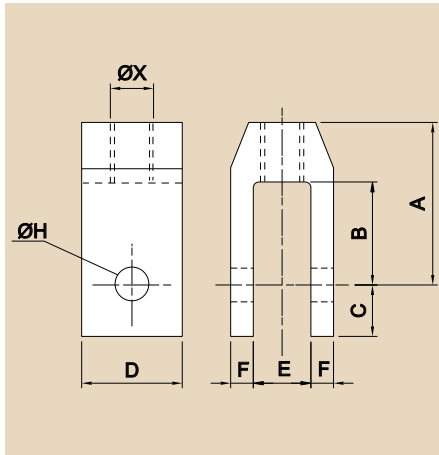


PART NUMBER	ROD THREAD SIZE A	B	C	D	E	F	G	H	Wt. kgf	LOAD CAPACITY		LOAD GROUP
										kgf	kN	
RA13M08	M8	38	13	32	95	30	10	18	1.2	230	2.3	0
RA13M10	M10	38	13	32	95	30	12	18	1.2	360	3.5	1
RA13M12	M12	38	13	32	95	30	14	18	1.1	530	5.2	2
RA13M16	M16	38	13	32	95	30	18	18	1.1	1010	9.9	3
RA13M20	M20	63	16	32	102	30	22	24	1.8	1580	15.5	4
RA13M24	M24	76	18	32	127	38	26	28	2.9	2280	22.4	5
RA13M30	M30	76	18	32	127	38	32	28	2.8	3650	35.8	6
RA13M36	M36	89	20	41	152	44	38	48	4.6	5340	52.4	7
RA13M42	M42	102	22	44	152	50	44	56	6.1	7400	72.6	8
RA13M48	M48	127	28	57	178	64	50	58	12.0	9650	94.6	9
RA13M56	M56	152	33	70	203	76	58	75	20.4	13350	130.9	10
RA13M64	M64	152	33	70	203	76	66	75	19.6	18000	176.5	11
RA13M72	M72	150	38	90	200	150	74	80	41.1	23025	225.8	12
RA13M80	M80	180	40	100	200	180	82	90	57.3	28125	275.8	13

Material: Forged Steel or Carbon Steel. This item may be forged or profiled

NORMAL SUPPLY IS FORGED UP TO M12 AND PROFILED FOR LARGER SIZES

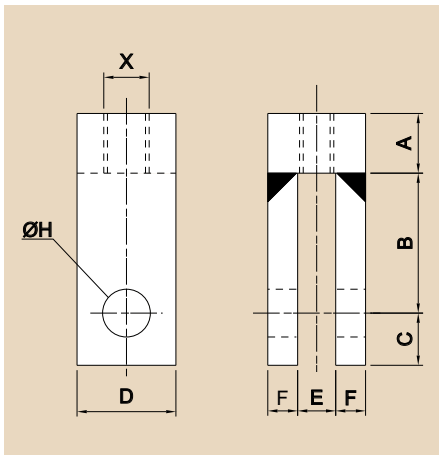
## RA13A-PROFILED CLEVIS



PART NUMBER	ROD DIA. X	A	B	C	D	E	F	ØH	Weight kgf	LOAD CAPACITY		LOAD GROUP
										kgf	KN	
RA13A M10	10	127	95	18	32	14	11	12	0.8	360	3.5	1
RA13A M12	12	127	95	20	36	16	12	14	0.9	530	5.2	2
RA13A M16	16	127	95	24	40	21	13	18	1.1	1010	9.9	3
RA13A M20	20	134	102	32	50	26	15	22	1.8	1580	15.5	4
RA13A M24	24	159	127	38	50	30	18	26	2.4	2280	22.4	5
RA13A M30	30	159	125	42	63	36	20	32	3.3	3650	35.8	6
RA13A M36	36	193	152	48	71	44	22	38	5.0	5340	52.4	7
RA13A M42	42	196	146	55	80	52	24	44	6.4	7400	72.6	8
RA13A M48	48	235	175	68	90	58	26	50	9.5	9650	94.6	9
RA13A M56	56	273	203	78	110	66	34	58	17.4	13350	130.9	10
RA13A M64	64	273	193	86	130	74	36	66	22.3	18000	176.5	11
RA13A M72	72	290	200	94	150	80	38	74	29.2	23025	225.8	12
RA13A M80	80	300	200	110	180	90	40	82	41.5	28125	275.8	13

Material: Carbon Steel

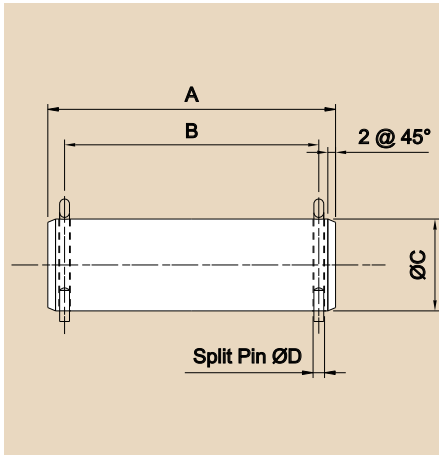
## RA13B (FABRICATED CLEVIS)



PART NUMBER	ROD THREAD SIZE X	A	B	C	D	E	F	H	Weight kgf	LOAD CAPACITY		LOAD GROUP
										kgf	KN	
RA13B M10	M10	15	95	18	32	14	10	12	0.7	360	3.5	1
RA13B M12	M12	15	95	20	36	16	12	14	0.9	530	5.2	2
RA13B M16	M16	20	95	24	40	21	16	18	1.5	1010	9.9	3
RA13B M20	M20	20	102	32	50	26	16	22	2.1	1580	15.5	4
RA13B M24	M24	25	127	38	50	30	18	26	2.9	2280	22.4	5
RA13B M30	M30	30	125	42	63	36	20	32	4.4	3650	35.8	6
RA13B M36	M36	40	152	48	71	44	22	38	6.8	5340	52.4	7
RA13B M42	M42	45	146	55	80	52	25	44	9.1	7400	72.6	8
RA13B M48	M48	50	175	68	100	58	28	50	15.0	9650	94.6	9
RA13B M56	M56	60	203	78	110	66	36	58	24.4	13350	131	10
RA13B M64	M64	60	193	86	130	74	36	66	29.2	18000	177	11
RA13B M72	M72	70	200	94	150	80	36	74	37.2	23025	226	12
RA13B M80	M80	80	200	110	180	90	40	82	53.9	28125	276	13
RA13B M90	M90	100	220	120	190	100	45	94	73.5	35500	348.3	14
RA13B M100	M100	110	240	130	210	110	50	104	98.5	45000	441.5	15
RA13B M110	M110	120	260	140	230	120	55	116	128.6	55000	539.6	16
RA13B M120	M120	130	275	150	250	130	60	126	163.1	66500	652.4	17

Material: Carbon Steel

## RA14(CLEVIS PIN)

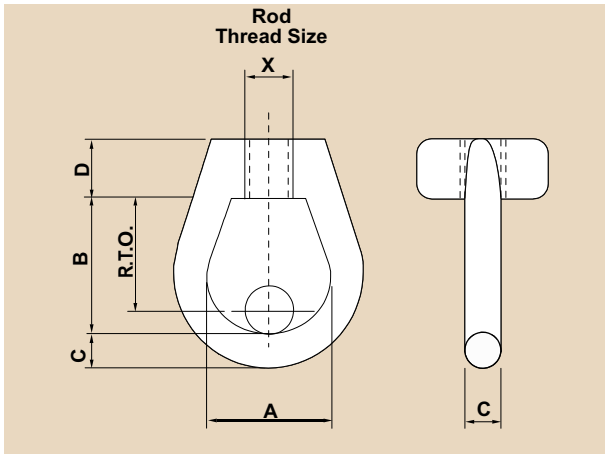


Material: Forged Steel

PART NUMBER	ROD DIA.	A	B	PIN ØC	SPLIT PIN ØD	WEIGHT kgf	LOAD CAPACITY		LOAD GROUP
							kgf	KN	
RA14M08	8	70	55	8	4	0.03	230	2.3	0
RA14M10	10	70	55	10	5	0.04	360	3.5	1
RA14M12	12	75	60	12	5	0.07	530	5.2	2
RA14M16	16	75	60	16	5	0.12	1010	9.9	3
RA14M20	20	90	75	20	5	0.22	1580	15.5	4
RA14M24	24	95	80	24	6	0.34	2280	22.4	5
RA14M30	30	105	90	30	6	0.58	3650	35.8	6
RA14M36	36	125	110	36	6	1.0	5340	52.4	7
RA14M42	42	130	115	42	6	1.4	7400	72.6	8
RA14M48	48	150	130	48	8	2.1	9650	94.6	9
RA14M56	56	175	155	56	8	3.4	13350	130.9	10
RA14M64	64	185	165	64	8	4.7	18000	176.5	11
RA14M72	72	205	185	72	8	6.6	23025	225.8	12
RA14M80	80	210	190	80	8	8.3	28125	275.8	13
RA14M90	90	240	215	90	10	11.9	35500	348.3	14
RA14M100	100	265	240	100	10	16.2	45000	441.5	15
RA14M110	110	285	260	110	10	21.1	55000	539.6	16
RA14M120	120	305	280	120	10	27	66500	652.4	17

R.T.O. ASSUMES USE IN CONJUNCTION WITH A PIN HAVING THE SAME DIAMETER AS THE HANGER ROD

## RA15 WELDLESS EYE NUT

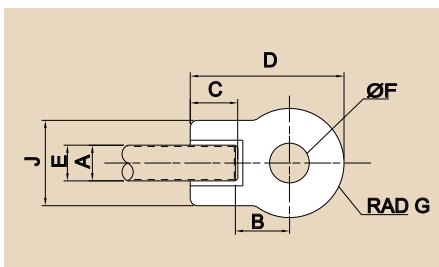


Material: Forged Steel

PART NUMBER	ROD THREAD SIZE X	A	B	C	D	R.T.O.	WEIGHT kgf	LOAD CAPACITY		LOAD GROUP
								kgf	kN	
RA15M08	M8	25	38	10	16	34	0.10	230	2.3	0
RA15M10	M10	25	38	10	16	33	0.10	360	3.5	1
RA15M12	M12	38	51	13	17	45	0.27	530	5.2	2
RA15M16	M16	38	51	13	17	43	0.25	1010	9.9	3
RA15M20	M20	50	79	17	28	69	0.84	1580	15.5	4
RA15M24	M24	50	79	17	28	67	0.81	2280	22.4	5
RA15M30	M30	47	95	20	47	80	2.1	3650	35.8	6
RA15M36	M36	47	95	20	47	77	2.0	5340	52.4	7
RA15M42	M42	101	159	38	57	138	7.5	7400	72.6	8
RA15M48	M48	101	159	38	57	135	7.3	9650	94.6	9
RA15M56	M56	101	159	38	57	131	7.1	13350	130.9	10
RA15M64	M64	101	159	38	57	127	6.8	18000	176.5	11
RA15M72	M72	101	222	49	89	186	18.0	23025	225.8	12
RA15M80	M80	101	222	49	89	182	17.4	28125	275.8	13

R.T.O. ASSUMES USE IN CONJUNCTION WITH A PIN HAVING THE SAME DIAMETER AS THE HANGER ROD. FOR THREAD SIZES M72 AND ABOVE, PROFILED SPADE ENDS CAN BE SUPPLIED INSTEAD OF EYENUT.

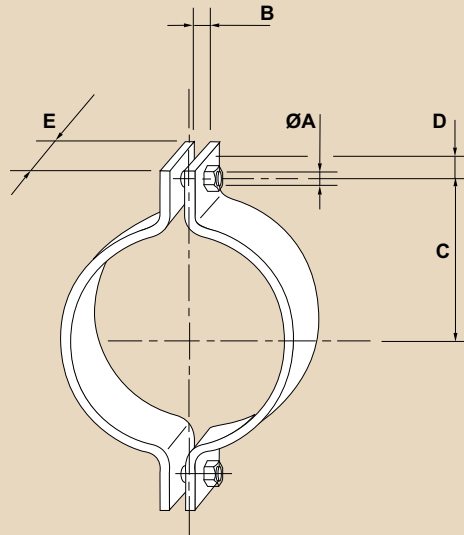
## RA15A-SPADE END



Material: Carbon Steel

PART NUMBER	ROD THREAD SIZE A	B	C	D	E	HOLE ØF	G	J	WEIGHT kg	LOAD CAPACITY		LOAD GROUP
										kgf	KN	
RA15A M72	M72	186	101	392	74	84	110	180	18.4	23025	225.8	12
RA15A M80	M80	182	121	408	82	90	110	180	22.8	28125	275.8	13
RA15A M90	M90	200	150	475	92	100	130	220	32.7	35500	348.3	14
RA15A M100	M100	225	160	510	102	110	130	220	41	45000	441.5	15
RA15A M110	M110	245	180	580	112	120	160	260	59.2	55000	539.6	16
RA15A M120	M120	270	200	645	122	130	180	300	74.3	66500	652.4	17

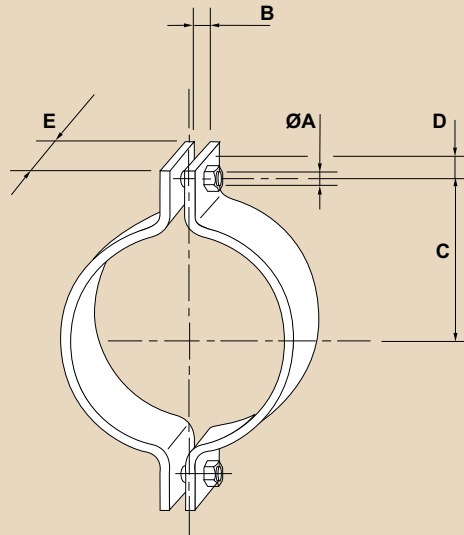
# PA2 PIPE CLAMP FOR UNLAGGED PIPE TWO BOLT TYPE



Material: Carbon Steel

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity at 350C	Compatible with Rod Sizes
	mm	in			mm	in					
<b>PA2-15-0</b>	21.3	0.839	12	15	30	1 <sup>3</sup> / <sub>16</sub>	18	35	0.3	390	M8-M16
<b>PA2-20-0</b>	26.7	1.051	12	15	35	1 <sup>3</sup> / <sub>8</sub>	18	35	0.4	390	M8-M16
<b>PA2-25-0</b>	33.4	1.315	12	15	40	1 <sup>9</sup> / <sub>16</sub>	18	35	0.4	390	M8-M16
<b>PA2-32-0</b>	42.2	1.661	12	15	45	1 <sup>3</sup> / <sub>4</sub>	18	35	0.4	390	M8-M16
<b>PA2-40-0</b>	48.3	1.902	12	15	45	1 <sup>3</sup> / <sub>4</sub>	18	35	0.5	390	M8-M16
<b>PA2-50-0</b>	60.3	2.375	12	15	55	2 <sup>3</sup> / <sub>16</sub>	18	35	0.5	390	M8-M16
PA2-50-1	60.3	2.375	16	17	60	2 <sup>3</sup> / <sub>8</sub>	24	40	0.9	740	M8-M16
PA2-50-2	60.3	2.375	16	17	60	2 <sup>3</sup> / <sub>8</sub>	24	40	0.9	740	M8-M16
PA2-65-0	73.0	2.875	12	15	65	2 <sup>9</sup> / <sub>16</sub>	18	35	0.6	370	M8-M16
PA2-65-1	73.0	2.875	16	17	70	2 <sup>3</sup> / <sub>4</sub>	24	40	1.0	590	M8-M16
<b>PA2-65-2</b>	73.0	2.875	16	17	70	2 <sup>3</sup> / <sub>4</sub>	24	40	1.0	590	M8-M16
PA2-80-0	88.9	3.500	12	15	70	2 <sup>3</sup> / <sub>4</sub>	18	35	0.7	340	M8-M16
PA2-80-1	88.9	3.500	16	17	75	2 <sup>15</sup> / <sub>16</sub>	24	40	1.0	530	M8-M16
<b>PA2-80-2</b>	88.9	3.500	16	17	75	2 <sup>15</sup> / <sub>16</sub>	24	40	1.0	530	M8-M16
PA2-90-0	101.6	4.000	12	15	75	2 <sup>15</sup> / <sub>16</sub>	18	35	0.7	320	M8-M16
PA2-90-1	101.6	4.000	16	17	80	3 <sup>1</sup> / <sub>8</sub>	24	40	1.1	500	M8-M16
PA2-90-2	101.6	4.000	16	17	85	3 <sup>3</sup> / <sub>8</sub>	24	40	1.4	800	M8-M16
<b>PA2-100-0</b>	114.3	4.500	12	15	85	3 <sup>3</sup> / <sub>8</sub>	18	35	0.8	270	M8-M16
PA2-100-1	114.3	4.500	16	17	90	3 <sup>9</sup> / <sub>16</sub>	24	40	1.2	420	M8-M16
<b>PA2-100-2</b>	114.3	4.500	16	17	95	3 <sup>3</sup> / <sub>4</sub>	24	40	1.6	740	M8-M16
PA2-100-3	114.3	4.500	20	20	105	4 <sup>1</sup> / <sub>8</sub>	30	60	3.8	1320	M12-M24
PA2-125-0	141.3	5.563	12	15	95	3 <sup>3</sup> / <sub>4</sub>	18	35	0.9	260	M8-M16
PA2-125-1	141.3	5.563	16	17	105	4 <sup>1</sup> / <sub>8</sub>	24	40	1.7	680	M8-M16
PA2-125-2	141.3	5.563	16	17	105	4 <sup>1</sup> / <sub>8</sub>	24	40	1.7	680	M8-M16
PA2-125-3	141.3	5.563	20	20	120	4 <sup>3</sup> / <sub>4</sub>	30	60	4.3	1320	M12-M24
<b>PA2-150-0</b>	168.3	6.625	12	15	115	4 <sup>1</sup> / <sub>2</sub>	18	40	1.4	340	M8-M16
PA2-150-1	168.3	6.625	16	17	120	4 <sup>3</sup> / <sub>4</sub>	24	40	2.0	590	M8-M16
<b>PA2-150-2</b>	168.3	6.625	16	17	120	4 <sup>3</sup> / <sub>4</sub>	24	40	2.0	590	M8-M16
PA2-150-3	168.3	6.625	20	20	135	5 <sup>5</sup> / <sub>16</sub>	30	60	4.8	1320	M12-M24
PA2-150-4	168.3	6.625	24	25	135	5 <sup>5</sup> / <sub>16</sub>	36	60	5.1	1800	M12-M36

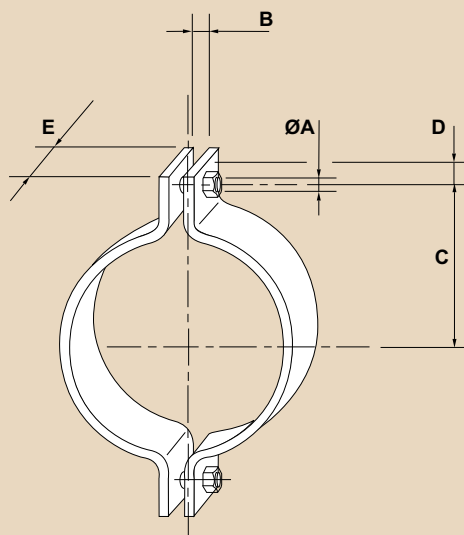
# PA2 PIPE CLAMP FOR UNLAGGED PIPE TWO BOLT TYPE



Material: Carbon Steel

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity at 350C	Compatible with Rod Sizes
	mm	in			mm	in					
PA2-175-0	193.7	7.625	12	15	125	4 <sup>15</sup> / <sub>16</sub>	18	40	1.5	330	M8-M16
PA2-175-1	193.7	7.625	16	17	135	5 <sup>9</sup> / <sub>16</sub>	24	40	2.2	510	M8-M16
PA2-175-2	193.7	7.625	16	17	140	5 <sup>1</sup> / <sub>2</sub>	24	45	3.1	800	M8-M16
PA2-175-3	193.7	7.625	20	20	145	5 <sup>11</sup> / <sub>16</sub>	30	60	5.2	1320	M12-M24
PA2-175-4	193.7	7.625	24	25	150	5 <sup>7</sup> / <sub>8</sub>	36	60	5.6	1590	M12-M36
PA2-175-5	193.7	7.625	30	29	170	6 <sup>11</sup> / <sub>16</sub>	45	90	15.1	3050	M12-M36
PA2-200-0	219.1	8.625	12	15	140	5 <sup>1</sup> / <sub>2</sub>	18	40	1.7	290	M8-M16
<b>PA2-200-1</b>	219.1	8.625	16	17	150	5 <sup>7</sup> / <sub>8</sub>	24	40	2.4	460	M8-M16
<b>PA2-200-2</b>	219.1	8.625	16	17	155	6 <sup>1</sup> / <sub>8</sub>	24	45	3.4	790	M8-M16
PA2-200-3	219.1	8.625	20	20	160	6 <sup>9</sup> / <sub>16</sub>	30	60	5.7	1320	M12-M24
PA2-200-4	219.1	8.625	24	25	180	7 <sup>1</sup> / <sub>16</sub>	36	65	11.1	1830	M12-M36
PA2-200-5	219.1	8.625	30	29	185	7 <sup>9</sup> / <sub>16</sub>	45	90	16.3	3050	M12-M36
PA2-200-6	219.1	8.625	36	41	185	7 <sup>9</sup> / <sub>16</sub>	54	90	17.5	3810	M20-M64
PA2-225-0	244.5	9.625	12	15	150	5 <sup>7</sup> / <sub>8</sub>	18	40	1.8	290	M8-M16
PA2-225-1	244.5	9.625	16	17	160	6 <sup>5</sup> / <sub>16</sub>	24	40	2.6	440	M8-M16
PA2-225-2	244.5	9.625	16	17	165	6 <sup>1</sup> / <sub>2</sub>	24	45	3.6	760	M8-M16
PA2-225-3	244.5	9.625	20	20	175	6 <sup>7</sup> / <sub>8</sub>	30	60	6.2	1320	M12-M24
PA2-225-4	244.5	9.625	24	25	190	7 <sup>1</sup> / <sub>2</sub>	36	65	11.7	1830	M12-M36
PA2-225-5	244.5	9.625	30	29	195	7 <sup>11</sup> / <sub>16</sub>	45	90	17.2	3050	M12-M36
PA2-225-6	244.5	9.625	36	41	200	7 <sup>7</sup> / <sub>8</sub>	54	90	18.7	3810	M20-M64
PA2-250-0	273.0	10.75	12	15	170	6 <sup>11</sup> / <sub>16</sub>	18	40	2.0	240	M8-M16
<b>PA2-250-1</b>	273.0	10.75	16	17	175	6 <sup>7</sup> / <sub>8</sub>	24	40	2.8	410	M8-M16
PA2-250-2	273.0	10.75	16	17	180	7 <sup>1</sup> / <sub>16</sub>	24	45	4.0	710	M8-M16
<b>PA2-250-3</b>	273.0	10.75	20	20	190	7 <sup>1</sup> / <sub>2</sub>	30	60	6.7	1240	M12-M24
PA2-250-4	273.0	10.75	24	25	205	8 <sup>1</sup> / <sub>16</sub>	36	65	12.7	1830	M12-M36
PA2-250-5	273.0	10.75	30	29	215	8 <sup>7</sup> / <sub>16</sub>	45	90	18.8	3050	M12-M36
PA2-250-6	273.0	10.75	36	41	215	8 <sup>7</sup> / <sub>16</sub>	54	90	20.0	3810	M20-M64
PA2-250-7	273.0	10.75	42	45	220	8 <sup>11</sup> / <sub>16</sub>	63	110	26.0	5470	M30-M64

# PA2 PIPE CLAMP FOR UNLAGGED PIPE TWO BOLT TYPE

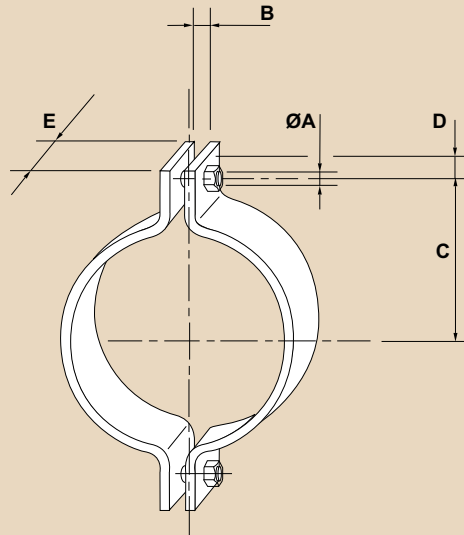


Material: Carbon Steel

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity at 350C	Compatible with Rod Sizes
	mm	in			mm	in					
PA2-300-1	323.9	12.75	16	17	200	7 <sup>7</sup> / <sub>8</sub>	24	40	3.2	380	M8-M16
<b>PA2-300-2</b>	323.9	12.75	16	17	205	8 <sup>1</sup> / <sub>16</sub>	24	45	4.5	650	M8-M16
PA2-300-3	323.9	12.75	20	20	215	8 <sup>7</sup> / <sub>16</sub>	30	60	7.6	1130	M12-M24
<b>PA2-300-4</b>	323.9	12.75	24	25	235	9 <sup>1</sup> / <sub>4</sub>	36	65	14.4	1830	M12-M36
PA2-300-5	323.9	12.75	30	29	240	9 <sup>7</sup> / <sub>16</sub>	45	90	21.0	3050	M12-M36
PA2-300-6	323.9	12.75	36	41	245	9 <sup>9</sup> / <sub>8</sub>	54	90	22.5	3810	M20-M64
PA2-300-7	323.9	12.75	42	45	260	10 <sup>1</sup> / <sub>4</sub>	63	110	36.1	5470	M30-M64
PA2-300-8	323.9	12.75	48	52	265	10 <sup>7</sup> / <sub>16</sub>	72	130	44.9	8760	M42-M80
PA2-350-1	355.6	14.00	16	17	225	8 <sup>7</sup> / <sub>8</sub>	24	45	4.9	570	M8-M16
PA2-350-2	355.6	14.00	16	17	225	8 <sup>7</sup> / <sub>8</sub>	24	45	4.9	570	M8-M16
PA2-350-3	355.6	14.00	20	20	230	9 <sup>1</sup> / <sub>16</sub>	30	60	8.1	1080	M12-M24
PA2-350-4	355.6	14.00	24	25	250	9 <sup>13</sup> / <sub>16</sub>	36	65	15.4	1830	M12-M36
PA2-350-5	355.6	14.00	30	29	255	10 <sup>1</sup> / <sub>16</sub>	45	90	22.3	3050	M12-M36
PA2-350-6	355.6	14.00	36	41	260	10 <sup>1</sup> / <sub>4</sub>	54	90	23.8	3810	M20-M64
PA2-350-7	355.6	14.00	42	45	275	10 <sup>13</sup> / <sub>16</sub>	63	110	38.1	5470	M30-M64
PA2-350-8	355.6	14.00	48	52	280	11	72	130	47.2	8250	M42-M80
PA2-350-9	355.6	14.00	56	58	295	11 <sup>5</sup> / <sub>8</sub>	84	150	69.5	10000	M42-M80
PA2-400-1	406.4	16.00	16	17	250	9 <sup>13</sup> / <sub>16</sub>	24	45	5.5	530	M8-M16
PA2-400-2	406.4	16.00	16	17	255	10 <sup>1</sup> / <sub>16</sub>	24	60	8.7	800	M8-M16
PA2-400-3	406.4	16.00	20	20	265	10 <sup>7</sup> / <sub>16</sub>	30	55	10.5	1320	M12-M24
PA2-400-4	406.4	16.00	24	25	275	10 <sup>13</sup> / <sub>16</sub>	36	65	17.0	1830	M12-M36
PA2-400-5	406.4	16.00	30	29	285	11 <sup>1</sup> / <sub>4</sub>	45	90	24.8	3050	M12-M36
PA2-400-6	406.4	16.00	36	41	285	11 <sup>1</sup> / <sub>4</sub>	54	110	31.3	3810	M20-M64
PA2-400-7	406.4	16.00	42	45	300	11 <sup>13</sup> / <sub>16</sub>	63	110	41.4	5470	M30-M64
PA2-400-8	406.4	16.00	48	52	305	12	72	130	51.1	7530	M42-M80
PA2-400-9	406.4	16.00	56	58	325	12 <sup>13</sup> / <sub>16</sub>	84	150	75.5	10000	M42-M80
PA2-400-10	406.4	16.00	64	65	345	13 <sup>9</sup> / <sub>16</sub>	96	180	125.9	20510	M42-M80



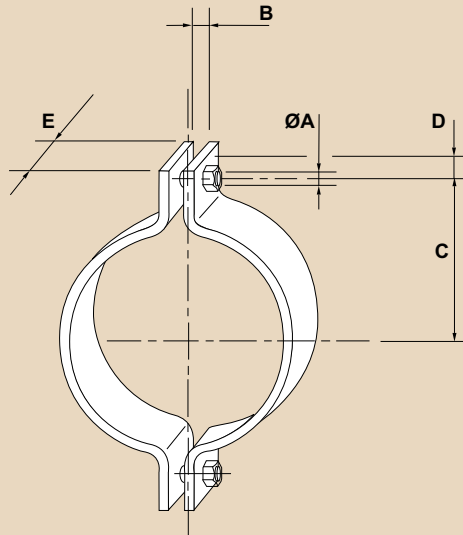
# PA2 PIPE CLAMP FOR UNLAGGED PIPE TWO BOLT TYPE



Material: Carbon Steel

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity at 350C	Compatible with Rod Sizes
	mm	in			mm	in					
PA2-450-2	457.2	18.00	16	17	280	11	24	60	9.6	800	M8-M16
PA2-450-3	457.2	18.00	20	20	290	11 <sup>7/16</sup>	30	55	11.5	1260	M12-M24
PA2-450-4	457.2	18.00	24	25	305	12	36	65	18.8	1830	M12-M36
PA2-450-5	457.2	18.00	30	29	310	12 <sup>3/16</sup>	45	90	27.0	3050	M12-M36
PA2-450-6	457.2	18.00	36	41	315	12 <sup>3/8</sup>	54	110	34.3	3810	M20-M64
PA2-450-7	457.2	18.00	42	45	330	13	63	110	45.2	5470	M30-M64
PA2-450-8	457.2	18.00	48	52	335	13 <sup>3/16</sup>	72	150	63.4	7780	M42-M80
PA2-450-9	457.2	18.00	56	58	350	13 <sup>3/4</sup>	84	150	81.0	10000	M42-M80
PA2-450-10	457.2	18.00	64	65	375	14 <sup>3/4</sup>	96	180	135.7	20510	M42-M80
PA2-450-11	457.2	18.00	72	69	385	15 <sup>3/16</sup>	108	180	144.6	21500	M42-M80
PA2-500-2	508	20.00	16	17	305	12	24	60	10.5	800	M8-M16
PA2-500-3	508	20.00	20	20	315	12 <sup>3/8</sup>	30	55	12.5	1200	M12-M24
PA2-500-4	508	20.00	24	25	330	13	36	65	20.4	1830	M12-M36
PA2-500-5	508	20.00	30	29	335	13 <sup>3/16</sup>	45	90	29.2	3050	M12-M36
PA2-500-6	508	20.00	36	41	340	13 <sup>3/8</sup>	54	110	37.0	3680	M20-M64
PA2-500-7	508	20.00	42	45	355	14	63	110	48.6	5470	M30-M64
PA2-500-8	508	20.00	48	52	370	14 <sup>9/16</sup>	72	150	81.7	10420	M42-M80
PA2-500-9	508	20.00	56	58	380	14 <sup>15/16</sup>	84	150	87.2	9870	M42-M80
PA2-500-10	508	20.00	64	65	405	15 <sup>15/16</sup>	96	180	145.4	20380	M42-M80
PA2-500-11	508	20.00	72	69	410	16 <sup>1/8</sup>	108	180	153.2	20020	M42-M80
PA2-500-12	508	20.00	80	77	420	16 <sup>9/16</sup>	120	220	194.9	23700	M72-M80
PA2-550-3	558.8	22.00	20	20	340	13 <sup>3/8</sup>	30	55	13.5	1130	M12-M24
PA2-550-4	558.8	22.00	24	25	355	14	36	65	22.0	1830	M12-M36
PA2-550-5	558.8	22.00	30	29	360	14 <sup>3/16</sup>	45	90	31.4	2920	M12-M36
PA2-550-6	558.8	22.00	36	41	375	14 <sup>3/4</sup>	54	110	49.7	3810	M20-M64
PA2-550-7	558.8	22.00	42	45	385	15 <sup>3/16</sup>	63	130	61.3	5470	M30-M64
PA2-550-8	558.8	22.00	48	52	400	15 <sup>3/4</sup>	72	150	87.9	9480	M42-M80
PA2-550-9	558.8	22.00	56	58	425	16 <sup>3/4</sup>	84	150	123.9	10000	M42-M80
PA2-550-10	558.8	22.00	64	65	430	16 <sup>15/16</sup>	96	180	154.0	19130	M42-M80
PA2-550-11	558.8	22.00	72	69	440	17 <sup>5/16</sup>	108	180	162.9	18340	M42-M80
PA2-550-12	558.8	22.00	80	77	465	18 <sup>5/16</sup>	120	200	235.6	31070	M72-M80
PA2-550-13	558.8	22.00	80	85	460	18 <sup>1/8</sup>	120	200	233.9	30830	M72-M80

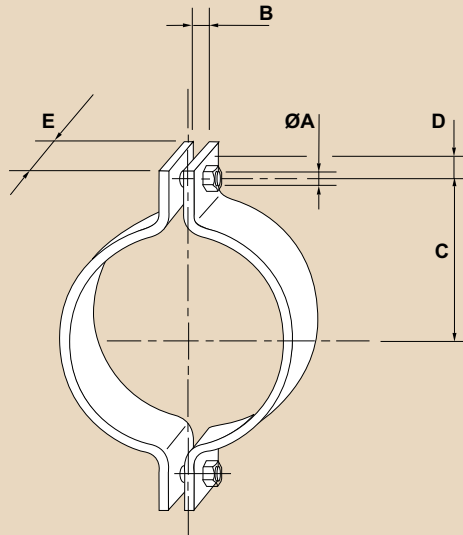
# PA2 PIPE CLAMP FOR UNLAGGED PIPE TWO BOLT TYPE



Material: Carbon Steel

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity at 350C	Compatible with Rod Sizes
	mm	in			mm	in					
PA2-600-3	609.6	24.00	20	20	370	14 <sup>9</sup> / <sub>16</sub>	30	55	14.7	1010	M12-M24
PA2-600-4	609.6	24.00	24	25	385	15 <sup>3</sup> / <sub>16</sub>	36	65	23.8	1830	M12-M36
PA2-600-5	609.6	24.00	30	29	390	15 <sup>3</sup> / <sub>8</sub>	45	90	34.0	2660	M12-M36
PA2-600-6	609.6	24.00	36	41	405	15 <sup>15</sup> / <sub>16</sub>	54	110	53.5	3810	M20-M64
PA2-600-7	609.6	24.00	42	45	410	16 <sup>1</sup> / <sub>8</sub>	63	130	65.3	5470	M30-M64
PA2-600-8	609.6	24.00	48	52	425	16 <sup>3</sup> / <sub>4</sub>	72	150	93.4	9000	M42-M80
PA2-600-9	609.6	24.00	56	58	450	17 <sup>11</sup> / <sub>16</sub>	84	150	131.2	10000	M42-M80
PA2-600-10	609.6	24.00	64	65	460	18 <sup>1</sup> / <sub>8</sub>	96	180	163.8	17670	M42-M80
PA2-600-11	609.6	24.00	72	69	465	18 <sup>5</sup> / <sub>16</sub>	108	200	189.0	19260	M42-M80
PA2-600-12	609.6	24.00	80	77	490	19 <sup>5</sup> / <sub>16</sub>	120	200	247.6	29340	M72-M80
PA2-600-13	609.6	24.00	80	85	490	19 <sup>5</sup> / <sub>16</sub>	120	200	247.4	29610	M72-M80
PA2-650-3	660.4	26.00	20	20	405	15 <sup>15</sup> / <sub>16</sub>	30	65	24.8	1320	M12-M24
PA2-650-4	660.4	26.00	24	25	410	16 <sup>1</sup> / <sub>8</sub>	36	65	25.4	1830	M12-M36
PA2-650-5	660.4	26.00	30	29	415	16 <sup>5</sup> / <sub>16</sub>	45	90	36.2	2530	M12-M36
PA2-650-6	660.4	26.00	36	41	430	16 <sup>15</sup> / <sub>16</sub>	54	110	56.9	3810	M20-M64
PA2-650-7	660.4	26.00	42	45	435	17 <sup>1</sup> / <sub>8</sub>	63	150	79.5	5470	M30-M64
PA2-650-8	660.4	26.00	48	52	450	17 <sup>11</sup> / <sub>16</sub>	72	150	98.8	8560	M42-M80
PA2-650-9	660.4	26.00	56	58	480	18 <sup>7</sup> / <sub>8</sub>	84	150	139.4	10000	M42-M80
PA2-650-10	660.4	26.00	64	65	485	19 <sup>1</sup> / <sub>8</sub>	96	180	172.6	16770	M42-M80
PA2-650-11	660.4	26.00	72	69	490	19 <sup>5</sup> / <sub>16</sub>	108	200	198.7	18270	M42-M80
PA2-650-12	660.4	26.00	80	77	520	20 <sup>1</sup> / <sub>2</sub>	120	200	261.1	27260	M72-M80
PA2-650-13	660.4	26.00	80	85	515	20 <sup>1</sup> / <sub>4</sub>	120	220	283.0	30830	M72-M80
PA2-700-3	711.2	28.00	20	20	430	16 <sup>15</sup> / <sub>16</sub>	30	65	26.4	1320	M12-M24
PA2-700-4	711.2	28.00	24	25	435	17 <sup>1</sup> / <sub>8</sub>	36	65	27.0	1830	M12-M36
PA2-700-5	711.2	28.00	30	29	440	17 <sup>5</sup> / <sub>16</sub>	45	90	38.4	2420	M12-M36
PA2-700-6	711.2	28.00	36	41	455	17 <sup>15</sup> / <sub>16</sub>	54	110	60.3	3810	M20-M64
PA2-700-7	711.2	28.00	42	45	460	18 <sup>1</sup> / <sub>8</sub>	63	150	84.0	5470	M30-M64
PA2-700-8	711.2	28.00	48	52	475	18 <sup>11</sup> / <sub>16</sub>	72	150	104.3	8170	M42-M80
PA2-700-9	711.2	28.00	56	58	505	19 <sup>7</sup> / <sub>8</sub>	84	150	146.5	10000	M42-M80
PA2-700-10	711.2	28.00	64	65	510	20 <sup>1</sup> / <sub>16</sub>	96	180	181.2	15990	M42-M80
PA2-700-11	711.2	28.00	72	69	520	20 <sup>1</sup> / <sub>2</sub>	108	220	229.0	18700	M42-M80
PA2-700-12	711.2	28.00	80	77	545	21 <sup>7</sup> / <sub>16</sub>	120	200	273.0	25950	M72-M80
PA2-700-13	711.2	28.00	80	85	545	21 <sup>7</sup> / <sub>16</sub>	120	220	297.9	28790	M72-M80

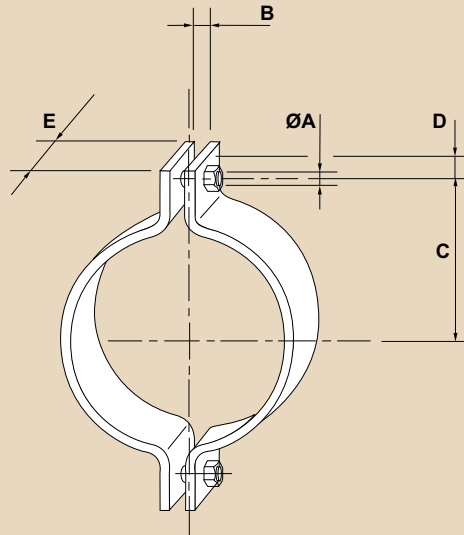
# PA2 PIPE CLAMP FOR UNLAGGED PIPE TWO BOLT TYPE



Material: Carbon Steel

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity at 350C	Compatible with Rod Sizes
	mm	in			mm	in					
PA2-750-4	762.0	30.00	24	25	460	18 <sup>1</sup> / <sub>8</sub>	36	65	28.6	1780	M12-M36
PA2-750-5	762.0	30.00	30	29	465	18 <sup>5</sup> / <sub>16</sub>	45	90	40.6	2350	M12-M36
PA2-750-6	762.0	30.00	36	41	480	18 <sup>7</sup> / <sub>8</sub>	54	110	63.7	3810	M20-M64
PA2-750-7	762.0	30.00	42	45	485	19 <sup>1</sup> / <sub>8</sub>	63	150	88.7	5470	M30-M64
PA2-750-8	762.0	30.00	48	52	505	19 <sup>7</sup> / <sub>8</sub>	72	150	110.6	7610	M42-M80
PA2-750-9	762.0	30.00	56	58	530	20 <sup>7</sup> / <sub>8</sub>	84	150	153.9	10000	M42-M80
PA2-750-10	762.0	30.00	64	65	540	21 <sup>1</sup> / <sub>4</sub>	96	180	191.1	14970	M42-M80
PA2-750-11	762.0	30.00	72	69	565	22 <sup>1</sup> / <sub>4</sub>	108	200	275.1	25190	M42-M80
PA2-750-12	762.0	30.00	80	77	570	22 <sup>7</sup> / <sub>16</sub>	120	200	285.1	24860	M72-M80
PA2-750-13	762.0	30.00	80	85	570	22 <sup>7</sup> / <sub>16</sub>	120	240	337.6	30070	M72-M80
PA2-800-4	812.8	32.00	24	25	485	19 <sup>1</sup> / <sub>8</sub>	36	65	30.2	1730	M12-M36
PA2-800-5	812.8	32.00	30	29	490	19 <sup>5</sup> / <sub>16</sub>	45	110	52.1	2780	M12-M36
PA2-800-6	812.8	32.00	36	41	510	20 <sup>1</sup> / <sub>16</sub>	54	110	67.5	3810	M20-M64
PA2-800-7	812.8	32.00	42	45	525	20 <sup>11</sup> / <sub>16</sub>	63	150	113.0	5470	M30-M64
PA2-800-8	812.8	32.00	48	52	550	21 <sup>5</sup> / <sub>8</sub>	72	150	155.9	10910	M42-M80
PA2-800-9	812.8	32.00	56	58	560	22 <sup>1</sup> / <sub>16</sub>	84	150	162.3	10000	M42-M80
PA2-800-10	812.8	32.00	64	65	565	22 <sup>1</sup> / <sub>4</sub>	96	180	199.9	14410	M42-M80
PA2-800-11	812.8	32.00	72	69	590	23 <sup>1</sup> / <sub>4</sub>	108	200	287.4	24240	M42-M80
PA2-800-12	812.8	32.00	80	77	600	23 <sup>5</sup> / <sub>8</sub>	120	200	299.0	23420	M72-M80
PA2-800-13	812.8	32.00	80	85	600	23 <sup>5</sup> / <sub>8</sub>	120	240	354.2	28320	M72-M80
PA2-850-4	863.6	34.00	24	25	510	20 <sup>1</sup> / <sub>16</sub>	36	65	31.8	1670	M12-M36
PA2-850-5	863.6	34.00	30	29	515	21 <sup>1</sup> / <sub>4</sub>	45	110	54.8	2690	M12-M36
PA2-850-6	863.6	34.00	36	41	535	21 <sup>1</sup> / <sub>16</sub>	54	110	70.9	3810	M20-M64
PA2-850-7	863.6	34.00	42	45	550	21 <sup>5</sup> / <sub>8</sub>	63	150	118.5	5470	M30-M64
PA2-850-8	863.6	34.00	48	52	575	22 <sup>5</sup> / <sub>8</sub>	72	150	163.3	10910	M42-M80
PA2-850-9	863.6	34.00	56	58	585	23 <sup>1</sup> / <sub>16</sub>	84	150	169.5	10000	M42-M80
PA2-850-10	863.6	34.00	64	65	590	23 <sup>1</sup> / <sub>4</sub>	96	180	208.7	13870	M42-M80
PA2-850-11	863.6	34.00	72	69	620	24 <sup>7</sup> / <sub>16</sub>	108	200	300.9	22830	M42-M80
PA2-850-12	863.6	34.00	80	77	625	24 <sup>5</sup> / <sub>8</sub>	120	220	340.0	24770	M72-M80
PA2-850-13	863.6	34.00	80	85	625	24 <sup>5</sup> / <sub>8</sub>	120	260	397.4	29490	M72-M80

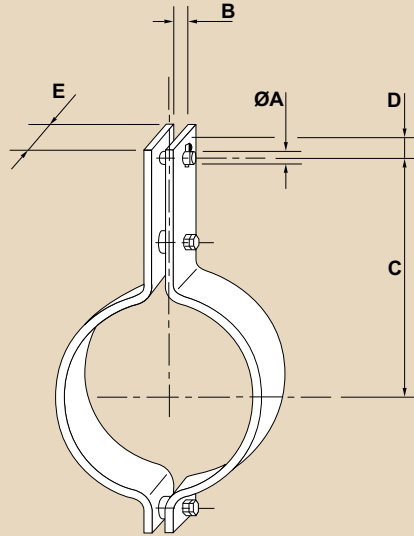
# PA2 PIPE CLAMP FOR UNLAGGED PIPE TWO BOLT TYPE



Material: Carbon Steel

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity at 350C	Compatible with Rod Sizes
	mm	in			mm	in					
PA2-900-4	914.4	36.00	24	25	535	21 <sup>1</sup> / <sub>16</sub>	36	65	33.5	1630	M12-M36
PA2-900-5	914.4	36.00	30	29	545	21 <sup>7</sup> / <sub>16</sub>	45	110	57.9	2490	M12-M36
PA2-900-6	914.4	36.00	36	41	560	22 <sup>1</sup> / <sub>16</sub>	54	110	74.3	3760	M20-M64
PA2-900-7	914.4	36.00	42	45	575	22 <sup>5</sup> / <sub>8</sub>	63	150	124.1	5470	M30-M64
PA2-900-8	914.4	36.00	48	52	605	23 <sup>13</sup> / <sub>16</sub>	72	150	171.6	10910	M42-M80
PA2-900-9	914.4	36.00	56	58	610	24	84	150	176.9	10000	M42-M80
PA2-900-10	914.4	36.00	64	65	620	24 <sup>7</sup> / <sub>16</sub>	96	200	241.9	14560	M42-M80
PA2-900-11	914.4	36.00	72	69	645	25 <sup>3</sup> / <sub>8</sub>	108	200	313.2	22080	M42-M80
PA2-900-12	914.4	36.00	80	77	655	25 <sup>13</sup> / <sub>16</sub>	120	220	355.2	23470	M72-M80
PA2-900-13	914.4	36.00	80	85	650	25 <sup>9</sup> / <sub>16</sub>	120	260	413.4	28500	M72-M80
PA2-950-4	965.2	38.00	24	25	565	22 <sup>1</sup> / <sub>4</sub>	36	90	48.6	1830	M12-M36
PA2-950-5	965.2	38.00	30	29	570	22 <sup>7</sup> / <sub>16</sub>	45	110	60.7	2440	M12-M36
PA2-950-6	965.2	38.00	36	41	585	23 <sup>1</sup> / <sub>16</sub>	54	110	77.7	3660	M20-M64
PA2-950-7	965.2	38.00	42	45	605	23 <sup>13</sup> / <sub>16</sub>	63	150	130.4	5470	M30-M64
PA2-950-8	965.2	38.00	48	52	630	24 <sup>13</sup> / <sub>16</sub>	72	150	179.0	10910	M42-M80
PA2-950-9	965.2	38.00	56	58	635	25	84	150	184.3	10000	M42-M80
PA2-950-10	965.2	38.00	64	65	645	25 <sup>3</sup> / <sub>8</sub>	96	200	251.7	14130	M42-M80
PA2-950-11	965.2	38.00	72	69	675	26 <sup>9</sup> / <sub>16</sub>	108	200	327.0	20950	M42-M80
PA2-950-12	965.2	38.00	80	77	680	26 <sup>3</sup> / <sub>4</sub>	120	240	400.3	24800	M72-M80
PA2-950-13	965.2	38.00	80	85	680	26 <sup>3</sup> / <sub>4</sub>	120	280	462.9	29130	M72-M80
PA2-1000-4	1016.0	40.00	24	25	590	23 <sup>1</sup> / <sub>4</sub>	36	90	50.8	1810	M12-M36
PA2-1000-5	1016.0	40.00	30	29	595	23 <sup>7</sup> / <sub>16</sub>	45	110	63.4	2370	M12-M36
PA2-1000-6	1016.0	40.00	36	41	610	24	54	130	95.5	3810	M20-M64
PA2-1000-7	1016.0	40.00	42	45	630	24 <sup>13</sup> / <sub>16</sub>	63	150	135.9	5470	M30-M64
PA2-1000-8	1016.0	40.00	48	52	655	25 <sup>13</sup> / <sub>16</sub>	72	150	186.3	10910	M42-M80
PA2-1000-9	1016.0	40.00	56	58	665	26 <sup>3</sup> / <sub>16</sub>	84	150	192.6	10000	M42-M80
PA2-1000-10	1016.0	40.00	64	65	670	26 <sup>3</sup> / <sub>8</sub>	96	200	261.5	13690	M42-M80
PA2-1000-11	1016.0	40.00	72	69	700	27 <sup>9</sup> / <sub>16</sub>	108	200	339.1	20290	M42-M80
PA2-1000-12	1016.0	40.00	80	77	705	27 <sup>3</sup> / <sub>4</sub>	120	240	414.8	24010	M72-M80
PA2-1000-13	1016.0	40.00	80	85	705	27 <sup>3</sup> / <sub>4</sub>	120	280	479.9	28200	M72-M80

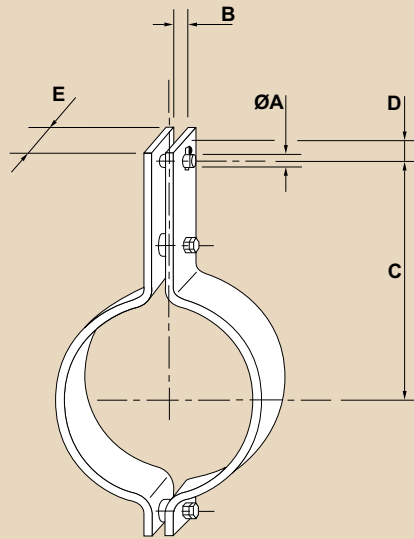
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes
	mm	in			mm	in				mm	in	350	400	490	530	560	
<b>PA3-15-0-400</b>	21.3	0.839	12	15	100	3 <sup>15</sup> / <sub>16</sub>	18	35	0.6	390	390						M8-M16
PA3-15-0-490	21.3	0.839	12	15	110	4 <sup>5</sup> / <sub>16</sub>	18	40	0.8	390	390	390	390	390	390	340	M8-M16
PA3-15-0-530	21.3	0.839	12	15	110	4 <sup>5</sup> / <sub>16</sub>	18	40	0.8	390	390	390	390	390	390	340	M8-M16
PA3-15-0-560	21.3	0.839	12	15	110	4 <sup>5</sup> / <sub>16</sub>	18	40	0.8	390	390	390	390	390	390	390	M8-M16
PA3-15-0-600	21.3	0.839	12	15	110	4 <sup>5</sup> / <sub>16</sub>	18	40	0.8	390	390	390	390	390	390	390	M8-M16
<b>PA3-20-0-400</b>	26.7	1.051	12	15	100	3 <sup>15</sup> / <sub>16</sub>	18	35	0.6	390	390						M8-M16
PA3-20-0-490	26.7	1.051	12	15	110	4 <sup>5</sup> / <sub>16</sub>	18	40	0.8	390	390	390	390	390	390	340	M8-M16
PA3-20-0-530	26.7	1.051	12	15	110	4 <sup>5</sup> / <sub>16</sub>	18	40	0.8	390	390	390	390	390	390	340	M8-M16
PA3-20-0-560	26.7	1.051	12	15	110	4 <sup>5</sup> / <sub>16</sub>	18	40	0.8	390	390	390	390	390	390	390	M8-M16
PA3-20-0-600	26.7	1.051	12	15	110	4 <sup>5</sup> / <sub>16</sub>	18	40	0.8	390	390	390	390	390	390	390	M8-M16
<b>PA3-25-0-400</b>	33.4	1.315	12	15	100	3 <sup>15</sup> / <sub>16</sub>	18	35	0.6	390	390						M8-M16
PA3-25-0-490	33.4	1.315	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	40	0.9	390	390	390	390	390	380	300	M8-M16
PA3-25-0-530	33.4	1.315	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	40	0.9	390	390	390	390	390	380	300	M8-M16
PA3-25-0-560	33.4	1.315	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	40	0.9	390	390	390	390	390	390	390	M8-M16
PA3-25-0-600	33.4	1.315	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	40	0.9	390	390	390	390	390	390	390	M8-M16
<b>PA3-32-0-400</b>	42.2	1.661	12	15	110	4 <sup>5</sup> / <sub>16</sub>	18	35	0.6	390	390						M8-M16
PA3-32-0-490	42.2	1.661	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	40	0.9	390	390	390	390	390	300	240	M8-M16
PA3-32-0-530	42.2	1.661	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	40	0.9	390	390	390	390	390	300	240	M8-M16
PA3-32-0-560	42.2	1.661	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	40	0.9	390	390	390	390	390	390	320	M8-M16
PA3-32-0-600	42.2	1.661	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	40	0.9	390	390	390	390	390	390	320	M8-M16
<b>PA3-40-0-400</b>	48.3	1.902	12	15	110	4 <sup>5</sup> / <sub>16</sub>	18	35	0.7	390	390						M8-M16
PA3-40-0-490	48.3	1.902	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	40	0.9	390	390	390	390	350	250	210	M8-M16
PA3-40-0-530	48.3	1.902	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	40	0.9	390	390	390	390	350	250	210	M8-M16
PA3-40-0-560	48.3	1.902	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	40	0.9	390	390	390	390	390	360	270	M8-M16
PA3-40-0-600	48.3	1.902	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	40	0.9	390	390	390	390	390	360	270	M8-M16
<b>PA3-50-0-400</b>	60.3	2.375	12	15	120	4 <sup>3</sup> / <sub>4</sub>	18	35	0.7	390	390						M8-M16
PA3-50-1-400	60.3	2.375	16	17	120	4 <sup>3</sup> / <sub>4</sub>	24	40	1.0	800	740						M8-M16
PA3-50-2-400	60.3	2.375	16	17	120	4 <sup>3</sup> / <sub>4</sub>	24	40	1.0	800	740						M8-M16
PA3-50-0-490	60.3	2.375	12	15	130	5 <sup>1</sup> / <sub>8</sub>	18	40	1.0	390	390	390	390	300	220	170	M8-M16
PA3-50-1-490	60.3	2.375	16	17	130	5 <sup>1</sup> / <sub>8</sub>	24	40	1.0	800	800	730	510	310	220	180	M8-M16
PA3-50-2-490	60.3	2.375	16	17	130	5 <sup>1</sup> / <sub>8</sub>	24	40	1.0	800	800	730	510	310	220	180	M8-M16
PA3-50-0-530	60.3	2.375	12	15	130	5 <sup>1</sup> / <sub>8</sub>	18	40	1.0	390	390	390	390	300	220	170	M8-M16
PA3-50-1-530	60.3	2.375	16	17	130	5 <sup>1</sup> / <sub>8</sub>	24	40	1.0	800	800	730	510	310	220	180	M8-M16
PA3-50-2-530	60.3	2.375	16	17	130	5 <sup>1</sup> / <sub>8</sub>	24	50	2.1	800	800	800	800	800	800	640	M8-M16
PA3-50-0-560	60.3	2.375	12	15	130	5 <sup>1</sup> / <sub>8</sub>	18	40	1.0	390	390	390	390	380	300	230	M8-M16
PA3-50-1-560	60.3	2.375	16	17	130	5 <sup>1</sup> / <sub>8</sub>	24	40	1.0	800	800	740	550	390	310	240	M8-M16
PA3-50-2-560	60.3	2.375	16	17	130	5 <sup>1</sup> / <sub>8</sub>	24	50	2.1	800	800	800	800	800	800	800	M8-M16
PA3-50-0-600	60.3	2.375	12	15	130	5 <sup>1</sup> / <sub>8</sub>	18	40	1.0	390	390	390	390	380	300	230	M8-M16
PA3-50-1-600	60.3	2.375	16	17	130	5 <sup>1</sup> / <sub>8</sub>	24	50	2.1	800	800	800	800	800	800	800	M8-M16
PA3-50-2-600	60.3	2.375	16	17	130	5 <sup>1</sup> / <sub>8</sub>	24	50	2.1	800	800	800	800	800	800	800	M8-M16

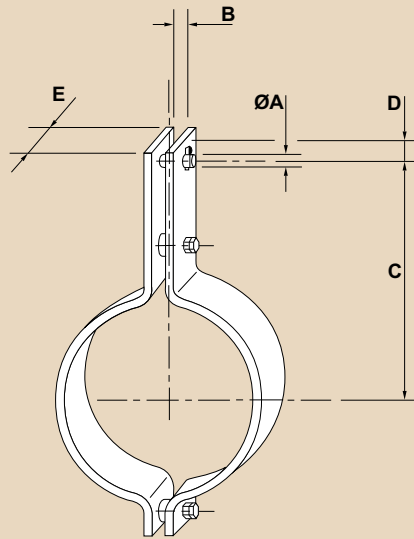
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	mm				mm	in	350	400	490	530	560		580
PA3-65-0-400	73.0	2.875	12	15	130	5 1/8	18	35	0.8	370	340							M8-M16
PA3-65-1-400	73.0	2.875	16	17	130	5 1/8	24	40	1.1	650	590							M8-M16
<b>PA3-65-2-400</b>	73.0	2.875	16	17	130	5 1/8	24	40	1.1	650	590							M8-M16
PA3-65-0-490	73.0	2.875	12	15	140	5 1/2	18	40	1.1	390	390	390	390	270	190	150		M8-M16
PA3-65-1-490	73.0	2.875	16	17	140	5 1/2	24	40	1.2	670	670	590	440	270	200	150		M8-M16
PA3-65-2-490	73.0	2.875	16	17	140	5 1/2	24	40	1.2	670	670	590	440	270	200	150		M8-M16
PA3-65-0-530	73.0	2.875	12	15	140	5 1/2	18	40	1.1	390	390	390	390	270	190	150		M8-M16
PA3-65-1-530	73.0	2.875	16	17	140	5 1/2	24	40	1.2	670	670	590	440	270	200	150		M8-M16
PA3-65-2-530	73.0	2.875	16	17	140	5 1/2	24	50	2.3	800	800	800	800	800	740	550		M8-M16
PA3-65-0-560	73.0	2.875	12	15	150	5 7/8	18	40	1.1	390	390	390	390	330	260	200		M8-M16
PA3-65-1-560	73.0	2.875	16	17	150	5 7/8	24	50	2.4	800	800	800	800	800	800	760		M8-M16
PA3-65-2-560	73.0	2.875	16	17	150	5 7/8	24	50	2.4	800	800	800	800	800	800	760		M8-M16
PA3-65-0-600	73.0	2.875	12	15	150	5 7/8	18	50	2.3	390	390	390	390	390	390	390		M8-M16
PA3-65-1-600	73.0	2.875	16	17	150	5 7/8	24	50	2.4	800	800	800	800	800	800	760		M8-M16
PA3-65-2-600	73.0	2.875	16	17	150	5 7/8	24	50	2.4	800	800	800	800	800	800	760		M8-M16
PA3-80-0-400	88.9	3.5	12	15	150	5 7/8	18	35	0.9	340	310							M8-M16
PA3-80-1-400	88.9	3.5	16	17	150	5 7/8	24	40	1.2	600	540							M8-M16
<b>PA3-80-2-400</b>	88.9	3.5	16	17	150	5 7/8	24	40	1.2	600	540							M8-M16
PA3-80-0-490	88.9	3.5	12	15	150	5 7/8	18	40	1.2	390	390	390	380	230	160	130		M8-M16
PA3-80-1-490	88.9	3.5	16	17	150	5 7/8	24	40	1.2	620	620	540	380	230	170	130		M8-M16
PA3-80-2-490	88.9	3.5	16	17	150	5 7/8	24	40	1.2	620	620	540	380	230	170	130		M8-M16
PA3-80-0-530	88.9	3.5	12	15	150	5 7/8	18	40	1.2	390	390	390	380	230	160	130		M8-M16
PA3-80-1-530	88.9	3.5	16	17	150	5 7/8	24	40	1.2	620	620	540	380	230	170	130		M8-M16
PA3-80-2-530	88.9	3.5	16	17	150	5 7/8	24	50	2.5	800	800	800	800	800	570	440		M8-M16
PA3-80-0-560	88.9	3.5	12	15	160	6 5/16	18	40	1.2	390	390	390	390	290	230	170		M8-M16
PA3-80-1-560	88.9	3.5	16	17	160	6 5/16	24	50	2.6	800	800	800	800	800	770	600		M8-M16
PA3-80-2-560	88.9	3.5	16	17	160	6 5/16	24	50	2.6	800	800	800	800	800	770	600		M8-M16
PA3-80-0-600	88.9	3.5	12	15	160	6 5/16	18	50	2.5	390	390	390	390	390	390	390		M8-M16
PA3-80-1-600	88.9	3.5	16	17	160	6 5/16	24	50	2.6	800	800	800	800	800	770	600		M8-M16
PA3-80-2-600	88.9	3.5	16	17	160	6 5/16	24	50	2.6	800	800	800	800	800	770	600		M8-M16
PA3-90-0-400	101.6	4	12	15	170	6 11/16	18	35	1.0	320	290							M8-M16
PA3-90-1-400	101.6	4	16	17	170	6 11/16	24	40	1.4	490	450							M8-M16
PA3-90-2-400	101.6	4	16	17	170	6 11/16	24	40	1.8	800	800							M8-M16
PA3-90-0-490	101.6	4	12	15	180	7 1/16	18	40	1.3	390	390	390	310	180	130	110		M8-M16
PA3-90-1-490	101.6	4	16	17	180	7 1/16	24	40	1.4	510	510	440	310	190	140	110		M8-M16
PA3-90-2-490	101.6	4	16	17	180	7 1/16	24	50	2.8	800	800	800	800	730	530	410		M8-M16
PA3-90-0-530	101.6	4	12	15	180	7 1/16	18	40	1.3	390	390	390	310	180	130	110		M8-M16
PA3-90-1-530	101.6	4	16	17	180	7 1/16	24	50	2.8	800	800	800	800	730	530	410		M8-M16
PA3-90-2-530	101.6	4	16	17	180	7 1/16	24	50	2.8	800	800	800	800	730	530	410		M8-M16
PA3-90-0-560	101.6	4	12	15	180	7 1/16	18	40	1.3	390	390	390	330	230	190	140		M8-M16
PA3-90-1-560	101.6	4	16	17	180	7 1/16	24	50	2.8	800	800	800	800	800	720	550		M8-M16
PA3-90-2-560	101.6	4	16	17	180	7 1/16	24	50	2.8	800	800	800	800	800	720	550		M8-M16
PA3-90-0-600	101.6	4	12	15	180	7 1/16	18	50	2.7	390	390	390	390	390	390	390		M8-M16
PA3-90-1-600	101.6	4	16	17	180	7 1/16	24	50	2.8	800	800	800	800	800	720	550		M8-M16
PA3-90-2-600	101.6	4	16	17	180	7 1/16	24	50	2.8	800	800	800	800	800	720	550		M8-M16

# PA3 PIPE CLAMP THREE BOLT TYPE

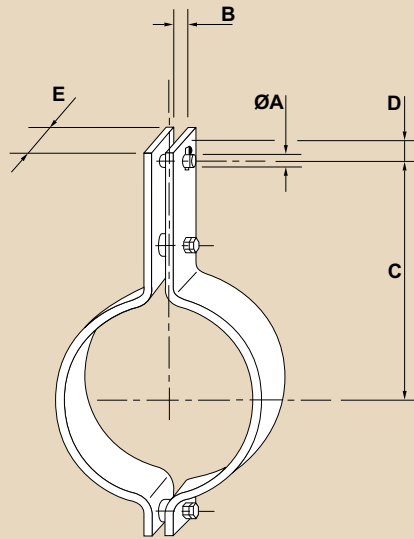


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	in				mm	in	350	400	490	530	560		580
<b>PA3-100-0-400</b>	114.3	4.5	12	15	180	7 <sup>1</sup> / <sub>16</sub>	18	35	1.0	270	240							M8-M16
PA3-100-1-400	114.3	4.5	16	17	180	7 <sup>1</sup> / <sub>16</sub>	24	40	1.5	470	430							M8-M16
<b>PA3-100-2-400</b>	114.3	4.5	16	17	180	7 <sup>1</sup> / <sub>16</sub>	24	40	1.9	800	740							M8-M16
PA3-100-3-400	114.3	4.5	20	20	180	7 <sup>1</sup> / <sub>16</sub>	30	60	4.3	1170	1170							M12-M24
PA3-100-0-490	114.3	4.5	12	15	190	7 <sup>1</sup> / <sub>2</sub>	18	40	1.4	390	390	390	300	180	130	100		M8-M16
PA3-100-1-490	114.3	4.5	16	17	190	7 <sup>1</sup> / <sub>2</sub>	24	40	1.5	490	490	430	300	180	130	110		M8-M16
PA3-100-2-490	114.3	4.5	16	17	190	7 <sup>1</sup> / <sub>2</sub>	24	50	3.0	800	800	800	800	650	460	350		M8-M16
PA3-100-3-490	114.3	4.5	20	20	190	7 <sup>1</sup> / <sub>2</sub>	30	50	3.1	1320	1320	1320	1170	740	530	400		M12-M24
PA3-100-0-530	114.3	4.5	12	15	190	7 <sup>1</sup> / <sub>2</sub>	18	40	1.4	390	390	390	300	180	130	100		M8-M16
PA3-100-1-530	114.3	4.5	16	17	190	7 <sup>1</sup> / <sub>2</sub>	24	50	3.0	800	800	800	800	650	460	350		M8-M16
PA3-100-2-530	114.3	4.5	16	17	190	7 <sup>1</sup> / <sub>2</sub>	24	50	3.0	800	800	800	800	650	460	350		M8-M16
PA3-100-3-530	114.3	4.5	20	20	190	7 <sup>1</sup> / <sub>2</sub>	30	50	3.1	1320	1320	1320	1170	740	530	400		M12-M24
PA3-100-0-560	114.3	4.5	12	15	190	7 <sup>1</sup> / <sub>2</sub>	18	50	2.9	390	390	390	390	390	390	390		M8-M16
PA3-100-1-560	114.3	4.5	16	17	190	7 <sup>1</sup> / <sub>2</sub>	24	50	3.0	800	800	800	800	790	630	490		M8-M16
PA3-100-2-560	114.3	4.5	16	17	190	7 <sup>1</sup> / <sub>2</sub>	24	50	3.0	800	800	800	800	790	630	490		M8-M16
PA3-100-3-560	114.3	4.5	20	20	190	7 <sup>1</sup> / <sub>2</sub>	30	60	3.7	1320	1320	1320	1320	1070	850	660		M12-M24
PA3-100-0-600	114.3	4.5	12	15	190	7 <sup>1</sup> / <sub>2</sub>	18	50	2.9	390	390	390	390	390	390	390		M8-M16
PA3-100-1-600	114.3	4.5	16	17	190	7 <sup>1</sup> / <sub>2</sub>	24	50	3.0	800	800	800	800	790	630	490		M8-M16
PA3-100-2-600	114.3	4.5	16	17	190	7 <sup>1</sup> / <sub>2</sub>	24	60	3.6	800	800	800	800	800	750	580		M8-M16
PA3-100-3-600	114.3	4.5	20	20	190	7 <sup>1</sup> / <sub>2</sub>	30	70	5.1	1320	1320	1320	1320	1320	1320	1090		M12-M24
PA3-125-0-400	141.3	5.5625	12	15	190	7 <sup>1</sup> / <sub>2</sub>	18	35	1.1	260	230							M8-M16
PA3-125-1-400	141.3	5.5625	16	17	190	7 <sup>1</sup> / <sub>2</sub>	24	40	2.1	680	610							M8-M16
PA3-125-2-400	141.3	5.5625	16	17	190	7 <sup>1</sup> / <sub>2</sub>	24	40	2.1	680	610							M8-M16
PA3-125-3-400	141.3	5.5625	20	20	190	7 <sup>1</sup> / <sub>2</sub>	30	60	4.7	1030	1030							M12-M24
PA3-125-0-490	141.3	5.5625	12	15	200	7 <sup>7</sup> / <sub>8</sub>	18	40	1.6	390	390	350	240	150	110	90		M8-M16
PA3-125-1-490	141.3	5.5625	16	17	200	7 <sup>7</sup> / <sub>8</sub>	24	50	3.3	800	800	800	800	590	420	330		M8-M16
PA3-125-2-490	141.3	5.5625	16	17	200	7 <sup>7</sup> / <sub>8</sub>	24	50	3.3	800	800	800	800	590	420	330		M8-M16
PA3-125-3-490	141.3	5.5625	20	20	200	7 <sup>7</sup> / <sub>8</sub>	30	50	3.4	1320	1320	1310	960	600	430	330		M12-M24
PA3-125-0-530	141.3	5.5625	12	15	200	7 <sup>7</sup> / <sub>8</sub>	18	40	1.6	390	390	350	240	150	110	90		M8-M16
PA3-125-1-530	141.3	5.5625	16	17	200	7 <sup>7</sup> / <sub>8</sub>	24	50	3.3	800	800	800	800	590	420	330		M8-M16
PA3-125-2-530	141.3	5.5625	16	17	200	7 <sup>7</sup> / <sub>8</sub>	24	50	3.3	800	800	800	800	590	420	330		M8-M16
PA3-125-3-530	141.3	5.5625	20	20	200	7 <sup>7</sup> / <sub>8</sub>	30	60	4.0	1320	1320	1320	1160	720	520	400		M12-M24
PA3-125-0-560	141.3	5.5625	12	15	210	8 <sup>1</sup> / <sub>4</sub>	18	50	3.3	390	390	390	390	390	390	390		M8-M16
PA3-125-1-560	141.3	5.5625	16	17	210	8 <sup>1</sup> / <sub>4</sub>	24	50	3.4	800	800	800	800	720	580	450		M8-M16
PA3-125-2-560	141.3	5.5625	16	17	210	8 <sup>1</sup> / <sub>4</sub>	24	50	3.4	800	800	800	800	720	580	450		M8-M16
PA3-125-3-560	141.3	5.5625	20	20	210	8 <sup>1</sup> / <sub>4</sub>	30	70	5.7	1320	1320	1320	1320	1320	1160	900		M12-M24
PA3-125-0-600	141.3	5.5625	12	15	210	8 <sup>1</sup> / <sub>4</sub>	18	50	3.3	390	390	390	390	390	390	390		M8-M16
PA3-125-1-600	141.3	5.5625	16	17	210	8 <sup>1</sup> / <sub>4</sub>	24	50	3.4	800	800	800	800	720	580	450		M8-M16
PA3-125-2-600	141.3	5.5625	16	17	210	8 <sup>1</sup> / <sub>4</sub>	24	60	4.0	800	800	800	800	800	690	530		M8-M16
PA3-125-3-600	141.3	5.5625	20	20	210	8 <sup>1</sup> / <sub>4</sub>	30	80	6.5	1320	1320	1320	1320	1320	1270	1030		M12-M24



# PA3 PIPE CLAMP THREE BOLT TYPE

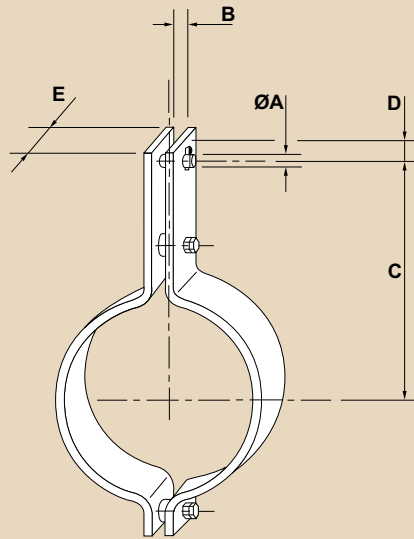


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	mm				mm	in	350	400	490	530	560		580
<b>PA3-150-0-400</b>	168.3	6.625	12	15	210	8 1/4	18	40	1.7	340	300							M8-M16
PA3-150-1-400	168.3	6.625	16	17	210	8 1/4	24	40	2.4	590	530							M8-M16
<b>PA3-150-2-400</b>	168.3	6.625	16	17	210	8 1/4	24	40	2.4	590	530							M8-M16
PA3-150-3-400	168.3	6.625	20	20	210	8 1/4	30	60	5.5	1320	1320							M12-M24
PA3-150-4-400	168.3	6.625	24	25	210	8 1/4	36	60	5.6	1830	1790							M12-M36
PA3-150-0-490	168.3	6.625	12	15	220	8 11/16	18	40	1.8	350	350	300	220	130	90	80		M8-M16
PA3-150-1-490	168.3	6.625	16	17	220	8 11/16	24	50	3.7	800	800	800	800	530	380	290		M8-M16
PA3-150-2-490	168.3	6.625	16	17	220	8 11/16	24	50	3.7	800	800	800	800	530	380	290		M8-M16
PA3-150-3-490	168.3	6.625	20	20	220	8 11/16	30	50	3.8	1300	1300	1150	850	530	380	290		M12-M24
PA3-150-4-490	168.3	6.625	24	25	220	8 11/16	36	70	6.4	1590	1590	1590	1540	1090	780	580		M12-M36
PA3-150-0-530	168.3	6.625	12	15	220	8 11/16	18	50	3.6	390	390	390	390	390	370	280		M8-M16
PA3-150-1-530	168.3	6.625	16	17	220	8 11/16	24	50	3.7	800	800	800	800	530	380	290		M8-M16
PA3-150-2-530	168.3	6.625	16	17	220	8 11/16	24	50	3.7	800	800	800	800	530	380	290		M8-M16
PA3-150-3-530	168.3	6.625	20	20	220	8 11/16	30	60	4.5	1320	1320	1320	1020	640	460	350		M12-M24
PA3-150-4-530	168.3	6.625	24	25	220	8 11/16	36	80	7.5	1830	1830	1830	1800	1140	810	610		M12-M36
PA3-150-0-560	168.3	6.625	12	15	240	9 7/16	18	50	3.8	390	390	390	390	390	390	390		M8-M16
PA3-150-1-560	168.3	6.625	16	17	240	9 7/16	24	50	3.8	800	800	800	800	640	510	390		M8-M16
PA3-150-2-560	168.3	6.625	16	17	240	9 7/16	24	50	3.8	800	800	800	800	640	510	390		M8-M16
PA3-150-3-560	168.3	6.625	20	20	240	9 7/16	30	70	6.5	1320	1320	1320	1320	1280	1020	790		M12-M24
PA3-150-4-560	168.3	6.625	24	25	240	9 7/16	36	80	9.7	1830	1830	1830	1830	1830	1750	1370		M12-M36
PA3-150-0-600	168.3	6.625	12	15	240	9 7/16	18	50	3.8	390	390	390	390	390	390	390		M8-M16
PA3-150-1-600	168.3	6.625	16	17	240	9 7/16	24	50	3.8	800	800	800	800	640	510	390		M8-M16
PA3-150-2-600	168.3	6.625	16	17	240	9 7/16	24	70	6.4	800	800	800	800	800	800	780		M8-M16
PA3-150-3-600	168.3	6.625	20	20	240	9 7/16	30	80	9.2	1320	1320	1320	1320	1320	1320	1150		M12-M24
PA3-150-4-600	168.3	6.625	24	25	240	9 7/16	36	100	12.0	1830	1830	1830	1830	1830	1830	1710		M12-M36
PA3-175-0-400	193.7	7.625	12	15	250	9 13/16	18	40	2.0	330	300							M8-M16
PA3-175-1-400	193.7	7.625	16	17	250	9 13/16	24	40	2.7	570	520							M8-M16
PA3-175-2-400	193.7	7.625	16	17	250	9 13/16	24	45	3.7	770	770							M8-M16
PA3-175-3-400	193.7	7.625	20	20	250	9 13/16	30	60	6.2	1320	1320							M12-M24
PA3-175-4-400	193.7	7.625	24	25	250	9 13/16	36	60	6.3	1640	1640							M12-M36
PA3-175-5-400	193.7	7.625	30	29	250	9 13/16	45	90	16.3	3050	3050							M12-M36
PA3-175-0-490	193.7	7.625	12	15	260	10 1/4	18	40	2.0	340	340	300	210	130	90	70		M8-M16
PA3-175-1-490	193.7	7.625	16	17	260	10 1/4	24	50	4.2	800	800	800	740	460	330	250		M8-M16
PA3-175-2-490	193.7	7.625	16	17	260	10 1/4	24	50	4.2	800	800	800	740	460	330	250		M8-M16
PA3-175-3-490	193.7	7.625	20	20	260	10 1/4	30	60	5.1	1320	1320	1200	900	560	400	310		M12-M24
PA3-175-4-490	193.7	7.625	24	25	260	10 1/4	36	70	7.4	1830	1830	1830	1520	970	690	510		M12-M36
PA3-175-5-490	193.7	7.625	30	29	260	10 1/4	45	80	8.7	2590	2590	2320	1760	1120	800	590		M12-M36
PA3-175-0-530	193.7	7.625	12	15	260	10 1/4	18	50	4.1	390	390	390	390	390	390	350		M8-M16
PA3-175-1-530	193.7	7.625	16	17	260	10 1/4	24	50	4.2	800	800	800	740	460	330	250		M8-M16
PA3-175-2-530	193.7	7.625	16	17	260	10 1/4	24	50	4.2	800	800	800	740	460	330	250		M8-M16
PA3-175-3-530	193.7	7.625	20	20	260	10 1/4	30	70	7.2	1320	1320	1320	1320	950	680	500		M12-M24
PA3-175-4-530	193.7	7.625	24	25	260	10 1/4	36	80	8.4	1830	1830	1830	1730	1110	790	590		M12-M36
PA3-175-5-530	193.7	7.625	30	29	260	10 1/4	45	80	10.8	3000	3000	3000	2830	1850	1300	940		M12-M36
PA3-175-0-560	193.7	7.625	12	15	260	10 1/4	18	50	4.1	390	390	390	390	390	390	340		M8-M16
PA3-175-1-560	193.7	7.625	16	17	260	10 1/4	24	50	4.2	800	800	800	770	560	450	350		M8-M16
PA3-175-2-560	193.7	7.625	16	17	260	10 1/4	24	50	4.2	800	800	800	770	560	450	350		M8-M16
PA3-175-3-560	193.7	7.625	20	20	260	10 1/4	30	70	7.2	1320	1320	1320	1320	1130	900	700		M12-M24
PA3-175-4-560	193.7	7.625	24	25	260	10 1/4	36	80	10.5	1830	1830	1830	1830	1830	1680	1320		M12-M36
PA3-175-5-560	193.7	7.625	30	29	260	10 1/4	45	100	13.4	3000	3000	3000	3000	2690	2130	1670		M12-M36
PA3-175-0-600	193.7	7.625	12	15	260	10 1/4	18	50	4.1	390	390	390	390	390	390	340		M8-M16
PA3-175-1-600	193.7	7.625	16	17	260	10 1/4	24	60	5.0	800	800	800	800	670	540	420		M8-M16
PA3-175-2-600	193.7	7.625	16	17	260	10 1/4	24	70	7.0	800	800	800	800	800	800	690		M8-M16
PA3-175-3-600	193.7	7.625	20	20	260	10 1/4	30	80	10.2	1320	1320	1320	1320	1320	1280	1110		M12-M24
PA3-175-4-600	193.7	7.625	24	25	260	10 1/4	36	100	13.0	1830	1830	1830	1830	1830	1830	1650		M12-M36
PA3-175-5-600	193.7	7.625	30	29	260	10 1/4	45	100	17.9	3050	3050	3050	3050	3050	3050	2880		M12-M36

Bold part numbers indicate a stocked item.

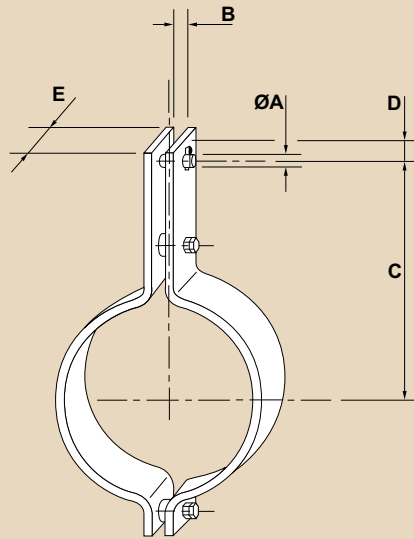
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C						Compatible with Rod Sizes	
	mm	in			mm	mm				mm	in	mm	mm	kgf	350		400
PA3-200-0-400	219.1	8.625	12	15	280	11	18	40	2.2	290	260						M8-M16
<b>PA3-200-1-400</b>	219.1	8.625	16	17	280	11	24	40	3.0	510	460						M8-M16
PA3-200-2-400	219.1	8.625	16	17	280	11	24	45	4.2	730	730						M8-M16
<b>PA3-200-3-400</b>	219.1	8.625	20	20	280	11	30	60	6.9	1320	1320						M12-M24
PA3-200-4-400	219.1	8.625	24	25	280	11	36	65	12.8	1830	1830						M12-M36
PA3-200-5-400	219.1	8.625	30	29	280	11	45	90	17.9	3050	3050						M12-M36
PA3-200-6-400	219.1	8.625	36	41	280	11	54	90	18.8	3810	3810						M20-M64
PA3-200-0-490	219.1	8.625	12	15	290	11 <sup>7/16</sup>	18	40	2.2	300	300	260	190	120	80	70	M8-M16
PA3-200-1-490	219.1	8.625	16	17	290	11 <sup>7/16</sup>	24	50	4.7	800	800	800	660	420	300	220	M8-M16
PA3-200-2-490	219.1	8.625	16	17	290	11 <sup>7/16</sup>	24	50	4.7	800	800	800	660	420	300	220	M8-M16
PA3-200-3-490	219.1	8.625	20	20	290	11 <sup>7/16</sup>	30	60	5.7	1200	1200	1060	800	500	360	270	M12-M24
PA3-200-4-490	219.1	8.625	24	25	290	11 <sup>7/16</sup>	36	70	8.2	1830	1830	1780	1360	870	620	460	M12-M36
PA3-200-5-490	219.1	8.625	30	29	290	11 <sup>7/16</sup>	45	80	11.9	2800	2800	2800	2540	1660	1170	850	M12-M36
PA3-200-6-490	219.1	8.625	36	41	290	11 <sup>7/16</sup>	54	100	15.5	3810	3810	3810	3280	2150	1510	1090	M20-M64
PA3-200-0-530	219.1	8.625	12	15	290	11 <sup>7/16</sup>	18	50	4.6	390	390	390	390	390	290	220	M8-M16
PA3-200-1-530	219.1	8.625	16	17	290	11 <sup>7/16</sup>	24	50	4.7	800	800	800	660	420	300	220	M8-M16
PA3-200-2-530	219.1	8.625	16	17	290	11 <sup>7/16</sup>	24	50	4.7	800	800	800	660	420	300	220	M8-M16
PA3-200-3-530	219.1	8.625	20	20	290	11 <sup>7/16</sup>	30	70	7.9	1240	1240	1240	1200	950	670	500	M12-M24
PA3-200-4-530	219.1	8.625	24	25	290	11 <sup>7/16</sup>	36	80	11.6	1830	1830	1830	1830	1640	1160	840	M12-M36
PA3-200-5-530	219.1	8.625	30	29	290	11 <sup>7/16</sup>	45	80	11.9	2800	2800	2800	2540	1660	1170	850	M12-M36
PA3-200-6-530	219.1	8.625	36	41	290	11 <sup>7/16</sup>	54	100	20.5	3810	3810	3810	3810	3810	2780	1990	M20-M64
PA3-200-0-560	219.1	8.625	12	15	290	11 <sup>7/16</sup>	18	50	4.6	390	390	390	390	390	290	310	M8-M16
PA3-200-1-560	219.1	8.625	16	17	290	11 <sup>7/16</sup>	24	50	4.7	800	800	800	690	500	400	310	M8-M16
PA3-200-2-560	219.1	8.625	16	17	290	11 <sup>7/16</sup>	24	60	5.6	800	800	800	800	600	480	370	M8-M16
PA3-200-3-560	219.1	8.625	20	20	290	11 <sup>7/16</sup>	30	70	7.9	1240	1240	1240	1200	1080	890	700	M12-M24
PA3-200-4-560	219.1	8.625	24	25	290	11 <sup>7/16</sup>	36	80	11.6	1830	1830	1830	1830	1830	1510	1190	M12-M36
PA3-200-5-560	219.1	8.625	30	29	290	11 <sup>7/16</sup>	45	100	14.8	2800	2800	2800	2800	2410	1910	1500	M12-M36
PA3-200-6-560	219.1	8.625	36	41	290	11 <sup>7/16</sup>	54	100	20.5	3810	3810	3810	3810	3810	3550	2820	M20-M64
PA3-200-0-600	219.1	8.625	12	15	290	11 <sup>7/16</sup>	18	50	4.6	390	390	390	390	390	390	310	M8-M16
PA3-200-1-600	219.1	8.625	16	17	290	11 <sup>7/16</sup>	24	60	5.6	800	800	800	800	600	480	370	M8-M16
PA3-200-2-600	219.1	8.625	16	17	290	11 <sup>7/16</sup>	24	70	7.8	800	800	800	800	800	800	620	M8-M16
PA3-200-3-600	219.1	8.625	20	20	290	11 <sup>7/16</sup>	30	80	11.3	1320	1320	1320	1320	1320	1230	1080	M12-M24
PA3-200-4-600	219.1	8.625	24	25	290	11 <sup>7/16</sup>	36	100	19.3	1830	1830	1830	1830	1830	1830	1830	M12-M36
PA3-200-5-600	219.1	8.625	30	29	290	11 <sup>7/16</sup>	45	100	19.7	3050	3050	3050	3050	3050	2960	2730	M12-M36
PA3-200-6-600	219.1	8.625	36	41	290	11 <sup>7/16</sup>	54	90	23.1	3810	3810	3810	3810	3810	3810	3810	M20-M64

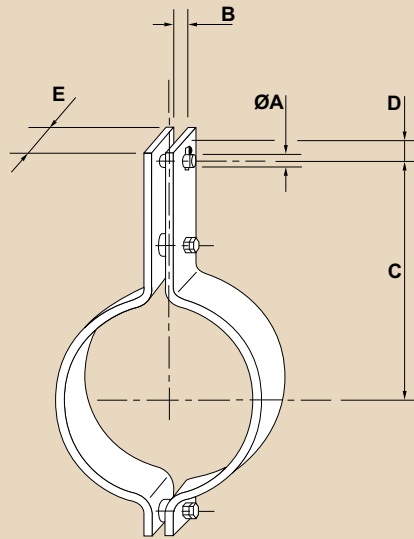
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes
	mm	in			mm	in				mm	in	350	400	490	530	560	
PA3-225-0-400	244.5	9.625	12	15	290	11 7/16	18	40	2.3	290	260						M8-M16
PA3-225-1-400	244.5	9.625	16	17	290	11 7/16	24	40	3.1	500	450						M8-M16
PA3-225-2-400	244.5	9.625	16	17	290	11 7/16	24	45	4.4	660	660						M8-M16
PA3-225-3-400	244.5	9.625	20	20	290	11 7/16	30	60	7.3	1320	1320						M12-M24
PA3-225-4-400	244.5	9.625	24	25	290	11 7/16	36	65	13.2	1730	1730						M12-M36
PA3-225-5-400	244.5	9.625	30	29	290	11 7/16	45	90	18.8	2770	2770						M12-M36
PA3-225-6-400	244.5	9.625	36	41	290	11 7/16	54	90	19.8	3810	3810						M20-M64
PA3-225-0-490	244.5	9.625	12	15	300	11 13/16	18	40	2.4	300	300	260	180	110	80	60	M8-M16
PA3-225-1-490	244.5	9.625	16	17	300	11 13/16	24	50	4.9	800	800	800	630	400	280	220	M8-M16
PA3-225-2-490	244.5	9.625	16	17	300	11 13/16	24	50	4.9	800	800	800	630	400	280	220	M8-M16
PA3-225-3-490	244.5	9.625	20	20	300	11 13/16	30	60	6.0	1130	1130	1040	770	480	340	260	M12-M24
PA3-225-4-490	244.5	9.625	24	25	300	11 13/16	36	80	9.9	1830	1830	1790	1350	860	610	460	M12-M36
PA3-225-5-490	244.5	9.625	30	29	300	11 13/16	45	80	12.7	2690	2690	2690	2220	1440	1020	740	M12-M36
PA3-225-6-490	244.5	9.625	36	41	300	11 13/16	54	100	16.4	3810	3810	3700	2870	1860	1320	960	M20-M64
PA3-225-0-530	244.5	9.625	12	15	300	11 13/16	18	50	4.9	390	390	390	390	390	280	210	M8-M16
PA3-225-1-530	244.5	9.625	16	17	300	11 13/16	24	50	4.9	800	800	800	630	400	280	220	M8-M16
PA3-225-2-530	244.5	9.625	16	17	300	11 13/16	24	50	4.9	800	800	800	630	400	280	220	M8-M16
PA3-225-3-530	244.5	9.625	20	20	300	11 13/16	30	70	8.4	1210	1210	1210	1180	810	580	430	M12-M24
PA3-225-4-530	244.5	9.625	24	25	300	11 13/16	36	80	12.3	1830	1830	1830	1830	1430	1010	740	M12-M36
PA3-225-5-530	244.5	9.625	30	29	300	11 13/16	45	100	15.7	2690	2690	2690	2690	1800	1270	930	M12-M36
PA3-225-6-530	244.5	9.625	36	41	300	11 13/16	54	100	21.6	3810	3810	3810	3810	3500	2450	1740	M20-M64
PA3-225-0-560	244.5	9.625	12	15	300	11 13/16	18	50	4.9	390	390	390	390	390	380	290	M8-M16
PA3-225-1-560	244.5	9.625	16	17	300	11 13/16	24	50	4.9	800	800	800	660	480	380	300	M8-M16
PA3-225-2-560	244.5	9.625	16	17	300	11 13/16	24	60	5.9	800	800	800	800	580	460	360	M8-M16
PA3-225-3-560	244.5	9.625	20	20	300	11 13/16	30	80	9.5	1210	1210	1210	1180	1070	880	690	M12-M24
PA3-225-4-560	244.5	9.625	24	25	300	11 13/16	36	80	12.3	1830	1830	1830	1830	1670	1330	1040	M12-M36
PA3-225-5-560	244.5	9.625	30	29	300	11 13/16	45	100	20.9	2960	2960	2960	2960	2960	2860	2410	M12-M36
PA3-225-6-560	244.5	9.625	36	41	300	11 13/16	54	100	21.6	3810	3810	3810	3810	3810	3140	2490	M20-M64
PA3-225-0-600	244.5	9.625	12	15	300	11 13/16	18	50	4.9	390	390	390	390	390	380	290	M8-M16
PA3-225-1-600	244.5	9.625	16	17	300	11 13/16	24	70	8.2	800	800	800	800	800	760	590	M8-M16
PA3-225-2-600	244.5	9.625	16	17	300	11 13/16	24	70	8.2	800	800	800	800	800	760	590	M8-M16
PA3-225-3-600	244.5	9.625	20	20	300	11 13/16	30	80	12.2	1320	1320	1320	1320	1320	1310	1020	M12-M24
PA3-225-4-600	244.5	9.625	24	25	300	11 13/16	36	100	20.5	1830	1830	1830	1830	1830	1830	1830	M12-M36
PA3-225-5-600	244.5	9.625	30	29	300	11 13/16	45	100	20.9	2960	2960	2960	2960	2960	2860	2410	M12-M36
PA3-225-6-600	244.5	9.625	36	41	300	11 13/16	54	100	27.0	3810	3810	3810	3810	3810	3810	3810	M20-M64

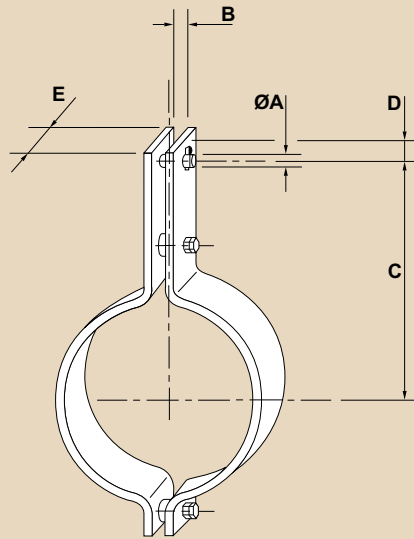
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes
	mm	in			mm	in				mm	in	350	400	490	530	560	
PA3-250-0-400	273	10.75	12	15	320	12 <sup>5</sup> / <sub>8</sub>	18	40	3.4	390	390						M8-M16
PA3-250-1-400	273	10.75	16	17	320	12 <sup>5</sup> / <sub>8</sub>	24	40	3.5	460	420						M8-M16
<b>PA3-250-2-400</b>	273	10.75	16	17	320	12 <sup>5</sup> / <sub>8</sub>	24	45	4.8	620	620						M8-M16
PA3-250-3-400	273	10.75	20	20	320	12 <sup>5</sup> / <sub>8</sub>	30	60	8.0	1320	1240						M12-M24
<b>PA3-250-4-400</b>	273	10.75	24	25	320	12 <sup>5</sup> / <sub>8</sub>	36	65	14.5	1590	1590						M12-M36
PA3-250-5-400	273	10.75	30	29	320	12 <sup>5</sup> / <sub>8</sub>	45	90	20.7	2670	2670						M12-M36
PA3-250-6-400	273	10.75	36	41	320	12 <sup>5</sup> / <sub>8</sub>	54	90	21.5	3810	3810						M20-M64
PA3-250-7-400	273	10.75	42	45	320	12 <sup>5</sup> / <sub>8</sub>	63	110	27.6	5470	5470						M30-M64
PA3-250-0-490	273	10.75	12	15	330	13	18	50	5.3	390	390	390	390	380	270	200	M8-M16
PA3-250-1-490	273	10.75	16	17	330	13	24	50	5.4	800	800	800	600	380	270	200	M8-M16
PA3-250-2-490	273	10.75	16	17	330	13	24	50	5.4	800	800	800	600	380	270	200	M8-M16
PA3-250-3-490	273	10.75	20	20	330	13	30	70	9.2	1120	1120	1120	1100	780	550	410	M12-M24
PA3-250-4-490	273	10.75	24	25	330	13	36	80	10.8	1830	1830	1670	1280	820	580	430	M12-M36
PA3-250-5-490	273	10.75	30	29	330	13	45	80	13.8	2480	2480	2480	2100	1380	970	700	M12-M36
PA3-250-6-490	273	10.75	36	41	330	13	54	100	23.5	3810	3810	3810	3810	3330	2320	1660	M20-M64
PA3-250-7-490	273	10.75	42	45	330	13	63	110	27.0	5470	5470	5470	5140	3480	2420	1730	M30-M64
PA3-250-0-530	273	10.75	12	15	330	13	18	50	5.3	390	390	390	390	380	270	200	M8-M16
PA3-250-1-530	273	10.75	16	17	330	13	24	50	5.4	800	800	800	600	380	270	200	M8-M16
PA3-250-2-530	273	10.75	16	17	330	13	24	50	5.4	800	800	800	600	380	270	200	M8-M16
PA3-250-3-530	273	10.75	20	20	330	13	30	70	9.2	1120	1120	1120	1100	780	550	410	M12-M24
PA3-250-4-530	273	10.75	24	25	330	13	36	80	13.5	1830	1830	1830	1830	1360	960	690	M12-M36
PA3-250-5-530	273	10.75	30	29	330	13	45	100	17.1	2480	2480	2480	2480	1720	1210	880	M12-M36
PA3-250-6-530	273	10.75	36	41	330	13	54	100	23.5	3810	3810	3810	3810	3330	2320	1660	M20-M64
PA3-250-7-530	273	10.75	42	45	330	13	63	110	33.4	5470	5470	5470	5470	5470	4260	3070	M30-M64
PA3-250-0-560	273	10.75	12	15	330	13	18	50	5.3	390	390	390	390	390	360	280	M8-M16
PA3-250-1-560	273	10.75	16	17	330	13	24	50	5.4	800	800	800	630	460	360	280	M8-M16
PA3-250-2-560	273	10.75	16	17	330	13	24	60	6.5	800	800	800	750	550	440	340	M8-M16
PA3-250-3-560	273	10.75	20	20	330	13	30	80	13.3	1320	1320	1320	1320	1320	1240	970	M12-M24
PA3-250-4-560	273	10.75	24	25	330	13	36	100	16.8	1830	1830	1830	1830	1830	1570	1230	M12-M36
PA3-250-5-560	273	10.75	30	29	330	13	45	100	22.8	2720	2720	2720	2720	2720	2640	2290	M12-M36
PA3-250-6-560	273	10.75	36	41	330	13	54	100	23.5	3810	3810	3810	3810	3750	2960	2350	M20-M64
PA3-250-7-560	273	10.75	42	45	330	13	63	110	33.4	5470	5470	5470	5470	5470	5260	4200	M30-M64
PA3-250-0-600	273	10.75	12	15	330	13	18	50	5.3	390	390	390	390	390	360	280	M8-M16
PA3-250-1-600	273	10.75	16	17	330	13	24	70	9.1	800	800	800	800	800	730	570	M8-M16
PA3-250-2-600	273	10.75	16	17	330	13	24	70	9.1	800	800	800	800	800	730	570	M8-M16
PA3-250-3-600	273	10.75	20	20	330	13	30	100	16.6	1320	1320	1320	1320	1320	1320	1210	M12-M24
PA3-250-4-600	273	10.75	24	25	330	13	36	100	22.4	1830	1830	1830	1830	1830	1830	1830	M12-M36
PA3-250-5-600	273	10.75	30	29	330	13	45	100	22.8	2720	2720	2720	2720	2720	2640	2290	M12-M36
PA3-250-6-600	273	10.75	36	41	330	13	54	100	29.4	3810	3810	3810	3810	3810	3810	3790	M20-M64
PA3-250-7-600	273	10.75	42	45	330	13	63	110	40.1	5470	5470	5470	5470	5470	5470	5470	M30-M64

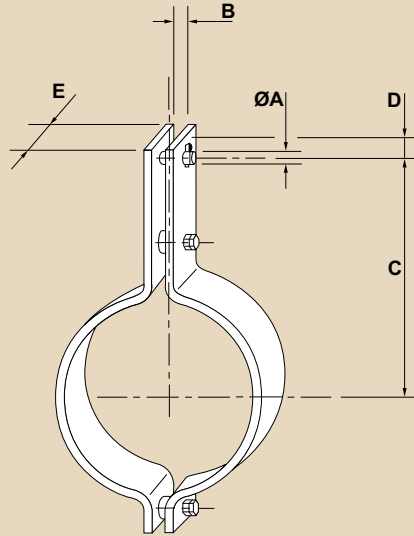
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	in				mm	in	350	400	490	530	560		580
PA3-300-1-400	323.9	12.75	16	17	350	13 <sup>3</sup> / <sub>4</sub>	24	45	5.5	590	590							M8-M16
PA3-300-2-400	323.9	12.75	16	17	350	13 <sup>3</sup> / <sub>4</sub>	24	45	5.5	590	590							M8-M16
<b>PA3-300-3-400</b>	323.9	12.75	20	20	350	13 <sup>3</sup> / <sub>4</sub>	30	60	8.9	1180	1130							M12-M24
<b>PA3-300-4-400</b>	323.9	12.75	24	25	350	13 <sup>3</sup> / <sub>4</sub>	36	65	16.5	1830	1830							M12-M36
PA3-300-5-400	323.9	12.75	30	29	350	13 <sup>3</sup> / <sub>4</sub>	45	90	23.0	2340	2340							M12-M36
PA3-300-6-400	323.9	12.75	36	41	350	13 <sup>3</sup> / <sub>4</sub>	54	90	24.8	3810	3810							M20-M64
PA3-300-7-400	323.9	12.75	42	45	360	14 <sup>3</sup> / <sub>16</sub>	63	110	38.1	5470	5470							M30-M64
PA3-300-8-400	323.9	12.75	48	52	370	14 <sup>9</sup> / <sub>16</sub>	72	130	47.4	9820	9410							M42-M80
PA3-300-1-490	323.9	12.75	16	17	370	14 <sup>9</sup> / <sub>16</sub>	24	50	6.2	740	740	660	500	320	230	170		M8-M16
PA3-300-2-490	323.9	12.75	16	17	370	14 <sup>9</sup> / <sub>16</sub>	24	50	6.2	740	740	660	500	320	230	170		M8-M16
PA3-300-3-490	323.9	12.75	20	20	370	14 <sup>9</sup> / <sub>16</sub>	30	70	10.6	1320	1320	1320	1020	660	470	340		M12-M24
PA3-300-4-490	323.9	12.75	24	25	370	14 <sup>9</sup> / <sub>16</sub>	36	80	15.2	1830	1830	1830	1830	1270	890	640		M12-M36
PA3-300-5-490	323.9	12.75	30	29	370	14 <sup>9</sup> / <sub>16</sub>	45	100	19.7	3050	3050	2830	2240	1480	1040	740		M12-M36
PA3-300-6-490	323.9	12.75	36	41	370	14 <sup>9</sup> / <sub>16</sub>	54	100	26.6	3810	3810	3810	3810	2880	2000	1440		M20-M64
PA3-300-7-490	323.9	12.75	42	45	370	14 <sup>9</sup> / <sub>16</sub>	63	110	30.2	5470	5470	5470	4700	3200	2220	1600		M30-M64
PA3-300-8-490	323.9	12.75	48	52	370	14 <sup>9</sup> / <sub>16</sub>	72	120	42.8	9770	9770	9210	7760	5520	3930	2820		M42-M80
PA3-300-1-530	323.9	12.75	16	17	370	14 <sup>9</sup> / <sub>16</sub>	24	50	6.2	740	740	660	500	320	230	170		M8-M16
PA3-300-2-530	323.9	12.75	16	17	370	14 <sup>9</sup> / <sub>16</sub>	24	60	7.4	800	800	800	600	380	270	200		M8-M16
PA3-300-3-530	323.9	12.75	20	20	370	14 <sup>9</sup> / <sub>16</sub>	30	70	10.6	1320	1320	1320	1020	660	470	340		M12-M24
PA3-300-4-530	323.9	12.75	24	25	370	14 <sup>9</sup> / <sub>16</sub>	36	80	15.2	1830	1830	1830	1830	1270	890	640		M12-M36
PA3-300-5-530	323.9	12.75	30	29	370	14 <sup>9</sup> / <sub>16</sub>	45	100	26.1	3050	3050	3050	3050	2810	1950	1410		M12-M36
PA3-300-6-530	323.9	12.75	36	41	370	14 <sup>9</sup> / <sub>16</sub>	54	100	26.6	3810	3810	3810	3810	2880	2000	1440		M20-M64
PA3-300-7-530	323.9	12.75	42	45	370	14 <sup>9</sup> / <sub>16</sub>	63	110	37.5	5470	5470	5470	5470	5260	3740	2680		M30-M64
PA3-300-8-530	323.9	12.75	48	52	370	14 <sup>9</sup> / <sub>16</sub>	72	120	42.8	9770	9770	9210	7760	5520	3930	2820		M42-M80
PA3-300-1-560	323.9	12.75	16	17	390	15 <sup>3</sup> / <sub>8</sub>	24	50	6.4	740	740	670	520	380	300	240		M8-M16
PA3-300-2-560	323.9	12.75	16	17	390	15 <sup>3</sup> / <sub>8</sub>	24	70	10.6	800	800	800	800	800	680	530		M8-M16
PA3-300-3-560	323.9	12.75	20	20	390	15 <sup>3</sup> / <sub>8</sub>	30	80	15.3	1110	1110	1110	1110	1070	1000	890		M12-M24
PA3-300-4-560	323.9	12.75	24	25	390	15 <sup>3</sup> / <sub>8</sub>	36	100	19.4	1830	1830	1830	1830	1830	1450	1140		M12-M36
PA3-300-5-560	323.9	12.75	30	29	390	15 <sup>3</sup> / <sub>8</sub>	45	100	26.3	2390	2390	2390	2390	2390	2310	2120		M12-M36
PA3-300-6-560	323.9	12.75	36	41	390	15 <sup>3</sup> / <sub>8</sub>	54	90	30.5	3810	3810	3810	3810	3810	3810	3140		M20-M64
PA3-300-7-560	323.9	12.75	42	45	390	15 <sup>3</sup> / <sub>8</sub>	63	110	38.4	5470	5470	5470	5470	5470	4570	3650		M30-M64
PA3-300-8-560	323.9	12.75	48	52	390	15 <sup>3</sup> / <sub>8</sub>	72	120	52.2	10910	10910	10910	10910	8920	7190	5710		M42-M80
PA3-300-1-600	323.9	12.75	16	17	390	15 <sup>3</sup> / <sub>8</sub>	24	70	10.6	800	800	800	800	800	680	530		M8-M16
PA3-300-2-600	323.9	12.75	16	17	390	15 <sup>3</sup> / <sub>8</sub>	24	80	12.1	800	800	800	800	800	770	600		M8-M16
PA3-300-3-600	323.9	12.75	20	20	390	15 <sup>3</sup> / <sub>8</sub>	30	100	19.3	1320	1320	1320	1320	1320	1320	1130		M12-M24
PA3-300-4-600	323.9	12.75	24	25	390	15 <sup>3</sup> / <sub>8</sub>	36	100	25.9	1830	1830	1830	1830	1830	1830	1830		M12-M36
PA3-300-5-600	323.9	12.75	30	29	390	15 <sup>3</sup> / <sub>8</sub>	45	90	30.2	3050	3050	3050	3050	3050	3050	2900		M12-M36
PA3-300-6-600	323.9	12.75	36	41	390	15 <sup>3</sup> / <sub>8</sub>	54	110	37.0	3810	3810	3810	3810	3810	3810	3810		M20-M64
PA3-300-7-600	323.9	12.75	42	45	390	15 <sup>3</sup> / <sub>8</sub>	63	110	46.1	5470	5470	5470	5470	5470	5470	5420		M30-M64
PA3-300-8-600	323.9	12.75	48	52	390	15 <sup>3</sup> / <sub>8</sub>	72	160	68.7	10910	10910	10910	10910	10910	9590	7620		M42-M80

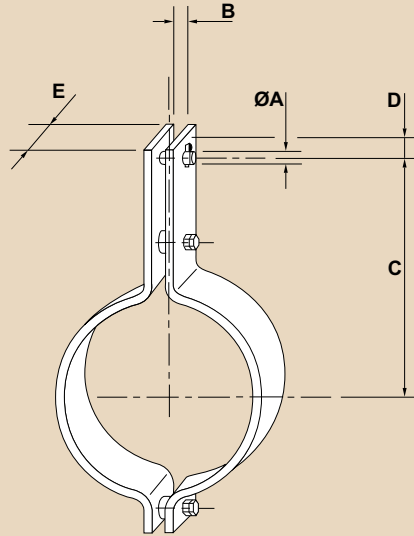
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	in				mm	mm	350	400	490	530	560		580
PA3-350-1-400	355.6	14	16	17	380	14 <sup>15</sup> / <sub>16</sub>	24	45	5.9	550	550							M8-M16
PA3-350-2-400	355.6	14	16	17	380	14 <sup>15</sup> / <sub>16</sub>	24	45	5.9	550	550							M8-M16
PA3-350-3-400	355.6	14	20	20	380	14 <sup>15</sup> / <sub>16</sub>	30	60	9.6	1100	1090							M12-M24
PA3-350-4-400	355.6	14	24	25	380	14 <sup>15</sup> / <sub>16</sub>	36	65	17.8	1830	1830							M12-M36
PA3-350-5-400	355.6	14	30	29	380	14 <sup>15</sup> / <sub>16</sub>	45	90	25.3	3050	3050							M12-M36
PA3-350-6-400	355.6	14	36	41	380	14 <sup>15</sup> / <sub>16</sub>	54	90	26.5	3810	3810							M20-M64
PA3-350-7-400	355.6	14	42	45	380	14 <sup>15</sup> / <sub>16</sub>	63	110	40.6	5470	5470							M30-M64
PA3-350-8-400	355.6	14	48	52	390	15 <sup>3</sup> / <sub>8</sub>	72	130	50.3	8900	8540							M42-M80
PA3-350-9-400	355.6	14	56	58	440	17 <sup>5</sup> / <sub>16</sub>	84	150	75.4	10000	10000							M42-M80
PA3-350-1-490	355.6	14	16	17	400	15 <sup>3</sup> / <sub>4</sub>	24	50	6.7	720	720	640	490	310	220	160		M8-M16
PA3-350-2-490	355.6	14	16	17	400	15 <sup>3</sup> / <sub>4</sub>	24	50	6.7	720	720	640	490	310	220	160		M8-M16
PA3-350-3-490	355.6	14	20	20	400	15 <sup>3</sup> / <sub>4</sub>	30	70	11.4	1320	1320	1270	990	640	450	330		M12-M24
PA3-350-4-490	355.6	14	24	25	400	15 <sup>3</sup> / <sub>4</sub>	36	80	16.5	1830	1830	1830	1710	1130	790	570		M12-M36
PA3-350-5-490	355.6	14	30	29	400	15 <sup>3</sup> / <sub>4</sub>	45	100	21.2	2980	2980	2710	2150	1430	1000	710		M12-M36
PA3-350-6-490	355.6	14	36	41	400	15 <sup>3</sup> / <sub>4</sub>	54	100	28.5	3810	3810	3810	3810	2760	1920	1390		M20-M64
PA3-350-7-490	355.6	14	42	45	400	15 <sup>3</sup> / <sub>4</sub>	63	110	40.4	5470	5470	5470	5470	4770	3400	2440		M30-M64
PA3-350-8-490	355.6	14	48	52	400	15 <sup>3</sup> / <sub>4</sub>	72	120	45.6	9280	9280	8750	7380	5260	3750	2690		M42-M80
PA3-350-9-490	355.6	14	56	58	410	16 <sup>1</sup> / <sub>8</sub>	84	140	54.8	10000	10000	10000	8690	6200	4420	3170		M42-M80
PA3-350-1-530	355.6	14	16	17	400	15 <sup>3</sup> / <sub>4</sub>	24	50	6.7	720	720	640	490	310	220	160		M8-M16
PA3-350-2-530	355.6	14	16	17	400	15 <sup>3</sup> / <sub>4</sub>	24	60	8.0	800	800	770	580	370	270	200		M8-M16
PA3-350-3-530	355.6	14	20	20	400	15 <sup>3</sup> / <sub>4</sub>	30	80	13.0	1320	1320	1320	1130	730	520	380		M12-M24
PA3-350-4-530	355.6	14	24	25	400	15 <sup>3</sup> / <sub>4</sub>	36	80	16.5	1830	1830	1830	1710	1130	790	570		M12-M36
PA3-350-5-530	355.6	14	30	29	400	15 <sup>3</sup> / <sub>4</sub>	45	100	28.1	3050	3050	3050	3050	2700	1880	1360		M12-M36
PA3-350-6-530	355.6	14	36	41	400	15 <sup>3</sup> / <sub>4</sub>	54	100	28.5	3810	3810	3810	3810	2760	1920	1390		M20-M64
PA3-350-7-530	355.6	14	42	45	400	15 <sup>3</sup> / <sub>4</sub>	63	110	40.4	5470	5470	5470	5470	4770	3400	2440		M30-M64
PA3-350-8-530	355.6	14	48	52	400	15 <sup>3</sup> / <sub>4</sub>	72	130	49.2	10050	10050	9480	7990	5700	4060	2910		M42-M80
PA3-350-9-530	355.6	14	56	58	420	16 <sup>9</sup> / <sub>16</sub>	84	140	66.1	10000	10000	10000	10000	9370	6870	4860		M42-M80
PA3-350-1-560	355.6	14	16	17	420	16 <sup>9</sup> / <sub>16</sub>	24	50	6.8	720	720	650	510	370	290	230		M8-M16
PA3-350-2-560	355.6	14	16	17	420	16 <sup>9</sup> / <sub>16</sub>	24	70	11.5	800	800	800	800	740	590	460		M8-M16
PA3-350-3-560	355.6	14	20	20	420	16 <sup>9</sup> / <sub>16</sub>	30	80	16.7	1320	1320	1320	1320	1280	1020	800		M12-M24
PA3-350-4-560	355.6	14	24	25	420	16 <sup>9</sup> / <sub>16</sub>	36	100	21.0	1830	1830	1830	1830	1620	1280	1010		M12-M36
PA3-350-5-560	355.6	14	30	29	420	16 <sup>9</sup> / <sub>16</sub>	45	100	28.4	2330	2330	2330	2330	2330	2290	1900		M12-M36
PA3-350-6-560	355.6	14	36	41	420	16 <sup>9</sup> / <sub>16</sub>	54	90	32.8	3810	3810	3810	3810	3810	3550	2830		M20-M64
PA3-350-7-560	355.6	14	42	45	420	16 <sup>9</sup> / <sub>16</sub>	63	120	44.9	5470	5470	5470	5470	5470	4520	3600		M30-M64
PA3-350-8-560	355.6	14	48	52	420	16 <sup>9</sup> / <sub>16</sub>	72	120	55.7	10910	10910	10910	10770	8490	6850	5440		M42-M80
PA3-350-9-560	355.6	14	56	58	420	16 <sup>9</sup> / <sub>16</sub>	84	140	66.1	10000	10000	10000	10000	10000	8070	6410		M42-M80
PA3-350-1-600	355.6	14	16	17	420	16 <sup>9</sup> / <sub>16</sub>	24	70	11.5	800	800	800	800	740	590	460		M8-M16
PA3-350-2-600	355.6	14	16	17	420	16 <sup>9</sup> / <sub>16</sub>	24	80	16.3	800	800	800	800	800	800	800		M8-M16
PA3-350-3-600	355.6	14	20	20	420	16 <sup>9</sup> / <sub>16</sub>	30	100	27.8	1320	1320	1320	1320	1320	1320	1320		M12-M24
PA3-350-4-600	355.6	14	24	25	420	16 <sup>9</sup> / <sub>16</sub>	36	100	28.0	1830	1830	1830	1830	1830	1830	1830		M12-M36
PA3-350-5-600	355.6	14	30	29	420	16 <sup>9</sup> / <sub>16</sub>	45	90	32.1	2520	2520	2520	2520	2520	2520	2490		M12-M36
PA3-350-6-600	355.6	14	36	41	420	16 <sup>9</sup> / <sub>16</sub>	54	120	43.4	3810	3810	3810	3810	3810	3810	3780		M20-M64
PA3-350-7-600	355.6	14	42	45	420	16 <sup>9</sup> / <sub>16</sub>	63	120	53.6	5470	5470	5470	5470	5470	5470	5470		M30-M64
PA3-350-8-600	355.6	14	48	52	420	16 <sup>9</sup> / <sub>16</sub>	72	120	74.3	10910	10910	10910	10910	10910	10910	10280		M42-M80
PA3-350-9-600	355.6	14	56	58	430	16 <sup>15</sup> / <sub>16</sub>	84	140	88.4	10000	10000	10000	10000	10000	10000	10000		M42-M80

# PA3 PIPE CLAMP THREE BOLT TYPE

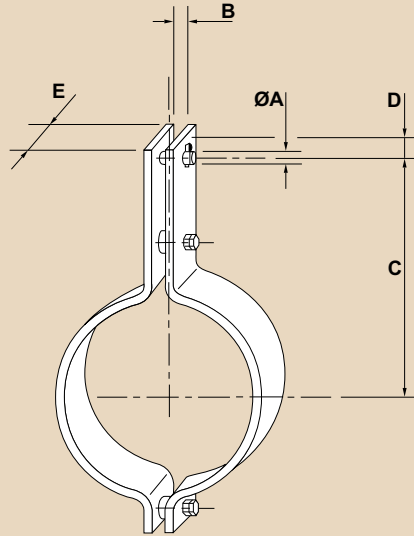


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes
	mm	in			mm	in				mm	mm	kgf	350	400	490	530	
PA3-400-1-400	406.4	16	16	17	420	16 <sup>9</sup> / <sub>16</sub>	24	45	6.6	510	510						M8-M16
PA3-400-2-400	406.4	16	16	17	420	16 <sup>9</sup> / <sub>16</sub>	24	60	10.6	800	800						M8-M16
PA3-400-3-400	406.4	16	20	20	420	16 <sup>9</sup> / <sub>16</sub>	30	55	12.3	1130	1130						M12-M24
PA3-400-4-400	406.4	16	24	25	420	16 <sup>9</sup> / <sub>16</sub>	36	65	19.7	1830	1830						M12-M36
PA3-400-5-400	406.4	16	30	29	420	16 <sup>9</sup> / <sub>16</sub>	45	90	27.9	3000	3000						M12-M36
PA3-400-6-400	406.4	16	36	41	420	16 <sup>9</sup> / <sub>16</sub>	54	110	35.2	3810	3810						M20-M64
PA3-400-7-400	406.4	16	42	45	420	16 <sup>9</sup> / <sub>16</sub>	63	110	44.5	5470	5470						M30-M64
PA3-400-8-400	406.4	16	48	52	420	16 <sup>9</sup> / <sub>16</sub>	72	130	54.4	8150	7800						M42-M80
PA3-400-9-400	406.4	16	56	58	470	18 <sup>1</sup> / <sub>2</sub>	84	150	81.5	10000	10000						M42-M80
PA3-400-10-400	406.4	16	64	65	500	19 <sup>11</sup> / <sub>16</sub>	96	180	133.7	14730	14730						M42-M80
PA3-400-1-490	406.4	16	16	17	430	16 <sup>15</sup> / <sub>16</sub>	24	50	7.3	660	660	590	450	280	200	150	M8-M16
PA3-400-2-490	406.4	16	16	17	430	16 <sup>15</sup> / <sub>16</sub>	24	50	7.3	660	660	590	450	280	200	150	M8-M16
PA3-400-3-490	406.4	16	20	20	430	16 <sup>15</sup> / <sub>16</sub>	30	70	12.6	1200	1200	1070	830	530	380	280	M12-M24
PA3-400-4-490	406.4	16	24	25	430	16 <sup>15</sup> / <sub>16</sub>	36	80	18.1	1830	1830	1830	1560	1030	720	520	M12-M36
PA3-400-5-490	406.4	16	30	29	430	16 <sup>15</sup> / <sub>16</sub>	45	100	23.1	2750	2750	2490	1970	1290	910	650	M12-M36
PA3-400-6-490	406.4	16	36	41	430	16 <sup>15</sup> / <sub>16</sub>	54	100	31.6	3810	3810	3810	3470	2360	1640	1180	M20-M64
PA3-400-7-490	406.4	16	42	45	430	16 <sup>15</sup> / <sub>16</sub>	63	110	43.9	5470	5470	5470	5470	4330	3070	2210	M30-M64
PA3-400-8-490	406.4	16	48	52	430	16 <sup>15</sup> / <sub>16</sub>	72	120	49.7	8110	8110	7630	6420	4540	3220	2320	M42-M80
PA3-400-9-490	406.4	16	56	58	440	17 <sup>5</sup> / <sub>16</sub>	84	140	70.7	10000	10000	10000	10000	8510	6210	4400	M42-M80
PA3-400-10-490	406.4	16	64	65	470	18 <sup>1</sup> / <sub>2</sub>	96	160	86.2	15540	15540	14880	12660	9400	6860	4860	M42-M80
PA3-400-1-530	406.4	16	16	17	430	16 <sup>15</sup> / <sub>16</sub>	24	50	7.3	660	660	590	450	280	200	150	M8-M16
PA3-400-2-530	406.4	16	16	17	430	16 <sup>15</sup> / <sub>16</sub>	24	60	8.8	800	800	710	530	340	240	180	M8-M16
PA3-400-3-530	406.4	16	20	20	430	16 <sup>15</sup> / <sub>16</sub>	30	80	17.9	1320	1320	1320	1320	1010	710	510	M12-M24
PA3-400-4-530	406.4	16	24	25	430	16 <sup>15</sup> / <sub>16</sub>	36	100	22.5	1830	1830	1830	1830	1280	900	650	M12-M36
PA3-400-5-530	406.4	16	30	29	430	16 <sup>15</sup> / <sub>16</sub>	45	100	30.8	3050	3050	3050	3050	2300	1600	1150	M12-M36
PA3-400-6-530	406.4	16	36	41	430	16 <sup>15</sup> / <sub>16</sub>	54	110	34.7	3810	3810	3810	3810	2590	1800	1300	M20-M64
PA3-400-7-530	406.4	16	42	45	430	16 <sup>15</sup> / <sub>16</sub>	63	110	43.9	5470	5470	5470	5470	4330	3070	2210	M30-M64
PA3-400-8-530	406.4	16	48	52	430	16 <sup>15</sup> / <sub>16</sub>	72	140	57.5	9460	9460	8900	7490	5300	3760	2700	M42-M80
PA3-400-9-530	406.4	16	56	58	440	17 <sup>5</sup> / <sub>16</sub>	84	140	70.7	10000	10000	10000	10000	8510	6210	4400	M42-M80
PA3-400-10-530	406.4	16	64	65	490	19 <sup>5</sup> / <sub>16</sub>	96	160	116.3	17480	17480	17480	17480	17480	13980	9690	M42-M80
PA3-400-1-560	406.4	16	16	17	460	18 <sup>1</sup> / <sub>8</sub>	24	60	9.1	800	800	720	560	410	320	250	M8-M16
PA3-400-2-560	406.4	16	16	17	460	18 <sup>1</sup> / <sub>8</sub>	24	70	12.7	800	800	800	800	680	540	420	M8-M16
PA3-400-3-560	406.4	16	20	20	460	18 <sup>1</sup> / <sub>8</sub>	30	80	18.5	1320	1320	1320	1320	1170	930	730	M12-M24
PA3-400-4-560	406.4	16	24	25	460	18 <sup>1</sup> / <sub>8</sub>	36	100	30.9	1830	1830	1830	1830	1830	1830	1720	M12-M36
PA3-400-5-560	406.4	16	30	29	460	18 <sup>1</sup> / <sub>8</sub>	45	100	31.8	3050	3050	3050	3050	2580	2040	1620	M12-M36
PA3-400-6-560	406.4	16	36	41	460	18 <sup>1</sup> / <sub>8</sub>	54	90	36.1	3770	3770	3770	3770	3770	3240	2590	M20-M64
PA3-400-7-560	406.4	16	42	45	460	18 <sup>1</sup> / <sub>8</sub>	63	130	53.1	5470	5470	5470	5470	5470	4450	3550	M30-M64
PA3-400-8-560	406.4	16	48	52	460	18 <sup>1</sup> / <sub>8</sub>	72	130	66.0	10290	10290	10290	10210	8020	6460	5130	M42-M80
PA3-400-9-560	406.4	16	56	58	460	18 <sup>1</sup> / <sub>8</sub>	84	150	76.9	10000	10000	10000	10000	9750	7860	6250	M42-M80
PA3-400-10-560	406.4	16	64	65	490	19 <sup>5</sup> / <sub>16</sub>	96	160	116.3	17480	17480	17480	17480	17480	15520	12250	M42-M80
PA3-400-1-600	406.4	16	16	17	460	18 <sup>1</sup> / <sub>8</sub>	24	70	12.7	800	800	800	800	680	540	420	M8-M16
PA3-400-2-600	406.4	16	16	17	460	18 <sup>1</sup> / <sub>8</sub>	24	80	18.1	800	800	800	800	800	800	740	M8-M16
PA3-400-3-600	406.4	16	20	20	460	18 <sup>1</sup> / <sub>8</sub>	30	100	30.7	1320	1320	1320	1320	1320	1320	1320	M12-M24
PA3-400-4-600	406.4	16	24	25	460	18 <sup>1</sup> / <sub>8</sub>	36	100	30.9	1830	1830	1830	1830	1830	1830	1720	M12-M36
PA3-400-5-600	406.4	16	30	29	460	18 <sup>1</sup> / <sub>8</sub>	45	90	35.8	3050	3050	3050	3050	3050	3000	2390	M12-M36
PA3-400-6-600	406.4	16	36	41	460	18 <sup>1</sup> / <sub>8</sub>	54	100	48.0	3810	3810	3810	3810	3810	3810	3810	M20-M64
PA3-400-7-600	406.4	16	42	45	460	18 <sup>1</sup> / <sub>8</sub>	63	140	68.5	5470	5470	5470	5470	5470	5470	5470	M30-M64
PA3-400-8-600	406.4	16	48	52	460	18 <sup>1</sup> / <sub>8</sub>	72	120	81.0	10910	10910	10910	10910	10910	10910	9370	M42-M80
PA3-400-9-600	406.4	16	56	58	460	18 <sup>1</sup> / <sub>8</sub>	84	140	95.8	10000	10000	10000	10000	10000	10000	10000	M42-M80
PA3-400-10-600	406.4	16	64	65	490	19 <sup>5</sup> / <sub>16</sub>	96	180	130.1	17480	17480	17480	17480	17480	17460	13780	M42-M80



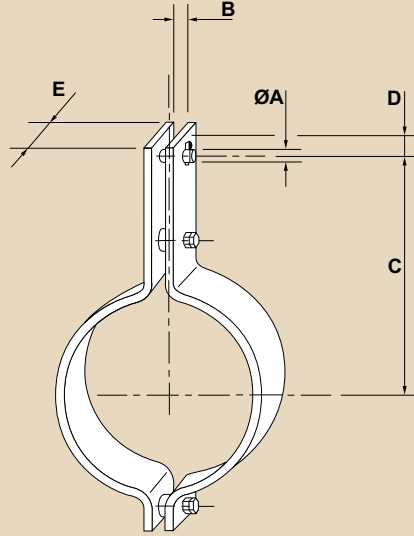
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	in				mm	in	350	400	490	530	560		580
PA3-450-2-400	457.2	18	16	17	450	17 <sup>11</sup> / <sub>16</sub>	24	60	11.6	800	800							M8-M16
PA3-450-3-400	457.2	18	20	20	450	17 <sup>11</sup> / <sub>16</sub>	30	55	13.4	1040	1040							M12-M24
PA3-450-4-400	457.2	18	24	25	450	17 <sup>11</sup> / <sub>16</sub>	36	65	21.5	1830	1830							M12-M36
PA3-450-5-400	457.2	18	30	29	450	17 <sup>11</sup> / <sub>16</sub>	45	90	30.4	2870	2870							M12-M36
PA3-450-6-400	457.2	18	36	41	450	17 <sup>11</sup> / <sub>16</sub>	54	110	38.3	3810	3810							M20-M64
PA3-450-7-400	457.2	18	42	45	450	17 <sup>11</sup> / <sub>16</sub>	63	110	49.5	5470	5470							M30-M64
PA3-450-8-400	457.2	18	48	52	450	17 <sup>11</sup> / <sub>16</sub>	72	150	67.5	8220	8060							M42-M80
PA3-450-9-400	457.2	18	56	58	490	19 <sup>5</sup> / <sub>16</sub>	84	150	86.6	10000	10000							M42-M80
PA3-450-10-400	457.2	18	64	65	530	20 <sup>7</sup> / <sub>8</sub>	96	180	143.4	13670	13670							M42-M80
PA3-450-11-400	457.2	18	72	69	540	21 <sup>1</sup> / <sub>4</sub>	108	180	150.0	18610	18610							M42-M80
PA3-450-2-490	457.2	18	16	17	460	18 <sup>1</sup> / <sub>8</sub>	24	50	8.0	630	630	560	430	280	200	150		M8-M16
PA3-450-3-490	457.2	18	20	20	460	18 <sup>1</sup> / <sub>8</sub>	30	70	13.7	1130	1130	1020	790	520	360	270		M12-M24
PA3-450-4-490	457.2	18	24	25	460	18 <sup>1</sup> / <sub>8</sub>	36	80	19.6	1770	1770	1770	1490	990	700	490		M12-M36
PA3-450-5-490	457.2	18	30	29	460	18 <sup>1</sup> / <sub>8</sub>	45	100	33.5	3050	3050	3050	3050	2210	1530	1110		M12-M36
PA3-450-6-490	457.2	18	36	41	460	18 <sup>1</sup> / <sub>8</sub>	54	100	34.2	3810	3810	3810	3310	2260	1570	1130		M20-M64
PA3-450-7-490	457.2	18	42	45	460	18 <sup>1</sup> / <sub>8</sub>	63	110	48.8	5470	5470	5470	5220	3740	2670	1910		M30-M64
PA3-450-8-490	457.2	18	48	52	460	18 <sup>1</sup> / <sub>8</sub>	72	130	57.8	8210	8210	7750	6540	4690	3350	2400		M42-M80
PA3-450-9-490	457.2	18	56	58	480	18 <sup>1</sup> / <sub>8</sub>	84	140	78.7	10000	10000	10000	9870	7410	5450	3850		M42-M80
PA3-450-10-490	457.2	18	64	65	500	19 <sup>11</sup> / <sub>16</sub>	96	160	92.8	13890	13890	13350	11390	8550	6280	4440		M42-M80
PA3-450-11-490	457.2	18	72	69	540	21 <sup>1</sup> / <sub>4</sub>	108	180	147.3	23130	23130	23130	22490	18280	14050	9820		M42-M80
PA3-450-2-530	457.2	18	16	17	460	18 <sup>1</sup> / <sub>8</sub>	24	70	13.4	800	800	800	800	560	400	290		M8-M16
PA3-450-3-530	457.2	18	20	20	460	18 <sup>1</sup> / <sub>8</sub>	30	80	19.5	1320	1320	1320	1320	980	690	490		M12-M24
PA3-450-4-530	457.2	18	24	25	460	18 <sup>1</sup> / <sub>8</sub>	36	100	24.5	1770	1770	1770	1770	1240	870	620		M12-M36
PA3-450-5-530	457.2	18	30	29	460	18 <sup>1</sup> / <sub>8</sub>	45	100	33.5	3050	3050	3050	3050	2210	1530	1110		M12-M36
PA3-450-6-530	457.2	18	36	41	460	18 <sup>1</sup> / <sub>8</sub>	54	90	38.5	3810	3810	3810	3810	3360	2400	1720		M20-M64
PA3-450-7-530	457.2	18	42	45	460	18 <sup>1</sup> / <sub>8</sub>	63	120	53.0	5470	5470	5470	5470	4080	2910	2090		M30-M64
PA3-450-8-530	457.2	18	48	52	460	18 <sup>1</sup> / <sub>8</sub>	72	120	64.0	9370	9370	9370	8760	6570	4830	3410		M42-M80
PA3-450-9-530	457.2	18	56	58	480	18 <sup>1</sup> / <sub>8</sub>	84	140	78.7	10000	10000	10000	9870	7410	5450	3850		M42-M80
PA3-450-10-530	457.2	18	64	65	520	20 <sup>1</sup> / <sub>2</sub>	96	160	125.0	16240	16240	16240	16240	16240	12840	8970		M42-M80
PA3-450-11-530	457.2	18	72	69	540	21 <sup>1</sup> / <sub>4</sub>	108	180	147.3	23130	23130	23130	22490	18280	14050	9820		M42-M80
PA3-450-2-560	457.2	18	16	17	480	18 <sup>1</sup> / <sub>8</sub>	24	70	13.7	800	800	800	800	660	520	410		M8-M16
PA3-450-3-560	457.2	18	20	20	480	18 <sup>1</sup> / <sub>8</sub>	30	80	19.9	1320	1320	1320	1320	1120	890	700		M12-M24
PA3-450-4-560	457.2	18	24	25	480	18 <sup>1</sup> / <sub>8</sub>	36	100	33.2	1830	1830	1830	1830	1830	1830	1650		M12-M36
PA3-450-5-560	457.2	18	30	29	480	18 <sup>1</sup> / <sub>8</sub>	45	100	34.1	3050	3050	3050	3050	2460	1940	1550		M12-M36
PA3-450-6-560	457.2	18	36	41	480	18 <sup>1</sup> / <sub>8</sub>	54	90	39.2	3810	3810	3810	3810	3650	2920	2330		M20-M64
PA3-450-7-560	457.2	18	42	45	480	18 <sup>1</sup> / <sub>8</sub>	63	110	59.1	5470	5470	5470	5470	5470	5130	4080		M30-M64
PA3-450-8-560	457.2	18	48	52	480	18 <sup>1</sup> / <sub>8</sub>	72	130	70.4	9370	9370	9370	9370	7590	6130	4860		M42-M80
PA3-450-9-560	457.2	18	56	58	500	19 <sup>11</sup> / <sub>16</sub>	84	140	106.2	10000	10000	10000	10000	10000	10000	9730		M42-M80
PA3-450-10-560	457.2	18	64	65	520	20 <sup>1</sup> / <sub>2</sub>	96	160	125.0	16240	16240	16240	16240	16240	14160	11220		M42-M80
PA3-450-11-560	457.2	18	72	69	540	21 <sup>1</sup> / <sub>4</sub>	108	180	147.3	23130	23130	23130	22740	18890	15500	12280		M42-M80
PA3-450-2-600	457.2	18	16	17	480	18 <sup>1</sup> / <sub>8</sub>	24	80	19.5	800	800	800	800	800	770	680		M8-M16
PA3-450-3-600	457.2	18	20	20	480	18 <sup>1</sup> / <sub>8</sub>	30	100	33.1	1320	1320	1320	1320	1320	1320	1320		M12-M24
PA3-450-4-600	457.2	18	24	25	480	18 <sup>1</sup> / <sub>8</sub>	36	100	33.2	1830	1830	1830	1830	1830	1830	1650		M12-M36
PA3-450-5-600	457.2	18	30	29	480	18 <sup>1</sup> / <sub>8</sub>	45	90	38.4	3050	3050	3050	3050	3050	3050	2870		M12-M36
PA3-450-6-600	457.2	18	36	41	480	18 <sup>1</sup> / <sub>8</sub>	54	100	51.6	3810	3810	3810	3810	3810	3810	3810		M20-M64
PA3-450-7-600	457.2	18	42	45	480	18 <sup>1</sup> / <sub>8</sub>	63	140	73.3	5470	5470	5470	5470	5470	5470	5440		M30-M64
PA3-450-8-600	457.2	18	48	52	480	18 <sup>1</sup> / <sub>8</sub>	72	120	86.8	10410	10410	10410	10410	10410	10410	8580		M42-M80
PA3-450-9-600	457.2	18	56	58	490	19 <sup>5</sup> / <sub>16</sub>	84	140	103.4	10000	10000	10000	10000	10000	10000	10000		M42-M80
PA3-450-10-600	457.2	18	64	65	520	20 <sup>1</sup> / <sub>2</sub>	96	200	154.7	16240	16240	16240	16240	16240	16240	14020		M42-M80
PA3-450-11-600	457.2	18	72	69	550	21 <sup>5</sup> / <sub>8</sub>	108	180	184.5	24610	24610	24610	24610	24610	24610	21700		M42-M80

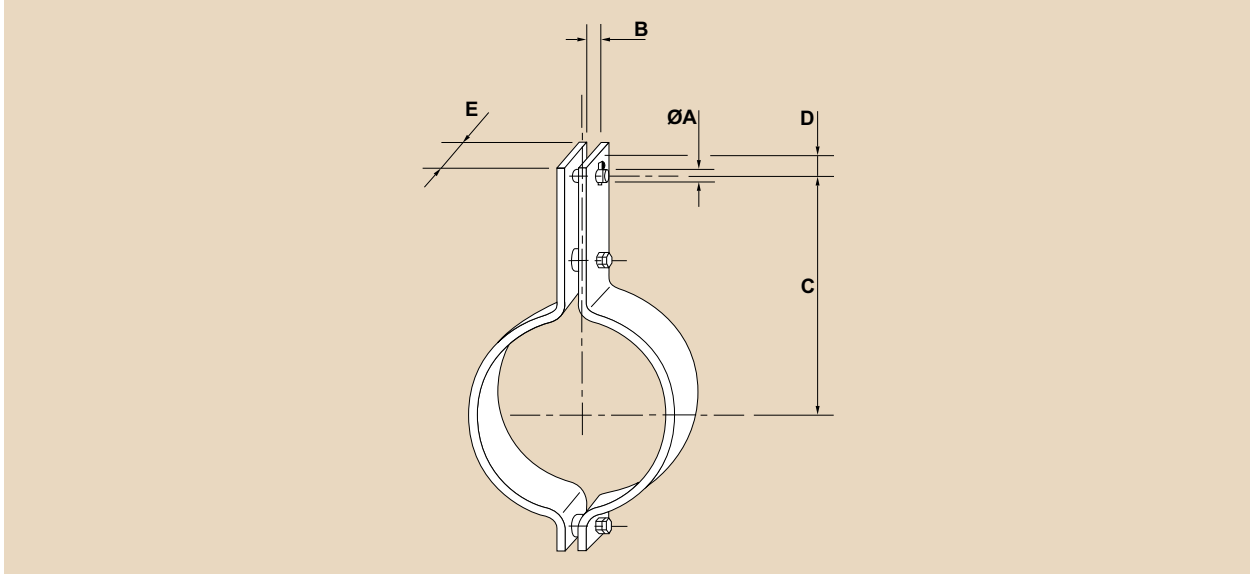
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A		B		C		D	E	Weight	Load Capacity (kgf) at Temperature C						Compatible with Rod Sizes
	mm	in	mm	mm	mm	in	mm	mm				350	400	490	530	560	580	
PA3-500-2-400	508.0	20	16	17	470	18 <sup>1</sup> / <sub>2</sub>	24	60	12.4	800	800						M8-M16	
PA3-500-3-400	508.0	20	20	20	470	18 <sup>1</sup> / <sub>2</sub>	30	55	14.6	1200	1130						M12-M24	
PA3-500-4-400	508.0	20	24	25	470	18 <sup>1</sup> / <sub>2</sub>	36	65	23.0	1750	1750						M12-M36	
PA3-500-5-400	508.0	20	30	29	470	18 <sup>1</sup> / <sub>2</sub>	45	90	32.5	2660	2660						M12-M36	
PA3-500-6-400	508.0	20	36	41	470	18 <sup>1</sup> / <sub>2</sub>	54	110	40.8	3810	3680						M20-M64	
PA3-500-7-400	508.0	20	42	45	470	18 <sup>1</sup> / <sub>2</sub>	63	110	52.7	5470	5470						M30-M64	
PA3-500-8-400	508.0	20	48	52	470	18 <sup>1</sup> / <sub>2</sub>	72	150	71.7	7580	7580						M42-M80	
PA3-500-9-400	508.0	20	56	58	520	20 <sup>1</sup> / <sub>2</sub>	84	150	92.7	10000	10000						M42-M80	
PA3-500-10-400	508.0	20	64	65	560	22 <sup>1</sup> / <sub>16</sub>	96	180	155.9	17240	17240						M42-M80	
PA3-500-11-400	508.0	20	72	69	580	22 <sup>13</sup> / <sub>16</sub>	108	180	164.7	21590	21390						M42-M80	
PA3-500-12-400	508.0	20	80	77	590	23 <sup>1</sup> / <sub>4</sub>	120	200	186.3	24240	24020						M72-M80	
PA3-500-2-490	508.0	20	16	17	480	18 <sup>7</sup> / <sub>8</sub>	24	50	8.6	610	610	540	420	270	190	140	M8-M16	
PA3-500-3-490	508.0	20	20	20	480	18 <sup>7</sup> / <sub>8</sub>	30	80	16.8	1230	1230	1120	880	580	410	290	M12-M24	
PA3-500-4-490	508.0	20	24	25	480	18 <sup>7</sup> / <sub>8</sub>	36	80	21.0	1640	1640	1640	1450	970	680	480	M12-M36	
PA3-500-5-490	508.0	20	30	29	480	18 <sup>7</sup> / <sub>8</sub>	45	100	35.8	2960	2960	2960	2960	2140	1490	1080	M12-M36	
PA3-500-6-490	508.0	20	36	41	480	18 <sup>7</sup> / <sub>8</sub>	54	110	40.3	3810	3810	3810	3280	2260	1570	1140	M20-M64	
PA3-500-7-490	508.0	20	42	45	480	18 <sup>7</sup> / <sub>8</sub>	63	110	51.9	5470	5470	5470	4960	3590	2580	1840	M30-M64	
PA3-500-8-490	508.0	20	48	52	480	18 <sup>7</sup> / <sub>8</sub>	72	140	66.3	7940	7940	7940	7530	6370	4620	3320	M42-M80	
PA3-500-9-490	508.0	20	56	58	510	20 <sup>1</sup> / <sub>16</sub>	84	140	84.5	10000	10000	10000	8980	6810	5030	3550	M42-M80	
PA3-500-10-490	508.0	20	64	65	540	21 <sup>1</sup> / <sub>4</sub>	96	160	132.1	14900	14900	14900	14900	14900	12310	8670	M42-M80	
PA3-500-11-490	508.0	20	72	69	560	22 <sup>1</sup> / <sub>16</sub>	108	180	155.3	21190	21190	21190	21190	17410	13440	9470	M42-M80	
PA3-500-12-490	508.0	20	80	77	570	22 <sup>7</sup> / <sub>16</sub>	120	200	179.0	26440	26440	25930	23080	18920	14600	10290	M72-M80	
PA3-500-2-530	508.0	20	16	17	480	18 <sup>7</sup> / <sub>8</sub>	24	70	14.4	760	760	760	760	550	390	280	M8-M16	
PA3-500-3-530	508.0	20	20	20	480	18 <sup>7</sup> / <sub>8</sub>	30	80	20.9	1320	1320	1320	1320	960	670	470	M12-M24	
PA3-500-4-530	508.0	20	24	25	480	18 <sup>7</sup> / <sub>8</sub>	36	100	26.2	1640	1640	1640	1640	1210	840	600	M12-M36	
PA3-500-5-530	508.0	20	30	29	480	18 <sup>7</sup> / <sub>8</sub>	45	100	35.8	2960	2960	2960	2960	2140	1490	1080	M12-M36	
PA3-500-6-530	508.0	20	36	41	480	18 <sup>7</sup> / <sub>8</sub>	54	90	41.3	3810	3810	3810	3810	3070	2210	1580	M20-M64	
PA3-500-7-530	508.0	20	42	45	480	18 <sup>7</sup> / <sub>8</sub>	63	120	56.4	5470	5470	5470	5410	3920	2820	2010	M30-M64	
PA3-500-8-530	508.0	20	48	52	480	18 <sup>7</sup> / <sub>8</sub>	72	120	68.4	8900	8900	8900	7950	6030	4460	3140	M42-M80	
PA3-500-9-530	508.0	20	56	58	510	20 <sup>1</sup> / <sub>16</sub>	84	160	95.9	10000	10000	10000	10000	7780	5750	4050	M42-M80	
PA3-500-10-530	508.0	20	64	65	540	21 <sup>1</sup> / <sub>4</sub>	96	160	132.1	14900	14900	14900	14900	14900	12310	8670	M42-M80	
PA3-500-11-530	508.0	20	72	69	560	22 <sup>1</sup> / <sub>16</sub>	108	180	155.3	21190	21190	21190	21190	17410	13440	9470	M42-M80	
PA3-500-12-530	508.0	20	80	77	570	22 <sup>7</sup> / <sub>16</sub>	120	200	179.0	26440	26440	25930	23080	18920	14600	10290	M72-M80	
PA3-500-2-560	508.0	20	16	17	510	20 <sup>1</sup> / <sub>16</sub>	24	70	14.8	760	760	760	760	640	510	400	M8-M16	
PA3-500-3-560	508.0	20	20	20	510	20 <sup>1</sup> / <sub>16</sub>	30	80	21.5	1320	1320	1320	1320	1090	860	680	M12-M24	
PA3-500-4-560	508.0	20	24	25	510	20 <sup>1</sup> / <sub>16</sub>	36	100	36.0	1830	1830	1830	1830	1830	1830	1490	M12-M36	
PA3-500-5-560	508.0	20	30	29	510	20 <sup>1</sup> / <sub>16</sub>	45	100	36.7	2960	2960	2960	2960	2370	1870	1500	M12-M36	
PA3-500-6-560	508.0	20	36	41	510	20 <sup>1</sup> / <sub>16</sub>	54	100	46.9	3810	3810	3810	3810	3690	2950	2350	M20-M64	
PA3-500-7-560	508.0	20	42	45	510	20 <sup>1</sup> / <sub>16</sub>	63	110	63.6	5470	5470	5470	5470	5470	4700	3730	M30-M64	
PA3-500-8-560	508.0	20	48	52	510	20 <sup>1</sup> / <sub>16</sub>	72	140	81.3	8900	8900	8900	8900	7470	6040	4790	M42-M80	
PA3-500-9-560	508.0	20	56	58	520	20 <sup>1</sup> / <sub>2</sub>	84	140	112.5	10000	10000	10000	10000	10000	10000	9310	M42-M80	
PA3-500-10-560	508.0	20	64	65	540	21 <sup>1</sup> / <sub>4</sub>	96	160	132.1	14900	14900	14900	14900	14900	13500	10730	M42-M80	
PA3-500-11-560	508.0	20	72	69	560	22 <sup>1</sup> / <sub>16</sub>	108	190	163.5	21190	21190	21190	21190	18920	15560	12370	M42-M80	
PA3-500-12-560	508.0	20	80	77	570	22 <sup>7</sup> / <sub>16</sub>	120	240	212.4	29180	29180	29180	28000	23380	19220	15280	M72-M80	
PA3-500-2-600	508.0	20	16	17	510	20 <sup>1</sup> / <sub>16</sub>	24	80	21.1	800	800	800	800	800	790	680	M8-M16	
PA3-500-3-600	508.0	20	20	20	510	20 <sup>1</sup> / <sub>16</sub>	30	100	35.9	1320	1320	1320	1320	1320	1320	1320	M12-M24	
PA3-500-4-600	508.0	20	24	25	510	20 <sup>1</sup> / <sub>16</sub>	36	110	39.6	1830	1830	1830	1830	1830	1830	1640	M12-M36	
PA3-500-5-600	508.0	20	30	29	510	20 <sup>1</sup> / <sub>16</sub>	45	100	45.9	3050	3050	3050	3050	3050	3050	2440	M12-M36	
PA3-500-6-600	508.0	20	36	41	510	20 <sup>1</sup> / <sub>16</sub>	54	110	61.7	3810	3810	3810	3810	3810	3810	3810	M20-M64	
PA3-500-7-600	508.0	20	42	45	510	20 <sup>1</sup> / <sub>16</sub>	63	160	91.5	5470	5470	5470	5470	5470	5470	5430	M30-M64	
PA3-500-8-600	508.0	20	48	52	510	20 <sup>1</sup> / <sub>16</sub>	72	120	93.3	9830	9830	9830	9830	9830	9830	7930	M42-M80	
PA3-500-9-600	508.0	20	56	58	520	20 <sup>1</sup> / <sub>2</sub>	84	140	110.6	9760	9760	9760	9760	9760	9760	9670	M42-M80	
PA3-500-10-600	508.0	20	64	65	540	21 <sup>1</sup> / <sub>4</sub>	96	200	163.6	14900	14900	14900	14900	14900	14900	13410	M42-M80	
PA3-500-11-600	508.0	20	72	69	580	22 <sup>13</sup> / <sub>16</sub>	108	180	196.7	23020	23020	23020	23020	23020	23020	20110	M42-M80	
PA3-500-12-600	508.0	20	80	77	580	22 <sup>13</sup> / <sub>16</sub>	120	200	220.2	23080	23080	23080	23080	23080	23080	23080	M72-M80	

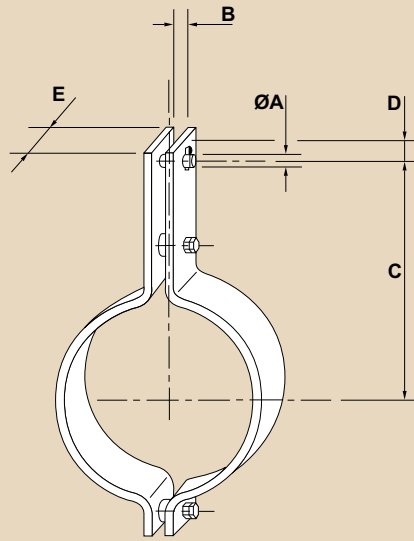
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes
	mm	in			mm	in				mm	mm	kgf	350	400	490	530	
PA3-550-3-400	558.8	22	20	20	500	19 <sup>11/16</sup>	30	55	15.7	1130	1060						M12-M24
PA3-550-4-400	558.8	22	24	25	500	19 <sup>11/16</sup>	36	65	24.6	1650	1650						M12-M36
PA3-550-5-400	558.8	22	30	29	500	19 <sup>11/16</sup>	45	90	34.8	2510	2510						M12-M36
PA3-550-6-400	558.8	22	36	41	500	19 <sup>11/16</sup>	54	110	54.3	3810	3810						M20-M64
PA3-550-7-400	558.8	22	42	45	500	19 <sup>11/16</sup>	63	130	65.9	5470	5470						M30-M64
PA3-550-8-400	558.8	22	48	52	520	20 <sup>1/2</sup>	72	150	94.7	10160	9870						M42-M80
PA3-550-9-400	558.8	22	56	58	550	21 <sup>5/8</sup>	84	150	98.5	10000	9950						M42-M80
PA3-550-10-400	558.8	22	64	65	590	23 <sup>1/4</sup>	96	180	165.0	16090	16090						M42-M80
PA3-550-11-400	558.8	22	72	69	610	24	108	180	173.9	20280	20090						M42-M80
PA3-550-12-400	558.8	22	80	77	620	24 <sup>7/16</sup>	120	220	214.8	23470	23470						M72-M80
PA3-550-13-400	558.8	22	80	85	640	25 <sup>3/16</sup>	120	200	252.3	30830	30830						M72-M80
PA3-550-3-490	558.8	22	20	20	510	20 <sup>1/16</sup>	30	80	18.0	1170	1170	1050	820	540	380	270	M12-M24
PA3-550-4-490	558.8	22	24	25	510	20 <sup>1/16</sup>	36	100	28.5	1830	1830	1830	1560	1040	730	520	M12-M36
PA3-550-5-490	558.8	22	30	29	510	20 <sup>1/16</sup>	45	100	38.4	2790	2790	2790	2790	2000	1380	1000	M12-M36
PA3-550-6-490	558.8	22	36	41	510	20 <sup>1/16</sup>	54	110	43.1	3810	3810	3690	3070	2100	1460	1060	M20-M64
PA3-550-7-490	558.8	22	42	45	510	20 <sup>1/16</sup>	63	110	55.5	5470	5470	5470	4650	3340	2400	1710	M30-M64
PA3-550-8-490	558.8	22	48	52	510	20 <sup>1/16</sup>	72	120	73.0	8340	8340	8340	7460	5620	4140	2920	M42-M80
PA3-550-9-490	558.8	22	56	58	530	23 <sup>5/8</sup>	84	140	89.2	10000	10000	9850	8420	6340	4670	3290	M42-M80
PA3-550-10-490	558.8	22	64	65	580	22 <sup>13/16</sup>	96	160	144.1	19620	19620	19210	17050	13900	10700	7500	M42-M80
PA3-550-11-490	558.8	22	72	69	590	23 <sup>1/4</sup>	108	180	165.0	20230	20230	20230	19270	15700	12090	8470	M42-M80
PA3-550-12-490	558.8	22	80	77	600	23 <sup>5/8</sup>	120	200	189.8	24110	24110	23610	20960	17080	13150	9210	M72-M80
PA3-550-13-490	558.8	22	80	85	630	24 <sup>13/16</sup>	120	200	244.6	30830	30830	30830	30830	29060	23400	17390	M72-M80
PA3-550-3-530	558.8	22	20	20	510	20 <sup>1/16</sup>	30	80	22.5	1320	1320	1320	1320	890	620	440	M12-M24
PA3-550-4-530	558.8	22	24	25	510	20 <sup>1/16</sup>	36	100	38.0	1830	1830	1830	1830	1830	1380	1000	M12-M36
PA3-550-5-530	558.8	22	30	29	510	20 <sup>1/16</sup>	45	100	38.4	2790	2790	2790	2790	2000	1380	1000	M12-M36
PA3-550-6-530	558.8	22	36	41	510	20 <sup>1/16</sup>	54	90	44.2	3810	3810	3810	3810	2860	2050	1470	M20-M64
PA3-550-7-530	558.8	22	42	45	510	20 <sup>1/16</sup>	63	130	65.1	5470	5470	5470	5470	3950	2830	2020	M30-M64
PA3-550-8-530	558.8	22	48	52	510	20 <sup>1/16</sup>	72	120	73.0	8340	8340	8340	7460	5620	4140	2920	M42-M80
PA3-550-9-530	558.8	22	56	58	550	21 <sup>5/8</sup>	84	140	120.1	10000	10000	10000	10000	10000	9600	6730	M42-M80
PA3-550-10-530	558.8	22	64	65	570	22 <sup>7/16</sup>	96	160	140.8	14260	14260	14260	14260	14260	11060	7750	M42-M80
PA3-550-11-530	558.8	22	72	69	590	23 <sup>1/4</sup>	108	180	165.0	20230	20230	20230	19270	15700	12090	8470	M42-M80
PA3-550-12-530	558.8	22	80	77	600	23 <sup>1/4</sup>	120	220	207.6	26520	26520	25970	23050	18790	14460	10140	M72-M80
PA3-550-13-530	558.8	22	80	85	630	24 <sup>13/16</sup>	120	200	244.6	30830	30830	30830	30830	29060	23400	17390	M72-M80
PA3-550-3-560	558.8	22	20	20	540	21 <sup>1/4</sup>	30	80	23.0	1320	1320	1320	1320	1020	810	640	M12-M24
PA3-550-4-560	558.8	22	24	25	540	21 <sup>1/4</sup>	36	100	38.6	1770	1770	1770	1770	1770	1740	1390	M12-M36
PA3-550-5-560	558.8	22	30	29	540	21 <sup>1/4</sup>	45	110	43.2	2790	2790	2790	2790	2440	1930	1540	M12-M36
PA3-550-6-560	558.8	22	36	41	540	21 <sup>1/4</sup>	54	110	55.0	3810	3810	3810	3810	3790	3030	2420	M20-M64
PA3-550-7-560	558.8	22	42	45	540	21 <sup>1/4</sup>	63	110	67.9	5470	5470	5470	5470	5430	4390	3490	M30-M64
PA3-550-8-560	558.8	22	48	52	540	21 <sup>1/4</sup>	72	150	92.7	8340	8340	8340	8340	7480	6040	4800	M42-M80
PA3-550-9-560	558.8	22	56	58	550	21 <sup>5/8</sup>	84	140	120.1	10000	10000	10000	10000	10000	10000	8380	M42-M80
PA3-550-10-560	558.8	22	64	65	570	22 <sup>7/16</sup>	96	160	140.8	14260	14260	14260	14260	14260	12170	9650	M42-M80
PA3-550-11-560	558.8	22	72	69	590	23 <sup>1/4</sup>	108	200	182.4	20230	20230	20230	20230	18010	14790	11730	M42-M80
PA3-550-12-560	558.8	22	80	77	620	24 <sup>7/16</sup>	120	200	238.5	29380	29380	29380	29380	29380	25210	20440	M72-M80
PA3-550-13-560	558.8	22	80	85	630	24 <sup>13/16</sup>	120	200	244.6	30830	30830	30830	30830	29410	24760	20070	M72-M80
PA3-550-3-600	558.8	22	20	20	540	21 <sup>1/4</sup>	30	100	38.4	1320	1320	1320	1320	1320	1320	1320	M12-M24
PA3-550-4-600	558.8	22	24	25	540	21 <sup>1/4</sup>	36	90	43.5	1830	1830	1830	1830	1830	1830	1830	M12-M36
PA3-550-5-600	558.8	22	30	29	540	21 <sup>1/4</sup>	45	100	49.1	3000	3000	3000	3000	3000	2870	2290	M12-M36
PA3-550-6-600	558.8	22	36	41	540	21 <sup>1/4</sup>	54	120	71.8	3810	3810	3810	3810	3810	3810	3810	M20-M64
PA3-550-7-600	558.8	22	42	45	540	21 <sup>1/4</sup>	63	120	98.5	5470	5470	5470	5470	5470	5470	5470	M30-M64
PA3-550-8-600	558.8	22	48	52	540	21 <sup>1/4</sup>	72	130	107.5	9210	9210	9210	9210	9210	9210	8020	M42-M80
PA3-550-9-600	558.8	22	56	58	550	21 <sup>5/8</sup>	84	170	144.8	10000	10000	10000	10000	10000	10000	10000	M42-M80
PA3-550-10-600	558.8	22	64	65	590	23 <sup>1/4</sup>	96	180	199.3	15150	15150	15150	15150	15150	15150	15150	M42-M80
PA3-550-11-600	558.8	22	72	69	610	24	108	180	208.0	21450	21450	21450	21450	21450	21450	18770	M42-M80
PA3-550-12-600	558.8	22	80	77	620	24 <sup>7/16</sup>	120	230	272.5	29380	29380	29380	29380	29380	29000	23500	M72-M80
PA3-550-13-600	558.8	22	80	85	620	24 <sup>7/16</sup>	120	280	328.5	30030	30030	30030	30030	30030	30030	28840	M72-M80

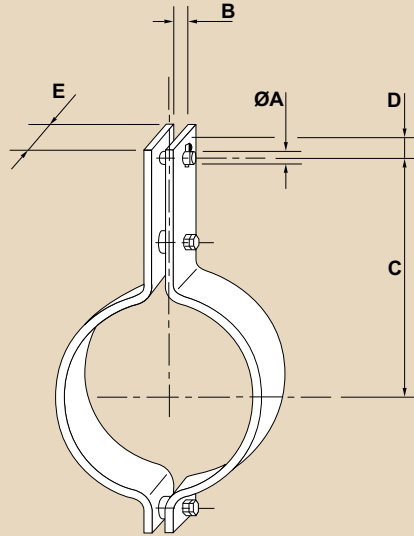
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	in				mm	mm	350	400	490	530	560		580
PA3-600-3-400	609.6	24	20	20	520	20 <sup>1</sup> / <sub>2</sub>	30	65	26.1	1320	1320							M12-M24
PA3-600-4-400	609.6	24	24	25	520	20 <sup>1</sup> / <sub>2</sub>	36	65	26.3	1620	1620							M12-M36
PA3-600-5-400	609.6	24	30	29	520	20 <sup>1</sup> / <sub>2</sub>	45	90	36.9	2360	2360							M12-M36
PA3-600-6-400	609.6	24	36	41	520	20 <sup>1</sup> / <sub>2</sub>	54	110	57.7	3810	3810							M20-M64
PA3-600-7-400	609.6	24	42	45	520	20 <sup>1</sup> / <sub>2</sub>	63	130	69.9	5470	5470							M30-M64
PA3-600-8-400	609.6	24	48	52	550	21 <sup>5</sup> / <sub>8</sub>	72	150	100.9	9320	9080							M42-M80
PA3-600-9-400	609.6	24	56	58	600	23 <sup>5</sup> / <sub>8</sub>	84	150	140.6	10000	10000							M42-M80
PA3-600-10-400	609.6	24	64	65	610	24	96	180	173.2	15020	15020							M42-M80
PA3-600-11-400	609.6	24	72	69	640	25 <sup>3</sup> / <sub>16</sub>	108	180	183.8	18700	18540							M42-M80
PA3-600-12-400	609.6	24	80	77	670	26 <sup>3</sup> / <sub>8</sub>	120	200	265.9	31290	31150							M72-M80
PA3-600-13-400	609.6	24	80	85	670	26 <sup>3</sup> / <sub>8</sub>	120	200	265.8	30830	30830							M72-M80
PA3-600-3-490	609.6	24	20	20	540	21 <sup>1</sup> / <sub>4</sub>	30	80	19.3	1130	1130	1020	810	530	370	270		M12-M24
PA3-600-4-490	609.6	24	24	25	540	21 <sup>1</sup> / <sub>4</sub>	36	100	30.5	1830	1830	1830	1530	1020	710	510		M12-M36
PA3-600-5-490	609.6	24	30	29	540	21 <sup>1</sup> / <sub>4</sub>	45	100	41.2	2730	2730	2730	2650	1830	1280	930		M12-M36
PA3-600-6-490	609.6	24	36	41	540	21 <sup>1</sup> / <sub>4</sub>	54	90	47.1	3810	3810	3810	3810	2790	2010	1440		M20-M64
PA3-600-7-490	609.6	24	42	45	540	21 <sup>1</sup> / <sub>4</sub>	63	120	64.2	5470	5470	5470	4880	3550	2560	1830		M30-M64
PA3-600-8-490	609.6	24	48	52	540	21 <sup>1</sup> / <sub>4</sub>	72	120	79.4	7970	7970	7690	6600	5020	3720	2620		M42-M80
PA3-600-9-490	609.6	24	56	58	560	22 <sup>1</sup> / <sub>16</sub>	84	150	101.1	10000	10000	10000	8650	6580	4880	3430		M42-M80
PA3-600-10-490	609.6	24	64	65	610	24	96	160	152.3	18660	18660	18310	16320	13410	10370	7330		M42-M80
PA3-600-11-490	609.6	24	72	69	620	24 <sup>7</sup> / <sub>16</sub>	108	180	174.3	18880	18880	18880	18430	15160	11720	8280		M42-M80
PA3-600-12-490	609.6	24	80	77	630	24 <sup>13</sup> / <sub>16</sub>	120	210	209.6	24030	24030	23570	21010	17280	13360	9440		M72-M80
PA3-600-13-490	609.6	24	80	85	660	26	120	200	258.1	30830	30830	30830	30830	27050	22000	16440		M72-M80
PA3-600-3-530	609.6	24	20	20	540	21 <sup>1</sup> / <sub>4</sub>	30	80	24.1	1320	1320	1320	1210	810	570	400		M12-M24
PA3-600-4-530	609.6	24	24	25	540	21 <sup>1</sup> / <sub>4</sub>	36	100	40.8	1830	1830	1830	1830	1820	1270	920		M12-M36
PA3-600-5-530	609.6	24	30	29	540	21 <sup>1</sup> / <sub>4</sub>	45	100	41.2	2730	2730	2730	2650	1830	1280	930		M12-M36
PA3-600-6-530	609.6	24	36	41	540	21 <sup>1</sup> / <sub>4</sub>	54	90	47.1	3810	3810	3810	3810	2790	2010	1440		M20-M64
PA3-600-7-530	609.6	24	42	45	540	21 <sup>1</sup> / <sub>4</sub>	63	110	70.9	5470	5470	5470	5470	4750	3520	2480		M30-M64
PA3-600-8-530	609.6	24	48	52	540	21 <sup>1</sup> / <sub>4</sub>	72	130	84.0	7810	7810	7810	7770	5910	4380	3080		M42-M80
PA3-600-9-530	609.6	24	56	58	580	22 <sup>13</sup> / <sub>16</sub>	84	140	127.3	10000	10000	10000	10000	10000	9320	6590		M42-M80
PA3-600-10-530	609.6	24	64	65	610	24	96	160	152.3	18660	18660	18310	16320	13410	10370	7330		M42-M80
PA3-600-11-530	609.6	24	72	69	620	24 <sup>7</sup> / <sub>16</sub>	108	180	174.3	18880	18880	18880	18430	15160	11720	8280		M42-M80
PA3-600-12-530	609.6	24	80	77	630	24 <sup>13</sup> / <sub>16</sub>	120	240	237.8	25880	25880	25880	24020	19740	15260	10790		M72-M80
PA3-600-13-530	609.6	24	80	85	660	26	120	200	258.1	30830	30830	30830	30830	27050	22000	16440		M72-M80
PA3-600-3-560	609.6	24	20	20	560	22 <sup>1</sup> / <sub>16</sub>	30	100	30.6	1320	1320	1320	1320	1150	910	720		M12-M24
PA3-600-4-560	609.6	24	24	25	560	22 <sup>1</sup> / <sub>16</sub>	36	100	40.9	1660	1660	1660	1660	1660	1650	1360		M12-M36
PA3-600-5-560	609.6	24	30	29	560	22 <sup>1</sup> / <sub>16</sub>	45	90	47.0	2920	2920	2920	2920	2920	2380	1890		M12-M36
PA3-600-6-560	609.6	24	36	41	560	22 <sup>1</sup> / <sub>16</sub>	54	110	58.2	3810	3810	3810	3810	3680	2950	2350		M20-M64
PA3-600-7-560	609.6	24	42	45	560	22 <sup>1</sup> / <sub>16</sub>	63	120	78.3	5470	5470	5470	5470	5470	4450	3530		M30-M64
PA3-600-8-560	609.6	24	48	52	560	22 <sup>1</sup> / <sub>16</sub>	72	160	104.2	7810	7810	7810	7810	7710	6250	4950		M42-M80
PA3-600-9-560	609.6	24	56	58	580	22 <sup>13</sup> / <sub>16</sub>	84	140	127.3	10000	10000	10000	10000	10000	10000	8120		M42-M80
PA3-600-10-560	609.6	24	64	65	610	24	96	160	152.3	18660	18660	18310	16500	13800	11350	9030		M42-M80
PA3-600-11-560	609.6	24	72	69	620	24 <sup>7</sup> / <sub>16</sub>	108	210	201.9	18880	18880	18880	18880	18190	14960	11910		M42-M80
PA3-600-12-560	609.6	24	80	77	650	25 <sup>9</sup> / <sub>16</sub>	120	200	252.0	27920	27920	27920	27920	27880	23610	19170		M72-M80
PA3-600-13-560	609.6	24	80	85	660	26	120	210	270.3	30830	30830	30830	30830	28750	24340	19770		M72-M80
PA3-600-3-600	609.6	24	20	20	560	22 <sup>1</sup> / <sub>16</sub>	30	100	40.8	1320	1320	1320	1320	1320	1320	1320		M12-M24
PA3-600-4-600	609.6	24	24	25	560	22 <sup>1</sup> / <sub>16</sub>	36	90	46.1	1780	1780	1780	1780	1780	1780	1780		M12-M36
PA3-600-5-600	609.6	24	30	29	560	22 <sup>1</sup> / <sub>16</sub>	45	110	57.3	2920	2920	2920	2920	2920	2900	2310		M12-M36
PA3-600-6-600	609.6	24	36	41	560	22 <sup>1</sup> / <sub>16</sub>	54	120	76.0	3810	3810	3810	3810	3810	3810	3810		M20-M64
PA3-600-7-600	609.6	24	42	45	560	22 <sup>1</sup> / <sub>16</sub>	63	120	104.4	5470	5470	5470	5470	5470	5470	5470		M30-M64
PA3-600-8-600	609.6	24	48	52	560	22 <sup>1</sup> / <sub>16</sub>	72	130	113.5	8620	8620	8620	8620	8620	8620	7780		M42-M80
PA3-600-9-600	609.6	24	56	58	580	22 <sup>13</sup> / <sub>16</sub>	84	170	153.6	10000	10000	10000	10000	10000	10000	9860		M42-M80
PA3-600-10-600	609.6	24	64	65	630	24 <sup>13</sup> / <sub>16</sub>	96	180	215.8	20230	20230	20230	20230	20230	20230	17540		M42-M80
PA3-600-11-600	609.6	24	72	69	640	25 <sup>3</sup> / <sub>16</sub>	108	190	232.0	20430	20430	20430	20430	20430	20430	18580		M42-M80
PA3-600-12-600	609.6	24	80	77	650	25 <sup>9</sup> / <sub>16</sub>	120	250	312.0	27920	27920	27920	27920	27920	27920	23960		M72-M80
PA3-600-13-600	609.6	24	80	85	660	26	120	300	379.8	30830	30830	30830	30830	30830	30830	28240		M72-M80

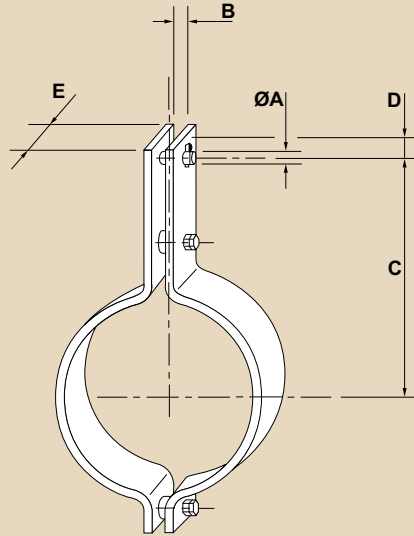
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	in				mm	in	350	400	490	530	560		580
PA3-650-3-400	660.4	26	20	20	560	22 <sup>1</sup> / <sub>16</sub>	30	65	28.0	1320	1320							M12-M24
PA3-650-4-400	660.4	26	24	25	560	22 <sup>1</sup> / <sub>16</sub>	36	65	28.6	1830	1820							M12-M36
PA3-650-5-400	660.4	26	30	29	560	22 <sup>1</sup> / <sub>16</sub>	45	90	39.7	2340	2340							M12-M36
PA3-650-6-400	660.4	26	36	41	560	22 <sup>1</sup> / <sub>16</sub>	54	110	61.7	3810	3810							M20-M64
PA3-650-7-400	660.4	26	42	45	560	22 <sup>1</sup> / <sub>16</sub>	63	150	85.7	5470	5470							M30-M64
PA3-650-8-400	660.4	26	48	52	570	22 <sup>1</sup> / <sub>16</sub>	72	150	106.0	8870	8620							M42-M80
PA3-650-9-400	660.4	26	56	58	620	24 <sup>7</sup> / <sub>16</sub>	84	150	147.4	10000	10000							M42-M80
PA3-650-10-400	660.4	26	64	65	640	25 <sup>3</sup> / <sub>16</sub>	96	180	183.0	14530	14530							M42-M80
PA3-650-11-400	660.4	26	72	69	660	26	108	200	211.9	19740	19550							M42-M80
PA3-650-12-400	660.4	26	80	77	700	27 <sup>9</sup> / <sub>16</sub>	120	200	278.6	29700	29560							M72-M80
PA3-650-13-400	660.4	26	80	85	700	27 <sup>9</sup> / <sub>16</sub>	120	200	278.4	29940	29800							M72-M80
PA3-650-3-490	660.4	26	20	20	590	23 <sup>1</sup> / <sub>4</sub>	30	80	26.1	1320	1320	1320	1140	760	530	380		M12-M24
PA3-650-4-490	660.4	26	24	25	590	23 <sup>1</sup> / <sub>4</sub>	36	100	33.0	1830	1830	1800	1440	960	670	480		M12-M36
PA3-650-5-490	660.4	26	30	29	590	23 <sup>1</sup> / <sub>4</sub>	45	100	44.4	2600	2600	2600	2520	1730	1200	870		M12-M36
PA3-650-6-490	660.4	26	36	41	590	23 <sup>1</sup> / <sub>4</sub>	54	90	50.8	3810	3810	3810	3640	2630	1890	1350		M20-M64
PA3-650-7-490	660.4	26	42	45	590	23 <sup>1</sup> / <sub>4</sub>	63	130	74.9	5470	5470	5470	4780	3450	2480	1770		M30-M64
PA3-650-8-490	660.4	26	48	52	590	23 <sup>1</sup> / <sub>4</sub>	72	130	92.0	8220	8220	7910	6770	5120	3780	2660		M42-M80
PA3-650-9-490	660.4	26	56	58	590	23 <sup>1</sup> / <sub>4</sub>	84	160	114.1	10000	10000	9810	8400	6340	4680	3300		M42-M80
PA3-650-10-490	660.4	26	64	65	640	25 <sup>3</sup> / <sub>16</sub>	96	160	161.1	17180	17180	16840	14960	12230	9430	6630		M42-M80
PA3-650-11-490	660.4	26	72	69	650	25 <sup>9</sup> / <sub>16</sub>	108	180	186.9	18830	18830	18450	16400	13400	10330	7260		M42-M80
PA3-650-12-490	660.4	26	80	77	650	25 <sup>9</sup> / <sub>16</sub>	120	220	228.8	23920	23920	23440	20830	17030	13130	9230		M72-M80
PA3-650-13-490	660.4	26	80	85	690	27 <sup>3</sup> / <sub>16</sub>	120	200	270.7	30830	30830	30830	29420	25570	20660	15380		M72-M80
PA3-650-3-530	660.4	26	20	20	590	23 <sup>1</sup> / <sub>4</sub>	30	80	26.1	1320	1320	1320	1140	760	530	380		M12-M24
PA3-650-4-530	660.4	26	24	25	590	23 <sup>1</sup> / <sub>4</sub>	36	100	43.5	1580	1580	1580	1580	1580	1270	920		M12-M36
PA3-650-5-530	660.4	26	30	29	590	23 <sup>1</sup> / <sub>4</sub>	45	100	44.4	2600	2600	2600	2520	1730	1200	870		M12-M36
PA3-650-6-530	660.4	26	36	41	590	23 <sup>1</sup> / <sub>4</sub>	54	100	56.3	3810	3810	3810	3810	2920	2100	1500		M20-M64
PA3-650-7-530	660.4	26	42	45	590	23 <sup>1</sup> / <sub>4</sub>	63	110	76.2	5470	5470	5470	5470	4470	3300	2330		M30-M64
PA3-650-8-530	660.4	26	48	52	590	23 <sup>1</sup> / <sub>4</sub>	72	140	97.3	7630	7630	7630	7600	5740	4240	2990		M42-M80
PA3-650-9-530	660.4	26	56	58	610	24	84	140	135.0	10000	10000	10000	10000	10000	8460	5950		M42-M80
PA3-650-10-530	660.4	26	64	65	640	25 <sup>3</sup> / <sub>16</sub>	96	160	161.1	17180	17180	16840	14960	12230	9430	6630		M42-M80
PA3-650-11-530	660.4	26	72	69	650	25 <sup>9</sup> / <sub>16</sub>	108	200	206.6	20920	20920	20500	18220	14890	11480	8070		M42-M80
PA3-650-12-530	660.4	26	80	77	670	26 <sup>3</sup> / <sub>8</sub>	120	200	263.2	26340	26340	26340	26340	26070	21070	15680		M72-M80
PA3-650-13-530	660.4	26	80	85	690	27 <sup>3</sup> / <sub>16</sub>	120	200	270.7	30830	30830	30830	29420	25570	20660	15380		M72-M80
PA3-650-3-560	660.4	26	20	20	610	24	30	100	33.0	1320	1320	1320	1320	1090	860	680		M12-M24
PA3-650-4-560	660.4	26	24	25	610	24	36	100	44.2	1580	1580	1580	1580	1580	1580	1280		M12-M36
PA3-650-5-560	660.4	26	30	29	610	24	45	90	50.7	2780	2780	2780	2780	2780	2240	1790		M12-M36
PA3-650-6-560	660.4	26	36	41	610	24	54	120	68.2	3810	3810	3810	3810	3790	3040	2420		M20-M64
PA3-650-7-560	660.4	26	42	45	610	24	63	130	90.9	5470	5470	5470	5470	5470	4540	3600		M30-M64
PA3-650-8-560	660.4	26	48	52	610	24	72	120	113.0	8380	8380	8380	8380	8380	8210	6520		M42-M80
PA3-650-9-560	660.4	26	56	58	610	24	84	140	135.0	10000	10000	10000	10000	10000	9300	7380		M42-M80
PA3-650-10-560	660.4	26	64	65	640	25 <sup>3</sup> / <sub>16</sub>	96	170	170.7	18090	18090	17890	16080	13400	11010	8740		M42-M80
PA3-650-11-560	660.4	26	72	69	670	26 <sup>3</sup> / <sub>8</sub>	108	180	234.7	25850	25850	25850	25850	23580	19890	16130		M42-M80
PA3-650-12-560	660.4	26	80	77	670	26 <sup>3</sup> / <sub>8</sub>	120	200	263.2	26340	26340	26340	26340	26340	22260	18050		M72-M80
PA3-650-13-560	660.4	26	80	85	690	27 <sup>3</sup> / <sub>16</sub>	120	220	296.3	30830	30830	30830	30830	28470	24020	19480		M72-M80
PA3-650-3-600	660.4	26	20	20	610	24	30	100	44.0	1320	1320	1320	1320	1320	1320	1270		M12-M24
PA3-650-4-600	660.4	26	24	25	610	24	36	90	49.8	1700	1700	1700	1700	1700	1700	1700		M12-M36
PA3-650-5-600	660.4	26	30	29	610	24	45	120	67.3	2780	2780	2780	2780	2780	2780	2380		M12-M36
PA3-650-6-600	660.4	26	36	41	610	24	54	130	88.8	3810	3810	3810	3810	3810	3810	3750		M20-M64
PA3-650-7-600	660.4	26	42	45	610	24	63	120	112.0	5470	5470	5470	5470	5470	5470	5470		M30-M64
PA3-650-8-600	660.4	26	48	52	610	24	72	140	131.3	8380	8380	8380	8380	8380	8380	7600		M42-M80
PA3-650-9-600	660.4	26	56	58	610	24	84	190	181.5	10000	10000	10000	10000	10000	10000	10000		M42-M80
PA3-650-10-600	660.4	26	64	65	650	25 <sup>9</sup> / <sub>16</sub>	96	180	225.8	19130	19130	19130	19130	19130	19130	16540		M42-M80
PA3-650-11-600	660.4	26	72	69	660	26	108	200	254.8	19310	19310	19310	19310	19310	19310	18440		M42-M80
PA3-650-12-600	660.4	26	80	77	670	26 <sup>3</sup> / <sub>8</sub>	120	260	338.5	26340	26340	26340	26340	26340	26340	23470		M72-M80
PA3-650-13-600	660.4	26	80	85	690	27 <sup>3</sup> / <sub>16</sub>	120	320	424.3	30830	30830	30830	30830	30830	30830	28330		M72-M80

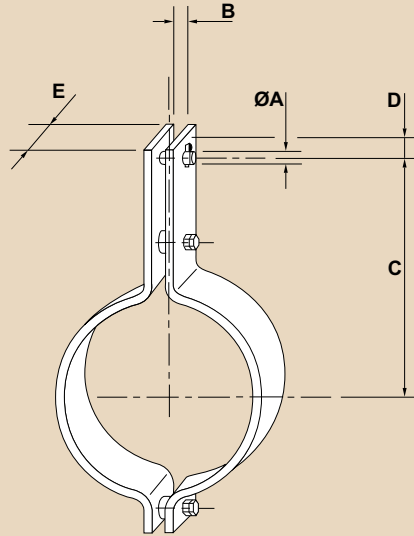
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	in				mm	in	350	400	490	530	560		580
PA3-700-3-400	711.2	28	20	20	590	23 <sup>1</sup> / <sub>4</sub>	30	65	29.7	1320	1320							M12-M24
PA3-700-4-400	711.2	28	24	25	590	23 <sup>1</sup> / <sub>4</sub>	36	65	30.2	1830	1740							M12-M36
PA3-700-5-400	711.2	28	30	29	590	23 <sup>1</sup> / <sub>4</sub>	45	90	42.8	2420	2300							M12-M36
PA3-700-6-400	711.2	28	36	41	590	23 <sup>1</sup> / <sub>4</sub>	54	110	65.3	3810	3810							M20-M64
PA3-700-7-400	711.2	28	42	45	590	23 <sup>1</sup> / <sub>4</sub>	63	150	90.6	5470	5470							M30-M64
PA3-700-8-400	711.2	28	48	52	600	23 <sup>9</sup> / <sub>8</sub>	72	150	111.8	8470	8220							M42-M80
PA3-700-9-400	711.2	28	56	58	650	25 <sup>9</sup> / <sub>16</sub>	84	150	157.4	10000	10000							M42-M80
PA3-700-10-400	711.2	28	64	65	670	26 <sup>3</sup> / <sub>8</sub>	96	180	192.2	13810	13810							M42-M80
PA3-700-11-400	711.2	28	72	69	690	27 <sup>3</sup> / <sub>16</sub>	108	200	222.1	18830	18650							M42-M80
PA3-700-12-400	711.2	28	80	77	730	28 <sup>3</sup> / <sub>4</sub>	120	200	292.1	27670	27530							M72-M80
PA3-700-13-400	711.2	28	80	85	740	29 <sup>1</sup> / <sub>8</sub>	120	220	327.3	30000	29850							M72-M80
PA3-700-3-490	711.2	28	20	20	610	24	30	80	27.5	1320	1320	1320	1090	720	500	360		M12-M24
PA3-700-4-490	711.2	28	24	25	610	24	36	100	34.8	1750	1750	1600	1270	850	590	420		M12-M36
PA3-700-5-490	711.2	28	30	29	610	24	45	100	46.7	2490	2490	2490	2390	1630	1130	820		M12-M36
PA3-700-6-490	711.2	28	36	41	610	24	54	90	53.5	3810	3810	3810	3290	2360	1680	1210		M20-M64
PA3-700-7-490	711.2	28	42	45	610	24	63	130	78.6	5470	5470	5390	4550	3260	2330	1670		M30-M64
PA3-700-8-490	711.2	28	48	52	610	24	72	130	96.4	7850	7850	7550	6440	4830	3550	2510		M42-M80
PA3-700-9-490	711.2	28	56	58	630	24 <sup>13</sup> / <sub>16</sub>	84	140	141.2	10000	10000	10000	10000	10000	7980	5580		M42-M80
PA3-700-10-490	711.2	28	64	65	660	26	96	160	168.2	16410	16410	16060	14230	11560	8890	6210		M42-M80
PA3-700-11-490	711.2	28	72	69	680	26 <sup>3</sup> / <sub>4</sub>	108	190	206.4	18970	18970	18560	16450	13370	10270	7180		M42-M80
PA3-700-12-490	711.2	28	80	77	680	26 <sup>3</sup> / <sub>4</sub>	120	240	261.5	23700	23700	23630	20940	17020	13080	9140		M72-M80
PA3-700-13-490	711.2	28	80	85	720	28 <sup>3</sup> / <sub>8</sub>	120	200	284.2	30120	30120	29980	27280	23670	19000	14090		M72-M80
PA3-700-3-530	711.2	28	20	20	610	24	30	80	27.5	1320	1320	1320	1090	720	500	360		M12-M24
PA3-700-4-530	711.2	28	24	25	610	24	36	100	46.3	1830	1830	1830	1830	1620	1130	810		M12-M36
PA3-700-5-530	711.2	28	30	29	610	24	45	100	46.7	2490	2490	2490	2390	1630	1130	820		M12-M36
PA3-700-6-530	711.2	28	36	41	610	24	54	100	59.3	3810	3810	3810	3650	2620	1870	1340		M20-M64
PA3-700-7-530	711.2	28	42	45	610	24	63	110	80.0	5470	5470	5470	5470	4230	3110	2200		M30-M64
PA3-700-8-530	711.2	28	48	52	610	24	72	150	110.7	9060	9060	8710	7430	5580	4100	2900		M42-M80
PA3-700-9-530	711.2	28	56	58	630	24 <sup>13</sup> / <sub>16</sub>	84	140	141.2	10000	10000	10000	10000	10000	7980	5580		M42-M80
PA3-700-10-530	711.2	28	64	65	660	26	96	160	168.2	16410	16410	16060	14230	11560	8890	6210		M42-M80
PA3-700-11-530	711.2	28	72	69	680	26 <sup>3</sup> / <sub>4</sub>	108	210	227.1	20960	20960	20510	18180	14770	11350	7940		M42-M80
PA3-700-12-530	711.2	28	80	77	700	27 <sup>9</sup> / <sub>16</sub>	120	200	275.9	24990	24990	24990	24990	24770	19890	14750		M72-M80
PA3-700-13-530	711.2	28	80	85	720	28 <sup>3</sup> / <sub>8</sub>	120	210	297.7	30830	30830	30830	28640	24850	19950	14790		M72-M80
PA3-700-3-560	711.2	28	20	20	640	25 <sup>3</sup> / <sub>16</sub>	30	100	35.0	1320	1320	1320	1320	1030	820	640		M12-M24
PA3-700-4-560	711.2	28	24	25	640	25 <sup>3</sup> / <sub>16</sub>	36	100	47.2	1830	1830	1830	1830	1800	1420	1140		M12-M36
PA3-700-5-560	711.2	28	30	29	640	25 <sup>3</sup> / <sub>16</sub>	45	90	53.6	2660	2660	2660	2660	2660	2120	1690		M12-M36
PA3-700-6-560	711.2	28	36	41	640	25 <sup>3</sup> / <sub>16</sub>	54	100	72.5	3810	3810	3810	3810	3810	3440	2730		M20-M64
PA3-700-7-560	711.2	28	42	45	640	25 <sup>3</sup> / <sub>16</sub>	63	140	103.1	5470	5470	5470	5470	5470	4630	3680		M30-M64
PA3-700-8-560	711.2	28	48	52	640	25 <sup>3</sup> / <sub>16</sub>	72	120	120.8	10910	10910	10910	10910	9140	7510	5940		M42-M80
PA3-700-9-560	711.2	28	56	58	640	25 <sup>3</sup> / <sub>16</sub>	84	140	142.1	10000	10000	10000	10000	10000	8810	6980		M42-M80
PA3-700-10-560	711.2	28	64	65	660	26	96	180	188.4	17200	17200	17200	16190	13440	11030	8740		M42-M80
PA3-700-11-560	711.2	28	72	69	700	27 <sup>9</sup> / <sub>16</sub>	108	180	247.0	25030	25030	25030	25030	25020	21810	18320		M42-M80
PA3-700-12-560	711.2	28	80	77	700	27 <sup>9</sup> / <sub>16</sub>	120	200	275.9	24990	24990	24990	24990	24990	21070	17070		M72-M80
PA3-700-13-560	711.2	28	80	85	720	28 <sup>3</sup> / <sub>8</sub>	120	240	338.1	30830	30830	30830	30830	28750	24160	19570		M72-M80
PA3-700-3-600	711.2	28	20	20	640	25 <sup>3</sup> / <sub>16</sub>	30	100	46.6	1320	1320	1320	1320	1320	1320	1210		M12-M24
PA3-700-4-600	711.2	28	24	25	640	25 <sup>3</sup> / <sub>16</sub>	36	90	52.7	1630	1630	1630	1630	1630	1630	1620		M12-M36
PA3-700-5-600	711.2	28	30	29	640	25 <sup>3</sup> / <sub>16</sub>	45	100	71.4	2830	2830	2830	2830	2830	2830	2830		M12-M36
PA3-700-6-600	711.2	28	36	41	640	25 <sup>3</sup> / <sub>16</sub>	54	140	101.0	3810	3810	3810	3810	3810	3810	3810		M20-M64
PA3-700-7-600	711.2	28	42	45	640	25 <sup>3</sup> / <sub>16</sub>	63	120	118.2	5470	5470	5470	5470	5470	5470	5470		M30-M64
PA3-700-8-600	711.2	28	48	52	640	25 <sup>3</sup> / <sub>16</sub>	72	150	148.2	7980	7980	7980	7980	7980	7980	7700		M42-M80
PA3-700-9-600	711.2	28	56	58	640	25 <sup>3</sup> / <sub>16</sub>	84	200	201.0	10000	10000	10000	10000	10000	10000	9970		M42-M80
PA3-700-10-600	711.2	28	64	65	680	26 <sup>3</sup> / <sub>4</sub>	96	180	238.0	18540	18540	18540	18540	18540	18540	15200		M42-M80
PA3-700-11-600	711.2	28	72	69	690	27 <sup>3</sup> / <sub>16</sub>	108	220	294.5	18710	18710	18710	18710	18710	18710	18640		M42-M80
PA3-700-12-600	711.2	28	80	77	700	27 <sup>9</sup> / <sub>16</sub>	120	270	368.3	24990	24990	24990	24990	24990	24990	23040		M72-M80
PA3-700-13-600	711.2	28	80	85	720	28 <sup>3</sup> / <sub>8</sub>	120	350	486.3	30830	30830	30830	30830	30830	30830	28530		M72-M80

# PA3 PIPE CLAMP THREE BOLT TYPE

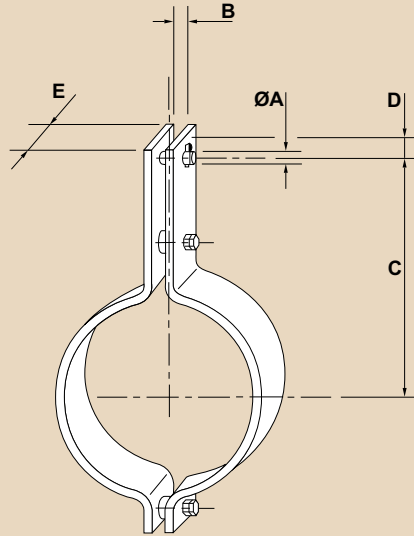


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C						Compatible with Rod Sizes		
	mm	in			mm	in				mm	in	350	400	490	530		560	580
PA3-750-4-400	762	30	24	25	640	25 <sup>3</sup> / <sub>16</sub>	36	65	32.4	1780	1690							M12-M36
PA3-750-5-400	762	30	30	29	640	25 <sup>3</sup> / <sub>16</sub>	45	110	55.6	2870	2730							M12-M36
PA3-750-6-400	762	30	36	41	640	25 <sup>3</sup> / <sub>16</sub>	54	110	69.7	3810	3810							M20-M64
PA3-750-7-400	762	30	42	45	640	25 <sup>3</sup> / <sub>16</sub>	63	150	96.7	5470	5470							M30-M64
PA3-750-8-400	762	30	48	52	640	25 <sup>3</sup> / <sub>16</sub>	72	150	118.5	8160	7940							M42-M80
PA3-750-9-400	762	30	56	58	680	26 <sup>3</sup> / <sub>4</sub>	84	150	165.7	10000	10000							M42-M80
PA3-750-10-400	762	30	64	65	710	27 <sup>15</sup> / <sub>16</sub>	96	180	207.1	15770	15630							M42-M80
PA3-750-11-400	762	30	72	69	720	28 <sup>3</sup> / <sub>8</sub>	108	220	255.3	19030	19030							M42-M80
PA3-750-12-400	762	30	80	77	750	29 <sup>1</sup> / <sub>2</sub>	120	200	303.4	26550	26430							M72-M80
PA3-750-13-400	762	30	80	85	750	29 <sup>1</sup> / <sub>2</sub>	120	220	331.8	28280	28280							M72-M80
PA3-750-4-490	762	30	24	25	660	26	36	100	49.6	1830	1830	1830	1830	1610	1120	810		M12-M36
PA3-750-5-490	762	30	30	29	660	26	45	100	50.0	2370	2370	2370	2340	1620	1120	820		M12-M36
PA3-750-6-490	762	30	36	41	660	26	54	90	57.2	3810	3810	3790	3210	2320	1670	1190		M20-M64
PA3-750-7-490	762	30	42	45	660	26	63	110	85.4	5470	5470	5470	5470	4150	3070	2160		M30-M64
PA3-750-8-490	762	30	48	52	660	26	72	140	110.5	8160	8160	7860	6740	5110	3780	2660		M42-M80
PA3-750-9-490	762	30	56	58	660	26	84	140	148.5	10000	10000	10000	10000	10000	7850	5530		M42-M80
PA3-750-10-490	762	30	64	65	690	27 <sup>3</sup> / <sub>16</sub>	96	160	176.6	15800	15800	15490	13790	11300	8730	6150		M42-M80
PA3-750-11-490	762	30	72	69	700	27 <sup>9</sup> / <sub>16</sub>	108	200	226.0	19200	19200	18830	16760	13740	10610	7480		M42-M80
PA3-750-12-490	762	30	80	77	750	29 <sup>1</sup> / <sub>2</sub>	120	200	298.2	28010	28010	27940	25480	22170	17970	13400		M72-M80
PA3-750-13-490	762	30	80	85	740	29 <sup>1</sup> / <sub>8</sub>	120	200	295.6	28930	28930	28850	26310	22890	18560	13840		M72-M80
PA3-750-4-530	762	30	24	25	660	26	36	100	49.6	1830	1830	1830	1830	1610	1120	810		M12-M36
PA3-750-5-530	762	30	30	29	660	26	45	100	50.0	2370	2370	2370	2340	1620	1120	820		M12-M36
PA3-750-6-530	762	30	36	41	660	26	54	110	69.6	3810	3810	3810	3810	2840	2040	1460		M20-M64
PA3-750-7-530	762	30	42	45	660	26	63	110	85.4	5470	5470	5470	5470	4150	3070	2160		M30-M64
PA3-750-8-530	762	30	48	52	660	26	72	160	125.7	9320	9320	8980	7700	5840	4320	3040		M42-M80
PA3-750-9-530	762	30	56	58	660	26	84	140	148.5	10000	10000	10000	10000	10000	7850	5530		M42-M80
PA3-750-10-530	762	30	64	65	690	27 <sup>3</sup> / <sub>16</sub>	96	160	176.6	15800	15800	15490	13790	11300	8730	6150		M42-M80
PA3-750-11-530	762	30	72	69	700	27 <sup>9</sup> / <sub>16</sub>	108	220	247.6	21120	21120	20710	18440	15110	11670	8220		M42-M80
PA3-750-12-530	762	30	80	77	750	29 <sup>1</sup> / <sub>2</sub>	120	200	298.2	28010	28010	27940	25480	22170	17970	13400		M72-M80
PA3-750-13-530	762	30	80	85	740	29 <sup>1</sup> / <sub>8</sub>	120	220	323.6	30830	30830	30830	28940	25180	20410	15220		M72-M80
PA3-750-4-560	762	30	24	25	690	27 <sup>3</sup> / <sub>16</sub>	36	100	50.5	1830	1830	1830	1830	1780	1400	1120		M12-M36
PA3-750-5-560	762	30	30	29	690	27 <sup>3</sup> / <sub>16</sub>	45	90	57.3	2530	2530	2530	2530	2530	2090	1670		M12-M36
PA3-750-6-560	762	30	36	41	690	27 <sup>3</sup> / <sub>16</sub>	54	100	77.4	3810	3810	3810	3810	3810	3380	2680		M20-M64
PA3-750-7-560	762	30	42	45	690	27 <sup>3</sup> / <sub>16</sub>	63	140	110.0	5470	5470	5470	5470	5470	4540	3600		M30-M64
PA3-750-8-560	762	30	48	52	690	27 <sup>3</sup> / <sub>16</sub>	72	120	128.6	10910	10910	10910	10690	8920	7340	5830		M42-M80
PA3-750-9-560	762	30	56	58	690	27 <sup>3</sup> / <sub>16</sub>	84	140	151.2	10000	10000	10000	10000	10000	8610	6840		M42-M80
PA3-750-10-560	762	30	64	65	690	27 <sup>3</sup> / <sub>16</sub>	96	190	208.4	16320	16320	16320	16320	13820	11370	9030		M42-M80
PA3-750-11-560	762	30	72	69	720	28 <sup>3</sup> / <sub>8</sub>	108	180	257.2	23740	23740	23740	23740	21120	17850	14490		M42-M80
PA3-750-12-560	762	30	80	77	730	28 <sup>3</sup> / <sub>4</sub>	120	200	289.6	24140	24140	24140	24140	23630	19970	16210		M72-M80
PA3-750-13-560	762	30	80	85	740	29 <sup>1</sup> / <sub>8</sub>	120	250	365.7	30830	30830	30830	30830	28960	24480	19870		M72-M80
PA3-750-4-600	762	30	24	25	690	27 <sup>3</sup> / <sub>16</sub>	36	90	56.5	1610	1610	1610	1610	1610	1610	1610		M12-M36
PA3-750-5-600	762	30	30	29	690	27 <sup>3</sup> / <sub>16</sub>	45	100	76.3	2690	2690	2690	2690	2690	2690	2690		M12-M36
PA3-750-6-600	762	30	36	41	690	27 <sup>3</sup> / <sub>16</sub>	54	140	107.8	3810	3810	3810	3810	3810	3810	3760		M20-M64
PA3-750-7-600	762	30	42	45	690	27 <sup>3</sup> / <sub>16</sub>	63	120	125.9	5470	5470	5470	5470	5470	5470	5470		M30-M64
PA3-750-8-600	762	30	48	52	690	27 <sup>3</sup> / <sub>16</sub>	72	150	157.9	7580	7580	7580	7580	7580	7580	7560		M42-M80
PA3-750-9-600	762	30	56	58	690	27 <sup>3</sup> / <sub>16</sub>	84	200	214.0	10000	10000	10000	10000	10000	10000	9770		M42-M80
PA3-750-10-600	762	30	64	65	710	27 <sup>15</sup> / <sub>16</sub>	96	180	249.7	17590	17590	17590	17590	17590	17590	14850		M42-M80
PA3-750-11-600	762	30	72	69	720	28 <sup>3</sup> / <sub>8</sub>	108	230	326.0	23740	23740	23740	23740	23740	22810	18510		M42-M80
PA3-750-12-600	762	30	80	77	730	28 <sup>3</sup> / <sub>4</sub>	120	290	414.5	24140	24140	24140	24140	24140	24140	23500		M72-M80



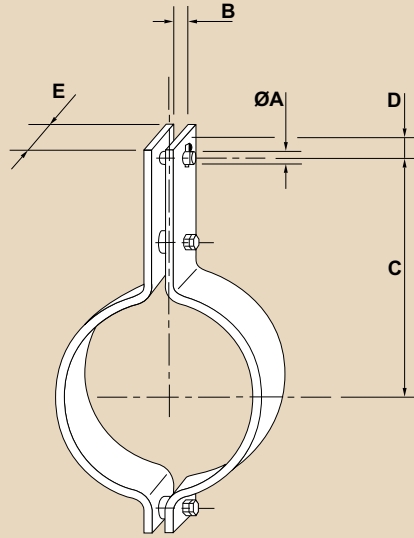
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	in				mm	mm	350	400	490	530	560		580
PA3-800-4-400	812.8	32	24	25	660	26	36	65	33.9	1730	1650							M12-M36
PA3-800-5-400	812.8	32	30	29	660	26	45	110	58.2	2790	2660							M12-M36
PA3-800-6-400	812.8	32	36	41	660	26	54	110	72.9	3650	3650							M20-M64
PA3-800-7-400	812.8	32	42	45	660	26	63	150	101.1	5470	5470							M30-M64
PA3-800-8-400	812.8	32	48	52	660	26	72	150	124.1	7610	7420							M42-M80
PA3-800-9-400	812.8	32	56	58	710	27 <sup>15</sup> / <sub>16</sub>	84	150	173.7	10000	10000							M42-M80
PA3-800-10-400	812.8	32	64	65	740	29 <sup>1</sup> / <sub>8</sub>	96	180	216.5	15200	15070							M42-M80
PA3-800-11-400	812.8	32	72	69	740	29 <sup>1</sup> / <sub>8</sub>	108	220	265.4	18120	18120							M42-M80
PA3-800-12-400	812.8	32	80	77	780	30 <sup>11</sup> / <sub>16</sub>	120	200	317.3	24970	24870							M72-M80
PA3-800-13-400	812.8	32	80	85	790	31 <sup>1</sup> / <sub>8</sub>	120	240	385.3	29520	29400							M72-M80
PA3-800-4-490	812.8	32	24	25	690	27 <sup>3</sup> / <sub>16</sub>	36	100	52.2	1830	1830	1830	1830	1600	1120	810		M12-M36
PA3-800-5-490	812.8	32	30	29	690	27 <sup>3</sup> / <sub>16</sub>	45	100	53.1	2760	2760	2580	2160	1510	1060	770		M12-M36
PA3-800-6-490	812.8	32	36	41	690	27 <sup>3</sup> / <sub>16</sub>	54	90	60.1	3710	3710	3700	3140	2300	1670	1180		M20-M64
PA3-800-7-490	812.8	32	42	45	690	27 <sup>3</sup> / <sub>16</sub>	63	110	89.7	5470	5470	5470	5350	4100	3050	2140		M30-M64
PA3-800-8-490	812.8	32	48	52	690	27 <sup>3</sup> / <sub>16</sub>	72	150	124.4	8130	8130	8130	7850	6760	5180	3850	2710	M42-M80
PA3-800-9-490	812.8	32	56	58	690	27 <sup>3</sup> / <sub>16</sub>	84	140	156.4	10000	10000	10000	10000	9640	7470	5310		M42-M80
PA3-800-10-490	812.8	32	64	65	720	28 <sup>3</sup> / <sub>8</sub>	96	160	185.4	14780	14780	14520	12980	10730	8320	5910		M42-M80
PA3-800-11-490	812.8	32	72	69	730	28 <sup>3</sup> / <sub>4</sub>	108	210	248.4	18880	18880	18550	16580	13710	10630	7550		M42-M80
PA3-800-12-490	812.8	32	80	77	770	30 <sup>5</sup> / <sub>16</sub>	120	200	309.7	26990	26990	26990	24660	21510	17600	13200		M72-M80
PA3-800-13-490	812.8	32	80	85	770	30 <sup>5</sup> / <sub>16</sub>	120	210	324.1	28530	28530	28520	26070	22740	18610	13960		M72-M80
PA3-800-4-530	812.8	32	24	25	690	27 <sup>3</sup> / <sub>16</sub>	36	100	52.2	1830	1830	1830	1830	1600	1120	810		M12-M36
PA3-800-5-530	812.8	32	30	29	690	27 <sup>3</sup> / <sub>16</sub>	45	110	58.4	3030	3030	2840	2380	1660	1170	840		M12-M36
PA3-800-6-530	812.8	32	36	41	690	27 <sup>3</sup> / <sub>16</sub>	54	110	73.2	3710	3710	3710	3710	3710	2810	2040	1450	M20-M64
PA3-800-7-530	812.8	32	42	45	690	27 <sup>3</sup> / <sub>16</sub>	63	110	89.7	5470	5470	5470	5350	4100	3050	2140		M30-M64
PA3-800-8-530	812.8	32	48	52	690	27 <sup>3</sup> / <sub>16</sub>	72	120	133.0	10910	10910	10910	9940	8210	6370	4520		M42-M80
PA3-800-9-530	812.8	32	56	58	690	27 <sup>3</sup> / <sub>16</sub>	84	140	156.4	10000	10000	10000	10000	9640	7470	5310		M42-M80
PA3-800-10-530	812.8	32	64	65	720	28 <sup>3</sup> / <sub>8</sub>	96	170	196.6	15700	15700	15430	13790	11400	8840	6280		M42-M80
PA3-800-11-530	812.8	32	72	69	750	29 <sup>1</sup> / <sub>2</sub>	108	180	269.7	23030	23030	23030	22620	19730	16150	12110		M42-M80
PA3-800-12-530	812.8	32	80	77	770	30 <sup>5</sup> / <sub>16</sub>	120	200	309.7	26990	26990	26990	24660	21510	17600	13200		M72-M80
PA3-800-13-530	812.8	32	80	85	770	30 <sup>5</sup> / <sub>16</sub>	120	230	353.6	30830	30830	30830	28550	24900	20380	15290		M72-M80
PA3-800-4-560	812.8	32	24	25	710	27 <sup>15</sup> / <sub>16</sub>	36	100	52.8	1830	1830	1830	1830	1750	1390	1110		M12-M36
PA3-800-5-560	812.8	32	30	29	710	27 <sup>15</sup> / <sub>16</sub>	45	90	60.1	2510	2510	2510	2510	2440	1960	1560		M12-M36
PA3-800-6-560	812.8	32	36	41	710	27 <sup>15</sup> / <sub>16</sub>	54	100	80.9	3810	3810	3810	3810	3810	3330	2640		M20-M64
PA3-800-7-560	812.8	32	42	45	710	27 <sup>15</sup> / <sub>16</sub>	63	140	114.8	5470	5470	5470	5470	5470	4470	3540		M30-M64
PA3-800-8-560	812.8	32	48	52	710	27 <sup>15</sup> / <sub>16</sub>	72	120	134.5	10910	10910	10910	10050	8430	6940	5540		M42-M80
PA3-800-9-560	812.8	32	56	58	710	27 <sup>15</sup> / <sub>16</sub>	84	140	158.1	10000	10000	10000	10000	9890	8150	6500		M42-M80
PA3-800-10-560	812.8	32	64	65	720	28 <sup>3</sup> / <sub>8</sub>	96	200	230.0	15890	15890	15890	15890	13770	11340	9040		M42-M80
PA3-800-11-560	812.8	32	72	69	750	29 <sup>1</sup> / <sub>2</sub>	108	180	269.7	23030	23030	23030	22770	19970	16980	13810		M42-M80
PA3-800-12-560	812.8	32	80	77	770	30 <sup>5</sup> / <sub>16</sub>	120	220	339.3	29690	29690	29670	27300	23950	20360	16550		M72-M80
PA3-800-13-560	812.8	32	80	85	770	30 <sup>5</sup> / <sub>16</sub>	120	260	397.8	30830	30830	30830	30830	28490	24220	19700		M72-M80
PA3-800-4-600	812.8	32	24	25	710	27 <sup>15</sup> / <sub>16</sub>	36	100	66.2	1830	1830	1830	1830	1830	1830	1720		M12-M36
PA3-800-5-600	812.8	32	30	29	710	27 <sup>15</sup> / <sub>16</sub>	45	100	80.0	2650	2650	2650	2650	2650	2650	2610		M12-M36
PA3-800-6-600	812.8	32	36	41	710	27 <sup>15</sup> / <sub>16</sub>	54	140	112.7	3810	3810	3810	3810	3810	3810	3700		M20-M64
PA3-800-7-600	812.8	32	42	45	710	27 <sup>15</sup> / <sub>16</sub>	63	120	131.9	5470	5470	5470	5470	5470	5470	5470		M30-M64
PA3-800-8-600	812.8	32	48	52	710	27 <sup>15</sup> / <sub>16</sub>	72	160	176.1	7410	7410	7410	7410	7410	7410	7410		M42-M80
PA3-800-9-600	812.8	32	56	58	710	27 <sup>15</sup> / <sub>16</sub>	84	210	234.9	10000	10000	10000	10000	10000	10000	9750		M42-M80
PA3-800-10-600	812.8	32	64	65	740	29 <sup>1</sup> / <sub>8</sub>	96	180	262.0	17090	17090	17090	17090	17090	17090	14140		M42-M80
PA3-800-11-600	812.8	32	72	69	750	29 <sup>1</sup> / <sub>2</sub>	108	240	356.3	23030	23030	23030	23030	23030	22640	18410		M42-M80
PA3-800-12-600	812.8	32	80	77	770	30 <sup>5</sup> / <sub>16</sub>	120	310	472.2	32900	32900	32900	32900	32900	28680	23330		M72-M80

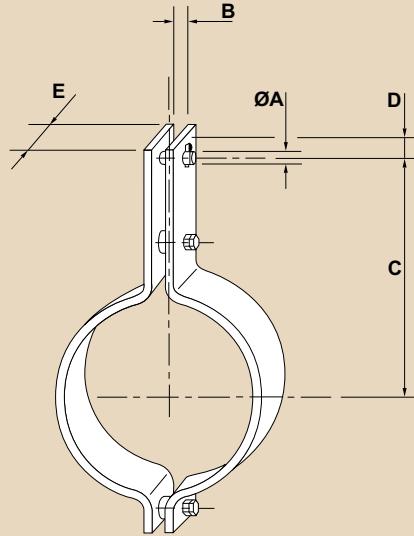
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C						Compatible with Rod Sizes		
	mm	in			mm	in				mm	in	350	400	490	530		560	580
PA3-850-4-400	863.6	34	24	25	710	27 <sup>15</sup> / <sub>16</sub>	36	65	36.0	1670	1590							M12-M36
PA3-850-5-400	863.6	34	30	29	710	27 <sup>15</sup> / <sub>16</sub>	45	110	61.7	2690	2560							M12-M36
PA3-850-6-400	863.6	34	36	41	710	27 <sup>15</sup> / <sub>16</sub>	54	110	78.8	3810	3720							M20-M64
PA3-850-7-400	863.6	34	42	45	710	27 <sup>15</sup> / <sub>16</sub>	63	150	128.6	5470	5470							M30-M64
PA3-850-8-400	863.6	34	48	52	710	27 <sup>15</sup> / <sub>16</sub>	72	150	174.4	8920	8920							M42-M80
PA3-850-9-400	863.6	34	56	58	730	28 <sup>3</sup> / <sub>4</sub>	84	150	180.4	10000	10000							M42-M80
PA3-850-10-400	863.6	34	64	65	770	30 <sup>5</sup> / <sub>16</sub>	96	180	226.4	14240	14120							M42-M80
PA3-850-11-400	863.6	34	72	69	800	31 <sup>1</sup> / <sub>2</sub>	108	200	324.9	23870	23760							M42-M80
PA3-850-12-400	863.6	34	80	77	810	31 <sup>7</sup> / <sub>8</sub>	120	200	330.0	24030	23930							M72-M80
PA3-850-13-400	863.6	34	80	85	820	32 <sup>5</sup> / <sub>16</sub>	120	240	400.6	28390	28270							M72-M80
PA3-850-4-490	863.6	34	24	25	740	29 <sup>1</sup> / <sub>8</sub>	36	100	55.5	1830	1830	1830	1830	1520	1060	770		M12-M36
PA3-850-5-490	863.6	34	30	29	740	29 <sup>1</sup> / <sub>8</sub>	45	100	56.4	2660	2660	2480	2080	1440	1000	730		M12-M36
PA3-850-6-490	863.6	34	36	41	740	29 <sup>1</sup> / <sub>8</sub>	54	100	71.7	3810	3810	3760	3180	2310	1670	1190		M20-M64
PA3-850-7-490	863.6	34	42	45	740	29 <sup>1</sup> / <sub>8</sub>	63	110	95.3	5470	5470	5470	4920	3740	2770	1950		M30-M64
PA3-850-8-490	863.6	34	48	52	740	29 <sup>1</sup> / <sub>8</sub>	72	150	131.6	7840	7840	7560	6490	4940	3660	2580		M42-M80
PA3-850-9-490	863.6	34	56	58	740	29 <sup>1</sup> / <sub>8</sub>	84	140	165.3	10000	10000	10000	10000	9200	7110	5030		M42-M80
PA3-850-10-490	863.6	34	64	65	740	29 <sup>1</sup> / <sub>8</sub>	96	160	192.7	14240	14240	13970	12450	10240	7920	5590		M42-M80
PA3-850-11-490	863.6	34	72	69	760	29 <sup>15</sup> / <sub>16</sub>	108	220	271.1	19050	19050	18690	16660	13700	10590	7480		M42-M80
PA3-850-12-490	863.6	34	80	77	800	31 <sup>1</sup> / <sub>2</sub>	120	200	322.4	25990	25990	25940	23680	20610	16770	12530		M72-M80
PA3-850-13-490	863.6	34	80	85	800	31 <sup>1</sup> / <sub>2</sub>	120	220	352.8	28770	28770	28720	26210	22820	18560	13870		M72-M80
PA3-850-4-530	863.6	34	24	25	740	29 <sup>1</sup> / <sub>8</sub>	36	100	55.5	1830	1830	1830	1830	1520	1060	770		M12-M36
PA3-850-5-530	863.6	34	30	29	740	29 <sup>1</sup> / <sub>8</sub>	45	110	61.9	2930	2930	2730	2290	1580	1110	800		M12-M36
PA3-850-6-530	863.6	34	36	41	740	29 <sup>1</sup> / <sub>8</sub>	54	120	85.7	3810	3810	3810	3810	2780	2000	1430		M20-M64
PA3-850-7-530	863.6	34	42	45	740	29 <sup>1</sup> / <sub>8</sub>	63	120	103.7	5470	5470	5470	5360	4080	3020	2130		M30-M64
PA3-850-8-530	863.6	34	48	52	740	29 <sup>1</sup> / <sub>8</sub>	72	120	140.7	10630	10630	10630	9540	7840	6060	4280		M42-M80
PA3-850-9-530	863.6	34	56	58	740	29 <sup>1</sup> / <sub>8</sub>	84	140	165.3	10000	10000	10000	10000	9200	7110	5030		M42-M80
PA3-850-10-530	863.6	34	64	65	740	29 <sup>1</sup> / <sub>8</sub>	96	180	215.9	15280	15280	15280	14010	11520	8900	6290		M42-M80
PA3-850-11-530	863.6	34	72	69	780	30 <sup>11</sup> / <sub>16</sub>	108	180	281.1	22120	22120	22120	21730	18920	15390	11500		M42-M80
PA3-850-12-530	863.6	34	80	77	800	31 <sup>1</sup> / <sub>2</sub>	120	200	322.4	25990	25990	25940	23680	20610	16770	12530		M72-M80
PA3-850-13-530	863.6	34	80	85	800	31 <sup>1</sup> / <sub>2</sub>	120	240	383.6	30830	30830	30830	28600	24900	20250	15130		M72-M80
PA3-850-4-560	863.6	34	24	25	760	29 <sup>15</sup> / <sub>16</sub>	36	100	56.1	1830	1830	1830	1830	1680	1330	1060		M12-M36
PA3-850-5-560	863.6	34	30	29	760	29 <sup>15</sup> / <sub>16</sub>	45	90	63.7	2420	2420	2420	2420	2330	1870	1490		M12-M36
PA3-850-6-560	863.6	34	36	41	760	29 <sup>15</sup> / <sub>16</sub>	54	100	85.7	3790	3790	3790	3790	3790	3180	2520		M20-M64
PA3-850-7-560	863.6	34	42	45	760	29 <sup>15</sup> / <sub>16</sub>	63	150	130.5	5470	5470	5470	5470	5410	4380	3470		M30-M64
PA3-850-8-560	863.6	34	48	52	760	29 <sup>15</sup> / <sub>16</sub>	72	120	142.3	10630	10630	10630	9640	8070	6640	5280		M42-M80
PA3-850-9-560	863.6	34	56	58	760	29 <sup>15</sup> / <sub>16</sub>	84	150	178.7	10000	10000	10000	10000	10000	8340	6640		M42-M80
PA3-850-10-560	863.6	34	64	65	760	29 <sup>15</sup> / <sub>16</sub>	96	210	253.3	15280	15280	15280	15280	13820	11370	9050		M42-M80
PA3-850-11-560	863.6	34	72	69	780	30 <sup>11</sup> / <sub>16</sub>	108	180	281.1	22120	22120	22120	21880	19150	16220	13170		M42-M80
PA3-850-12-560	863.6	34	80	77	800	31 <sup>1</sup> / <sub>2</sub>	120	230	368.7	29890	29890	29830	27420	24000	20320	16500		M72-M80
PA3-850-13-560	863.6	34	80	85	800	31 <sup>1</sup> / <sub>2</sub>	120	270	429.7	30830	30830	30830	30830	28350	24010	19500		M72-M80
PA3-850-4-600	863.6	34	24	25	760	29 <sup>15</sup> / <sub>16</sub>	36	100	70.3	1830	1830	1830	1830	1830	1830	1640		M12-M36
PA3-850-5-600	863.6	34	30	29	760	29 <sup>15</sup> / <sub>16</sub>	45	100	84.8	2560	2560	2560	2560	2560	2560	2490		M12-M36
PA3-850-6-600	863.6	34	36	41	760	29 <sup>15</sup> / <sub>16</sub>	54	150	127.9	3790	3790	3790	3790	3790	3790	3790		M20-M64
PA3-850-7-600	863.6	34	42	45	760	29 <sup>15</sup> / <sub>16</sub>	63	120	139.6	5470	5470	5470	5470	5470	5470	5440		M30-M64
PA3-850-8-600	863.6	34	48	52	760	29 <sup>15</sup> / <sub>16</sub>	72	170	200.1	10630	10630	10630	10630	10630	9400	7480		M42-M80
PA3-850-9-600	863.6	34	56	58	760	29 <sup>15</sup> / <sub>16</sub>	84	220	260.0	10000	10000	10000	10000	10000	10000	9000		M42-M80
PA3-850-10-600	863.6	34	64	65	760	29 <sup>15</sup> / <sub>16</sub>	96	180	272.2	16420	16420	16420	16420	16420	16420	13500		M42-M80
PA3-850-11-600	863.6	34	72	69	780	30 <sup>11</sup> / <sub>16</sub>	108	250	386.7	22120	22120	22120	22120	22120	22120	18300		M42-M80
PA3-850-12-600	863.6	34	80	77	800	31 <sup>1</sup> / <sub>2</sub>	120	330	522.8	31580	31580	31580	31580	31580	29150	23680		M72-M80

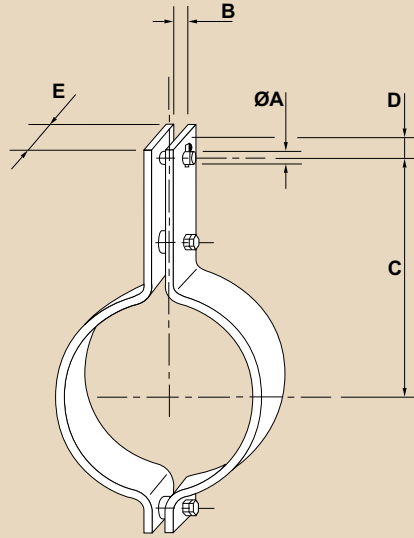
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	mm				mm	in	mm	mm	kgf	350	400		490
PA3-900-4-400	914.4	36	24	25	740	29 1/8	36	90	52.0	1830	1830							M12-M36
PA3-900-5-400	914.4	36	30	29	740	29 1/8	45	110	64.8	2490	2380							M12-M36
PA3-900-6-400	914.4	36	36	41	740	29 1/8	54	130	97.0	3810	3810							M20-M64
PA3-900-7-400	914.4	36	42	45	740	29 1/8	63	150	136.3	5470	5470							M30-M64
PA3-900-8-400	914.4	36	48	52	740	29 1/8	72	150	182.2	8560	8560							M42-M80
PA3-900-9-400	914.4	36	56	58	760	29 15/16	84	150	188.3	10000	10000							M42-M80
PA3-900-10-400	914.4	36	64	65	790	31 1/8	96	180	234.7	13800	13690							M42-M80
PA3-900-11-400	914.4	36	72	69	830	32 11/16	108	200	338.8	22580	22490							M42-M80
PA3-900-12-400	914.4	36	80	77	830	32 11/16	120	200	341.5	23260	23170							M72-M80
PA3-900-13-400	914.4	36	80	85	850	33 7/16	120	260	450.2	29100	28990							M72-M80
PA3-900-4-490	914.4	36	24	25	760	29 15/16	36	100	58.0	1830	1830	1830	1830	1430	1000	720		M12-M36
PA3-900-5-490	914.4	36	30	29	760	29 15/16	45	100	58.7	2600	2600	2440	2050	1430	1010	730		M12-M36
PA3-900-6-490	914.4	36	36	41	760	29 15/16	54	110	82.1	3810	3810	3810	3280	2410	1750	1240		M20-M64
PA3-900-7-490	914.4	36	42	45	760	29 15/16	63	110	99.1	5470	5470	5470	4820	3700	2760	1940		M30-M64
PA3-900-8-490	914.4	36	48	52	760	29 15/16	72	160	145.7	8130	8130	7860	6780	5210	3880	2730		M42-M80
PA3-900-9-490	914.4	36	56	58	760	29 15/16	84	140	173.8	10000	10000	10000	10000	8770	6810	4850		M42-M80
PA3-900-10-490	914.4	36	64	65	770	30 5/16	96	160	201.1	13820	13820	13590	12170	10090	7830	5580		M42-M80
PA3-900-11-490	914.4	36	72	69	780	30 11/16	108	220	281.3	18480	18480	18170	16260	13480	10470	7460		M42-M80
PA3-900-12-490	914.4	36	80	77	830	32 11/16	120	200	336.3	24550	24550	24550	22460	19610	16100	12100		M72-M80
PA3-900-13-490	914.4	36	80	85	820	32 5/16	120	230	381.4	29140	29140	29140	26670	23280	19110	14360		M72-M80
PA3-900-4-530	914.4	36	24	25	760	29 15/16	36	100	58.0	1830	1830	1830	1830	1430	1000	720		M12-M36
PA3-900-5-530	914.4	36	30	29	760	29 15/16	45	90	66.2	3050	3050	3050	2770	2040	1480	1050		M12-M36
PA3-900-6-530	914.4	36	36	41	760	29 15/16	54	100	89.5	3810	3810	3810	3810	3350	2500	1750		M20-M64
PA3-900-7-530	914.4	36	42	45	760	29 15/16	63	130	116.7	5470	5470	5470	5470	4380	3260	2290		M30-M64
PA3-900-8-530	914.4	36	48	52	760	29 15/16	72	120	146.3	10190	10190	10190	9330	7730	6010	4280		M42-M80
PA3-900-9-530	914.4	36	56	58	760	29 15/16	84	140	171.8	10000	10000	10000	10000	9070	7040	5020		M42-M80
PA3-900-10-530	914.4	36	64	65	770	30 5/16	96	180	225.4	14640	14640	14640	13690	11350	8810	6270		M42-M80
PA3-900-11-530	914.4	36	72	69	800	31 1/2	108	180	291.5	21200	21200	21200	21170	18480	15170	11400		M42-M80
PA3-900-12-530	914.4	36	80	77	830	32 11/16	120	210	352.4	25780	25780	25780	23590	20590	16900	12700		M72-M80
PA3-900-13-530	914.4	36	80	85	820	32 5/16	120	250	413.3	30680	30680	30680	28980	25300	20770	15610		M72-M80
PA3-900-4-560	914.4	36	24	25	790	31 1/8	36	110	64.8	1830	1830	1830	1830	1720	1370	1090		M12-M36
PA3-900-5-560	914.4	36	30	29	790	31 1/8	45	90	66.7	2320	2320	2320	2320	2310	1850	1480		M12-M36
PA3-900-6-560	914.4	36	36	41	790	31 1/8	54	100	89.9	3740	3740	3740	3740	3700	3000	2380		M20-M64
PA3-900-7-560	914.4	36	42	45	790	31 1/8	63	160	145.4	5470	5470	5470	5470	5470	4610	3660		M30-M64
PA3-900-8-560	914.4	36	48	52	790	31 1/8	72	120	148.5	10190	10190	10190	9430	7930	6540	5220		M42-M80
PA3-900-9-560	914.4	36	56	58	790	31 1/8	84	150	186.5	10000	10000	10000	10000	9970	8210	6560		M42-M80
PA3-900-10-560	914.4	36	64	65	790	31 1/8	96	210	264.4	14640	14640	14640	14640	13580	11190	8930		M42-M80
PA3-900-11-560	914.4	36	72	69	800	31 1/2	108	180	291.5	21200	21200	21200	21200	18700	15930	12960		M42-M80
PA3-900-12-560	914.4	36	80	77	830	32 11/16	120	240	400.7	29460	29460	29460	27130	23820	20280	16510		M72-M80
PA3-900-13-560	914.4	36	80	85	820	32 5/16	120	280	461.1	30680	30680	30680	30680	28680	24430	19880		M72-M80
PA3-900-4-600	914.4	36	24	25	790	31 1/8	36	100	73.6	1830	1830	1830	1830	1830	1830	1630		M12-M36
PA3-900-5-600	914.4	36	30	29	790	31 1/8	45	100	88.8	2460	2460	2460	2460	2460	2460	2460		M12-M36
PA3-900-6-600	914.4	36	36	41	790	31 1/8	54	160	143.0	3740	3740	3740	3740	3740	3740	3740		M20-M64
PA3-900-7-600	914.4	36	42	45	790	31 1/8	63	120	145.9	5470	5470	5470	5470	5470	5470	5380		M30-M64
PA3-900-8-600	914.4	36	48	52	790	31 1/8	72	180	221.0	10190	10190	10190	10190	10190	9800	7830		M42-M80
PA3-900-9-600	914.4	36	56	58	790	31 1/8	84	180	278.8	10000	10000	10000	10000	10000	10000	10000		M42-M80
PA3-900-10-600	914.4	36	64	65	790	31 1/8	96	190	299.3	15740	15740	15740	15740	15740	15740	14030		M42-M80
PA3-900-11-600	914.4	36	72	69	800	31 1/2	108	250	401.0	21200	21200	21200	21200	21200	21200	18000		M42-M80
PA3-900-12-600	914.4	36	80	77	830	32 11/16	120	340	561.7	30780	30780	30780	30780	30780	28730	23380		M72-M80

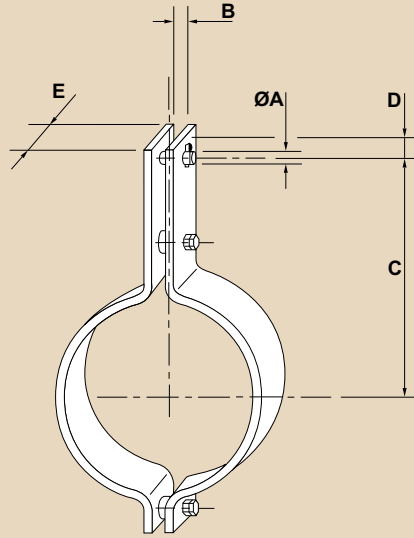
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A	B	C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	in				mm	mm	350	400	490	530	560		580
PA3-950-4-400	965.2	38	24	25	770	30 <sup>5</sup> / <sub>16</sub>	36	90	54.5	1830	1830							M12-M36
PA3-950-5-400	965.2	38	30	29	770	30 <sup>5</sup> / <sub>16</sub>	45	110	67.8	2440	2340							M12-M36
PA3-950-6-400	965.2	38	36	41	770	30 <sup>5</sup> / <sub>16</sub>	54	130	101.3	3810	3810							M20-M64
PA3-950-7-400	965.2	38	42	45	770	30 <sup>5</sup> / <sub>16</sub>	63	150	142.6	5470	5470							M30-M64
PA3-950-8-400	965.2	38	48	52	770	30 <sup>5</sup> / <sub>16</sub>	72	150	190.6	8410	8410							M42-M80
PA3-950-9-400	965.2	38	56	58	790	31 <sup>1</sup> / <sub>8</sub>	84	150	196.7	10000	10000							M42-M80
PA3-950-10-400	965.2	38	64	65	820	32 <sup>5</sup> / <sub>16</sub>	96	200	270.1	14900	14780							M42-M80
PA3-950-11-400	965.2	38	72	69	850	33 <sup>7</sup> / <sub>16</sub>	108	200	350.3	21900	21830							M42-M80
PA3-950-12-400	965.2	38	80	77	860	33 <sup>7</sup> / <sub>8</sub>	120	220	389.2	24170	24170							M72-M80
PA3-950-13-400	965.2	38	80	85	870	34 <sup>1</sup> / <sub>4</sub>	120	280	499.3	30380	30280							M72-M80
PA3-950-4-490	965.2	38	24	25	790	31 <sup>1</sup> / <sub>8</sub>	36	100	60.6	1830	1830	1830	1830	1430	1020	730		M12-M36
PA3-950-5-490	965.2	38	30	29	790	31 <sup>1</sup> / <sub>8</sub>	45	110	67.6	2650	2650	2490	2100	1490	1060	760		M12-M36
PA3-950-6-490	965.2	38	36	41	790	31 <sup>1</sup> / <sub>8</sub>	54	110	85.7	3810	3810	3790	3220	2400	1760	1240		M20-M64
PA3-950-7-490	965.2	38	42	45	790	31 <sup>1</sup> / <sub>8</sub>	63	110	103.5	5470	5470	5470	4740	3680	2760	1930		M30-M64
PA3-950-8-490	965.2	38	48	52	790	31 <sup>1</sup> / <sub>8</sub>	72	160	152.1	7930	7930	7680	6660	5180	3880	2720		M42-M80
PA3-950-9-490	965.2	38	56	58	790	31 <sup>1</sup> / <sub>8</sub>	84	140	181.7	10000	10000	10000	10000	8400	6560	4710		M42-M80
PA3-950-10-490	965.2	38	64	65	790	31 <sup>1</sup> / <sub>8</sub>	96	170	221.0	14070	14070	14070	12660	10610	8270	5940		M42-M80
PA3-950-11-490	965.2	38	72	69	830	32 <sup>11</sup> / <sub>16</sub>	108	180	303.9	20740	20740	20740	20120	17620	14620	11050		M42-M80
PA3-950-12-490	965.2	38	80	77	850	33 <sup>7</sup> / <sub>16</sub>	120	200	347.7	23830	23830	23830	21920	19190	15930	12040		M72-M80
PA3-950-13-490	965.2	38	80	85	850	33 <sup>7</sup> / <sub>16</sub>	120	240	414.0	28770	28770	28770	26470	23170	19230	14540		M72-M80
PA3-950-4-530	965.2	38	24	25	790	31 <sup>1</sup> / <sub>8</sub>	36	100	60.6	1830	1830	1830	1830	1430	1020	730		M12-M36
PA3-950-5-530	965.2	38	30	29	790	31 <sup>1</sup> / <sub>8</sub>	45	90	69.2	3050	3050	3050	2730	2030	1490	1050		M12-M36
PA3-950-6-530	965.2	38	36	41	790	31 <sup>1</sup> / <sub>8</sub>	54	100	93.5	3810	3810	3810	3810	3340	2500	1750		M20-M64
PA3-950-7-530	965.2	38	42	45	790	31 <sup>1</sup> / <sub>8</sub>	63	130	121.9	5470	5470	5470	5470	4350	3270	2290		M30-M64
PA3-950-8-530	965.2	38	48	52	790	31 <sup>1</sup> / <sub>8</sub>	72	120	153.0	9970	9970	9970	9830	8830	7400	5780		M42-M80
PA3-950-9-530	965.2	38	56	58	790	31 <sup>1</sup> / <sub>8</sub>	84	140	179.2	9910	9910	9910	9910	8990	7010	5040		M42-M80
PA3-950-10-530	965.2	38	64	65	790	31 <sup>1</sup> / <sub>8</sub>	96	180	233.6	14070	14070	14070	13400	11230	8760	6290		M42-M80
PA3-950-11-530	965.2	38	72	69	830	32 <sup>11</sup> / <sub>16</sub>	108	180	303.9	20740	20740	20740	20120	17620	14620	11050		M42-M80
PA3-950-12-530	965.2	38	80	77	850	33 <sup>7</sup> / <sub>16</sub>	120	220	381.1	26210	26210	26210	24110	21110	17520	13240		M72-M80
PA3-950-13-530	965.2	38	80	85	850	33 <sup>7</sup> / <sub>16</sub>	120	260	447.2	29960	29960	29960	28670	25100	20830	15750		M72-M80
PA3-950-4-560	965.2	38	24	25	820	32 <sup>5</sup> / <sub>16</sub>	36	110	67.7	1830	1830	1830	1830	1710	1370	1090		M12-M36
PA3-950-5-560	965.2	38	30	29	820	32 <sup>5</sup> / <sub>16</sub>	45	100	78.0	3050	3050	3050	3050	2420	1950	1550		M12-M36
PA3-950-6-560	965.2	38	36	41	820	32 <sup>5</sup> / <sub>16</sub>	54	110	104.2	3810	3810	3810	3810	3810	3140	2480		M20-M64
PA3-950-7-560	965.2	38	42	45	820	32 <sup>5</sup> / <sub>16</sub>	63	160	151.8	5470	5470	5470	5470	5470	4580	3630		M30-M64
PA3-950-8-560	965.2	38	48	52	820	32 <sup>5</sup> / <sub>16</sub>	72	120	155.2	9970	9970	9830	8930	7560	6250	5010		M42-M80
PA3-950-9-560	965.2	38	56	58	820	32 <sup>5</sup> / <sub>16</sub>	84	150	194.5	9910	9910	9910	9910	9840	8130	6510		M42-M80
PA3-950-10-560	965.2	38	64	65	820	32 <sup>5</sup> / <sub>16</sub>	96	210	275.4	14070	14070	14070	14070	13390	11060	8860		M42-M80
PA3-950-11-560	965.2	38	72	69	830	32 <sup>11</sup> / <sub>16</sub>	108	190	320.3	20740	20740	20740	20740	18820	16130	13160		M42-M80
PA3-950-12-560	965.2	38	80	77	850	33 <sup>7</sup> / <sub>16</sub>	120	240	414.5	28600	28600	28600	26450	23310	19980	16300		M72-M80
PA3-950-13-560	965.2	38	80	85	850	33 <sup>7</sup> / <sub>16</sub>	120	290	497.1	29960	29960	29960	29960	28340	24290	19810		M72-M80
PA3-950-4-600	965.2	38	24	25	820	32 <sup>5</sup> / <sub>16</sub>	36	100	76.9	1830	1830	1830	1830	1830	1830	1620		M12-M36
PA3-950-5-600	965.2	38	30	29	820	32 <sup>5</sup> / <sub>16</sub>	45	100	92.8	2360	2360	2360	2360	2360	2360	2360		M12-M36
PA3-950-6-600	965.2	38	36	41	820	32 <sup>5</sup> / <sub>16</sub>	54	120	151.7	3810	3810	3810	3810	3810	3810	3810		M20-M64
PA3-950-7-600	965.2	38	42	45	820	32 <sup>5</sup> / <sub>16</sub>	63	130	165.1	5470	5470	5470	5470	5470	5470	5470		M30-M64
PA3-950-8-600	965.2	38	48	52	820	32 <sup>5</sup> / <sub>16</sub>	72	180	231.1	10020	10020	10020	10020	10020	9370	7510		M42-M80
PA3-950-9-600	965.2	38	56	58	820	32 <sup>5</sup> / <sub>16</sub>	84	180	291.2	10000	10000	10000	10000	10000	10000	10000		M42-M80
PA3-950-10-600	965.2	38	64	65	820	32 <sup>5</sup> / <sub>16</sub>	96	190	312.5	15410	15410	15410	15410	15410	15410	13480		M42-M80
PA3-950-11-600	965.2	38	72	69	830	32 <sup>11</sup> / <sub>16</sub>	108	260	434.6	20740	20740	20740	20740	20740	20740	18010		M42-M80
PA3-950-12-600	965.2	38	80	77	850	33 <sup>7</sup> / <sub>16</sub>	120	340	581.2	29550	29550	29550	29550	29550	28300	23080		M72-M80

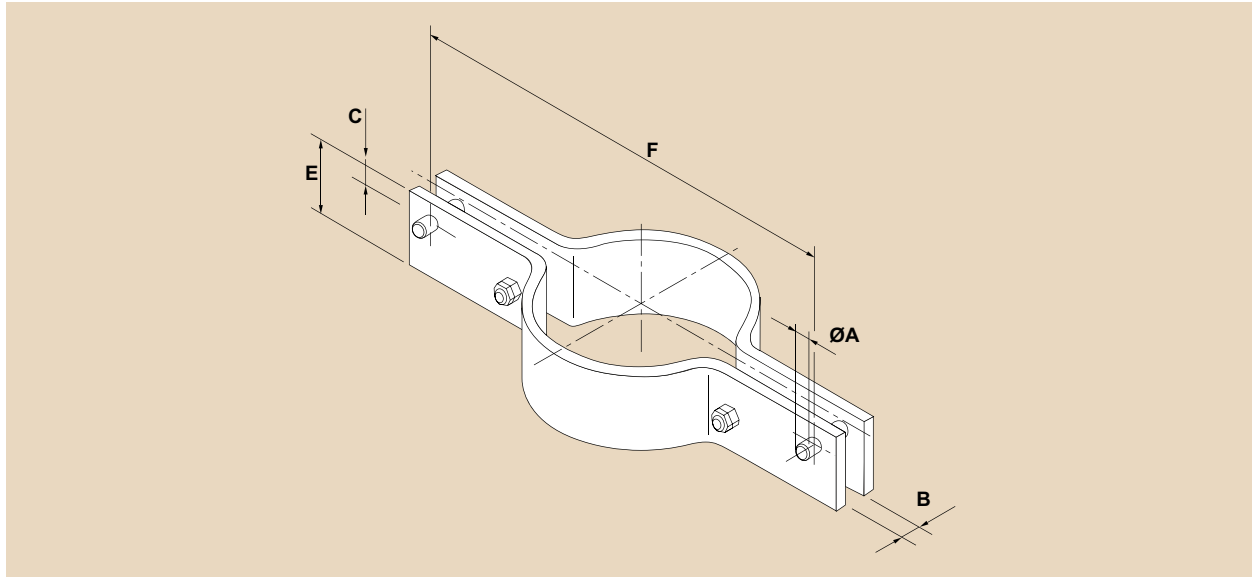
# PA3 PIPE CLAMP THREE BOLT TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C

Part Number	Pipe O/D		A		B		C		D	E	Weight	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes
	mm	in	mm	mm	mm	in	mm	mm				kgf	350	400	490	530	560	580	
PA3-1000-4-400	1016	40	24	25	790	31 <sup>1</sup> / <sub>8</sub>	36	90	56.6	1810	1810						M12-M36		
PA3-1000-5-400	1016	40	30	29	790	31 <sup>1</sup> / <sub>8</sub>	45	110	87.6	3050	3050						M12-M36		
PA3-1000-6-400	1016	40	36	41	790	31 <sup>1</sup> / <sub>8</sub>	54	130	105.0	3810	3810						M20-M64		
PA3-1000-7-400	1016	40	42	45	790	31 <sup>1</sup> / <sub>8</sub>	63	150	147.7	5470	5470						M30-M64		
PA3-1000-8-400	1016	40	48	52	790	31 <sup>1</sup> / <sub>8</sub>	72	150	197.4	8150	8150						M42-M80		
PA3-1000-9-400	1016	40	56	58	810	31 <sup>7</sup> / <sub>8</sub>	84	150	203.5	10000	10000						M42-M80		
PA3-1000-10-400	1016	40	64	65	840	33 <sup>1</sup> / <sub>16</sub>	96	200	279.3	14440	14320						M42-M80		
PA3-1000-11-400	1016	40	72	69	880	34 <sup>5</sup> / <sub>8</sub>	108	200	363.1	21220	21140						M42-M80		
PA3-1000-12-400	1016	40	80	77	890	35 <sup>1</sup> / <sub>16</sub>	120	220	403.4	23370	23370						M72-M80		
PA3-1000-13-400	1016	40	80	85	900	35 <sup>7</sup> / <sub>16</sub>	120	280	517.4	29410	29300						M72-M80		
PA3-1000-4-490	1016	40	24	25	820	32 <sup>5</sup> / <sub>16</sub>	36	100	63.2	1830	1830	1830	1830	1370	960	690	M12-M36		
PA3-1000-5-490	1016	40	30	29	820	32 <sup>5</sup> / <sub>16</sub>	45	110	70.5	2570	2570	2410	2030	1430	1010	730	M12-M36		
PA3-1000-6-490	1016	40	36	41	820	32 <sup>5</sup> / <sub>16</sub>	54	110	89.3	3810	3810	3660	3110	2300	1670	1190	M20-M64		
PA3-1000-7-490	1016	40	42	45	820	32 <sup>5</sup> / <sub>16</sub>	63	120	117.4	5470	5470	5470	4990	3850	2870	2010	M30-M64		
PA3-1000-8-490	1016	40	48	52	820	32 <sup>5</sup> / <sub>16</sub>	72	160	158.3	7690	7690	7440	6420	4950	3700	2590	M42-M80		
PA3-1000-9-490	1016	40	56	58	820	32 <sup>5</sup> / <sub>16</sub>	84	140	186.8	9810	9810	9810	9810	8320	6470	4620	M42-M80		
PA3-1000-10-490	1016	40	64	65	820	32 <sup>5</sup> / <sub>16</sub>	96	180	243.6	13910	13910	13910	12530	10410	8100	5780	M42-M80		
PA3-1000-11-490	1016	40	72	69	860	33 <sup>7</sup> / <sub>8</sub>	108	180	315.5	20070	20070	20070	19430	16980	13980	10520	M42-M80		
PA3-1000-12-490	1016	40	80	77	880	34 <sup>5</sup> / <sub>8</sub>	120	200	360.6	23090	23090	23090	21160	18490	15230	11460	M72-M80		
PA3-1000-13-490	1016	40	80	85	880	34 <sup>5</sup> / <sub>8</sub>	120	250	446.7	28960	28960	28960	26610	23250	19150	14410	M72-M80		
PA3-1000-4-530	1016	40	24	25	820	32 <sup>5</sup> / <sub>16</sub>	36	100	63.2	1830	1830	1830	1830	1370	960	690	M12-M36		
PA3-1000-5-530	1016	40	30	29	820	32 <sup>5</sup> / <sub>16</sub>	45	90	72.1	3050	3050	3050	2640	1950	1420	1010	M12-M36		
PA3-1000-6-530	1016	40	36	41	820	32 <sup>5</sup> / <sub>16</sub>	54	100	97.4	3810	3810	3810	3810	3190	2380	1670	M20-M64		
PA3-1000-7-530	1016	40	42	45	820	32 <sup>5</sup> / <sub>16</sub>	63	130	127.0	5470	5470	5470	5400	4170	3110	2180	M30-M64		
PA3-1000-8-530	1016	40	48	52	820	32 <sup>5</sup> / <sub>16</sub>	72	120	159.2	9670	9670	9520	8530	7090	5520	3940	M42-M80		
PA3-1000-9-530	1016	40	56	58	820	32 <sup>5</sup> / <sub>16</sub>	84	140	186.8	9810	9810	9810	9810	8320	6470	4620	M42-M80		
PA3-1000-10-530	1016	40	64	65	820	32 <sup>5</sup> / <sub>16</sub>	96	200	269.9	13910	13910	13910	13910	11570	9000	6420	M42-M80		
PA3-1000-11-530	1016	40	72	69	860	33 <sup>7</sup> / <sub>8</sub>	108	180	315.5	20070	20070	20070	19430	16980	13980	10520	M42-M80		
PA3-1000-12-530	1016	40	80	77	880	34 <sup>5</sup> / <sub>8</sub>	120	220	395.3	25400	25400	25400	23280	20340	16750	12610	M72-M80		
PA3-1000-13-530	1016	40	80	85	880	34 <sup>5</sup> / <sub>8</sub>	120	270	481.3	28960	28960	28960	28740	25110	20680	15560	M72-M80		
PA3-1000-4-560	1016	40	24	25	840	33 <sup>1</sup> / <sub>16</sub>	36	110	70.2	1830	1830	1830	1830	1650	1310	1040	M12-M36		
PA3-1000-5-560	1016	40	30	29	840	33 <sup>1</sup> / <sub>16</sub>	45	100	80.8	3050	3050	3050	2960	2320	1870	1480	M12-M36		
PA3-1000-6-560	1016	40	36	41	840	33 <sup>1</sup> / <sub>16</sub>	54	110	108.0	3810	3810	3810	3810	3700	3010	2380	M20-M64		
PA3-1000-7-560	1016	40	42	45	840	33 <sup>1</sup> / <sub>16</sub>	63	160	157.3	5470	5470	5470	5470	5410	4390	3480	M30-M64		
PA3-1000-8-560	1016	40	48	52	840	33 <sup>1</sup> / <sub>16</sub>	72	130	173.8	9710	9710	9710	9340	7870	6490	5190	M42-M80		
PA3-1000-9-560	1016	40	56	58	840	33 <sup>1</sup> / <sub>16</sub>	84	160	214.9	9810	9810	9810	9810	9740	8030	6420	M42-M80		
PA3-1000-10-560	1016	40	64	65	840	33 <sup>1</sup> / <sub>16</sub>	96	180	306.7	14910	14910	14910	14910	14910	14910	12240	M42-M80		
PA3-1000-11-560	1016	40	72	69	860	33 <sup>7</sup> / <sub>8</sub>	108	190	332.5	20070	20070	20070	20070	18140	15480	12600	M42-M80		
PA3-1000-12-560	1016	40	80	77	880	34 <sup>5</sup> / <sub>8</sub>	120	250	447.3	28580	28580	28580	26610	23390	19960	16250	M72-M80		
PA3-1000-13-560	1016	40	80	85	880	34 <sup>5</sup> / <sub>8</sub>	120	300	533.1	28960	28960	28960	28960	28240	24090	19620	M72-M80		
PA3-1000-4-600	1016	40	24	25	840	33 <sup>1</sup> / <sub>16</sub>	36	110	87.7	1830	1830	1830	1830	1830	1830	1710	M12-M36		
PA3-1000-5-600	1016	40	30	29	840	33 <sup>1</sup> / <sub>16</sub>	45	100	96.2	2290	2290	2290	2290	2290	2290	2290	M12-M36		
PA3-1000-6-600	1016	40	36	41	840	33 <sup>1</sup> / <sub>16</sub>	54	120	157.2	3810	3810	3810	3810	3810	3810	3810	M20-M64		
PA3-1000-7-600	1016	40	42	45	840	33 <sup>1</sup> / <sub>16</sub>	63	140	184.1	5470	5470	5470	5470	5470	5470	5470	M30-M64		
PA3-1000-8-600	1016	40	48	52	840	33 <sup>1</sup> / <sub>16</sub>	72	190	252.4	9710	9710	9710	9710	9710	9710	9480	M42-M80		
PA3-1000-9-600	1016	40	56	58	840	33 <sup>1</sup> / <sub>16</sub>	84	180	301.4	10000	10000	10000	10000	10000	10000	10000	M42-M80		
PA3-1000-10-600	1016	40	64	65	840	33 <sup>1</sup> / <sub>16</sub>	96	200	340.0	14910	14910	14910	14910	14910	14910	13600	M42-M80		
PA3-1000-11-600	1016	40	72	69	860	33 <sup>7</sup> / <sub>8</sub>	108	280	485.4	20070	20070	20070	20070	20070	20070	18570	M42-M80		

# PA4 PRESSED RISER CLAMP FOUR BOLT TYPE

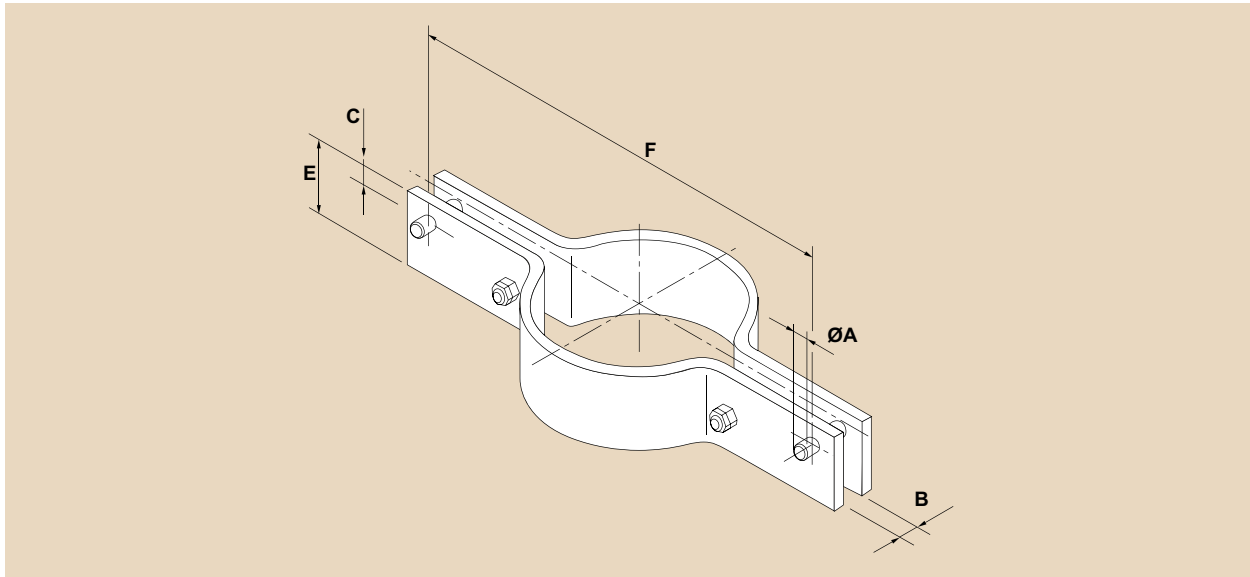


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes		
	mm	in			mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560		580	600
PA4-15-0-400	21.3	0.84	12	15	18	11/16	50	90	200	800	2.0	18.0	510	470								M8-M16
PA4-15-0-490	21.3	0.84	12	15	18	11/16	50	90	200	800	2.0	18.0	520	520	460	340	210	150	120			M8-M16
PA4-15-0-530	21.3	0.84	12	15	18	11/16	70	120	200	800	2.8	24.0	720	720	640	490	300	220	160			M8-M16
PA4-15-0-560	21.3	0.84	12	15	18	11/16	70	90	200	800	3.3	24.0	780	780	780	670	490	390	310			M8-M16
PA4-15-0-600	21.3	0.84	12	15	18	11/16	70	130	200	800	4.1	34.6	780	780	780	780	750	590	470			M8-M16
PA4-20-0-400	26.7	1.05	12	15	18	11/16	50	90	200	800	2.0	18.0	510	470								M8-M16
PA4-20-0-490	26.7	1.05	12	15	18	11/16	50	90	200	800	2.0	18.0	530	530	470	340	210	150	120			M8-M16
PA4-20-0-530	26.7	1.05	12	15	18	11/16	70	120	200	800	2.8	24.0	720	720	640	490	300	220	170			M8-M16
PA4-20-0-560	26.7	1.05	12	15	18	11/16	70	90	200	800	3.3	24.0	780	780	780	670	490	390	310			M8-M16
PA4-20-0-600	26.7	1.05	12	15	18	11/16	70	130	200	800	4.1	34.6	780	780	780	780	750	590	460			M8-M16
PA4-25-0-400	33.4	1.31	12	15	18	11/16	50	90	200	800	2.1	18.1	510	480								M8-M16
PA4-25-0-490	33.4	1.31	12	15	18	11/16	50	90	200	800	2.1	18.1	530	530	480	360	220	160	120			M8-M16
PA4-25-0-530	33.4	1.31	12	15	18	11/16	70	120	200	800	2.8	24.1	730	730	650	500	320	230	170			M8-M16
PA4-25-0-560	33.4	1.31	12	15	18	11/16	60	90	200	800	2.9	24.1	780	780	780	660	480	380	300			M8-M16
PA4-25-0-600	33.4	1.31	12	15	18	11/16	90	130	200	800	4.3	34.7	780	780	780	780	750	600	470			M8-M16
PA4-32-0-400	42.2	1.66	12	15	18	11/16	50	90	200	800	2.1	18.1	520	480								M12-M16
PA4-32-0-490	42.2	1.66	12	15	18	11/16	50	90	200	800	2.1	18.1	530	530	480	360	220	160	120			M12-M16
PA4-32-0-530	42.2	1.66	12	15	18	11/16	70	120	200	800	2.9	24.1	730	730	650	500	320	230	170			M12-M16
PA4-32-0-560	42.2	1.66	12	15	18	11/16	80	90	200	800	3.3	24.1	780	780	780	640	460	370	280			M12-M16
PA4-32-0-600	42.2	1.66	12	15	18	11/16	90	130	200	800	4.4	34.8	780	780	780	780	760	600	470			M12-M16
PA4-40-0-400	48.3	1.90	12	15	18	11/16	60	90	250	800	3.0	18.2	520	470								M8-M16
PA4-40-0-490	48.3	1.90	12	15	18	11/16	60	90	250	800	3.0	18.2	540	540	470	340	210	150	120			M8-M16
PA4-40-0-530	48.3	1.90	12	15	18	11/16	80	120	250	800	3.9	24.2	740	740	640	470	290	210	160			M8-M16
PA4-40-0-560	48.3	1.90	12	15	18	11/16	80	90	250	800	4.7	24.2	780	780	780	680	500	400	310			M8-M16
PA4-40-0-600	48.3	1.90	12	15	18	11/16	80	130	250	800	5.8	34.9	780	780	780	780	760	610	480			M8-M16
PA4-50-0-400	60.3	2.38	12	15	18	11/16	60	120	250	1000	3.0	30.0	530	480								M8-M16
PA4-50-1-400	60.3	2.38	16	17	24	15/16	70	100	250	1000	4.4	33.8	800	750								M8-M16
PA4-50-2-400	60.3	2.38	16	17	24	15/16	90	140	250	1000	5.7	47.3	1170	1090								M12-M16
PA4-50-0-490	60.3	2.38	12	15	18	11/16	60	120	250	1000	3.0	30.0	550	550	480	350	210	150	120			M8-M16
PA4-50-1-490	60.3	2.38	16	17	24	15/16	70	100	250	1000	4.4	33.8	830	830	750	600	380	270	200			M8-M16
PA4-50-2-490	60.3	2.38	16	17	24	15/16	90	140	250	1000	5.6	47.2	1210	1210	1090	800	500	360	270			M12-M16
PA4-50-0-530	60.3	2.38	12	15	18	11/16	80	80	250	1000	4.0	26.6	640	640	580	460	290	210	150			M8-M16
PA4-50-1-530	60.3	2.38	16	17	24	15/16	90	120	250	1000	5.6	40.5	1020	1020	930	740	490	340	240			M8-M16
PA4-50-2-530	60.3	2.38	16	17	24	15/16	80	110	250	1000	6.2	46.3	1390	1390	1290	1070	730	510	370			M12-M16
PA4-50-0-560	60.3	2.38	12	15	18	11/16	70	110	250	1000	4.2	36.6	780	780	780	640	460	370	280			M8-M16
PA4-50-1-560	60.3	2.38	16	17	24	15/16	70	160	250	1000	5.5	53.9	1390	1390	1280	1020	740	590	460			M8-M16
PA4-50-2-560	60.3	2.38	16	17	24	15/16	100	140	250	1000	7.8	59.0	1600	1600	1600	1430	1070	850	680			M12-M16
PA4-50-0-600	60.3	2.38	12	15	18	11/16	80	160	250	1000	5.9	53.1	780	780	780	780	770	610	480			M8-M16
PA4-50-1-600	60.3	2.38	16	17	24	15/16	110	150	250	1000	8.5	63.2	1600	1600	1600	1550	1160	920	730			M8-M16
PA4-50-2-600	60.3	2.38	16	17	24	15/16	110	150	300	1000	13	75.7	1600	1600	1600	1600	1600	1380	1100			M12-M16

# PA4 PRESSED RISER CLAMP FOUR BOLT TYPE



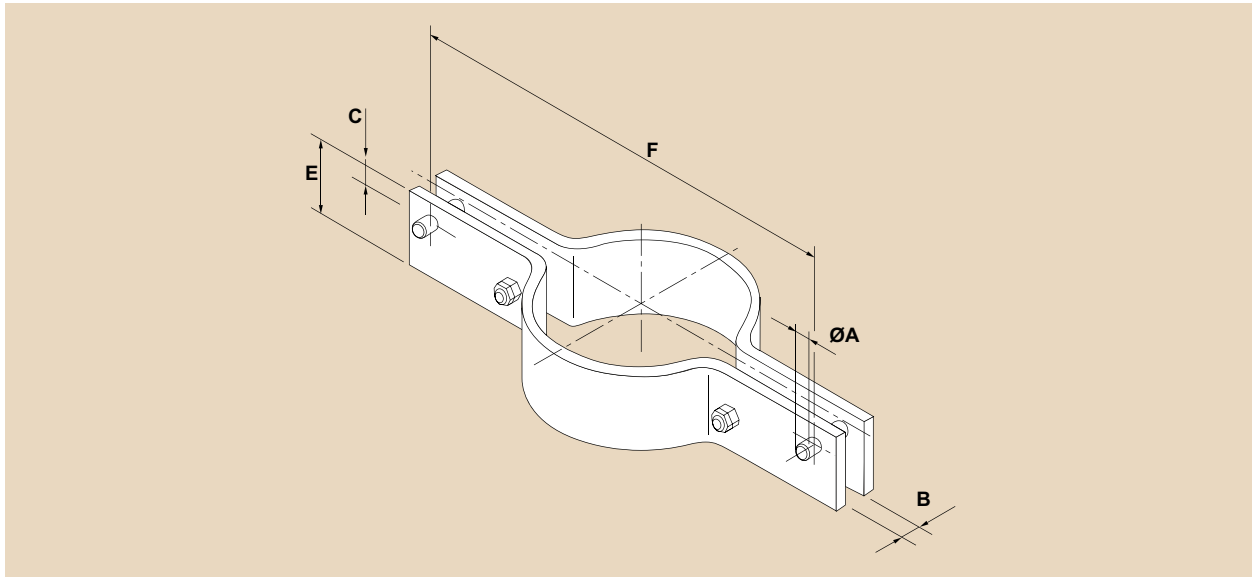
Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes					
	mm	in			mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600						
PA4-65-0-400	73.0	2.88	12	15	18	1 1/16	60	120	250	1000	3.2	30.3	520	490											M8-M16
PA4-65-1-400	73.0	2.88	16	17	24	1 5/16	80	100	300	1000	6.0	34.1	770	730											M8-M16
PA4-65-2-400	73.0	2.88	16	17	24	1 5/16	70	140	300	1000	6.5	47.6	1120	1060											M8-M16
PA4-65-0-490	73.0	2.88	12	15	18	1 1/16	60	120	250	1000	3.1	30.2	530	530	490	390	260	180	130						M8-M16
PA4-65-1-490	73.0	2.88	16	17	24	1 5/16	80	100	250	1000	4.3	34.0	790	790	720	550	350	250	190						M8-M16
PA4-65-2-490	73.0	2.88	16	17	24	1 5/16	70	140	300	1000	6.5	47.6	1150	1150	1070	870	580	400	290						M8-M16
PA4-65-0-530	73.0	2.88	12	15	18	1 1/16	70	80	250	1000	3.6	26.8	610	610	570	470	310	220	160						M8-M16
PA4-65-1-530	73.0	2.88	16	17	24	1 5/16	60	120	300	1000	5.5	40.8	950	950	900	730	480	340	240						M8-M16
PA4-65-2-530	73.0	2.88	16	17	24	1 5/16	90	110	300	1000	8.2	46.6	1390	1390	1320	1110	760	530	380						M8-M16
PA4-65-0-560	73.0	2.88	12	15	18	1 1/16	70	100	250	1000	4.3	33.5	780	780	730	620	460	360	290						M8-M16
PA4-65-1-560	73.0	2.88	16	17	24	1 5/16	80	150	300	1000	7.4	51.0	1240	1240	1160	970	730	580	460						M8-M16
PA4-65-2-560	73.0	2.88	16	17	24	1 5/16	110	140	300	1000	10.0	59.3	1600	1600	1600	1470	1090	860	680						M8-M16
PA4-65-0-600	73.0	2.88	12	15	18	1 1/16	80	160	300	1000	7.0	53.5	780	780	780	780	760	600	480						M8-M16
PA4-65-1-600	73.0	2.88	16	17	24	1 5/16	120	140	300	1000	11	59.3	1600	1600	1600	1480	1140	910	720						M8-M16
PA4-65-2-600	73.0	2.88	16	17	24	1 5/16	100	200	300	1000	12	84.6	1600	1600	1600	1600	1600	1350	1070						M8-M16
PA4-80-0-400	88.9	3.5	12	15	18	1 1/16	70	120	300	1000	4.3	30.4	510	470											M12-M16
PA4-80-1-400	88.9	3.5	16	17	24	1 5/16	80	110	300	1000	6.0	37.6	840	790											M8-M16
PA4-80-2-400	88.9	3.5	16	17	24	1 5/16	90	150	350	1000	9.5	51.3	1180	1110											M12-M16
PA4-80-0-490	88.9	3.5	12	15	18	1 1/16	70	120	300	1000	4.2	30.4	520	520	470	360	230	160	120						M12-M16
PA4-80-1-490	88.9	3.5	16	17	24	1 5/16	80	110	300	1000	6.0	37.6	870	870	790	620	390	280	210						M12-M16
PA4-80-2-490	88.9	3.5	16	17	24	1 5/16	70	150	300	1000	6.6	51.2	1220	1220	1110	860	560	390	290						M8-M16
PA4-80-0-530	88.9	3.5	12	15	18	1 1/16	70	90	300	1000	5.0	30.3	680	680	630	510	340	240	170						M12-M16
PA4-80-1-530	88.9	3.5	16	17	24	1 5/16	60	130	300	1000	5.7	44.4	1040	1040	930	720	470	330	240						M12-M16
PA4-80-2-530	88.9	3.5	16	17	24	1 5/16	90	120	300	1000	8.4	51.1	1500	1500	1400	1140	740	520	380						M8-M16
PA4-80-0-560	88.9	3.5	12	15	18	1 1/16	80	110	300	1000	5.7	37.0	710	710	710	650	470	380	290						M12-M16
PA4-80-1-560	88.9	3.5	16	17	24	1 5/16	80	160	300	1000	7.5	54.6	1300	1300	1200	980	730	580	460						M12-M16
PA4-80-2-560	88.9	3.5	16	17	24	1 5/16	110	140	300	1000	10	59.6	1600	1600	1600	1410	1060	840	670						M8-M16
PA4-80-0-600	88.9	3.5	12	15	18	1 1/16	80	110	300	1000	7.1	46.2	780	780	780	780	760	600	470						M12-M16
PA4-80-1-600	88.9	3.5	16	17	24	1 5/16	120	150	300	1000	11	63.8	1600	1600	1600	1520	1150	910	720						M12-M16
PA4-80-2-600	88.9	3.5	16	17	24	1 5/16	100	150	300	1000	12	76.4	1600	1600	1600	1600	1600	1410	1120						M8-M16
PA4-90-0-400	101.6	4	12	15	18	1 1/16	70	120	300	1000	4.3	30.6	500	470											M8-M16
PA4-90-1-400	101.6	4	16	17	24	1 5/16	70	110	300	1000	5.4	37.8	820	760											M8-M16
PA4-90-2-400	101.6	4	16	17	24	1 5/16	80	150	350	1000	8.6	51.5	1160	1080											M8-M16
PA4-90-0-490	101.6	4	12	15	18	1 1/16	70	120	300	1000	4.3	30.5	520	520	470	360	230	160	120						M8-M16
PA4-90-1-490	101.6	4	16	17	24	1 5/16	70	110	300	1000	5.4	37.8	850	850	750	560	350	250	190						M8-M16
PA4-90-2-490	101.6	4	16	17	24	1 5/16	70	150	300	1000	6.6	51.4	1200	1200	1100	880	580	410	290						M8-M16
PA4-90-0-530	101.6	4	12	15	18	1 1/16	60	90	300	1000	4.4	30.5	600	600	600	470	300	210	160						M8-M16
PA4-90-1-530	101.6	4	16	17	24	1 5/16	90	130	300	1000	6.9	44.6	1030	1030	940	740	470	330	250						M8-M16
PA4-90-2-530	101.6	4	16	17	24	1 5/16	90	120	300	1000	8.5	51.3	1480	1480	1370	1150	760	540	400						M8-M16
PA4-90-0-560	101.6	4	12	15	18	1 1/16	80	110	300	1000	5.9	37.3	780	780	780	640	470	370	290						M8-M16
PA4-90-1-560	101.6	4	16	17	24	1 5/16	80	110	300	1000	7.6	47.1	1340	1340	1250	1050	790	620	490						M8-M16
PA4-90-2-560	101.6	4	16	17	24	1 5/16	110	150	300	1000	10	64.1	1580	1580	1580	1490	1120	880	690						M8-M16
PA4-90-0-600	101.6	4	12	15	18	1 1/16	80	110	300	1000	7.2	46.4	780	780	780	780	780	620	490						M8-M16
PA4-90-1-600	101.6	4	16	17	24	1 5/16	120	160	300	1000	11	68.4	1580	1580	1580	1560	1200	950	760						M8-M16
PA4-90-2-600	101.6	4	16	17	24	1 5/16	120	150	350	1000	16	76.7	1600	1600	1600	1600	1580	1370	1090						M8-M16



# PA4 PRESSED RISER CLAMP FOUR BOLT TYPE

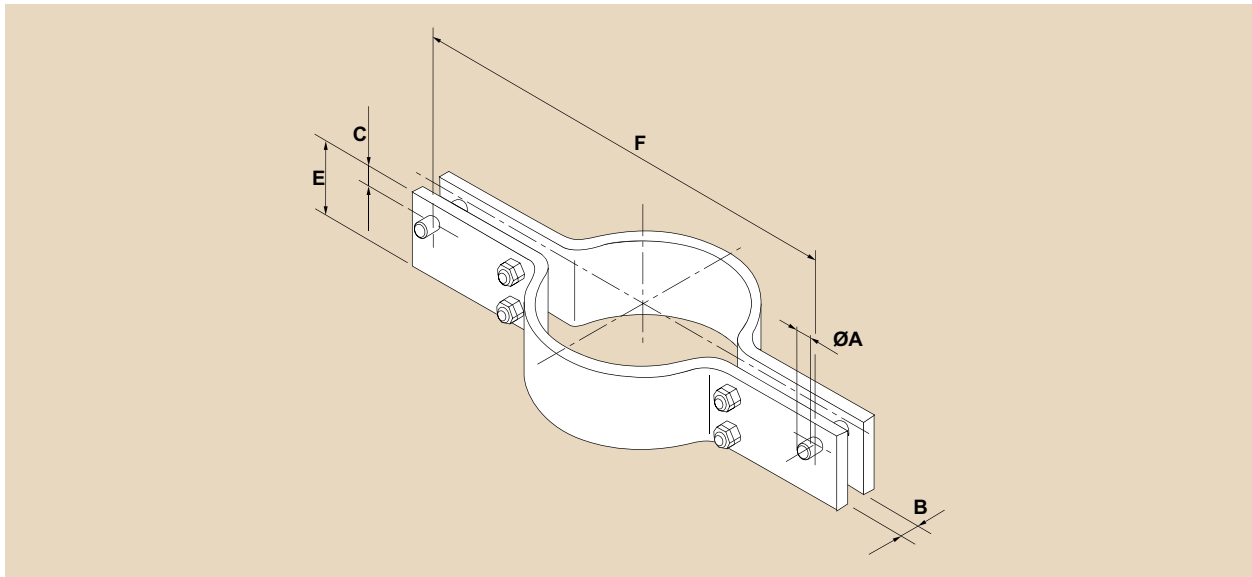


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560		580
PA4-100-0-400	114.3	4.5	12	15	18	11/16	60	90	300	1200	3.8	36.3	530	480							M12-M16
PA4-100-1-400	114.3	4.5	16	17	24	15/16	80	130	350	1200	7.1	53.1	800	740							M12-M16
PA4-100-2-400	114.3	4.5	16	17	24	15/16	80	120	350	1200	8.7	61.2	1160	1110							M12-M16
PA4-100-3-400	114.3	4.5	20	20	30	13/16	100	150	400	1200	16.5	92.6	2170	2090							M8-M16
PA4-100-0-490	114.3	4.5	12	15	18	11/16	60	90	300	1200	3.8	36.3	540	540	480	360	220	160	120		M12-M16
PA4-100-1-490	114.3	4.5	16	17	24	15/16	80	130	350	1200	7.0	53.0	830	830	740	560	350	250	190		M12-M16
PA4-100-2-490	114.3	4.5	16	17	24	15/16	80	120	350	1200	8.6	61.1	1190	1190	1120	890	580	410	300		M12-M16
PA4-100-3-490	114.3	4.5	20	20	30	13/16	100	150	400	1200	16.3	92.5	2240	2240	2130	1740	1170	820	580		M8-M16
PA4-100-0-530	114.3	4.5	12	15	18	11/16	80	100	300	1200	5.0	40.4	620	620	570	460	300	220	150		M12-M16
PA4-100-1-530	114.3	4.5	16	17	24	15/16	70	150	350	1200	7.6	61.1	970	970	890	720	480	340	240		M12-M16
PA4-100-2-530	114.3	4.5	16	17	24	15/16	100	140	350	1200	10.7	71.2	1330	1330	1330	1110	740	520	380		M12-M16
PA4-100-3-530	114.3	4.5	20	20	30	13/16	120	170	400	1200	19.5	104.7	2570	2570	2450	2070	1430	1000	710		M8-M16
PA4-100-0-560	114.3	4.5	12	15	18	11/16	70	130	300	1200	5.2	52.4	780	780	760	630	470	370	290		M12-M16
PA4-100-1-560	114.3	4.5	16	17	24	15/16	90	130	350	1200	9.7	66.1	1310	1310	1230	1040	770	610	480		M12-M16
PA4-100-2-560	114.3	4.5	16	17	24	15/16	70	180	350	1200	10.0	91.4	1360	1360	1360	1360	1060	840	670		M12-M16
PA4-100-3-560	114.3	4.5	20	20	30	13/16	150	210	400	1200	24.2	129.2	2630	2630	2630	2630	2060	1630	1290		M8-M16
PA4-100-0-600	114.3	4.5	12	15	18	11/16	90	130	350	1200	9.3	65.4	780	780	780	780	770	610	480		M12-M16
PA4-100-1-600	114.3	4.5	16	17	24	15/16	80	190	350	1200	11.4	96.5	1360	1360	1360	1360	1190	940	750		M12-M16
PA4-100-2-600	114.3	4.5	16	17	24	15/16	110	180	350	1200	15.6	109.6	1600	1600	1600	1600	1600	1380	1100		M12-M16
PA4-100-3-600	114.3	4.5	20	20	30	13/16	150	220	400	1200	30.0	157.6	2630	2630	2630	2630	2630	2550	2020		M8-M16
PA4-125-0-400	141.3	5.56	12	15	18	11/16	70	90	350	1200	5.1	36.7	530	500							M8-M16
PA4-125-1-400	141.3	5.56	16	17	24	15/16	90	130	400	1200	9.0	53.6	800	750							M8-M16
PA4-125-2-400	141.3	5.56	16	17	24	15/16	90	120	400	1200	11.3	61.8	1150	1090							M12-M24
PA4-125-3-400	141.3	5.56	20	20	30	13/16	110	150	450	1200	20.5	93.7	2130	2050							M8-M16
PA4-125-0-490	141.3	5.56	12	15	18	11/16	70	90	350	1200	5.1	36.7	550	550	500	370	230	160	130		M8-M16
PA4-125-1-490	141.3	5.56	16	17	24	15/16	80	130	350	1200	7.2	53.5	830	830	760	610	390	280	200		M8-M16
PA4-125-2-490	141.3	5.56	16	17	24	15/16	90	120	400	1200	11.1	61.7	1180	1180	1100	900	580	410	300		M12-M16
PA4-125-3-490	141.3	5.56	20	20	30	13/16	110	150	450	1200	20.2	93.4	2200	2200	2080	1740	1160	810	580		M12-M24
PA4-125-0-530	141.3	5.56	12	15	18	11/16	70	110	350	1200	6.1	44.8	690	690	630	500	340	230	170		M8-M16
PA4-125-1-530	141.3	5.56	16	17	24	15/16	70	160	350	1200	7.8	65.8	1030	1030	950	760	510	350	250		M8-M16
PA4-125-2-530	141.3	5.56	16	17	24	15/16	110	140	400	1200	13.5	71.9	1400	1400	1310	1090	720	510	380		M12-M16
PA4-125-3-530	141.3	5.56	20	20	30	13/16	130	170	450	1200	23.7	105.8	2530	2530	2400	2030	1400	980	690		M12-M24
PA4-125-0-560	141.3	5.56	12	15	18	11/16	80	140	350	1200	6.9	57.0	780	780	780	650	470	370	290		M8-M16
PA4-125-1-560	141.3	5.56	16	17	24	15/16	80	130	350	1200	8.9	66.7	1030	1030	1030	1020	740	590	460		M8-M16
PA4-125-2-560	141.3	5.56	16	17	24	15/16	80	180	400	1200	13.0	92.3	1600	1600	1600	1460	1090	860	690		M12-M16
PA4-125-3-560	141.3	5.56	20	20	30	13/16	110	220	450	1200	25.0	136.7	2630	2630	2630	2630	2100	1680	1340		M12-M24
PA4-125-0-600	141.3	5.56	12	15	18	11/16	80	130	350	1200	8.6	66.0	780	780	780	780	740	590	460		M8-M16
PA4-125-1-600	141.3	5.56	16	17	24	15/16	90	190	400	1200	14.6	97.4	1600	1600	1600	1540	1160	920	730		M8-M16
PA4-125-2-600	141.3	5.56	16	17	24	15/16	120	180	400	1200	19.3	110.6	1600	1600	1600	1600	1600	1340	1070		M12-M24
PA4-125-3-600	141.3	5.56	20	20	30	13/16	160	230	450	1200	36.1	166.3	2630	2630	2630	2630	2630	2580	2050		M12-M24

# PA6 PRESSED RISER CLAMP SIX BOLT TYPE

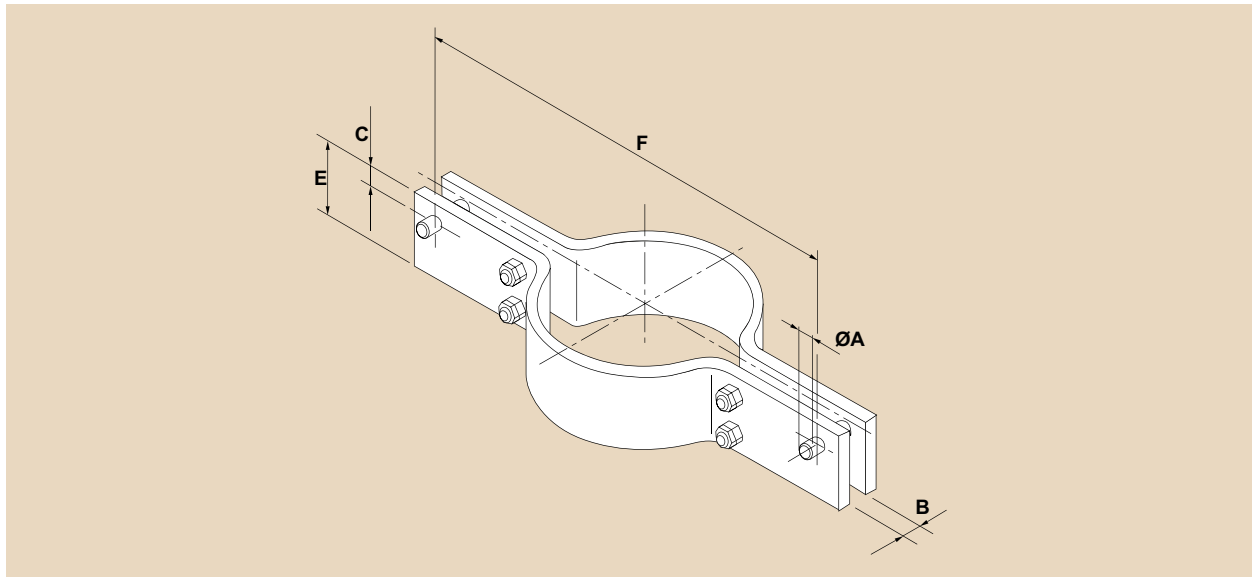


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C								Compatible with Rod Sizes
	mm	in			mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	
PA6-150-0-400	168.3	6.63	12	15	18	11/16	80	90	350	1200	6.0	37.1	540	500							M8-M16
PA6-150-1-400	168.3	6.63	16	17	24	15/16	80	130	400	1200	8.1	54.1	810	750							M8-M16
PA6-150-2-400	168.3	6.63	16	17	24	15/16	100	120	400	1200	12.7	62.4	1150	1100							M8-M16
PA6-150-3-400	168.3	6.63	20	20	30	13/16	100	150	450	1200	18.7	94.1	2130	2050							M12-M24
PA6-150-4-400	168.3	6.63	24	25	36	17/16	150	230	450	1200	28.6	145.7	3430	3310							M12-M36
PA6-150-0-490	168.3	6.63	12	15	18	11/16	80	90	350	1200	6.0	37.1	550	550	510	410	280	190	140		M8-M16
PA6-150-1-490	168.3	6.63	16	17	24	15/16	80	130	400	1200	8.1	54.1	830	830	750	560	360	250	190		M8-M16
PA6-150-2-490	168.3	6.63	16	17	24	15/16	80	120	400	1200	10.1	62.2	1180	1180	1110	890	580	410	300		M8-M16
PA6-150-3-490	168.3	6.63	20	20	30	13/16	100	150	450	1200	18.7	94.1	2190	2190	2090	1740	1170	810	580		M12-M24
PA6-150-4-490	168.3	6.63	24	25	36	17/16	150	220	450	1200	28.6	139.2	3370	3370	3200	2710	1820	1270	900		M12-M36
PA6-150-0-530	168.3	6.63	12	15	18	11/16	80	100	350	1200	6.0	41.2	620	620	570	460	290	210	150		M8-M16
PA6-150-1-530	168.3	6.63	16	17	24	15/16	80	150	400	1200	10.1	62.4	970	970	890	720	480	340	240		M8-M16
PA6-150-2-530	168.3	6.63	16	17	24	15/16	100	140	400	1200	12.5	72.6	1410	1410	1310	1100	740	520	380		M8-M16
PA6-150-3-530	168.3	6.63	20	20	30	13/16	120	170	450	1200	22.2	106.5	2520	2520	2400	2030	1430	1000	710		M12-M24
PA6-150-4-530	168.3	6.63	24	25	36	17/16	120	190	450	1200	28.4	140.0	3660	3660	3660	3240	2370	1660	1200		M12-M36
PA6-150-0-560	168.3	6.63	12	15	18	11/16	80	130	350	1200	7.1	53.5	780	780	770	630	470	370	290		M8-M16
PA6-150-1-560	168.3	6.63	16	17	24	15/16	90	130	400	1200	11.3	67.4	1300	1300	1220	1030	770	610	480		M8-M16
PA6-150-2-560	168.3	6.63	16	17	24	15/16	80	180	400	1200	13.3	93.2	1600	1600	1600	1470	1110	880	700		M8-M16
PA6-150-3-560	168.3	6.63	20	20	30	13/16	150	220	450	1200	27.7	137.6	2630	2630	2630	2630	2060	1630	1290		M12-M24
PA6-150-4-560	168.3	6.63	24	25	36	17/16	150	230	450	1200	35.4	169.3	3660	3660	3660	3660	3230	2620	2080		M12-M36
PA6-150-0-600	168.3	6.63	12	15	18	11/16	90	130	400	1200	11.0	66.6	780	780	780	780	770	610	480		M8-M16
PA6-150-1-600	168.3	6.63	16	17	24	15/16	80	190	400	1200	13.3	98.4	1600	1600	1600	1560	1180	930	740		M8-M16
PA6-150-2-600	168.3	6.63	16	17	24	15/16	110	180	400	1200	18.1	111.5	1600	1600	1600	1600	1600	1360	1080		M8-M16
PA6-150-3-600	168.3	6.63	20	20	30	13/16	150	230	450	1200	34.3	167.6	2630	2630	2630	2630	2630	2600	2060		M12-M24
PA6-150-4-600	168	6.63	24	25	36	17/16	180	260	500	1200	54.6	218.2	3660	3660	3660	3660	3660	3660	3300		M12-M36

# PA6 PRESSED RISER CLAMP SIX BOLT TYPE

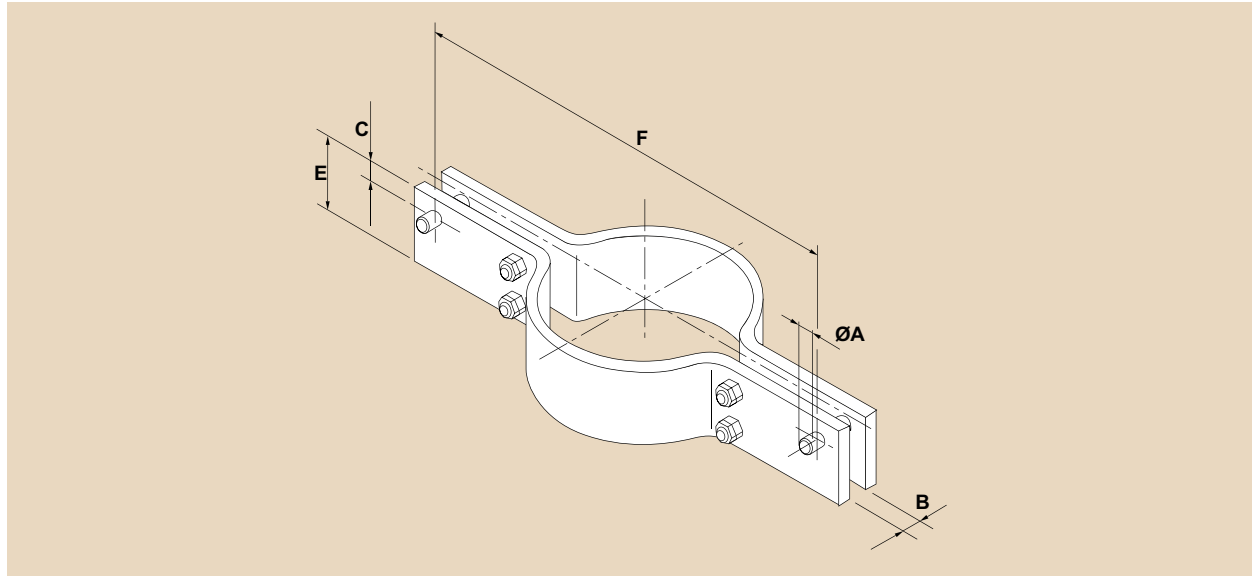


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560		580
PA6-175-0-400	193.7	7.63	12	15	18	11/16	80	90	400	1200	6.8	37.4	540	510							M8-M16
PA6-175-1-400	193.7	7.63	16	17	24	15/16	80	130	400	1200	8.4	54.6	820	770							M8-M16
PA6-175-2-400	193.7	7.63	16	17	24	15/16	100	120	450	1200	14.2	62.9	1160	1110							M8-M16
PA6-175-3-400	193.7	7.63	20	20	30	13/16	120	150	500	1200	25.0	95.2	2140	2070							M12-M24
PA6-175-4-400	193.7	7.63	24	25	36	17/16	160	220	500	1200	33.8	140.6	3280	3170							M12-M36
PA6-175-5-400	193.7	7.63	30	29	45	13/4	170	230	550	1200	49.5	174.0	4720	4610							M12-M36
PA6-175-0-490	193.7	7.63	12	15	18	11/16	80	90	400	1200	6.8	37.4	560	560	510	420	260	190	140		M8-M16
PA6-175-1-490	193.7	7.63	16	17	24	15/16	80	130	400	1200	8.4	54.6	840	840	770	610	390	280	200		M8-M16
PA6-175-2-490	193.7	7.63	16	17	24	15/16	80	120	400	1200	10.3	62.8	1200	1200	1120	940	620	440	320		M8-M16
PA6-175-3-490	193.7	7.63	20	20	30	13/16	100	150	450	1200	19.1	95.0	2210	2210	2110	1790	1260	880	630		M12-M24
PA6-175-4-490	193.7	7.63	24	25	36	17/16	160	220	500	1200	33.6	140.4	3380	3380	3230	2690	1810	1260	900		M12-M36
PA6-175-5-490	193.7	7.63	30	29	45	13/4	150	230	500	1200	40.6	173.8	4870	4870	4700	4040	2820	1980	1430		M12-M36
PA6-175-0-530	193.7	7.63	12	15	18	11/16	80	100	400	1200	8.1	41.6	630	630	580	470	320	220	160		M8-M16
PA6-175-1-530	193.7	7.63	16	17	24	15/16	80	150	400	1200	10.3	63.0	980	980	900	740	500	350	250		M8-M16
PA6-175-2-530	193.7	7.63	16	17	24	15/16	90	140	400	1200	11.6	73.2	1420	1420	1330	1090	710	500	360		M8-M16
PA6-175-3-530	193.7	7.63	20	20	30	13/16	110	170	450	1200	21.0	107.6	2540	2540	2420	2050	1400	980	700		M12-M24
PA6-175-4-530	193.7	7.63	24	25	36	17/16	130	190	500	1200	33.9	141.3	3660	3660	3660	3260	2400	1690	1220		M12-M36
PA6-175-5-530	193.7	7.63	30	29	45	13/4	170	260	500	1200	45.9	196.3	5560	5560	5370	4630	3240	2270	1640		M12-M36
PA6-175-0-560	193.7	7.63	12	15	18	11/16	80	130	400	1200	8.1	54.0	780	780	780	630	460	370	290		M8-M16
PA6-175-1-560	193.7	7.63	16	17	24	15/16	80	120	400	1200	10.3	62.8	1200	1200	1130	950	720	570	450		M8-M16
PA6-175-2-560	193.7	7.63	16	17	24	15/16	120	170	400	1200	15.4	88.8	1600	1600	1600	1400	1060	840	670		M8-M16
PA6-175-3-560	193.7	7.63	20	20	30	13/16	140	210	450	1200	26.4	132.7	2630	2630	2630	2620	2040	1630	1300		M12-M24
PA6-175-4-560	193.7	7.63	24	25	36	17/16	160	230	500	1200	41.6	170.8	3660	3660	3660	3660	3260	2640	2100		M12-M36
PA6-175-5-560	193.7	7.63	30	29	45	13/4	150	240	500	1200	48.3	206.7	6060	6060	6060	5760	4590	3690	2930		M12-M36
PA6-175-0-600	193.7	7.63	12	15	18	11/16	90	130	400	1200	11.2	67.3	780	780	780	780	780	630	500		M8-M16
PA6-175-1-600	193.7	7.63	16	17	24	15/16	90	190	450	1200	16.7	99.3	1600	1600	1600	1580	1200	950	760		M8-M16
PA6-175-2-600	193.7	7.63	16	17	24	15/16	120	180	450	1200	22.1	112.6	1600	1600	1600	1600	1600	1380	1090		M8-M16
PA6-175-3-600	193.7	7.63	20	20	30	13/16	140	230	450	1200	32.7	169.1	2630	2630	2630	2630	2630	2630	2080		M12-M24
PA6-175-4-600	193.7	7.63	24	25	36	17/16	170	250	500	1200	52.5	211.7	3660	3660	3660	3660	3660	3660	3180		M12-M36
PA6-175-5-600	193.7	7.63	30	29	45	13/4	230	320	500	1100	73.4	255.1	6090	6090	6090	6090	6090	5860	4630		M12-M36

# PA6 PRESSED RISER CLAMP SIX BOLT TYPE

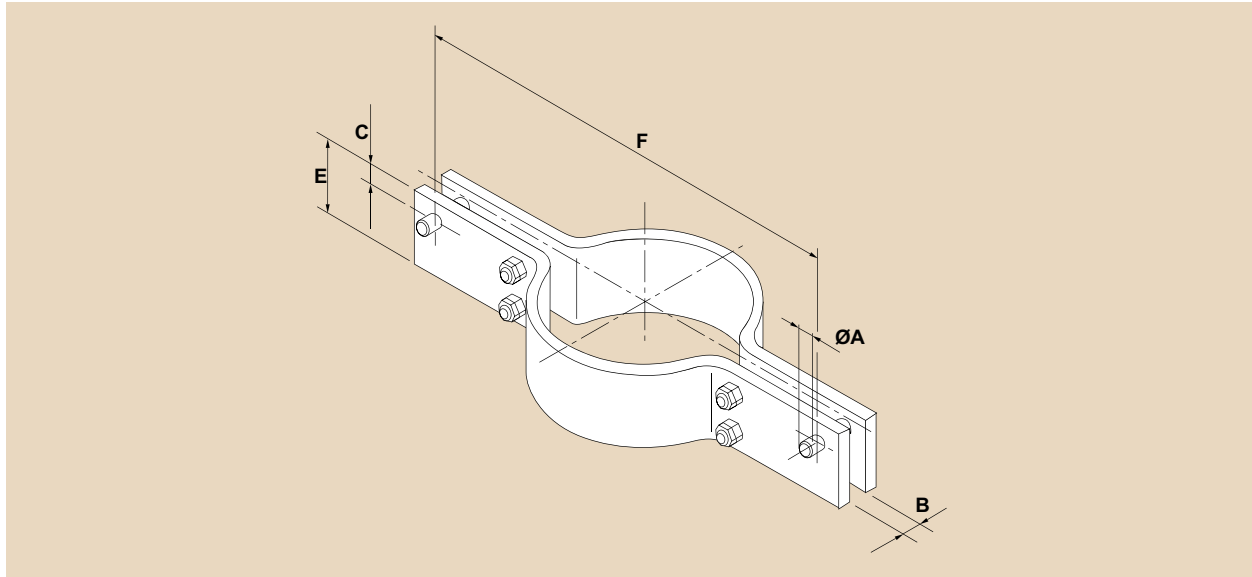


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A		B		C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C								Compatible with Rod Sizes
	mm	in	mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600				
PA6-200-0-400	219.1	8.63	12	15	18	11/16	80	110	400	1500	7.0	56.5	530	500						M8-M16			
PA6-200-1-400	219.1	8.63	16	17	24	15/16	90	160	450	1500	10.5	83.0	790	750						M8-M16			
PA6-200-2-400	219.1	8.63	16	17	24	15/16	100	150	450	1500	14.5	97.0	1150	1100						M8-M16			
PA6-200-3-400	219.1	8.63	20	20	30	13/16	120	190	500	1500	25.5	148.4	2160	2080						M12-M24			
PA6-200-4-400	219.1	8.63	24	25	36	17/16	150	210	500	1500	32.4	192.7	3290	3220						M12-M36			
PA6-200-5-400	219.1	8.63	30	29	45	13/4	160	230	550	1500	47.8	243.7	4770	4720						M12-M36			
PA6-200-6-400	219.1	8.63	36	41	54	21/8	200	320	600	1400	77.2	322.0	7520	7430						M20-M64			
PA6-200-0-490	219.1	8.63	12	15	18	11/16	80	110	400	1500	7.0	56.5	540	540	500	410	280	190	140	M8-M16			
PA6-200-1-490	219.1	8.63	16	17	24	15/16	90	160	450	1500	10.5	82.9	820	820	750	620	400	280	210	M8-M16			
PA6-200-2-490	219.1	8.63	16	17	24	15/16	80	150	450	1500	11.5	96.9	1190	1190	1100	860	560	400	290	M8-M16			
PA6-200-3-490	219.1	8.63	20	20	30	13/16	100	190	500	1500	21.1	148.2	2220	2220	2100	1720	1160	810	580	M12-M24			
PA6-200-4-490	219.1	8.63	24	25	36	17/16	150	210	500	1500	32.2	192.1	3390	3390	3280	2690	1810	1260	900	M12-M36			
PA6-200-5-490	219.1	8.63	30	29	45	13/4	160	220	550	1500	47.2	232.6	4680	4680	4570	4010	2820	1990	1430	M12-M36			
PA6-200-6-490	219.1	8.63	36	41	54	21/8	200	310	600	1400	76.9	311.6	7490	7490	7300	6430	4810	3500	2480	M20-M64			
PA6-200-0-530	219.1	8.63	12	15	18	11/16	80	130	450	1500	9.1	66.8	650	650	600	490	330	230	170	M8-M16			
PA6-200-1-530	219.1	8.63	16	17	24	15/16	80	120	450	1500	11.5	77.6	930	930	870	730	510	360	260	M8-M16			
PA6-200-2-530	219.1	8.63	16	17	24	15/16	100	170	450	1500	14.4	109.8	1360	1360	1280	1070	720	510	370	M8-M16			
PA6-200-3-530	219.1	8.63	20	20	30	13/16	120	220	500	1500	25.2	171.5	2600	2600	2490	2100	1420	990	710	M12-M24			
PA6-200-4-530	219.1	8.63	24	25	36	17/16	130	240	550	1500	37.1	219.4	3660	3660	3660	3180	2240	1580	1140	M12-M36			
PA6-200-5-530	219.1	8.63	30	29	45	13/4	180	250	550	1500	53.0	264.4	5390	5390	5260	4560	3210	2260	1630	M12-M36			
PA6-200-6-530	219.1	8.63	36	41	54	21/8	230	310	600	1250	88.0	282.4	7620	7620	7620	7340	5600	4070	2890	M20-M64			
PA6-200-0-560	219.1	8.63	12	15	18	11/16	90	160	450	1500	10.2	82.2	780	780	760	630	470	370	290	M8-M16			
PA6-200-1-560	219.1	8.63	16	17	24	15/16	90	150	450	1500	12.9	96.9	1190	1190	1120	950	720	570	460	M8-M16			
PA6-200-2-560	219.1	8.63	16	17	24	15/16	80	150	450	1500	15.2	116.0	1310	1310	1310	1310	1090	880	700	M8-M16			
PA6-200-3-560	219.1	8.63	20	20	30	13/16	150	190	500	1500	31.3	172.5	2510	2510	2510	2510	2040	1610	1280	M12-M24			
PA6-200-4-560	219.1	8.63	24	25	36	17/16	170	210	550	1500	48.3	219.0	3660	3660	3660	3660	3160	2590	2040	M12-M36			
PA6-200-5-560	219.1	8.63	30	29	45	13/4	160	300	550	1500	56.1	316.8	5480	5480	5480	5480	4580	3690	2930	M12-M36			
PA6-200-6-560	219.1	8.63	36	41	54	21/8	200	320	600	1100	89.1	261.2	7620	7620	7620	7620	7310	5930	4700	M20-M64			
PA6-200-0-600	219.1	8.63	12	15	18	11/16	90	160	450	1500	12.6	102.4	780	780	780	780	750	590	460	M8-M16			
PA6-200-1-600	219.1	8.63	16	17	24	15/16	80	160	450	1500	15.2	123.7	1310	1310	1310	1310	1180	930	740	M8-M16			
PA6-200-2-600	219.1	8.63	16	17	24	15/16	110	220	450	1500	20.8	170.0	1600	1600	1600	1600	1600	1340	1060	M8-M16			
PA6-200-3-600	219.1	8.63	20	20	30	13/16	150	210	500	1500	38.9	217.4	2630	2630	2630	2630	2630	2570	2030	M12-M24			
PA6-200-4-600	219.1	8.63	24	25	36	17/16	180	320	550	1500	60.9	333.4	3660	3660	3660	3660	3660	3660	3240	M12-M36			
PA6-200-5-600	219.1	8.63	30	29	45	13/4	240	320	550	1100	83.6	257.3	6090	6090	6090	6090	6090	5750	4570	M12-M36			
PA6-200-6-600	219.1	8.63	36	41	54	21/8	230	310	600	750	115.8	184.6	7620	7620	7620	7620	7620	7620	7460	M20-M64			

**PA6 PRESSED RISER CLAMP SIX BOLT TYPE**

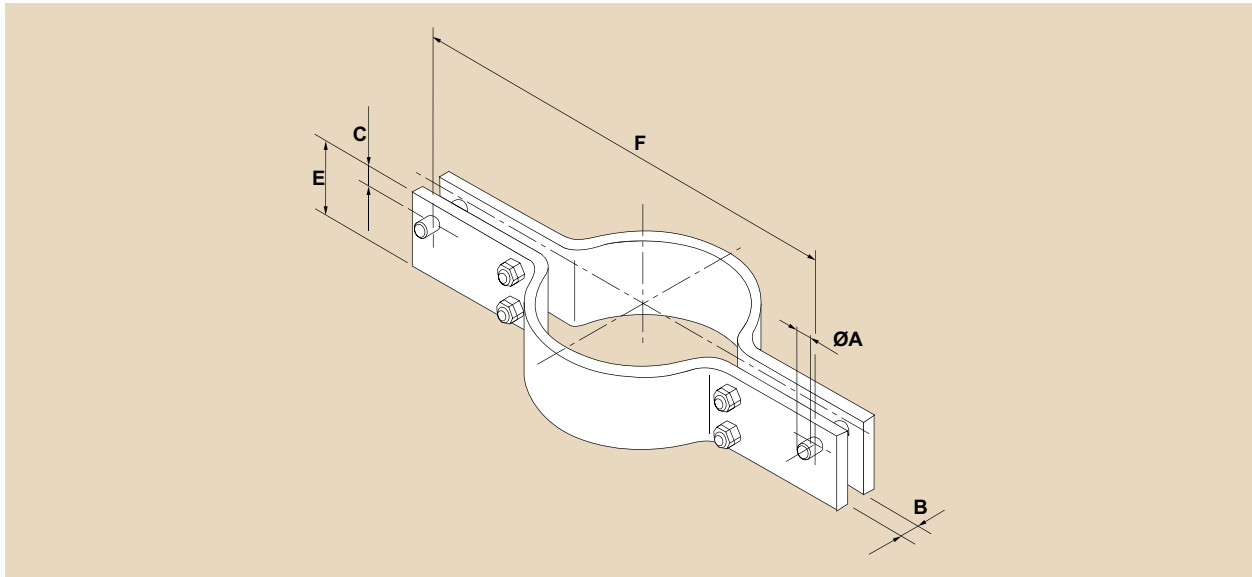


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600		
PA6-225-0-400	244.5	9.63	12	15	18	11/16	80	110	450	1500	7.8	57.0	530	500							M8-M16
PA6-225-1-400	244.5	9.63	16	17	24	15/16	100	160	500	1500	16.0	83.7	800	760							M8-M16
PA6-225-2-400	244.5	9.63	16	17	24	15/16	100	150	500	1500	16.0	97.7	1170	1110							M8-M16
PA6-225-3-400	244.5	9.63	20	20	30	13/16	120	190	550	1500	27.8	149.5	2170	2090							M12-M24
PA6-225-4-400	244.5	9.63	24	25	36	17/16	160	210	550	1500	37.6	193.9	3310	3190							M12-M36
PA6-225-5-400	244.5	9.63	30	29	45	13/4	170	230	600	1500	54.7	245.3	4790	4650							M12-M36
PA6-225-6-400	244.5	9.63	36	41	54	21/8	210	320	650	1400	87.9	325.0	7550	7400							M20-M64
PA6-225-0-490	244.5	9.63	12	15	18	11/16	80	110	450	1500	7.8	57.0	550	550	500	390	250	180	130		M8-M16
PA6-225-1-490	244.5	9.63	16	17	24	15/16	80	160	450	1500	9.5	83.6	830	830	750	570	360	260	190		M8-M16
PA6-225-2-490	244.5	9.63	16	17	24	15/16	100	150	500	1500	16.0	97.7	1200	1200	1120	940	630	450	330		M8-M16
PA6-225-3-490	244.5	9.63	20	20	30	13/16	100	190	500	1500	21.5	149.3	2240	2240	2130	1770	1190	830	590		M12-M24
PA6-225-4-490	244.5	9.63	24	25	36	17/16	160	210	550	1500	37.4	193.6	3410	3410	3200	2590	1740	1210	860		M12-M36
PA6-225-5-490	244.5	9.63	30	29	45	13/4	170	220	600	1500	54.4	234.4	4700	4700	4570	3930	2720	1900	1380		M12-M36
PA6-225-6-490	244.5	9.63	36	41	54	21/8	190	310	600	1400	74.2	313.7	7510	7510	7310	6400	4680	3380	2410		M20-M64
PA6-225-0-530	244.5	9.63	12	15	18	11/16	80	130	450	1500	9.2	67.3	660	660	610	490	330	230	160		M8-M16
PA6-225-1-530	244.5	9.63	16	17	24	15/16	80	120	450	1500	11.8	78.1	940	940	880	730	510	360	260		M8-M16
PA6-225-2-530	244.5	9.63	16	17	24	15/16	100	170	450	1500	14.6	110.7	1380	1380	1290	1080	750	520	380		M8-M16
PA6-225-3-530	244.5	9.63	20	20	30	13/16	120	220	500	1500	25.7	172.8	2630	2630	2500	2110	1460	1020	720		M12-M24
PA6-225-4-530	244.5	9.63	24	25	36	17/16	130	240	550	1500	37.7	220.9	3660	3660	3660	3270	2280	1600	1150		M12-M36
PA6-225-5-530	244.5	9.63	30	29	45	13/4	200	250	600	1500	63.7	266.1	5410	5410	5270	4610	3250	2270	1640		M12-M36
PA6-225-6-530	244.5	9.63	36	41	54	21/8	220	310	600	1250	85.6	284.5	7620	7620	7620	7340	5490	3970	2830		M20-M64
PA6-225-0-560	244.5	9.63	12	15	18	11/16	90	160	450	1500	10.4	82.8	780	780	760	630	470	370	290		M8-M16
PA6-225-1-560	244.5	9.63	16	17	24	15/16	90	160	450	1500	13.2	104.1	1290	1290	1210	1020	770	610	480		M8-M16
PA6-225-2-560	244.5	9.63	16	17	24	15/16	120	150	450	1500	17.5	116.8	1600	1600	1600	1400	1060	840	660		M8-M16
PA6-225-3-560	244.5	9.63	20	20	30	13/16	150	190	500	1500	32.0	173.6	2630	2630	2630	2550	2030	1650	1310		M12-M24
PA6-225-4-560	244.5	9.63	24	25	36	17/16	160	220	550	1500	46.3	231.1	3660	3660	3660	3660	3170	2510	2010		M12-M36
PA6-225-5-560	244.5	9.63	30	29	45	13/4	180	300	600	1500	68.5	319.1	6090	6090	6090	5680	4650	3800	3000		M12-M36
PA6-225-6-560	244.5	9.63	36	41	54	21/8	220	320	650	1100	105.1	263.4	7620	7620	7620	7620	7360	6010	4750		M20-M64
PA6-225-0-600	244.5	9.63	12	15	18	11/16	90	160	450	1500	12.9	103.2	780	780	780	780	770	610	480		M8-M16
PA6-225-1-600	244.5	9.63	16	17	24	15/16	90	160	500	1500	18.8	124.6	1310	1310	1310	1310	1170	940	750		M8-M16
PA6-225-2-600	244.5	9.63	16	17	24	15/16	130	230	500	1500	27.1	179.0	1600	1600	1600	1600	1600	1390	1110		M8-M16
PA6-225-3-600	244.5	9.63	20	20	30	13/16	170	220	550	1500	48.0	229.2	2550	2550	2550	2550	2550	2510	2120		M12-M24
PA6-225-4-600	244.5	9.63	24	25	36	17/16	170	320	550	1500	58.6	335.8	3660	3660	3660	3660	3660	3660	3200		M12-M36
PA6-225-5-600	244.5	9.63	30	29	45	13/4	190	320	600	1100	83.4	259.5	5770	5770	5770	5770	5770	5750	4560		M12-M36
PA6-225-6-600	244.5	9.63	36	41	54	21/8	250	300	650	750	135.5	181.1	7620	7620	7620	7620	7620	7620	7420		M20-M64

# PA6 PRESSED RISER CLAMP SIX BOLT TYPE

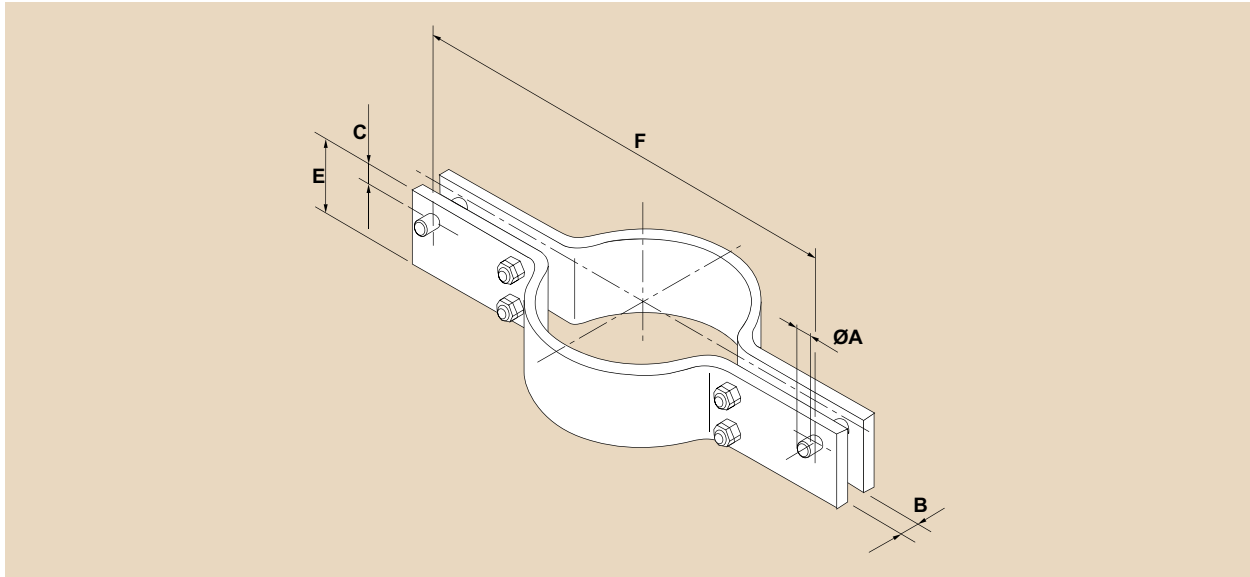


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A		B		C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes
	mm	in	mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600			
PA6-250-0-400	273	10.75	12	15	18	11/16	80	100	450	1500	8.0	52.3	490	460							M8-M16	
PA6-250-1-400	273	10.75	16	17	24	15/16	100	150	500	1500	16.4	79.2	760	720							M8-M16	
PA6-250-2-400	273	10.75	16	17	24	15/16	100	150	500	1500	16.4	98.7	1190	1130							M8-M16	
PA6-250-3-400	273	10.75	20	20	30	13/16	120	190	550	1500	28.4	150.8	2210	2130							M12-M24	
PA6-250-4-400	273	10.75	24	25	36	17/16	150	210	600	1500	47.8	195.7	3360	3280							M12-M36	
PA6-250-5-400	273	10.75	30	29	45	13/4	180	220	650	1500	62.5	236.7	4610	4560							M12-M36	
PA6-250-6-400	273	10.75	36	41	54	21/8	220	320	700	1400	98.6	327.6	7620	7430							M20-M64	
PA6-250-7-400	273	10.75	42	45	63	21/2	240	320	700	1050	127.7	262.2	10930	10930							M30-M64	
PA6-250-0-490	273	10.75	12	15	18	11/16	80	100	450	1500	8.0	52.3	500	500	470	380	260	180	130		M8-M16	
PA6-250-1-490	273	10.75	16	17	24	15/16	90	150	500	1500	11.8	79.1	790	790	730	590	380	270	200		M8-M16	
PA6-250-2-490	273	10.75	16	17	24	15/16	100	140	500	1500	16.4	92.1	1130	1130	1060	890	630	440	320		M8-M16	
PA6-250-3-490	273	10.75	20	20	30	13/16	100	180	550	1500	23.6	142.7	2140	2140	2030	1660	1120	780	560		M12-M24	
PA6-250-4-490	273	10.75	24	25	36	17/16	150	200	550	1500	35.8	186.1	3280	3170	2600	1760	1230	880			M12-M36	
PA6-250-5-490	273	10.75	30	29	45	13/4	160	280	600	1500	52.3	263.5	4740	4740	4580	3900	2740	1940	1390		M12-M36	
PA6-250-6-490	273	10.75	36	41	54	21/8	200	320	650	1450	84.0	336.5	7530	7530	7340	6440	4760	3460	2460		M20-M64	
PA6-250-7-490	273	10.75	42	45	63	21/2	230	310	700	1050	121.7	253.2	10930	10930	10750	9310	7180	5360	3760		M30-M64	
PA6-250-0-530	273	10.75	12	15	18	11/16	80	120	500	1500	10.3	62.8	620	620	570	470	310	220	160		M8-M16	
PA6-250-1-530	273	10.75	16	17	24	15/16	80	120	500	1500	13.0	78.9	960	960	900	750	530	370	270		M8-M16	
PA6-250-2-530	273	10.75	16	17	24	15/16	100	170	500	1500	16.2	111.8	1270	1270	1270	1060	700	490	350		M8-M16	
PA6-250-3-530	273	10.75	20	20	30	13/16	120	210	550	1500	28.2	166.4	2540	2540	2420	2040	1380	960	690		M12-M24	
PA6-250-4-530	273	10.75	24	25	36	17/16	140	230	600	1500	44.4	213.8	3660	3660	3660	3190	2370	1670	1200		M12-M36	
PA6-250-5-530	273	10.75	30	29	45	13/4	190	250	600	1500	61.8	268.3	5470	5470	5340	4700	3310	2340	1680		M12-M36	
PA6-250-6-530	273	10.75	36	41	54	21/8	230	320	650	1300	96.3	306.7	7620	7620	7620	7400	5540	4030	2860		M20-M64	
PA6-250-7-530	273	10.75	42	45	63	21/2	270	310	700	950	142.3	233.7	10930	10930	10930	10850	8550	6380	4480		M30-M64	
PA6-250-0-560	273	10.75	12	15	18	11/16	80	160	500	1500	12.7	83.6	780	780	780	650	480	380	300		M8-M16	
PA6-250-1-560	273	10.75	16	17	24	15/16	100	150	500	1500	16.2	98.5	1220	1220	1150	980	740	590	470		M8-M16	
PA6-250-2-560	273	10.75	16	17	24	15/16	100	150	550	1500	23.1	118.0	1600	1600	1600	1440	1120	900	720		M8-M16	
PA6-250-3-560	273	10.75	20	20	30	13/16	160	190	550	1500	37.4	175.2	2630	2630	2630	2610	2090	1680	1330		M12-M24	
PA6-250-4-560	273	10.75	24	25	36	17/16	170	280	600	1500	53.5	259.9	3660	3660	3660	3660	3210	2550	2040		M12-M36	
PA6-250-5-560	273	10.75	30	29	45	13/4	190	290	650	1500	78.0	311.1	6090	6090	6090	5580	4600	3760	2970		M12-M36	
PA6-250-6-560	273	10.75	36	41	54	21/8	210	310	650	1100	102.1	257.8	7620	7620	7620	7390	6050	4780			M20-M64	
PA6-250-7-560	273	10.75	42	45	63	21/2	240	320	700	850	144.0	221.1	10930	10930	10930	10930	10710	8770	6920		M30-M64	
PA6-250-0-600	273	10.75	12	15	18	11/16	100	150	500	1500	15.8	97.7	780	780	780	780	740	590	470		M8-M16	
PA6-250-1-600	273	10.75	16	17	24	15/16	90	160	500	1500	19.2	125.7	1150	1150	1150	1150	1130	970	770		M8-M16	
PA6-250-2-600	273	10.75	16	17	24	15/16	120	220	500	1500	25.6	172.8	1530	1530	1530	1530	1510	1380	1090		M8-M16	
PA6-250-3-600	273	10.75	20	20	30	13/16	160	280	550	1500	46.4	258.0	2630	2630	2630	2630	2630	2590	2050		M12-M24	
PA6-250-4-600	273	10.75	24	25	36	17/16	180	310	600	1500	67.4	328.0	3660	3660	3660	3660	3660	3660	3180		M12-M36	
PA6-250-5-600	273	10.75	30	29	45	13/4	200	320	650	1150	95.1	272.7	6090	6090	6090	6090	6090	5830	4620		M12-M36	
PA6-250-6-600	273	10.75	36	41	54	21/8	260	310	700	800	151.2	199.3	7620	7620	7620	7620	7620	7620	7480		M20-M64	

# PA6 PRESSED RISER CLAMP SIX BOLT TYPE



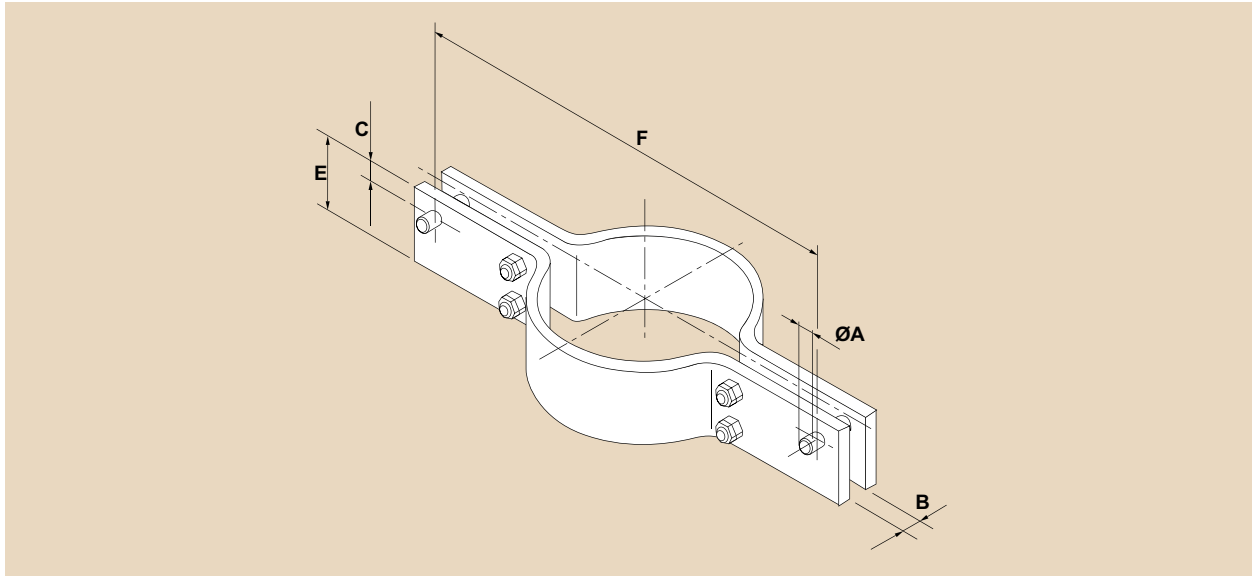
Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C								Compatible with Rod Sizes
	mm	in			mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600		
PA6-300-1-400	323.9	12.75	16	17	24	15/16	100	130	550	1900	18.2	107.4	780	750							M8-M16
PA6-300-2-400	323.9	12.75	16	17	24	15/16	120	180	600	1900	23.4	148.7	1110	1060							M8-M16
PA6-300-3-400	323.9	12.75	20	20	30	13/16	150	230	650	1850	41.7	223.5	2150	2080							M12-M24
PA6-300-4-400	323.9	12.75	24	25	36	17/16	150	260	650	1850	52.4	295.7	3350	3280							M12-M36
PA6-300-5-400	323.9	12.75	30	29	45	13/4	190	280	700	1850	72.3	367.7	4750	4700							M12-M36
PA6-300-6-400	323.9	12.75	36	41	54	21/8	230	320	750	1450	111.2	342.7	7510	7430							M20-M64
PA6-300-7-400	323.9	12.75	42	45	63	21/2	260	320	800	1100	157.1	278.4	10930	10810							M30-M64
PA6-300-8-400	323.9	12.75	48	52	72	213/16	300	300	850	850	218.6	218.6	15170	15020							M42-M80
PA6-300-1-490	323.9	12.75	16	17	24	15/16	90	130	550	1900	13.1	107.4	800	800	750	580	380	270	200		M8-M16
PA6-300-2-490	323.9	12.75	16	17	24	15/16	100	180	550	1900	18.2	148.5	1140	1140	1080	910	650	460	330		M8-M16
PA6-300-3-490	323.9	12.75	20	20	30	13/16	120	220	600	1850	31.3	213.5	2110	2110	2030	1730	1290	940	670		M12-M24
PA6-300-4-490	323.9	12.75	24	25	36	17/16	120	250	650	1850	41.8	284.1	3300	3300	3200	2760	1960	1400	1000		M12-M36
PA6-300-5-490	323.9	12.75	30	29	45	13/4	170	270	650	1850	60.5	353.9	4700	4700	4590	4060	2890	2060	1480		M12-M36
PA6-300-6-490	323.9	12.75	36	41	54	21/8	220	310	750	1450	105.7	331.3	7470	7470	7310	6340	4730	3460	2450		M20-M64
PA6-300-7-490	323.9	12.75	42	45	63	21/2	260	320	800	1100	155.9	277.2	10930	10930	10930	9560	7430	5580	3900		M30-M64
PA6-300-8-490	323.9	12.75	48	52	72	213/16	300	320	850	900	217.4	241.6	15280	15280	14930	13200	10670	8180	5690		M42-M80
PA6-300-1-530	323.9	12.75	16	17	24	15/16	100	150	550	1900	18.2	123.8	940	940	890	750	530	380	270		M8-M16
PA6-300-2-530	323.9	12.75	16	17	24	15/16	110	150	550	1900	20.0	148.2	1340	1340	1290	1100	760	530	380		M8-M16
PA6-300-3-530	323.9	12.75	20	20	30	13/16	130	200	600	1900	33.7	231.5	2500	2500	2420	2100	1480	1030	740		M12-M24
PA6-300-4-530	323.9	12.75	24	25	36	17/16	140	220	650	1850	48.6	285.1	3660	3660	3660	3240	2330	1660	1190		M12-M36
PA6-300-5-530	323.9	12.75	30	29	45	13/4	190	310	650	1850	67.5	406.0	5460	5460	5330	4590	3260	2320	1670		M12-M36
PA6-300-6-530	323.9	12.75	36	41	54	21/8	190	320	750	1350	106.1	321.8	7620	7620	7620	7340	5750	4320	3020		M20-M64
PA6-300-7-530	323.9	12.75	42	45	63	21/2	270	310	750	1000	153.4	249.2	10930	10930	10930	10840	8460	6350	4450		M30-M64
PA6-300-1-560	323.9	12.75	16	17	24	15/16	100	190	550	1900	18.1	156.8	1050	1050	1050	980	750	600	480		M8-M16
PA6-300-2-560	323.9	12.75	16	17	24	15/16	100	180	600	1900	25.5	177.7	1600	1600	1570	1360	1070	860	680		M8-M16
PA6-300-3-560	323.9	12.75	20	20	30	13/16	160	240	600	1900	41.3	277.4	2630	2630	2630	2590	2070	1640	1310		M12-M24
PA6-300-4-560	323.9	12.75	24	25	36	17/16	180	260	650	1850	62.2	336.8	3660	3660	3660	3660	3250	2670	2110		M12-M36
PA6-300-5-560	323.9	12.75	30	29	45	13/4	190	320	700	1650	84.8	378.5	6090	6090	6090	5680	4710	3830	3040		M12-M36
PA6-300-6-560	323.9	12.75	36	41	54	21/8	230	310	750	1150	127.9	272.8	7620	7620	7620	7620	7390	6060	4790		M20-M64
PA6-300-7-560	323.9	12.75	42	45	63	21/2	270	320	800	900	182.8	236.1	10930	10930	10930	10930	10930	9020	7130		M30-M64
PA6-300-1-600	323.9	12.75	16	17	24	15/16	100	190	600	1900	25.4	187.4	1050	1050	1050	1050	1050	910	730		M8-M16
PA6-300-2-600	323.9	12.75	16	17	24	15/16	140	200	600	1900	35.4	229.8	1480	1480	1480	1480	1480	1390	1100		M8-M16
PA6-300-3-600	323.9	12.75	20	20	30	13/16	160	260	600	1900	51.2	342.7	2630	2630	2630	2630	2630	2570	2030		M12-M24
PA6-300-4-600	323.9	12.75	24	25	36	17/16	180	320	650	1600	73.9	363.7	3660	3660	3660	3660	3660	3660	3160		M12-M36
PA6-300-5-600	323.9	12.75	30	29	45	13/4	210	320	700	1200	108.5	288.0	6090	6090	6090	6090	6090	5880	4640		M12-M36
PA6-300-6-600	323.9	12.75	36	41	54	21/8	260	300	750	850	163.8	207.5	7620	7620	7620	7620	7620	7620	7320		M20-M64



# PA6 PRESSED RISER CLAMP SIX BOLT TYPE

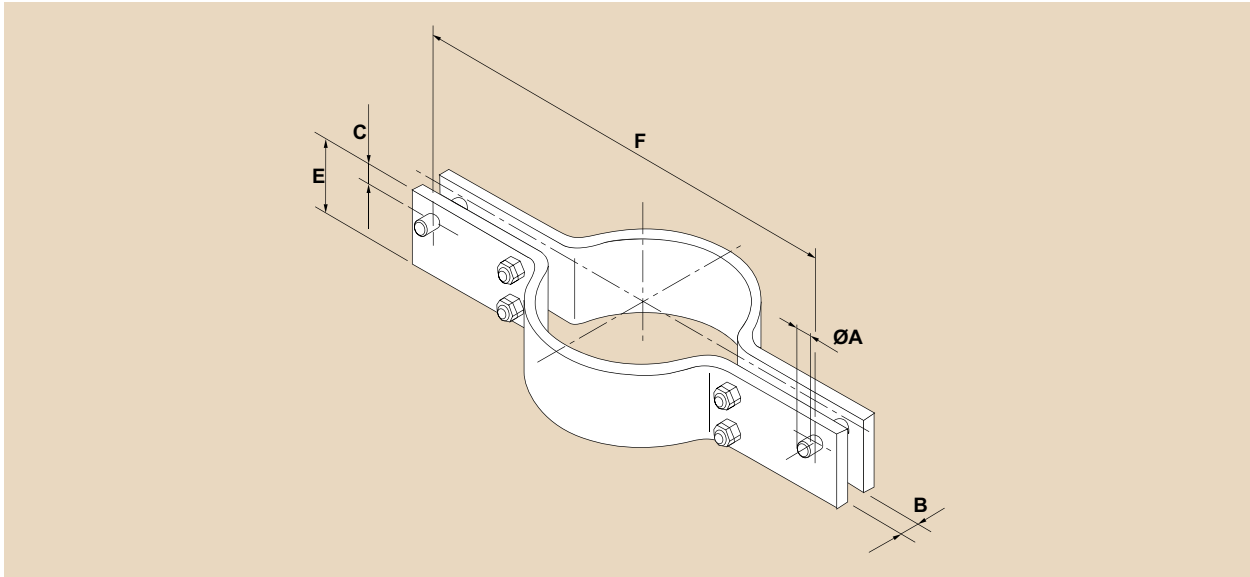


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560		580
PA6-350-1-400	355.6	14	16	17	24	15/16	120	130	600	1850	23.9	105.9	820	790							M8-M16
PA6-350-2-400	355.6	14	16	17	24	15/16	120	180	600	1850	23.9	146.4	1170	1120							M8-M16
PA6-350-3-400	355.6	14	20	20	30	13/16	150	220	650	1850	42.5	215.6	2080	2020							M12-M24
PA6-350-4-400	355.6	14	24	25	36	17/16	180	250	700	1850	68.0	287.3	3260	3190							M12-M36
PA6-350-5-400	355.6	14	30	29	45	13/4	190	270	750	1850	77.3	357.3	4630	4560							M12-M36
PA6-350-6-400	355.6	14	36	41	54	21/8	240	310	800	1450	124.5	336.4	7420	7350							M20-M64
PA6-350-7-400	355.6	14	42	45	63	21/2	270	310	850	1100	172.7	272.8	10930	10770							M30-M64
PA6-350-8-400	355.6	14	48	52	72	213/16	310	310	900	900	238.4	238.4	15170	15030							M42-M80
PA6-350-1-490	355.6	14	16	17	24	15/16	100	120	600	1850	19.8	97.6	770	770	730	610	440	310	220		M8-M16
PA6-350-2-490	355.6	14	16	17	24	15/16	100	170	600	1850	19.8	138.1	1130	1130	1070	900	630	440	320		M8-M16
PA6-350-3-490	355.6	14	20	20	30	13/16	120	220	650	1850	33.9	215.3	2150	2150	2060	1760	1270	880	640		M12-M24
PA6-350-4-490	355.6	14	24	25	36	17/16	150	250	700	1850	56.3	286.6	3360	3360	3250	2830	2200	1660	1160		M12-M36
PA6-350-5-490	355.6	14	30	29	45	13/4	180	270	700	1850	69.1	356.6	4760	4760	4660	4080	2910	2070	1490		M12-M36
PA6-350-6-490	355.6	14	36	41	54	21/8	230	320	800	1500	118.3	356.0	7560	7560	7390	6340	4740	3480	2460		M20-M64
PA6-350-7-490	355.6	14	42	45	63	21/2	250	320	800	1150	152.3	290.3	10930	10930	10730	9500	7440	5590	3910		M30-M64
PA6-350-8-490	355.6	14	48	52	72	213/16	290	310	850	900	213.1	237.1	15630	15630	15280	13520	10960	8410	5860		M42-M80
PA6-350-1-530	355.6	14	16	17	24	15/16	100	140	600	1850	19.8	113.8	920	920	860	730	520	370	270		M8-M16
PA6-350-2-530	355.6	14	16	17	24	15/16	110	200	600	1850	21.7	162.4	1350	1350	1270	1060	700	490	350		M8-M16
PA6-350-3-530	355.6	14	20	20	30	13/16	130	190	650	1850	36.6	216.5	2480	2480	2400	2040	1390	960	700		M12-M24
PA6-350-4-530	355.6	14	24	25	36	17/16	150	280	700	1850	56.0	320.5	3660	3660	3660	3190	2380	1700	1220		M12-M36
PA6-350-5-530	355.6	14	30	29	45	13/4	200	300	700	1850	76.2	396.0	5340	5340	5220	4570	3260	2320	1670		M12-M36
PA6-350-6-530	355.6	14	36	41	54	21/8	200	320	800	1350	118.8	325.0	7620	7620	7620	7460	5820	4370	3060		M20-M64
PA6-350-7-530	355.6	14	42	45	63	21/2	280	320	800	1050	170.0	270.2	10930	10930	10930	10790	8410	6320	4420		M30-M64
PA6-350-8-530	355.6	14	48	52	72	213/16	320	320	850	850	234.5	234.5	17480	17480	17100	15130	12260	9410	6560		M42-M80
PA6-350-1-560	355.6	14	16	17	24	15/16	100	180	600	1850	19.7	146.2	950	950	950	950	730	580	450		M8-M16
PA6-350-2-560	355.6	14	16	17	24	15/16	100	180	600	1850	26.0	174.9	1600	1600	1600	1430	1130	910	720		M8-M16
PA6-350-3-560	355.6	14	20	20	30	13/16	130	230	700	1850	47.9	261.9	2630	2630	2630	2600	2110	1710	1360		M12-M24
PA6-350-4-560	355.6	14	24	25	36	17/16	180	250	700	1850	67.0	326.4	3660	3660	3660	3660	3160	2530	2010		M12-M36
PA6-350-5-560	355.6	14	30	29	45	13/4	200	320	750	1700	95.9	392.1	6090	6090	6090	5580	4620	3790	3000		M12-M36
PA6-350-6-560	355.6	14	36	41	54	21/8	240	320	800	1200	142.1	294.8	7620	7620	7620	7620	7470	6080	4810		M20-M64
PA6-350-7-560	355.6	14	42	45	63	21/2	280	320	850	950	201.8	250.1	10930	10930	10930	10930	10720	8790	6950		M30-M64
PA6-350-1-600	355.6	14	16	17	24	15/16	100	180	600	1850	26.0	174.9	1600	1600	1600	1430	1130	910	720		M8-M16
PA6-350-2-600	355.6	14	16	17	24	15/16	130	190	600	1850	33.7	214.9	1600	1600	1600	1600	1600	1390	1100		M8-M16
PA6-350-3-600	355.6	14	20	20	30	13/16	170	250	650	1850	58.9	324.4	2630	2630	2630	2630	2630	2590	2050		M12-M24
PA6-350-4-600	355.6	14	24	25	36	17/16	190	320	700	1600	84.1	367.2	3660	3660	3660	3660	3660	3660	3200		M12-M36
PA6-350-5-600	355.6	14	30	29	45	13/4	220	310	750	1200	121.7	282.1	6090	6090	6090	6090	6090	5900	4660		M12-M36
PA6-350-6-600	355.6	14	36	41	54	21/8	270	310	800	900	181.2	227.2	7620	7620	7620	7620	7620	7620	7360		M20-M64

# PA6 PRESSED RISER CLAMP SIX BOLT TYPE

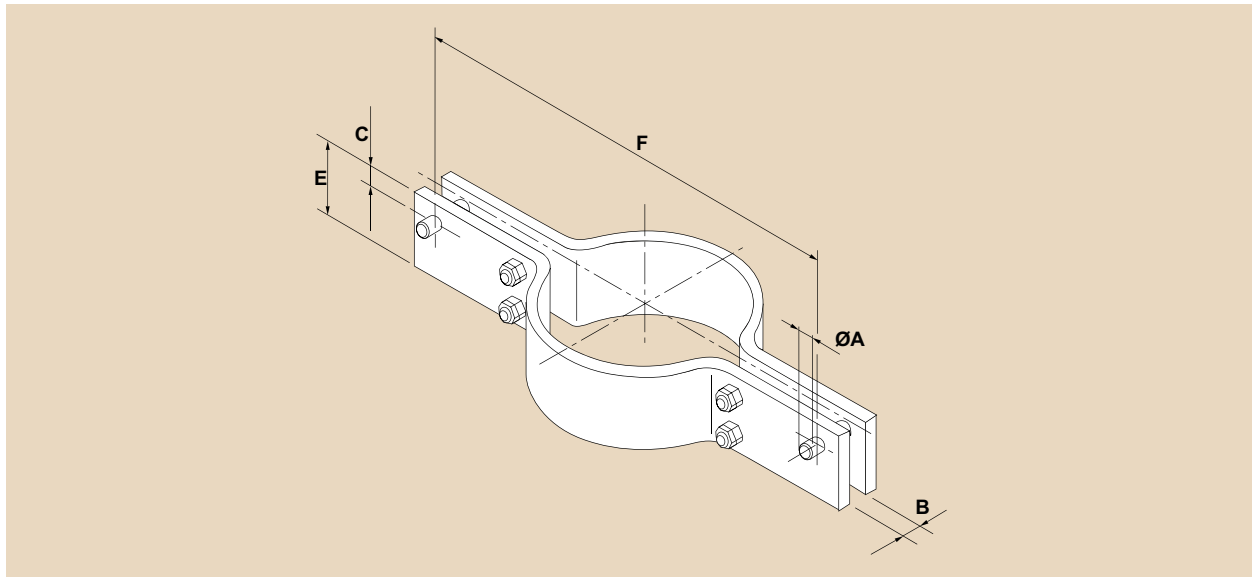


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A		B		C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes
	mm	in	mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600			
PA6-400-1-400	406.4	16	16	17	24	15/16	120	120	650	1850	26.1	99.1	770	740							M8-M16	
PA6-400-2-400	406.4	16	16	17	24	15/16	120	170	650	1850	26.1	140.1	1130	1080							M8-M16	
PA6-400-3-400	406.4	16	20	20	30	13/16	150	220	750	1850	48.5	218.3	2150	2080							M12-M24	
PA6-400-4-400	406.4	16	24	25	36	17/16	180	240	750	1800	73.5	272.7	3320	3250							M12-M36	
PA6-400-5-400	406.4	16	30	29	45	13/4	200	260	800	1800	87.3	340.1	4730	4680							M12-M36	
PA6-400-6-400	406.4	16	36	41	54	21/8	240	320	850	1500	133.1	362.2	7620	7430							M20-M64	
PA6-400-7-400	406.4	16	42	45	63	21/2	280	310	900	1150	190.4	287.4	10930	10860							M30-M64	
PA6-400-8-400	406.4	16	48	52	72	213/16	320	320	950	950	262.9	262.6	15360	15210							M42-M80	
PA6-400-1-490	406.4	16	16	17	24	15/16	100	120	650	1850	21.6	98.9	800	800	750	630	450	320	230		M8-M16	
PA6-400-2-490	406.4	16	16	17	24	15/16	100	170	650	1850	21.6	139.9	1170	1170	1060	840	550	390	280		M8-M16	
PA6-400-3-490	406.4	16	20	20	30	13/16	120	220	700	1850	36.8	218.0	2210	2210	2120	1780	1210	840	600		M12-M24	
PA6-400-4-490	406.4	16	24	25	36	17/16	150	230	750	1800	60.9	260.7	3270	3270	3160	2740	2120	1590	1110		M12-M36	
PA6-400-5-490	406.4	16	30	29	45	13/4	180	260	750	1800	74.6	339.4	4870	4870	4670	3930	2780	1970	1420		M12-M36	
PA6-400-6-490	406.4	16	36	41	54	21/8	240	320	850	1550	131.9	371.1	7500	7500	7320	6440	4780	3490	2470		M20-M64	
PA6-400-7-490	406.4	16	42	45	63	21/2	250	310	850	1150	162.6	286.3	10930	10930	10690	9260	7170	5370	3760		M30-M64	
PA6-400-8-490	406.4	16	48	52	72	213/16	310	310	950	950	253.0	253.0	15290	15290	14930	13180	10610	8120	5630		M42-M80	
PA6-400-1-530	406.4	16	16	17	24	15/16	100	140	650	1850	21.6	115.3	940	940	890	750	530	380	270		M8-M16	
PA6-400-2-530	406.4	16	16	17	24	15/16	120	200	700	1850	36.2	164.7	1390	1390	1310	1100	780	550	400		M8-M16	
PA6-400-3-530	406.4	16	20	20	30	13/16	140	190	700	1850	42.8	219.2	2550	2550	2470	2110	1430	1000	720		M12-M24	
PA6-400-4-530	406.4	16	24	25	36	17/16	150	270	750	1800	60.9	305.9	3660	3660	3660	3220	2280	1610	1160		M12-M36	
PA6-400-5-530	406.4	16	30	29	45	13/4	170	290	800	1800	87.9	378.3	5480	5480	5350	4720	3590	2620	1860		M12-M36	
PA6-400-6-530	406.4	16	36	41	54	21/8	210	320	850	1400	134.1	340.9	7620	7620	7620	7460	5920	4440	3110		M20-M64	
PA6-400-7-530	406.4	16	42	45	63	21/2	240	320	900	1100	184.9	285.3	10930	10930	10930	10750	8660	6620	4590		M30-M64	
PA6-400-1-560	406.4	16	16	17	24	15/16	120	180	650	1850	25.7	148.1	990	990	990	990	760	610	480		M8-M16	
PA6-400-2-560	406.4	16	16	17	24	15/16	100	170	650	1850	28.5	167.4	1540	1540	1540	1380	1080	870	690		M8-M16	
PA6-400-3-560	406.4	16	20	20	30	13/16	130	220	750	1850	51.8	253.7	2630	2630	2630	2540	2050	1660	1320		M12-M24	
PA6-400-4-560	406.4	16	24	25	36	17/16	190	250	750	1850	76.4	330.5	3660	3660	3660	3660	3220	2570	2050		M12-M36	
PA6-400-5-560	406.4	16	30	29	45	13/4	200	310	800	1700	103.1	348.8	6090	6090	6090	5540	4570	3700	2940		M12-M36	
PA6-400-6-560	406.4	16	36	41	54	21/8	250	320	850	1250	158.2	310.7	7620	7620	7620	7620	7380	6040	4770		M20-M64	
PA6-400-7-560	406.4	16	42	45	63	21/2	290	310	900	950	222.5	247.3	10930	10930	10930	10930	10930	9010	7120		M30-M64	
PA6-400-1-600	406.4	16	16	17	24	15/16	100	180	650	1850	28.5	177.2	1540	1540	1540	1460	1150	920	730		M8-M16	
PA6-400-2-600	406.4	16	16	17	24	15/16	150	190	650	1850	42.6	217.6	1600	1600	1600	1600	1600	1420	1120		M8-M16	
PA6-400-3-600	406.4	16	20	20	30	13/16	170	250	700	1850	64.0	328.5	2630	2630	2630	2630	2630	2540	2030		M12-M24	
PA6-400-4-600	406.4	16	24	25	36	17/16	200	320	750	1650	95.8	382.5	3660	3660	3660	3660	3660	3660	3180		M12-M36	
PA6-400-5-600	406.4	16	30	29	45	13/4	220	310	800	1250	131.2	297.1	6090	6090	6090	6090	6090	5820	4600		M12-M36	
PA6-400-6-600	406.4	16	36	41	54	21/8	280	320	850	950	201.1	249.5	7620	7620	7620	7620	7620	7620	7370		M20-M64	

# PA6 PRESSED RISER CLAMP SIX BOLT TYPE

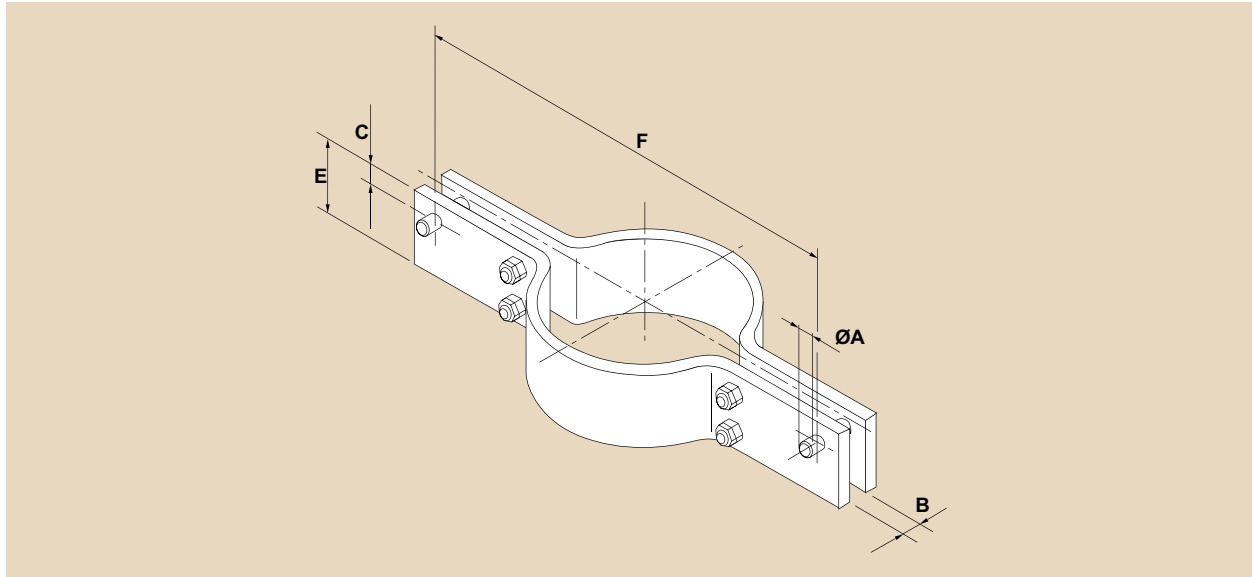


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes		
	mm	in			mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560		580	600
PA6-450-2-400	457.2	18	16	17	24	15/16	120	160	700	1800	28.3	130.5	1140	1100								M8-M16
PA6-450-3-400	457.2	18	20	20	30	13/16	150	200	800	1800	52.2	196.5	2080	2020								M12-M24
PA6-450-4-400	457.2	18	24	25	36	17/16	180	230	800	1800	79.0	264.8	3290	3220								M12-M36
PA6-450-5-400	457.2	18	30	29	45	13/4	200	250	850	1800	93.4	331.4	4680	4580								M12-M36
PA6-450-6-400	457.2	18	36	41	54	21/8	220	320	950	1550	156.9	377.7	7600	7530								M20-M64
PA6-450-7-400	457.2	18	42	45	63	21/2	280	310	950	1200	203.9	304.0	10930	10730								M30-M64
PA6-450-8-400	457.2	18	48	52	72	213/16	320	320	1000	1000	277.9	277.9	15070	14930								M42-M80
PA6-450-2-490	457.2	18	16	17	24	15/16	120	160	700	1800	28.1	130.3	1180	1180	1110	920	610	430	300			M8-M16
PA6-450-3-490	457.2	18	20	20	30	13/16	120	200	750	1800	39.8	196.2	2140	2140	2030	1690	1150	800	580			M12-M24
PA6-450-4-490	457.2	18	24	25	36	17/16	150	230	800	1800	65.5	264.2	3380	3380	3280	2860	2230	1610	1160			M12-M36
PA6-450-5-490	457.2	18	30	29	45	13/4	200	250	850	1800	92.7	331.4	4820	4820	4640	3920	2800	2000	1430			M12-M36
PA6-450-6-490	457.2	18	36	41	54	21/8	240	320	900	1600	140.8	386.6	7470	7470	7310	6340	4760	3500	2470			M20-M64
PA6-450-7-490	457.2	18	42	45	63	21/2	260	320	900	1250	179.9	320.9	10930	10930	10720	9500	7440	5600	3910			M30-M64
PA6-450-8-490	457.2	18	48	52	72	213/16	320	320	1000	1000	276.2	276.2	15520	15520	15190	13460	10940	8410	5880			M42-M80
PA6-450-2-530	457.2	18	16	17	24	15/16	120	180	750	1800	39.2	146.7	1340	1340	1260	1060	760	540	390			M8-M16
PA6-450-3-530	457.2	18	20	20	30	13/16	150	230	750	1800	49.5	225.5	2490	2490	2400	2050	1470	1020	740			M12-M24
PA6-450-4-530	457.2	18	24	25	36	17/16	160	260	800	1800	69.7	298.4	3660	3660	3660	3260	2430	1730	1240			M12-M36
PA6-450-5-530	457.2	18	30	29	45	13/4	180	280	850	1800	100.3	370.8	5460	5460	5340	4730	3790	2790	1970			M12-M36
PA6-450-6-530	457.2	18	36	41	54	21/8	210	320	900	1450	143.0	356.4	7620	7620	7620	7500	5890	4430	3100			M20-M64
PA6-450-7-530	457.2	18	42	45	63	21/2	250	320	950	1150	204.5	300.8	10930	10930	10930	10930	8890	6840	4780			M30-M64
PA6-450-2-560	457.2	18	16	17	24	15/16	110	160	700	1800	34.0	155.8	1490	1490	1490	1390	1100	890	710			M8-M16
PA6-450-3-560	457.2	18	20	20	30	13/16	130	210	800	1800	55.8	239.6	2630	2630	2630	2610	2090	1670	1330			M12-M24
PA6-450-4-560	457.2	18	24	25	36	17/16	190	230	800	1800	82.2	301.1	3660	3660	3660	3660	3180	2540	2020			M12-M36
PA6-450-5-560	457.2	18	30	29	45	13/4	210	320	850	1800	115.9	422.7	6090	6090	6090	5520	4590	3760	2980			M12-M36
PA6-450-6-560	457.2	18	36	41	54	21/8	250	320	900	1300	169.6	326.2	7620	7620	7620	7620	7470	6090	4820			M20-M64
PA6-450-7-560	457.2	18	42	45	63	21/2	290	310	950	1000	236.5	262.3	10930	10930	10930	10930	10920	8970	7100			M30-M64
PA6-450-2-600	457.2	18	16	17	24	15/16	160	240	700	1800	49.3	233.6	1600	1600	1600	1600	1600	1370	1100			M8-M16
PA6-450-3-600	457.2	18	20	20	30	13/16	180	230	750	1800	73.3	299.0	2470	2470	2470	2470	2470	2470	2040			M12-M24
PA6-450-4-600	457.2	18	24	25	36	17/16	200	320	800	1700	103.0	398.0	3660	3660	3660	3660	3660	3660	3210			M12-M36
PA6-450-5-600	457.2	18	30	29	45	13/4	220	310	850	1300	140.6	312.1	6090	6090	6090	6090	6090	5780	4570			M12-M36
PA6-450-6-600	457.2	18	36	41	54	21/8	280	320	900	1000	214.6	265.0	7620	7620	7620	7620	7620	7620	7350			M20-M64

**PA6 PRESSED RISER CLAMP SIX BOLT TYPE**

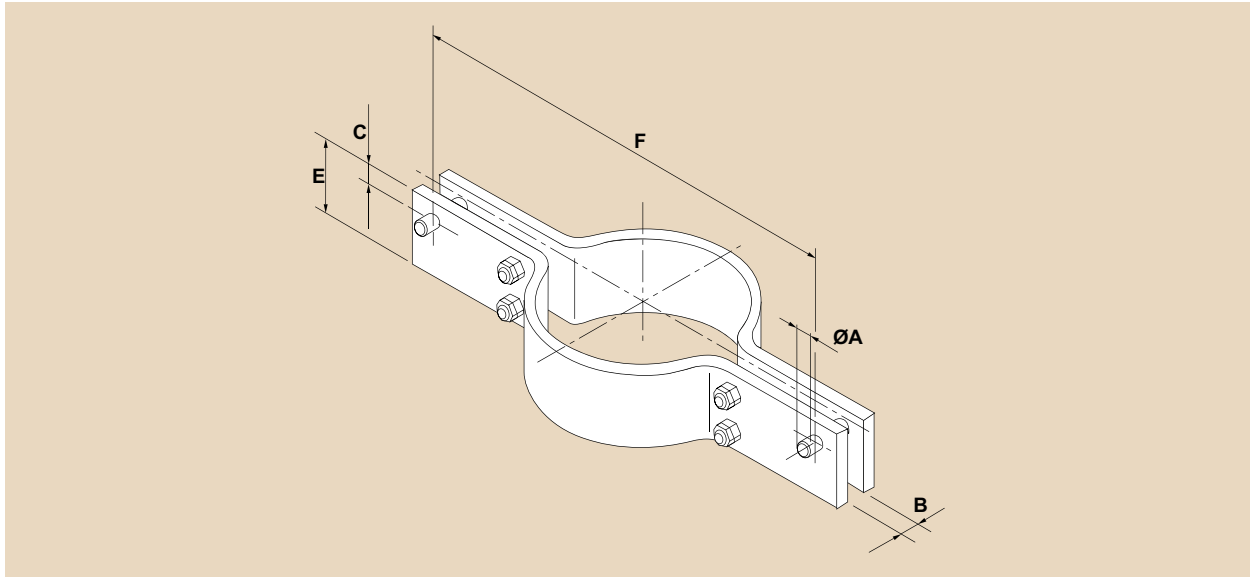


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes			
	mm	in			mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600				
PA6-500-2-400	508	20	16	17	24	1 <sup>5</sup> / <sub>16</sub>	150	150	800	1800	52.8	124.4	1110	1060									M8-M16
PA6-500-3-400	508	20	20	20	30	1 <sup>3</sup> / <sub>16</sub>	180	190	850	1750	83.5	185.4	2130	2080									M12-M24
PA6-500-4-400	508	20	24	25	36	1 <sup>7</sup> / <sub>16</sub>	180	210	850	1750	84.5	239.5	3220	3170									M12-M36
PA6-500-5-400	508	20	30	29	45	1 <sup>3</sup> / <sub>4</sub>	220	230	950	1750	136.2	302.7	4620	4580									M12-M36
PA6-500-6-400	508	20	36	41	54	2 <sup>1</sup> / <sub>8</sub>	220	320	1000	1600	166.2	393.2	7600	7530									M20-M64
PA6-500-7-400	508	20	42	45	63	2 <sup>1</sup> / <sub>2</sub>	260	310	1050	1250	236.0	319.0	10930	10930									M30-M64
PA6-500-2-490	508	20	16	17	24	1 <sup>5</sup> / <sub>16</sub>	120	150	800	1800	42.1	124.1	1140	1140	1080	920	660	480	340				M8-M16
PA6-500-3-490	508	20	20	20	30	1 <sup>3</sup> / <sub>16</sub>	140	190	800	1750	49.7	184.7	2200	2200	2120	1810	1250	870	630				M12-M24
PA6-500-4-490	508	20	24	25	36	1 <sup>7</sup> / <sub>16</sub>	150	210	850	1750	70.1	238.8	3320	3320	3220	2820	2230	1610	1150				M12-M36
PA6-500-5-490	508	20	30	29	45	1 <sup>3</sup> / <sub>4</sub>	180	230	900	1750	106.8	301.7	4760	4760	4670	4160	3410	2630	1850				M12-M36
PA6-500-6-490	508	20	36	41	54	2 <sup>1</sup> / <sub>8</sub>	190	320	950	1650	137.8	402.1	7470	7470	7320	6520	5230	3960	2760				M20-M64
PA6-500-7-490	508	20	42	45	63	2 <sup>1</sup> / <sub>2</sub>	280	320	1000	1300	214.2	337.9	10930	10930	10720	9370	7400	5600	3900				M30-M64
PA6-500-8-490	508	20	48	52	72	2 <sup>13</sup> / <sub>16</sub>	320	320	1050	1050	291.7	291.7	15230	15230	14940	13300	10900	8420	5930				M42-M80
PA6-500-2-530	508	20	16	17	24	1 <sup>5</sup> / <sub>16</sub>	120	180	800	1800	42.1	148.8	1390	1390	1320	1120	810	580	420				M8-M16
PA6-500-3-530	508	20	20	20	30	1 <sup>3</sup> / <sub>16</sub>	160	210	800	1750	56.7	204.1	2450	2450	2360	2020	1440	1000	730				M12-M24
PA6-500-4-530	508	20	24	25	36	1 <sup>7</sup> / <sub>16</sub>	160	240	850	1750	74.6	272.7	3660	3660	3660	3260	2410	1730	1240				M12-M36
PA6-500-5-530	508	20	30	29	45	1 <sup>3</sup> / <sub>4</sub>	180	260	900	1750	106.8	340.8	5450	5450	5340	4750	3770	2790	1960				M12-M36
PA6-500-6-530	508	20	36	41	54	2 <sup>1</sup> / <sub>8</sub>	210	320	950	1500	151.9	371.9	7620	7620	7620	7410	5850	4430	3090				M20-M64
PA6-500-7-530	508	20	42	45	63	2 <sup>1</sup> / <sub>2</sub>	250	320	1000	1200	217.8	317.5	10930	10930	10930	10930	8960	6920	4880				M30-M64
PA6-500-2-560	508	20	16	17	24	1 <sup>5</sup> / <sub>16</sub>	120	150	800	1800	41.9	148.2	1450	1450	1450	1360	1080	870	690				M8-M16
PA6-500-3-560	508	20	20	20	30	1 <sup>3</sup> / <sub>16</sub>	130	200	850	1800	59.8	231.3	2480	2480	2480	2480	2040	1640	1300				M12-M24
PA6-500-4-560	508	20	24	25	36	1 <sup>7</sup> / <sub>16</sub>	200	280	850	1750	92.6	317.9	3660	3660	3660	3660	3170	2590	2050				M12-M36
PA6-500-5-560	508	20	30	29	45	1 <sup>3</sup> / <sub>4</sub>	210	300	900	1750	123.5	392.1	5960	5960	5960	5610	4690	3830	3040				M12-M36
PA6-500-6-560	508	20	36	41	54	2 <sup>1</sup> / <sub>8</sub>	250	310	950	1350	180.2	331.1	7620	7620	7620	7620	7320	6020	4780				M20-M64
PA6-500-7-560	508	20	42	45	63	2 <sup>1</sup> / <sub>2</sub>	290	310	1000	1050	250.6	277.3	10930	10930	10930	10930	10850	8920	7090				M30-M64
PA6-500-2-600	508	20	16	17	24	1 <sup>5</sup> / <sub>16</sub>	110	230	800	1800	47.7	227.0	1330	1330	1330	1330	1330	1330	1080				M8-M16
PA6-500-3-600	508	20	20	20	30	1 <sup>3</sup> / <sub>16</sub>	200	220	800	1800	87.5	289.9	2450	2450	2450	2450	2450	2450	2090				M12-M24
PA6-500-4-600	508	20	24	25	36	1 <sup>7</sup> / <sub>16</sub>	200	310	850	1750	110.4	400.9	3660	3660	3660	3660	3660	3660	3160				M12-M36
PA6-500-5-600	508	20	30	29	45	1 <sup>3</sup> / <sub>4</sub>	230	320	900	1400	156.7	347.7	6090	6090	6090	6090	6090	5840	4650				M12-M36
PA6-500-6-600	508	20	36	41	54	2 <sup>1</sup> / <sub>8</sub>	300	320	1000	1050	254.5	281.3	7620	7620	7620	7620	7620	7620	7340				M20-M64

# PA6 PRESSED RISER CLAMP SIX BOLT TYPE

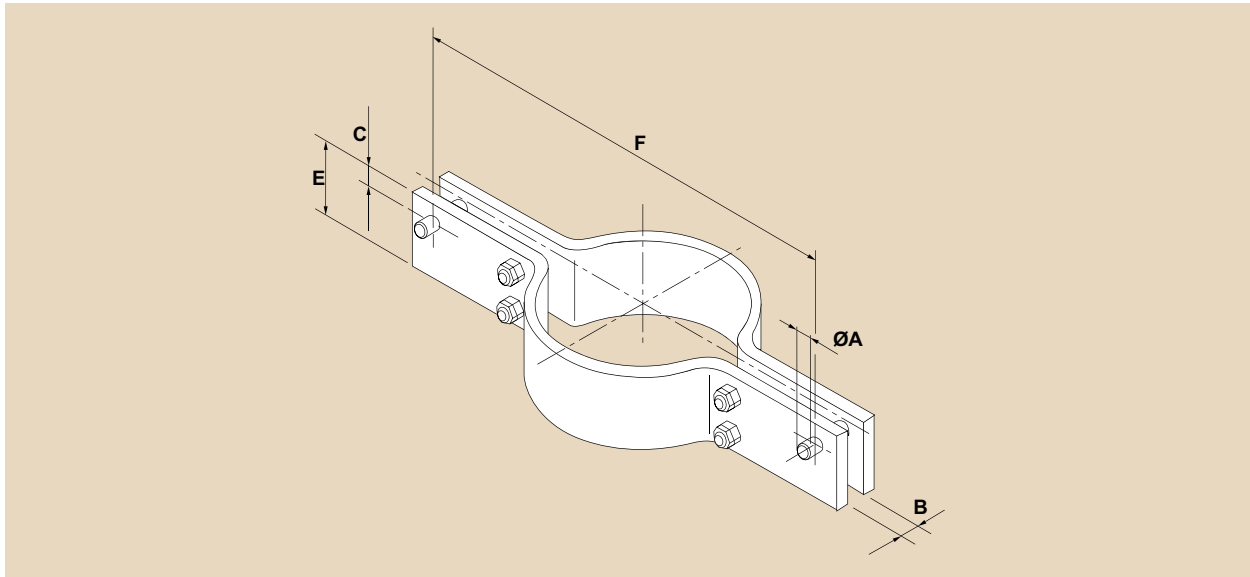


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A		C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes
	mm	in	mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600	
PA6-550-3-400	558.8	22	20	20	30	1 <sup>3</sup> / <sub>16</sub>	180	180	900	1750	89.0	178.1	2100	2040						M12-M24
PA6-550-4-400	558.8	22	24	25	36	1 <sup>7</sup> / <sub>16</sub>	220	220	950	1750	136.6	255.0	3530	3470						M12-M36
PA6-550-5-400	558.8	22	30	29	45	1 <sup>3</sup> / <sub>4</sub>	260	260	1050	1750	205.3	347.6	5510	5460						M12-M36
PA6-550-6-400	558.8	22	36	41	54	2 <sup>1</sup> / <sub>8</sub>	260	320	1050	1650	208.1	410.0	7590	7520						M20-M64
PA6-550-7-400	558.8	22	42	45	63	2 <sup>1</sup> / <sub>2</sub>	260	310	1100	1300	248.4	333.8	10930	10870						M30-M64
PA6-550-3-490	558.8	22	20	20	30	1 <sup>3</sup> / <sub>16</sub>	150	180	850	1750	56.9	177.5	2160	2160	2080	1770	1210	840	610	M12-M24
PA6-550-4-490	558.8	22	24	25	36	1 <sup>7</sup> / <sub>16</sub>	150	200	900	1750	74.6	230.4	3280	3280	3180	2770	2020	1440	1030	M12-M36
PA6-550-5-490	558.8	22	30	29	45	1 <sup>3</sup> / <sub>4</sub>	180	270	950	1700	113.4	307.2	4760	4760	4620	4020	3160	2380	1660	M12-M36
PA6-550-6-490	558.8	22	36	41	54	2 <sup>1</sup> / <sub>8</sub>	220	320	1050	1700	175.5	418.5	7460	7460	7300	6480	5280	4070	2850	M20-M64
PA6-550-7-490	558.8	22	42	45	63	2 <sup>1</sup> / <sub>2</sub>	230	320	1050	1350	211.8	352.9	10930	10930	10770	9560	7790	6000	4200	M30-M64
PA6-550-3-530	558.8	22	20	20	30	1 <sup>3</sup> / <sub>16</sub>	150	210	900	1750	73.8	206.9	2550	2550	2460	2100	1580	1170	820	M12-M24
PA6-550-4-530	558.8	22	24	25	36	1 <sup>7</sup> / <sub>16</sub>	170	230	900	1750	84.4	264.8	3660	3660	3660	3210	2310	1660	1180	M12-M36
PA6-550-5-530	558.8	22	30	29	45	1 <sup>3</sup> / <sub>4</sub>	180	250	950	1750	113.4	332.0	5440	5440	5330	4730	3630	2670	1890	M12-M36
PA6-550-6-530	558.8	22	36	41	54	2 <sup>1</sup> / <sub>8</sub>	230	320	1050	1550	183.3	388.3	7620	7620	7620	7370	5780	4360	3040	M20-M64
PA6-550-7-530	558.8	22	42	45	63	2 <sup>1</sup> / <sub>2</sub>	260	320	1050	1250	238.7	332.8	10930	10930	10930	10740	8760	6740	4720	M30-M64
PA6-550-3-560	558.8	22	20	20	30	1 <sup>3</sup> / <sub>16</sub>	150	180	900	1750	73.5	206.0	2590	2590	2590	2490	2020	1650	1310	M12-M24
PA6-550-4-560	558.8	22	24	25	36	1 <sup>7</sup> / <sub>16</sub>	160	280	950	1750	98.5	322.1	3660	3660	3660	3660	3280	2680	2120	M12-M36
PA6-550-5-560	558.8	22	30	29	45	1 <sup>3</sup> / <sub>4</sub>	210	290	950	1750	131.2	384.7	5380	5380	5380	5380	4580	3700	2930	M12-M36
PA6-550-6-560	558.8	22	36	41	54	2 <sup>1</sup> / <sub>8</sub>	260	320	1000	1400	198.3	357.0	7620	7620	7620	7620	7480	6090	4820	M20-M64
PA6-550-7-560	558.8	22	42	45	63	2 <sup>1</sup> / <sub>2</sub>	300	320	1050	1100	274.6	302.6	10930	10930	10930	10930	10910	8960	7110	M30-M64
PA6-550-3-600	558.8	22	20	20	30	1 <sup>3</sup> / <sub>16</sub>	150	270	900	1750	87.6	308.6	2600	2600	2600	2600	2600	2570	2030	M12-M24
PA6-550-4-600	558.8	22	24	25	36	1 <sup>7</sup> / <sub>16</sub>	220	310	900	1750	129.4	406.2	3660	3660	3660	3660	3660	3660	3160	M12-M36
PA6-550-5-600	558.8	22	30	29	45	1 <sup>3</sup> / <sub>4</sub>	230	320	950	1450	166.4	363.1	5920	5920	5920	5920	5920	5790	4590	M12-M36
PA6-550-6-600	558.8	22	36	41	54	2 <sup>1</sup> / <sub>8</sub>	310	310	1050	1050	277.7	277.7	7620	7620	7620	7620	7620	7620	7380	M20-M64
PA6-600-3-400	609.6	24	20	20	30	1 <sup>3</sup> / <sub>16</sub>	180	180	950	1700	94.5	176.2	2300	2240						M12-M24
PA6-600-4-400	609.6	24	24	25	36	1 <sup>7</sup> / <sub>16</sub>	220	220	1000	1700	144.7	252.3	3660	3660						M12-M36
PA6-600-5-400	609.6	24	30	29	45	1 <sup>3</sup> / <sub>4</sub>	260	260	1100	1700	216.5	302.3	4660	4590						M12-M36
PA6-600-6-400	609.6	24	36	41	54	2 <sup>1</sup> / <sub>8</sub>	260	320	1100	1700	219.3	425.7	7600	7530						M20-M64
PA6-600-7-400	609.6	24	42	45	63	2 <sup>1</sup> / <sub>2</sub>	290	310	1150	1350	292.5	351.0	10810	10720						M30-M64
PA6-600-3-490	609.6	24	20	20	30	1 <sup>3</sup> / <sub>16</sub>	160	170	900	1700	64.6	165.9	2230	2230	2090	1750	1210	840	610	M12-M24
PA6-600-4-490	609.6	24	24	25	36	1 <sup>7</sup> / <sub>16</sub>	180	190	1000	1700	99.1	217.4	3400	3400	3310	2900	2290	1650	1180	M12-M36
PA6-600-5-490	609.6	24	30	29	45	1 <sup>3</sup> / <sub>4</sub>	180	260	1000	1700	120.1	299.9	4800	4800	4670	4090	3240	2450	1710	M12-M36
PA6-600-6-490	609.6	24	36	41	54	2 <sup>1</sup> / <sub>8</sub>	220	310	1100	1700	185.0	411.0	7570	7570	7420	6620	5440	4160	2900	M20-M64
PA6-600-7-490	609.6	24	42	45	63	2 <sup>1</sup> / <sub>2</sub>	250	320	1150	1400	249.9	368.6	10930	10930	10740	9570	7870	6080	4300	M30-M64
PA6-600-3-530	609.6	24	20	20	30	1 <sup>3</sup> / <sub>16</sub>	150	190	950	1700	78.4	185.3	2520	2520	2430	2080	1590	1170	830	M12-M24
PA6-600-4-530	609.6	24	24	25	36	1 <sup>7</sup> / <sub>16</sub>	190	210	950	1700	100.0	240.0	3660	3660	3660	3230	2430	1750	1250	M12-M36
PA6-600-5-530	609.6	24	30	29	45	1 <sup>3</sup> / <sub>4</sub>	180	230	1000	1700	120.1	302.4	5450	5450	5350	4600	3500	2590	1820	M12-M36
PA6-600-6-530	609.6	24	36	41	54	2 <sup>1</sup> / <sub>8</sub>	240	310	1100	1600	201.4	391.5	7620	7620	7620	7330	6020	4580	3190	M20-M64
PA6-600-7-530	609.6	24	42	45	63	2 <sup>1</sup> / <sub>2</sub>	280	310	1150	1250	279.2	328.0	10930	10930	10930	10910	8970	6930	4900	M30-M64
PA6-600-3-560	609.6	24	20	20	30	1 <sup>3</sup> / <sub>16</sub>	160	230	950	1700	83.2	224.1	2520	2520	2520	2520	2070	1670	1330	M12-M24
PA6-600-4-560	609.6	24	24	25	36	1 <sup>7</sup> / <sub>16</sub>	180	250	1000	1700	118.0	285.4	3660	3660	3660	3660	3230	2640	2090	M12-M36
PA6-600-5-560	609.6	24	30	29	45	1 <sup>3</sup> / <sub>4</sub>	220	260	1000	1700	146.2	341.6	6090	6090	6090	5510	4610	3730	2960	M12-M36
PA6-600-6-560	609.6	24	36	41	54	2 <sup>1</sup> / <sub>8</sub>	260	310	1050	1450	209.5	361.2	7620	7620	7620	7620	7390	6050	4790	M20-M64
PA6-600-7-560	609.6	24	42	45	63	2 <sup>1</sup> / <sub>2</sub>	320	320	1150	1150	318.3	318.3	10930	10930	10930	10930	10840	8920	7100	M30-M64
PA6-600-3-600	609.6	24	20	20	30	1 <sup>3</sup> / <sub>16</sub>	160	250	950	1700	99.3	282.7	2530	2530	2530	2530	2530	2530	2050	M12-M24
PA6-600-4-600	609.6	24	24	25	36	1 <sup>7</sup> / <sub>16</sub>	240	280	950	1700	149.9	363.1	3660	3660	3660	3660	3660	3660	3220	M12-M36
PA6-600-5-600	609.6	24	30	29	45	1 <sup>3</sup> / <sub>4</sub>	250	320	1050	1500	198.3	379.6	5840	5840	5840	5840	5840	5800	4590	M12-M36
PA6-600-6-600	609.6	24	36	41	54	2 <sup>1</sup> / <sub>8</sub>	310	310	1100	1100	292.9	292.2	7620	7620	7620	7620	7620	7620	7360	M20-M64

# PA6 PRESSED RISER CLAMP SIX BOLT TYPE

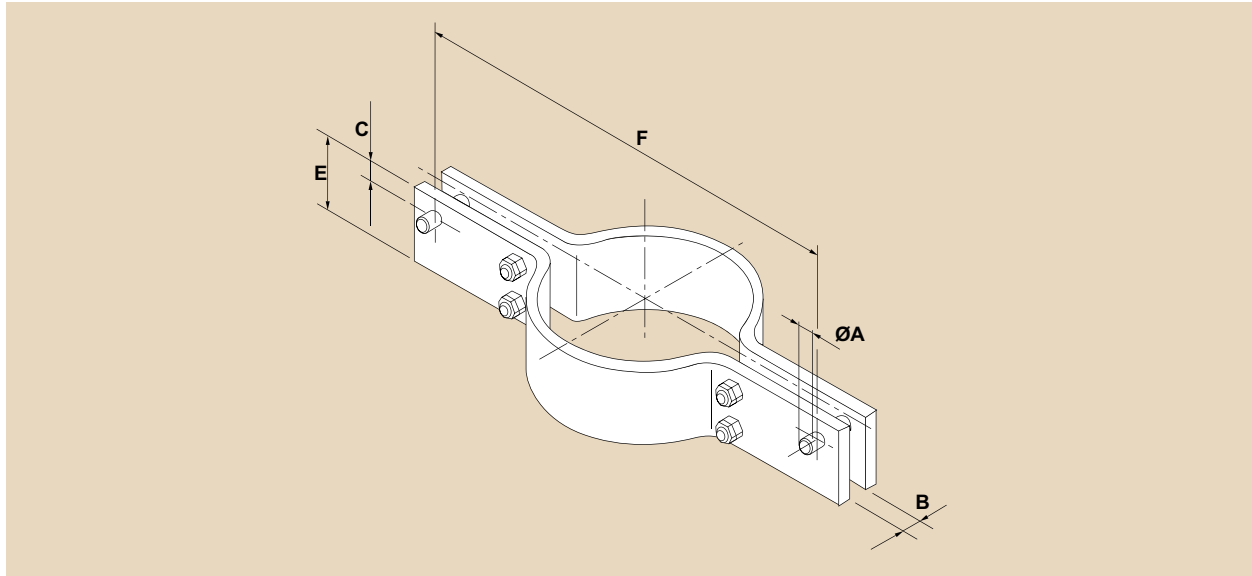


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A		C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes
	mm	in	mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600	
PA6-650-3-400	660.4	26	20	20	30	1 <sup>3</sup> / <sub>16</sub>	180	180	1000	1700	100.0	178.6	2420	2350						M12-M24
PA6-650-4-400	660.4	26	24	25	36	1 <sup>7</sup> / <sub>16</sub>	220	240	1050	1700	152.7	239.9	3310	3220						M12-M36
PA6-650-5-400	660.4	26	30	29	45	1 <sup>3</sup> / <sub>4</sub>	260	260	1150	1650	227.5	299.0	5160	5080						M12-M36
PA6-650-6-400	660.4	26	36	41	54	2 <sup>1</sup> / <sub>8</sub>	290	290	1200	1650	301.8	383.9	7580	7510						M20-M64
PA6-650-7-400	660.4	26	42	45	63	2 <sup>1</sup> / <sub>2</sub>	290	320	1200	1400	306.3	377.3	10930	10920						M30-M64
PA6-650-3-490	660.4	26	20	20	30	1 <sup>3</sup> / <sub>16</sub>	150	160	1000	1700	83.0	158.3	2190	2190	2110	1810	1360	1010	710	M12-M24
PA6-650-4-490	660.4	26	24	25	36	1 <sup>7</sup> / <sub>16</sub>	180	240	1050	1700	104.6	238.9	3410	3410	3290	2810	2090	1500	1070	M12-M36
PA6-650-5-490	660.4	26	30	29	45	1 <sup>3</sup> / <sub>4</sub>	180	240	1050	1650	126.6	274.0	4880	4880	4740	4130	3200	2360	1660	M12-M36
PA6-650-6-490	660.4	26	36	41	54	2 <sup>1</sup> / <sub>8</sub>	220	280	1150	1650	194.3	367.5	7510	7510	7360	6540	5310	4010	2800	M20-M64
PA6-650-7-490	660.4	26	42	45	63	2 <sup>1</sup> / <sub>2</sub>	250	310	1200	1400	261.8	362.3	10930	10930	10750	9550	7810	6020	4230	M30-M64
PA6-650-3-530	660.4	26	20	20	30	1 <sup>3</sup> / <sub>16</sub>	150	180	1000	1700	83.0	178.0	2490	2490	2400	2060	1550	1150	810	M12-M24
PA6-650-4-530	660.4	26	24	25	36	1 <sup>7</sup> / <sub>16</sub>	200	200	1000	1700	111.4	231.7	3660	3660	3660	3210	2340	1680	1200	M12-M36
PA6-650-5-530	660.4	26	30	29	45	1 <sup>3</sup> / <sub>4</sub>	200	270	1050	1650	140.4	307.9	5540	5540	5380	4700	3590	2650	1870	M12-M36
PA6-650-6-530	660.4	26	36	41	54	2 <sup>1</sup> / <sub>8</sub>	240	310	1150	1650	211.5	406.4	7620	7620	7620	7300	5850	4420	3080	M20-M64
PA6-650-7-530	660.4	26	42	45	63	2 <sup>1</sup> / <sub>2</sub>	280	320	1200	1300	292.6	353.7	10930	10930	10930	10830	8850	6820	4800	M30-M64
PA6-650-3-560	660.4	26	20	20	30	1 <sup>3</sup> / <sub>16</sub>	170	220	1000	1700	93.6	217.3	2460	2460	2460	2460	2050	1660	1320	M12-M24
PA6-650-4-560	660.4	26	24	25	36	1 <sup>7</sup> / <sub>16</sub>	180	240	1050	1700	124.5	277.6	3660	3660	3660	3660	3230	2630	2080	M12-M36
PA6-650-5-560	660.4	26	30	29	45	1 <sup>3</sup> / <sub>4</sub>	240	240	1050	1650	168.0	311.9	6090	6090	6090	5570	4640	3750	2980	M12-M36
PA6-650-6-560	660.4	26	36	41	54	2 <sup>1</sup> / <sub>8</sub>	270	320	1100	1500	228.8	389.1	7620	7620	7620	7620	7490	6100	4830	M20-M64
PA6-650-3-600	660.4	26	20	20	30	1 <sup>3</sup> / <sub>16</sub>	180	240	1000	1700	118.2	275.0	2620	2620	2620	2620	2620	2620	2080	M12-M24
PA6-650-4-600	660.4	26	24	25	36	1 <sup>7</sup> / <sub>16</sub>	190	270	1050	1700	151.5	354.8	3660	3660	3660	3660	3660	3660	3240	M12-M36
PA6-650-5-600	660.4	26	30	29	45	1 <sup>3</sup> / <sub>4</sub>	260	320	1100	1550	217.2	394.9	5580	5580	5580	5580	5580	5580	4590	M12-M36
PA6-650-6-600	660.4	26	36	41	54	2 <sup>1</sup> / <sub>8</sub>	320	320	1150	1150	317.6	7620	7620	7620	7620	7620	7620	7620	7370	M20-M64
PA6-700-3-400	711.2	28	20	20	30	1 <sup>3</sup> / <sub>16</sub>	180	200	1050	1650	105.6	164.3	2120	2030						M12-M24
PA6-700-4-400	711.2	28	24	25	36	1 <sup>7</sup> / <sub>16</sub>	220	220	1100	1650	160.8	217.9	3370	3270						M12-M36
PA6-700-5-400	711.2	28	30	29	45	1 <sup>3</sup> / <sub>4</sub>	260	260	1200	1650	238.6	303.0	5470	5360						M12-M36
PA6-700-6-400	711.2	28	36	41	54	2 <sup>1</sup> / <sub>8</sub>	290	290	1250	1650	315.9	388.8	7620	7620						M20-M64
PA6-700-3-490	711.2	28	20	20	30	1 <sup>3</sup> / <sub>16</sub>	180	200	1050	1650	105.6	164.3	2180	2180	2060	1740	1240	890	640	M12-M24
PA6-700-4-490	711.2	28	24	25	36	1 <sup>7</sup> / <sub>16</sub>	180	210	1100	1650	110.1	207.1	3300	3300	3170	2680	1920	1370	980	M12-M36
PA6-700-5-490	711.2	28	30	29	45	1 <sup>3</sup> / <sub>4</sub>	180	230	1100	1650	133.2	266.2	4770	4770	4590	3910	2940	2160	1530	M12-M36
PA6-700-6-490	711.2	28	36	41	54	2 <sup>1</sup> / <sub>8</sub>	220	270	1200	1650	203.6	359.1	7620	7620	7480	6580	5150	3880	2710	M20-M64
PA6-700-7-490	711.2	28	42	45	63	2 <sup>1</sup> / <sub>2</sub>	260	320	1250	1450	286.2	390.9	10930	10930	10930	9690	7880	6050	4230	M30-M64
PA6-700-3-530	711.2	28	20	20	30	1 <sup>3</sup> / <sub>16</sub>	150	170	1050	1650	87.6	166.3	2610	2610	2510	2140	1560	1110	800	M12-M24
PA6-700-4-530	711.2	28	24	25	36	1 <sup>7</sup> / <sub>16</sub>	180	180	1100	1650	131.1	206.5	3660	3660	3640	3170	2480	1870	1300	M12-M36
PA6-700-5-530	711.2	28	30	29	45	1 <sup>3</sup> / <sub>4</sub>	210	260	1100	1650	155.0	300.6	5630	5630	5420	4630	3470	2550	1800	M12-M36
PA6-700-6-530	711.2	28	36	41	54	2 <sup>1</sup> / <sub>8</sub>	250	300	1200	1650	230.7	398.5	7620	7620	7620	7430	5920	4460	3120	M20-M64
PA6-700-7-530	711.2	28	42	45	63	2 <sup>1</sup> / <sub>2</sub>	290	320	1250	1350	318.4	370.7	10930	10930	10930	10810	8790	6750	4720	M30-M64
PA6-700-3-560	711.2	28	20	20	30	1 <sup>3</sup> / <sub>16</sub>	180	200	1050	1650	104.6	195.4	2420	2420	2420	2420	2050	1650	1310	M12-M24
PA6-700-4-560	711.2	28	24	25	36	1 <sup>7</sup> / <sub>16</sub>	190	220	1100	1650	137.6	252.0	3660	3660	3660	3660	3240	2640	2090	M12-M36
PA6-700-5-560	711.2	28	30	29	45	1 <sup>3</sup> / <sub>4</sub>	190	230	1150	1650	168.1	303.0	5990	5990	5990	5610	4650	3800	3010	M12-M36
PA6-700-6-560	711.2	28	36	41	54	2 <sup>1</sup> / <sub>8</sub>	230	320	1200	1550	241.5	404.6	7620	7620	7620	7620	7380	6050	4790	M20-M64
PA6-700-3-600	711.2	28	20	20	30	1 <sup>3</sup> / <sub>16</sub>	190	220	1050	1650	131.7	249.5	2560	2560	2560	2560	2560	2560	2090	M12-M24
PA6-700-4-600	711.2	28	24	25	36	1 <sup>7</sup> / <sub>16</sub>	200	240	1100	1650	168.0	312.0	3660	3660	3660	3660	3660	3660	3160	M12-M36
PA6-700-5-600	711.2	28	30	29	45	1 <sup>3</sup> / <sub>4</sub>	280	320	1150	1600	245.8	410.6	5550	5550	5550	5550	5550	5550	4580	M12-M36

# PA6 PRESSED RISER CLAMP SIX BOLT TYPE



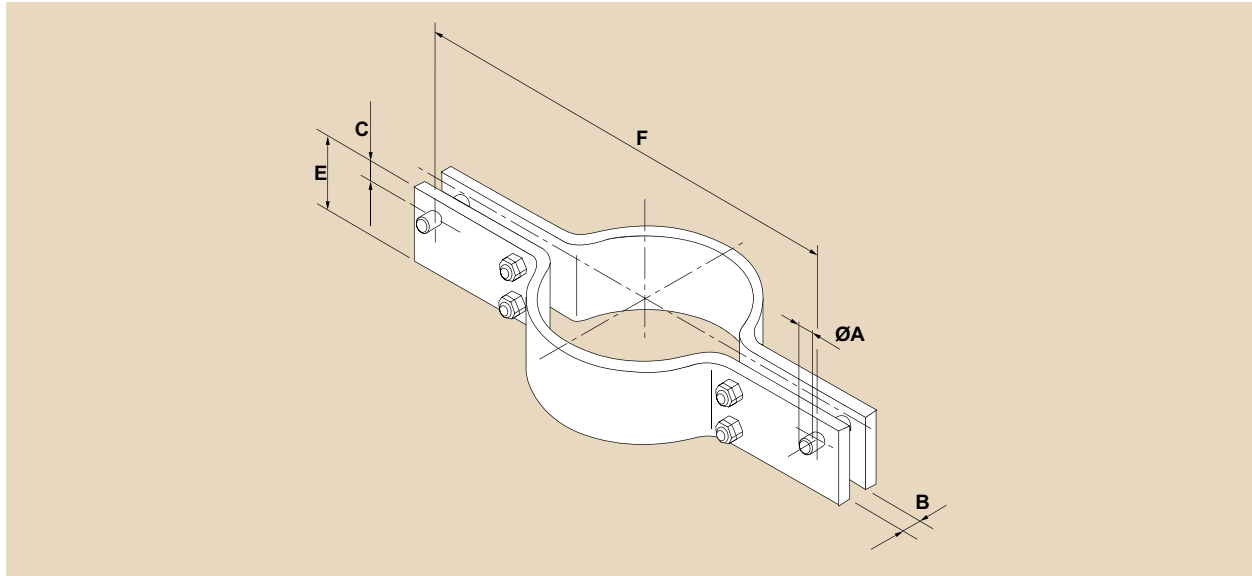
Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A		B		C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C						Compatible with Rod Sizes
	mm	in	mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600		
PA6-750-4-400	762.0	30	24	25	36	1 7/16	220	220	1200	1600	174.2	215.7	3660	3650							M12-M36
PA6-750-5-400	762.0	30	30	29	45	1 3/4	260	260	1250	1600	249.8	299.9	6020	5920							M12-M36
PA6-750-6-400	762.0	30	36	41	54	2 1/8	290	290	1300	1600	330.3	385.0	7620	7620							M20-M64
PA6-750-4-490	762.0	30	24	25	36	1 7/16	200	190	1150	1600	128.3	185.7	3290	3290	3170	2720	2040	1470	1050		M12-M36
PA6-750-5-490	762.0	30	30	29	45	1 3/4	200	210	1150	1600	155.2	240.7	4900	4900	4770	4120	3120	2310	1630		M12-M36
PA6-750-6-490	762.0	30	36	41	54	2 1/8	220	250	1250	1600	213.0	329.5	7530	7530	7320	6400	5050	3830	2670		M20-M64
PA6-750-7-490	762.0	30	42	45	63	2 1/2	260	320	1300	1500	299.0	406.5	10930	10930	10810	9620	7890	6090	4290		M30-M64
PA6-750-4-530	762.0	30	24	25	36	1 7/16	180	220	1150	1600	137.8	214.7	3660	3660	3660	3190	2420	1790	1260		M12-M36
PA6-750-5-530	762.0	30	30	29	45	1 3/4	220	230	1150	1600	170.5	263.4	5420	5420	5270	4560	3460	2560	1800		M12-M36
PA6-750-6-530	762.0	30	36	41	54	2 1/8	250	280	1250	1600	241.5	368.5	7620	7620	7620	7350	5810	4400	3060		M20-M64
PA6-750-7-530	762.0	30	42	45	63	2 1/2	290	320	1300	1400	332.6	386.4	10930	10930	10930	10720	8790	6780	4780		M30-M64
PA6-750-4-560	762.0	30	24	25	36	1 7/16	200	210	1150	1650	152.9	243.8	3660	3660	3660	3660	3280	2660	2110		M12-M36
PA6-750-5-560	762.0	30	30	29	45	1 3/4	200	280	1200	1600	185.4	320.2	5840	5840	5840	5710	4660	3800	3010		M12-M36
PA6-750-6-560	762.0	30	36	41	54	2 1/8	230	320	1250	1600	252.9	420.5	7620	7620	7620	7620	7370	6060	4820		M20-M64
PA6-750-4-600	762.0	30	24	25	36	1 7/16	220	230	1150	1650	194.1	303.1	3660	3660	3660	3660	3660	3660	3200		M12-M36
PA6-750-5-600	762.0	30	30	29	45	1 3/4	230	310	1200	1600	242.0	403.3	6090	6090	6090	6090	6090	5860	4650		M12-M36
PA6-800-4-400	812.8	32	24	25	36	1 7/16	260	260	1250	1600	250.7	300.7	3660	3660							M12-M36
PA6-800-5-400	812.8	32	30	29	45	1 3/4	260	260	1300	1600	261.1	304.0	6090	6090							M12-M36
PA6-800-6-400	812.8	32	36	41	54	2 1/8	290	290	1350	1600	344.5	390.1	7620	7620							M20-M64
PA6-800-4-490	812.8	32	24	25	36	1 7/16	180	190	1200	1600	144.5	188.3	3400	3400	3290	2830	2170	1610	1130		M12-M36
PA6-800-5-490	812.8	32	30	29	45	1 3/4	210	220	1250	1600	175.5	256.6	4910	4910	4750	4090	3130	2330	1640		M12-M36
PA6-800-6-490	812.8	32	36	41	54	2 1/8	240	240	1300	1600	242.4	320.8	7560	7560	7430	6620	5280	4020	2790		M20-M64
PA6-800-7-490	812.8	32	42	45	63	2 1/2	270	320	1350	1550	323.6	422.4	10880	10880	10690	9560	7900	6130	4350		M30-M64
PA6-800-4-530	812.8	32	24	25	36	1 7/16	180	210	1200	1600	144.5	207.9	3660	3660	3660	3160	2420	1800	1270		M12-M36
PA6-800-5-530	812.8	32	30	29	45	1 3/4	240	220	1250	1600	200.2	256.6	5350	5350	5210	4570	3610	2690	1890		M12-M36
PA6-800-6-530	812.8	32	36	41	54	2 1/8	270	270	1300	1600	272.2	360.3	7620	7620	7620	7520	5990	4560	3170		M20-M64
PA6-800-7-530	812.8	32	42	45	63	2 1/2	290	310	1350	1400	347.0	380.2	10930	10930	10930	10760	8890	6900	4900		M30-M64
PA6-800-4-560	812.8	32	24	25	36	1 7/16	210	190	1200	1600	168.3	218.6	3660	3660	3660	3660	3220	2630	2080		M12-M36
PA6-800-5-560	812.8	32	30	29	45	1 3/4	210	270	1250	1600	203.7	313.1	5720	5720	5720	5680	4660	3810	3010		M12-M36
PA6-800-6-560	812.8	32	36	41	54	2 1/8	240	310	1300	1600	275.5	413.0	7620	7620	7620	7620	7420	6110	4870		M20-M64
PA6-800-4-600	812.8	32	24	25	36	1 7/16	230	280	1200	1600	212.9	320.5	3660	3660	3660	3660	3660	3660	3190		M12-M36
PA6-800-5-600	812.8	32	30	29	45	1 3/4	230	300	1250	1600	253.3	395.6	6090	6090	6090	6090	6090	5720	4560		M12-M36



# PA6 PRESSED RISER CLAMP SIX BOLT TYPE

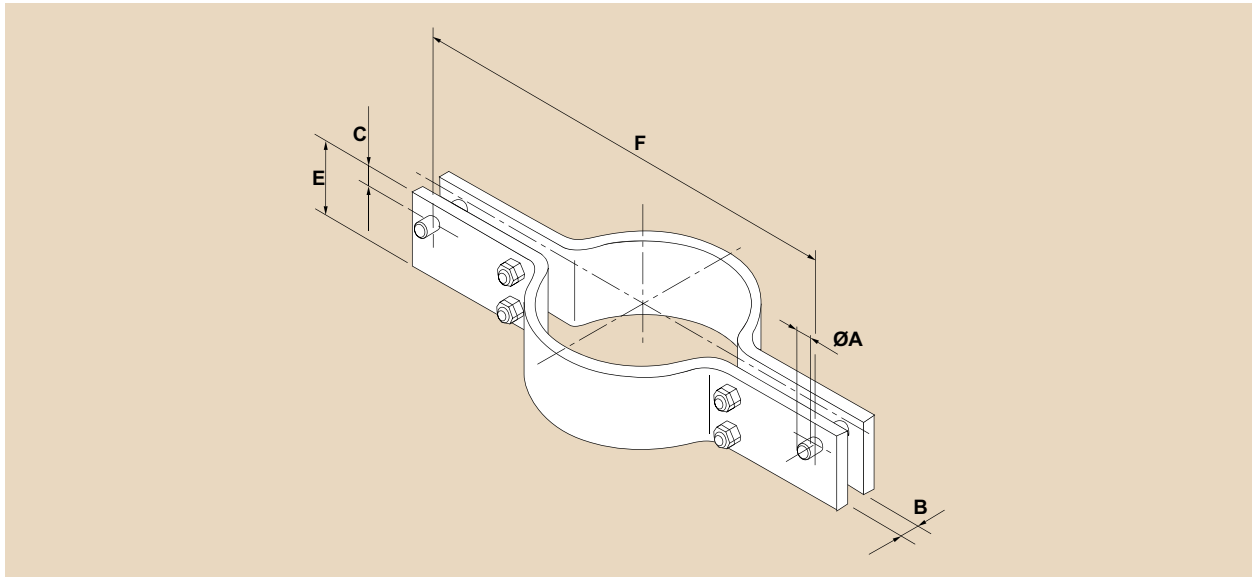


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes		
	mm	in			mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600			
PA6-850-4-400	863.6	34	24	25	36	1 7/16	260	260	1350	1550	269.0	297.6	3660	3660								M12-M36
PA6-850-5-400	863.6	34	30	29	45	1 3/4	260	260	1350	1550	272.1	300.7	6090	6090								M12-M36
PA6-850-6-400	863.6	34	36	41	54	2 1/8	290	290	1400	1550	358.5	385.9	7620	7620								M20-M64
PA6-850-4-490	863.6	34	24	25	36	1 7/16	180	180	1250	1550	151.2	176.6	3490	3490	3370	2890	2200	1630	1150			M12-M36
PA6-850-5-490	863.6	34	30	29	45	1 3/4	220	240	1300	1550	191.8	237.4	4790	4790	4620	3960	3020	2240	1570			M12-M36
PA6-850-6-490	863.6	34	36	41	54	2 1/8	250	280	1350	1550	263.1	324.9	7580	7580	7370	6450	5110	3880	2700			M20-M64
PA6-850-7-490	863.6	34	42	45	63	2 1/2	280	310	1400	1550	348.9	414.7	10900	10900	10700	9530	7840	6060	4280			M30-M64
PA6-850-4-530	863.6	34	24	25	36	1 7/16	180	200	1250	1550	151.2	196.0	3660	3660	3660	3220	2450	1820	1280			M12-M36
PA6-850-5-530	863.6	34	30	29	45	1 3/4	220	220	1300	1550	223.6	253.8	5820	5820	5670	4960	3930	2980	2070			M12-M36
PA6-850-6-530	863.6	34	36	41	54	2 1/8	280	260	1350	1550	294.1	344.9	7620	7620	7620	7330	5800	4400	3060			M20-M64
PA6-850-7-530	863.6	34	42	45	63	2 1/2	310	320	1400	1450	385.5	407.8	10930	10930	10930	10870	8940	6910	4880			M30-M64
PA6-850-4-560	863.6	34	24	25	36	1 7/16	220	240	1250	1550	184.3	234.8	3660	3660	3660	3660	3200	2590	2050			M12-M36
PA6-850-5-560	863.6	34	30	29	45	1 3/4	220	250	1300	1550	222.6	286.9	5620	5620	5620	5610	4580	3740	2960			M12-M36
PA6-850-6-560	863.6	34	36	41	54	2 1/8	260	290	1350	1550	310.7	382.4	7620	7620	7620	7620	7500	6170	4910			M20-M64
PA6-850-4-600	863.6	34	24	25	36	1 7/16	240	260	1250	1550	232.4	294.6	3660	3660	3660	3660	3660	3660	3180			M12-M36
PA6-850-5-600	863.6	34	30	29	45	1 3/4	250	280	1300	1550	287.3	365.5	6090	6090	6090	6090	6090	5850	4660			M12-M36
PA6-900-4-400	914.4	36	24	25	36	1 7/16	260	260	1400	1550	280.3	301.7	3660	3660								M12-M36
PA6-900-5-400	914.4	36	30	29	45	1 3/4	260	260	1400	1550	283.4	304.9	6090	6090								M12-M36
PA6-900-6-400	914.4	36	36	41	54	2 1/8	290	290	1450	1500	372.9	382.0	7620	7620								M20-M64
PA6-900-4-490	914.4	36	24	25	36	1 7/16	180	180	1300	1550	157.9	179.1	3630	3630	3510	3030	2330	1740	1220			M12-M36
PA6-900-5-490	914.4	36	30	29	45	1 3/4	230	230	1350	1500	209.0	225.3	4800	4800	4640	4000	3080	2290	1610			M12-M36
PA6-900-6-490	914.4	36	36	41	54	2 1/8	260	270	1400	1500	284.6	310.2	7490	7490	7300	6420	5130	3910	2720			M20-M64
PA6-900-7-490	914.4	36	42	45	63	2 1/2	290	290	1450	1500	375.5	384.6	10890	10890	10710	9590	7950	6170	4390			M30-M64
PA6-900-4-530	914.4	36	24	25	36	1 7/16	190	190	1300	1550	166.5	188.9	3660	3660	3660	3220	2470	1840	1290			M12-M36
PA6-900-5-530	914.4	36	30	29	45	1 3/4	220	220	1400	1550	239.2	257.3	6060	6060	5910	5190	4150	3160	2200			M12-M36
PA6-900-6-530	914.4	36	36	41	54	2 1/8	260	260	1450	1500	333.3	341.4	7620	7620	7620	7620	7020	5450	3880			M20-M64
PA6-900-4-560	914.4	36	24	25	36	1 7/16	230	230	1300	1550	201.2	228.3	3660	3660	3660	3660	3220	2610	2070			M12-M36
PA6-900-5-560	914.4	36	30	29	45	1 3/4	230	240	1350	1550	242.6	279.4	5530	5530	5530	5530	4590	3760	2970			M12-M36
PA6-900-6-560	914.4	36	36	41	54	2 1/8	270	270	1400	1500	335.8	352.8	7620	7620	7620	7620	7500	6180	4930			M20-M64
PA6-900-4-600	914.4	36	24	25	36	1 7/16	250	250	1300	1550	252.9	287.3	3660	3660	3660	3660	3660	3660	3210			M12-M36
PA6-900-5-600	914.4	36	30	29	45	1 3/4	260	260	1400	1550	319.8	344.3	6090	6090	6090	6090	6090	5770	4610			M12-M36

# PA6 PRESSED RISER CLAMP SIX BOLT TYPE

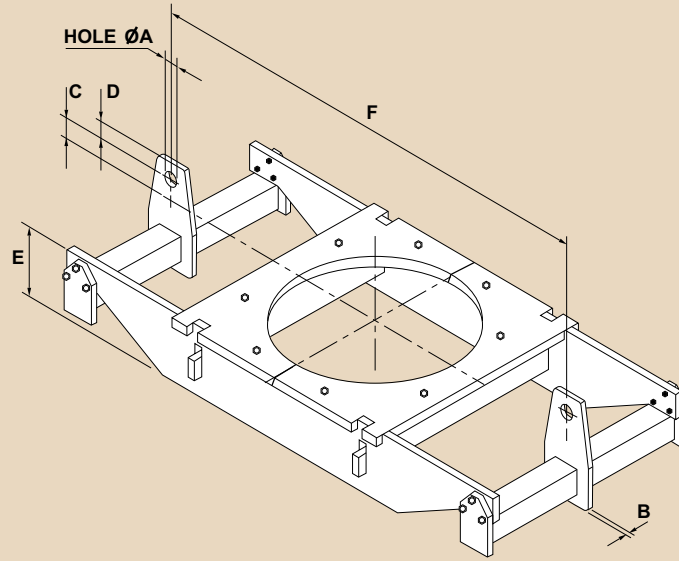


Material: Carbon Steel to 400°C Alloy Steel above 400°C

Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes		
	mm	in			mm	mm	mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560		580	600
PA6-950-4-400	965.2	38	24	25	36	1 7/16	260	260	1450	1500	291.4	298.6	3660	3660								M12-M36
PA6-950-5-400	965.2	38	30	29	45	1 3/4	290	290	1500	1500	383.9	383.9	6090	6090								M12-M36
PA6-950-6-400	965.2	38	36	41	54	2 1/8	290	290	1500	1500	387.2	387.2	7620	7620								M20-M64
PA6-950-4-490	965.2	38	24	25	36	1 7/16	180	180	1350	1500	164.6	177.3	3470	3470	3360	2910	2260	1700	1190			M12-M36
PA6-950-5-490	965.2	38	30	29	45	1 3/4	240	240	1400	1500	226.9	238.3	4760	4760	4610	4000	3110	2330	1630			M12-M36
PA6-950-6-490	965.2	38	36	41	54	2 1/8	280	280	1450	1500	318.3	326.0	7620	7620	7490	6620	5350	4100	2850			M20-M64
PA6-950-7-490	965.2	38	42	45	63	2 1/2	310	310	1500	1500	416.1	416.1	10930	10930	10910	9810	8220	6410	4610			M30-M64
PA6-950-4-530	965.2	38	24	25	36	1 7/16	200	200	1350	1500	182.6	196.8	3660	3660	3660	3270	2540	1910	1330			M12-M36
PA6-950-5-530	965.2	38	30	29	45	1 3/4	220	220	1450	1500	248.8	254.8	5800	5800	5670	5010	4050	3100	2160			M12-M36
PA6-950-6-530	965.2	38	36	41	54	2 1/8	260	260	1500	1500	346.0	346.0	7620	7620	7620	7620	6760	5270	3790			M20-M64
PA6-950-4-560	965.2	38	24	25	36	1 7/16	240	240	1350	1500	218.8	235.7	3660	3660	3660	3660	3250	2640	2090			M12-M36
PA6-950-5-560	965.2	38	30	29	45	1 3/4	240	240	1400	1500	263.4	276.6	5440	5440	5440	5440	4610	3780	2980			M12-M36
PA6-950-6-560	965.2	38	36	41	54	2 1/8	280	280	1500	1500	370.6	370.6	7620	7620	7620	7620	7480	6180	4950			M20-M64
PA6-950-4-600	965.2	38	24	25	36	1 7/16	260	260	1400	1500	282.0	296.3	3660	3660	3660	3660	3660	3660	3230			M12-M36
PA6-950-5-600	965.2	38	30	29	45	1 3/4	270	270	1450	1500	345.3	353.3	6090	6090	6090	6090	6090	5840	4680			M12-M36
PA6-1000-4-400	1016.0	40	24	25	36	1 7/16	260	260	1500	1500	302.6	302.6	3660	3660								M12-M36
PA6-1000-4-490	1016.0	40	24	25	36	1 7/16	180	180	1400	1500	171.2	179.7	3300	3300	3190	2760	2130	1590	1110			M12-M36
PA6-1000-4-530	1016.0	40	24	25	36	1 7/16	210	210	1400	1500	199.4	209.3	3660	3660	3660	3260	2510	1880	1320			M12-M36
PA6-1000-4-560	1016.0	40	24	25	36	1 7/16	190	190	1450	1500	214.7	220.0	3660	3660	3660	3660	3350	2740	2160			M12-M36
PA6-1000-5-560	1016.0	40	30	29	45	1 3/4	260	260	1450	1450	296.3	296.3	5590	5590	5590	5590	4740	3880	3060			M12-M36
PA6-1000-4-600	1016.0	40	24	25	36	1 7/16	270	270	1450	1500	304.3	311.7	3660	3660	3660	3660	3660	3660	3170			M12-M36
PA6-1000-5-600	1016.0	40	30	29	45	1 3/4	280	280	1500	1500	371.7	371.7	6030	6030	6030	6030	6030	5720	4570			M12-M36

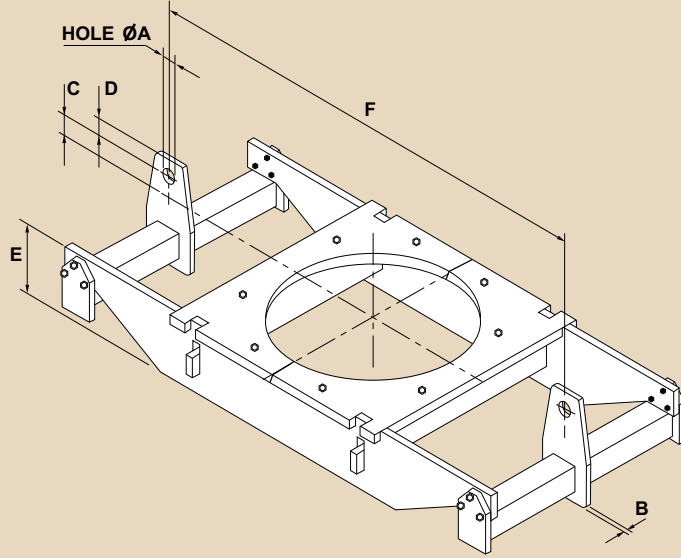
# PA7 RISER CLAMP FLAT PLATE TYPE



**Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres "F"**

Part Number	Pipe O/D		A	B	C		D	E		F		Weight kgf	Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes	
	mm	in			mm	in		Min.	Max.	Min.	Max.		Min.	Max.	350	400	490	530	560		580
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in									
PA7-250-0-400	273.0	10.75	14	6	-78	-3 <sup>1</sup> / <sub>16</sub>	20	158	158	500	2000	30.0	53.4	460	460						M8-M12
PA7-250-1-400	273.0	10.75	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	500	2000	30.2	63.2	720	720						M8-M16
PA7-250-2-400	273.0	10.75	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	500	2000	30.3	71.4	1060	1060						M8-M16
PA7-250-3-400	273.0	10.75	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	160	500	2000	30.6	108.5	2020	2020						M8-M24
PA7-250-4-400	273.0	10.75	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	158	190	500	2000	30.8	124.9	3160	3160						M8-M30
PA7-250-5-400	273.0	10.75	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	200	500	2000	35.5	167.0	4560	4560						M12-M36
PA7-250-6-400	273.0	10.75	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	250	600	2000	53.3	210.5	7300	7300						M20-M48
PA7-250-7-400	273.0	10.75	60	20	12	<sup>1</sup> / <sub>2</sub>	100	188	280	600	2000	71.5	281.3	10680	10680						M24-M56
PA7-250-8-400	273.0	10.75	68	25	32	<sup>1</sup> / <sub>4</sub>	115	208	300	700	2000	118.6	363.5	14800	14800						M36-M64
PA7-250-0-490	273.0	10.75	14	6	-78	-3 <sup>1</sup> / <sub>16</sub>	20	158	158	500	2000	30.0	53.4	460	460	460	300	180	130	110	M8-M12
PA7-250-1-490	273.0	10.75	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	500	2000	30.2	63.2	720	720	720	470	280	200	170	M8-M16
PA7-250-2-490	273.0	10.75	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	500	2000	30.3	71.4	1060	1060	1060	690	410	300	250	M8-M16
PA7-250-3-490	273.0	10.75	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	158	500	2000	30.6	103.0	2020	2020	2020	1310	790	570	480	M8-M24
PA7-250-4-490	273.0	10.75	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	158	190	500	2000	30.8	124.9	3160	3160	3160	2050	1230	880	760	M8-M30
PA7-250-5-490	273.0	10.75	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	200	500	2000	35.5	167.0	4560	4560	4560	2960	1780	1280	1090	M12-M36
PA7-250-6-490	273.0	10.75	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	250	600	2000	53.3	210.5	7300	7300	7300	4750	2850	2040	1750	M20-M48
PA7-250-7-490	273.0	10.75	60	20	12	<sup>1</sup> / <sub>2</sub>	100	188	270	600	2000	71.5	272.9	10680	10680	10680	6940	4170	2990	2560	M24-M56
PA7-250-8-490	273.0	10.75	68	25	32	<sup>1</sup> / <sub>4</sub>	115	208	300	700	2000	118.6	363.5	14800	14800	14800	9620	5770	4140	3550	M36-M64
PA7-250-0-530	273.0	10.75	14	6	-78	-3 <sup>1</sup> / <sub>16</sub>	20	158	158	500	2000	30.0	56.7	460	460	460	460	280	200	170	M8-M12
PA7-250-1-530	273.0	10.75	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	500	2000	30.2	71.3	720	720	720	720	430	320	260	M8-M16
PA7-250-2-530	273.0	10.75	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	500	2000	30.3	79.5	1060	1060	1060	1060	640	470	380	M8-M16
PA7-250-3-530	273.0	10.75	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	170	500	2000	30.6	113.8	2020	2020	2020	2020	1210	890	730	M8-M24
PA7-250-4-530	273.0	10.75	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	158	180	500	2000	30.8	148.6	3160	3160	3160	3160	1900	1390	1140	M8-M30
PA7-250-5-530	273.0	10.75	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	220	600	2000	45.0	180.8	4560	4560	4560	4560	2740	2010	1640	M12-M36
PA7-250-6-530	273.0	10.75	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	240	600	2000	67.3	243.5	7300	7300	7300	7300	4380	3210	2630	M20-M48
PA7-250-7-530	273.0	10.75	60	20	12	<sup>1</sup> / <sub>2</sub>	100	188	300	600	2000	73.6	298.0	10680	10680	10680	10680	6410	4700	3840	M24-M56
PA7-250-8-530	273.0	10.75	68	25	32	<sup>1</sup> / <sub>4</sub>	115	208	320	700	2000	121.8	383.2	14800	14800	14800	14800	8880	6510	5330	M36-M64
PA7-250-0-560	273.0	10.75	14	6	-78	-3 <sup>1</sup> / <sub>16</sub>	20	158	158	500	2000	30.0	67.2	460	460	460	460	460	360	270	M8-M12
PA7-250-1-560	273.0	10.75	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	500	2000	30.2	75.4	720	720	720	720	420	560	420	M8-M16
PA7-250-2-560	273.0	10.75	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	500	2000	30.3	97.2	1060	1060	1060	1060	1060	830	610	M8-M16
PA7-250-3-560	273.0	10.75	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	190	500	2000	30.6	124.7	2020	2020	2020	2020	2020	1580	1170	M8-M24
PA7-250-4-560	273.0	10.75	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	158	210	500	2000	34.6	169.0	3160	3160	3160	3160	3160	2460	1830	M8-M30
PA7-250-5-560	273.0	10.75	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	240	600	2000	46.6	194.5	4560	4560	4560	4560	4560	3560	2640	M12-M36
PA7-250-6-560	273.0	10.75	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	280	600	2000	69.6	279.4	7300	7300	7300	7300	7300	5690	4230	M20-M48
PA7-250-7-560	273.0	10.75	60	20	12	<sup>1</sup> / <sub>2</sub>	100	200	300	600	2000	83.9	346.6	10680	10680	10680	10680	10680	8330	6190	M24-M56
PA7-250-8-560	273.0	10.75	68	25	32	<sup>1</sup> / <sub>4</sub>	115	230	350	700	2000	131.2	412.6	14800	14800	14800	14800	14800	11540	8580	M36-M64
PA7-250-0-600	273.0	10.75	14	6	-78	-3 <sup>1</sup> / <sub>16</sub>	20	158	158	500	2000	30.0	75.3	460	460	460	460	460	460	460	M8-M12
PA7-250-1-600	273.0	10.75	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	500	2000	30.2	102.5	720	720	720	720	720	720	720	M8-M16
PA7-250-2-600	273.0	10.75	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	180	500	2000	30.3	119.0	1060	1060	1060	1060	1060	1060	1060	M8-M16
PA7-250-3-600	273.0	10.75	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	210	500	2000	34.5	168.8	2020	2020	2020	2020	2020	2020	2020	M8-M24
PA7-250-4-600	273.0	10.75	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	158	250	500	2000	41.0	196.3	3160	3160	3160	3160	3160	3160	3160	M8-M30
PA7-250-5-600	273.0	10.75	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	270	600	2000	62.0	260.2	4560	4560	4560	4560	4560	4560	4560	M12-M36
PA7-250-6-600	273.0	10.75	52	16	-3	<sup>1</sup> / <sub>8</sub>	85	188	310	600	2000	94.1	354.2	7300	7300	7300	7300	7300	7300	7300	M20-M48
PA7-250-7-600	273.0	10.75	60	20	12	<sup>1</sup> / <sub>2</sub>	100	220	340	600	2000	111.1	441.6	10680	10680	10680	10680	10680	10680	10680	M24-M56
PA7-250-8-600	273.0	10.75	68	25	32	<sup>1</sup> / <sub>4</sub>	115	260	400	700	2000	169.7	532.9	14800	14800	14800	14800	14800	14800	14800	M36-M64

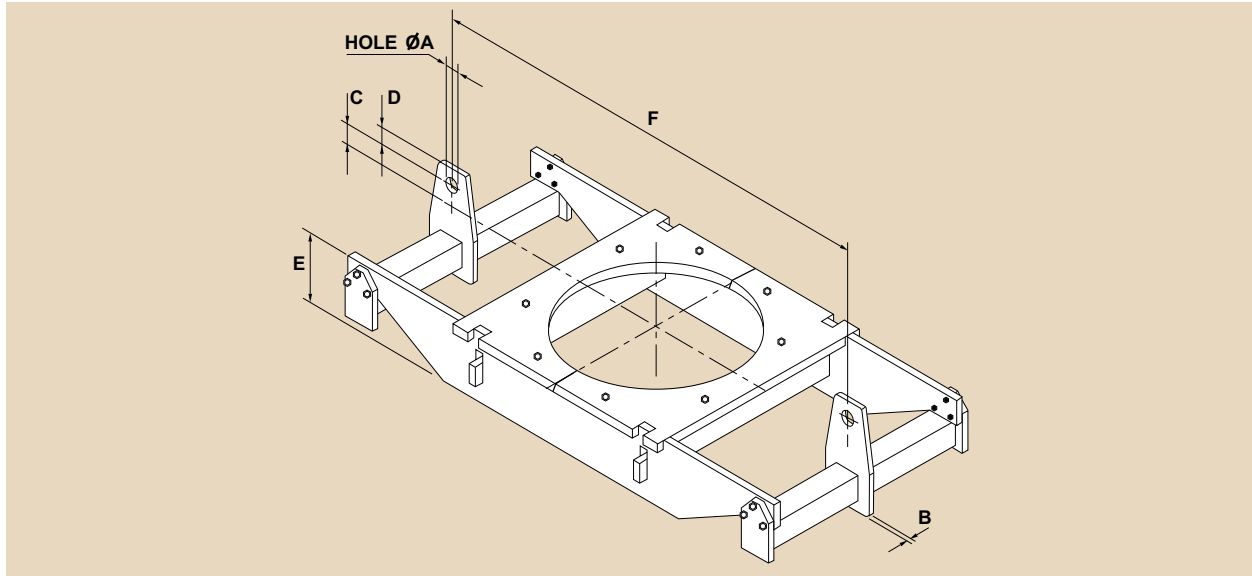
**PA7 RISER CLAMP FLAT PLATE TYPE**



Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A mm	B mm	C		D mm	E		F		Weight kgf		Load Capacity (kgf) at Temperature C								Compatible with Rod Sizes
	mm	in			mm	in		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	
PA7-300-1-400	323.9	12.75	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	35.8	60.9	720	720							M8-M16
PA7-300-2-400	323.9	12.75	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	35.9	75.8	1060	1060							M8-M16
PA7-300-3-400	323.9	12.75	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	158	600	2000	36.3	108.0	2020	2020							M8-M24
PA7-300-4-400	323.9	12.75	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	190	600	2000	39.8	134.3	3160	3160							M8-M30
PA7-300-5-400	323.9	12.75	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	200	600	2000	49.3	176.5	4560	4560							M12-M36
PA7-300-6-400	323.9	12.75	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	250	600	2000	65.8	226.0	7300	7300							M20-M48
PA7-300-7-400	323.9	12.75	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	208	280	700	2000	99.4	310.1	10680	10680							M24-M56
PA7-300-8-400	323.9	12.75	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	208	300	700	2000	115.1	381.3	14800	14800							M36-M64
PA7-300-9-400	323.9	12.75	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	244	350	700	2000	151.3	444.5	19300	19300							M36-M72
PA7-300-1-490	323.9	12.75	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	35.8	60.9	720	720	720	470	280	200	170		M8-M16
PA7-300-2-490	323.9	12.75	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	35.9	75.8	1060	1060	1060	690	410	300	250		M8-M16
PA7-300-3-490	323.9	12.75	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	158	600	2000	36.3	108.0	2020	2020	2020	1310	790	570	480		M8-M24
PA7-300-4-490	323.9	12.75	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	190	600	2000	39.8	134.3	3160	3160	3160	2050	1230	880	760		M8-M30
PA7-300-5-490	323.9	12.75	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	200	600	2000	49.3	176.5	4560	4560	4560	2960	1780	1280	1090		M12-M36
PA7-300-6-490	323.9	12.75	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	250	600	2000	65.8	226.0	7300	7300	7300	4750	2850	2040	1750		M20-M48
PA7-300-7-490	323.9	12.75	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	208	270	700	2000	99.4	301.4	10680	10680	10680	6940	4170	2990	2560		M24-M56
PA7-300-8-490	323.9	12.75	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	208	300	700	2000	115.1	381.3	14800	14800	14800	9620	5770	4140	3550		M36-M64
PA7-300-9-490	323.9	12.75	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	244	340	700	2000	151.3	434.7	19300	19300	19300	12550	7530	5400	4630		M36-M72
PA7-300-1-530	323.9	12.75	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	35.8	71.7	720	720	720	720	430	320	260		M8-M16
PA7-300-2-530	323.9	12.75	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	35.9	84.1	1060	1060	1060	1060	640	470	380		M8-M16
PA7-300-3-530	323.9	12.75	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	170	600	2000	36.3	119.1	2020	2020	2020	2020	1210	890	730		M8-M24
PA7-300-4-530	323.9	12.75	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	200	600	2000	44.3	139.9	3160	3160	3160	3160	1900	1390	1140		M8-M30
PA7-300-5-530	323.9	12.75	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	220	600	2000	50.9	190.5	4560	4560	4560	4560	2740	2010	1640		M12-M36
PA7-300-6-530	323.9	12.75	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	250	700	2000	84.7	268.7	7300	7300	7300	7300	4380	3210	2630		M20-M48
PA7-300-7-530	323.9	12.75	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	208	300	700	2000	109.3	332.7	10680	10680	10680	10680	6410	4700	3840		M24-M56
PA7-300-8-530	323.9	12.75	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	208	320	700	2000	136.5	401.3	14800	14800	14800	14800	8880	6510	5330		M36-M64
PA7-300-9-530	323.9	12.75	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	244	340	700	2000	157.8	495.6	19300	19300	19300	19300	11580	8490	6950		M36-M72
PA7-300-1-560	323.9	12.75	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	35.8	79.9	720	720	720	720	720	560	420		M8-M16
PA7-300-2-560	323.9	12.75	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	35.9	102.2	1060	1060	1060	1060	1060	830	610		M8-M16
PA7-300-3-560	323.9	12.75	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	190	600	2000	36.3	130.1	2020	2020	2020	2020	2020	1580	1170		M8-M24
PA7-300-4-560	323.9	12.75	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	210	600	2000	48.8	182.9	3160	3160	3160	3160	3160	2460	1830		M8-M30
PA7-300-5-560	323.9	12.75	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	250	600	2000	58.9	216.4	4560	4560	4560	4560	4560	3560	2640		M12-M36
PA7-300-6-560	323.9	12.75	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	280	700	2000	94.5	294.2	7300	7300	7300	7300	7300	5690	4230		M20-M48
PA7-300-7-560	323.9	12.75	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	208	300	700	2000	130.0	378.2	10680	10680	10680	10680	10680	8330	6190		M24-M56
PA7-300-8-560	323.9	12.75	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	230	330	700	2000	151.3	474.7	14800	14800	14800	14800	14800	11540	8580		M36-M64
PA7-300-9-560	323.9	12.75	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	260	370	800	2000	210.3	529.8	19300	19300	19300	19300	19300	15050	11190		M36-M72
PA7-300-1-600	323.9	12.75	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	35.8	107.5	720	720	720	720	720	720	720		M8-M16
PA7-300-2-600	323.9	12.75	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	170	600	2000	35.9	118.7	1060	1060	1060	1060	1060	1060	1060		M8-M16
PA7-300-3-600	323.9	12.75	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	210	600	2000	45.2	178.1	2020	2020	2020	2020	2020	2020	2020		M8-M24
PA7-300-4-600	323.9	12.75	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	230	600	2000	65.8	240.5	3160	3160	3160	3160	3160	3160	3160		M8-M30
PA7-300-5-600	323.9	12.75	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	270	600	2000	73.0	274.6	4560	4560	4560	4560	4560	4560	4560		M12-M36
PA7-300-6-600	323.9	12.75	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	200	310	700	2000	119.5	371.4	7300	7300	7300	7300	7300	7300	7300		M20-M48
PA7-300-7-600	323.9	12.75	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	240	350	700	2000	151.5	494.6	10680	10680	10680	10680	10680	10680	10680		M24-M56
PA7-300-8-600	323.9	12.75	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	280	400	800	2000	211.0	561.3	14800	14800	14800	14800	14800	14800	14800		M36-M64
PA7-300-9-600	323.9	12.75	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	290	420	800	2000	251.9	675.6	19300	19300	19300	19300	19300	19300	19300		M36-M72

# PA7 RISER CLAMP FLAT PLATE TYPE



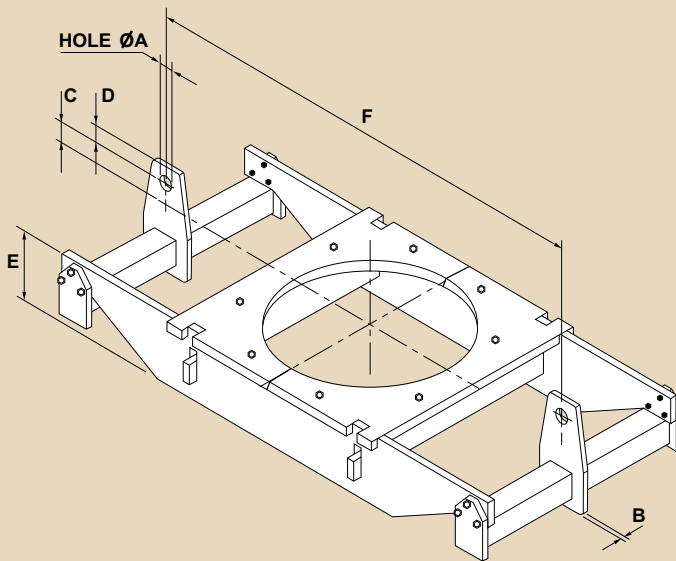
Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres 'F'

Part Number	Pipe O/D		A		C		D		E		F		Weight kgf	Load Capacity (kgf) at Temperature C								Compatible with Rod Sizes	
	mm	in	mm	mm	mm	in	mm	Min.	Max.	Min.	Max.	Min.		Max.	350	400	490	530	560	560	600		
Pa7-350-1-400	355.6	14	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	38.5	63.7	720	720							M8-M16	
PA7-350-2-400	355.6	14	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	38.6	78.8	1060	1060							M8-M16	
PA7-350-3-400	355.6	14	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	158	600	2000	39.0	111.3	2020	2020							M8-M24	
PA7-350-4-400	355.6	14	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	190	600	2000	42.7	138.0	3160	3160							M8-M30	
PA7-350-5-400	355.6	14	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	200	700	2000	56.9	181.2	4560	4560							M12-M36	
PA7-350-6-400	355.6	14	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	250	700	2000	84.7	232.1	7300	7300							M20-M48	
PA7-350-7-400	355.6	14	60	20	12	1 <sup>2</sup> / <sub>2</sub>	100	208	280	700	2000	110.7	323.9	10680	10680							M24-M56	
PA7-350-8-400	355.6	14	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	208	300	800	2000	155.6	390.2	14800	14800							M36-M64	
PA7-350-9-400	355.6	14	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	264	340	800	2000	184.9	460.0	19300	19300							M36-M72	
PA7-350-10-400	355.6	14	86	30	26	1	140	264	380	800	2000	233.8	581.0	26700	26700							M36-M80	
PA7-350-1-490	355.6	14	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	38.5	63.7	720	720	720	470	280	200	170		M8-M16	
PA7-350-2-490	355.6	14	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	38.6	78.8	1060	1060	1060	690	410	300	250		M8-M16	
PA7-350-3-490	355.6	14	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	158	600	2000	39.0	111.3	2020	2020	2020	1310	790	570	480		M8-M24	
PA7-350-4-490	355.6	14	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	180	600	2000	42.7	132.5	3160	3160	3160	2050	1230	880	760		M8-M30	
PA7-350-5-490	355.6	14	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	200	700	2000	56.9	181.2	4560	4560	4560	2960	1780	1280	1090		M12-M36	
PA7-350-6-490	355.6	14	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	250	700	2000	84.7	232.1	7300	7300	7300	4750	2850	2040	1750		M20-M48	
PA7-350-7-490	355.6	14	60	20	12	1 <sup>2</sup> / <sub>2</sub>	100	208	280	700	2000	110.7	323.9	10680	10680	10680	6940	4170	2990	2560		M24-M56	
PA7-350-8-490	355.6	14	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	208	300	800	2000	149.5	390.2	14800	14800	14800	9620	5770	4140	3550		M36-M64	
PA7-350-9-490	355.6	14	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	264	340	800	2000	184.9	460.0	19300	19300	19300	12550	7530	5400	4630		M36-M72	
PA7-350-10-490	355.6	14	86	30	26	1	140	264	380	800	2000	229.5	581.0	26700	26700	26700	17360	10410	7480	6410		M36-M80	
PA7-350-1-530	355.6	14	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	38.5	74.6	720	720	720	720	430	320	260		M8-M16	
PA7-350-2-530	355.6	14	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	38.6	83.0	1060	1060	1060	1060	640	470	380		M8-M16	
PA7-350-3-530	355.6	14	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	160	600	2000	39.0	117.0	2020	2020	2020	2020	1210	890	730		M8-M24	
PA7-350-4-530	355.6	14	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	200	700	2000	54.6	147.1	3160	3160	3160	3160	1900	1390	1140		M8-M30	
PA7-350-5-530	355.6	14	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	220	700	2000	66.1	201.4	4560	4560	4560	4560	2740	2010	1640		M12-M36	
PA7-350-6-530	355.6	14	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	250	700	2000	87.1	275.3	7300	7300	7300	7300	4380	3210	2630		M20-M48	
PA7-350-7-530	355.6	14	60	20	12	1 <sup>2</sup> / <sub>2</sub>	100	208	300	700	2000	116.0	341.2	10680	10680	10680	10680	6410	4700	3840		M24-M56	
PA7-350-8-530	355.6	14	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	220	320	800	2000	162.8	416.9	14800	14800	14800	14800	8880	6510	5330		M36-M64	
PA7-350-9-530	355.6	14	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	264	340	800	2000	198.4	523.3	19300	19300	19300	19300	11580	8490	6950		M36-M72	
PA7-350-10-530	355.6	14	86	30	26	1	140	270	400	800	2000	249.2	604.4	26700	26700	26700	26700	16020	11750	9610		M36-M80	
PA7-350-1-560	355.6	14	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	38.5	82.9	720	720	720	720	720	560	420		M8-M16	
PA7-350-2-560	355.6	14	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	38.6	105.5	1060	1060	1060	1060	1060	830	610		M8-M16	
PA7-350-3-560	355.6	14	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	190	600	2000	43.6	133.6	2020	2020	2020	2020	1260	1580	1170		M8-M24	
PA7-350-4-560	355.6	14	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	200	700	2000	63.8	180.8	3160	3160	3160	3160	3160	2460	1830		M8-M30	
PA7-350-5-560	355.6	14	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	168	250	700	2000	76.7	222.3	4560	4560	4560	4560	4560	3560	2640		M12-M36	
PA7-350-6-560	355.6	14	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	280	700	2000	100.7	307.6	7300	7300	7300	7300	7300	5690	4230		M20-M48	
PA7-350-7-560	355.6	14	60	20	12	1 <sup>2</sup> / <sub>2</sub>	100	210	300	800	2000	155.9	387.1	10680	10680	10680	10680	10680	8330	6190		M24-M56	
PA7-350-8-560	355.6	14	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	250	350	800	2000	179.6	447.0	14800	14800	14800	14800	11540	8580			M36-M64	
PA7-350-9-560	355.6	14	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	264	370	800	2000	229.7	565.0	19300	19300	19300	19300	19300	15050	11190			M36-M72
PA7-350-10-560	355.6	14	86	30	26	1	140	300	400	800	2000	269.2	687.6	26700	26700	26700	26700	26700	20830	15490			M36-M80
PA7-350-1-600	355.6	14	18	6	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	158	600	2000	38.5	105.4	720	720	720	720	720	720	720		M8-M16	
PA7-350-2-600	355.6	14	18	8	-66	-2 <sup>5</sup> / <sub>8</sub>	30	158	170	600	2000	38.6	122.1	1060	1060	1060	1060	1060	1060	1060		M8-M16	
PA7-350-3-600	355.6	14	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	200	600	2000	57.5	175.8	2020	2020	2020	2020	2020	2020	2020		M8-M24	
PA7-350-4-600	355.6	14	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	230	700	2000	78.7	246.8	3160	3160	3160	3160	3160	3160	3160		M8-M30	
PA7-350-5-600	355.6	14	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	180	280	700	2000	92.5	296.4	4560	4560	4560	4560	4560	4560	4560		M12-M36	
PA7-350-6-600	355.6	14	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	200	310	700	2000	132.3	386.5	7300	7300	7300	7300	7300	7300	7300		M20-M48	
PA7-350-7-600	355.6	14	60	20	12	1 <sup>2</sup> / <sub>2</sub>	100	240	340	800	2000	200.6	494.1	10680	10680	10680	10680	10680	10680	10680		M24-M56	
PA7-350-8-600	355.6	14	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	280	370	800	2000	227.7	606.5	14800	14800	14800	14800	14800	14800	14800		M36-M64	
PA7-350-9-600	355.6	14	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	290	420	800	2000	284.7	710.0	19300	19300	19300	19300	19300	19300	19300		M36-M72	
PA7-350-10-600	355.6	14	86	30	26	1	140	330	460	800	2000	316.2	847.1	26700	26700	26700	26700	26700	26700			M36-M80	





# PA7 RISER CLAMP FLAT PLATE TYPE

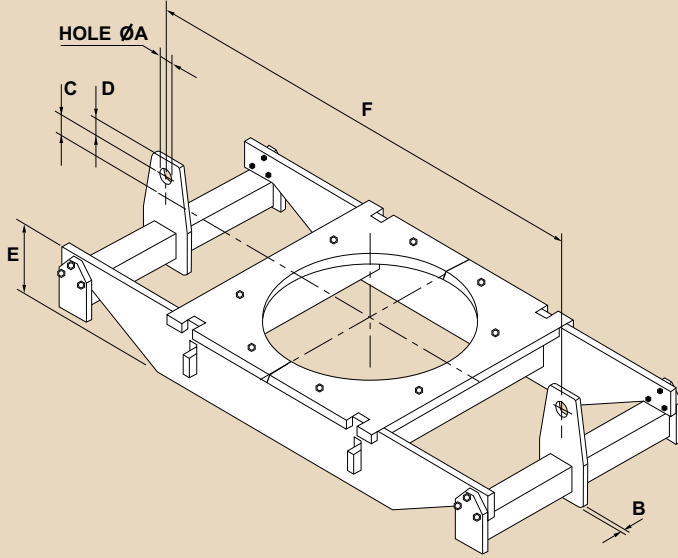


Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A		B		C		D		E		F		Weight kgf		Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes
	mm	in	mm	mm	mm	in	mm	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600		
PA7-450-2-400	457.2	18	18	8	-66	-2 <sup>9</sup> / <sub>8</sub>	30	158	158	700	2500	50.1	106.2	1060	1060								M8-M16	
PA7-450-3-400	457.2	18	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	170	700	2500	50.5	154.6	2020	2020								M8-M24	
PA7-450-4-400	457.2	18	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	190	800	2500	69.8	217.9	3160	3160								M8-M30	
PA7-450-5-400	457.2	18	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	188	230	800	2500	89.7	271.5	4560	4560								M12-M36	
PA7-450-6-400	457.2	18	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	260	800	2500	120.8	363.3	7300	7300								M20-M48	
PA7-450-7-400	457.2	18	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	208	290	900	2500	160.6	476.8	10680	10680								M24-M56	
PA7-450-8-400	457.2	18	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	210	340	900	2500	203.4	542.5	14800	14800								M36-M64	
PA7-450-9-400	457.2	18	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	264	360	900	2500	231.2	681.3	19300	19300								M36-M72	
PA7-450-10-400	457.2	18	86	30	26	1	140	294	400	1000	2500	348.2	877.6	26700	26700								M36-M80	
PA7-450-11-400	457.2	18	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	330	450	1000	2500	420.3	1093.9	36000	36000								M36-M80	
PA7-450-12-400	457.2	18	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	340	470	1000	2500	479.2	1387.2	46050	46050								M36-M80	
PA7-450-2-490	457.2	18	18	8	-66	-2 <sup>9</sup> / <sub>8</sub>	30	158	158	700	2500	50.1	106.2	1060	1060	1060	690	410	300	250			M8-M16	
PA7-450-3-490	457.2	18	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	170	700	2500	50.5	154.6	2020	2020	2020	1310	790	570	480			M8-M24	
PA7-450-4-490	457.2	18	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	190	800	2500	69.8	217.9	3160	3160	3160	2050	1230	880	760			M8-M30	
PA7-450-5-490	457.2	18	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	188	220	800	2500	89.7	262.9	4560	4560	4560	2960	1780	1280	1090			M12-M36	
PA7-450-6-490	457.2	18	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	260	800	2500	120.8	363.3	7300	7300	7300	4750	2850	2040	1750			M20-M48	
PA7-450-7-490	457.2	18	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	208	290	900	2500	160.6	476.8	10680	10680	10680	6940	4170	2990	2560			M24-M56	
PA7-450-8-490	457.2	18	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	208	330	900	2500	190.1	529.8	14800	14800	14800	9620	5770	4140	3550			M36-M64	
PA7-450-9-490	457.2	18	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	264	360	900	2500	231.2	681.3	19300	19300	19300	12550	7530	5400	4630			M36-M72	
PA7-450-10-490	457.2	18	86	30	26	1	140	294	400	1000	2500	332.6	877.6	26700	26700	26700	17360	10410	7480	6410			M36-M80	
PA7-450-11-490	457.2	18	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	330	440	1000	2500	420.3	1076.0	36000	36000	36000	23400	14040	10080	8640			M36-M80	
PA7-450-12-490	457.2	18	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	340	500	1000	2500	479.2	1222.3	60504	60504	60504	29930	17960	12890	11050			M36-M80	
PA7-450-2-530	457.2	18	18	8	-66	-2 <sup>9</sup> / <sub>8</sub>	30	158	158	700	2500	50.1	133.6	1060	1060	1060	1060	640	470	380			M8-M16	
PA7-450-3-530	457.2	18	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	180	700	2500	57.2	167.0	2020	2020	2020	2020	1210	890	730			M8-M24	
PA7-450-4-530	457.2	18	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	210	800	2500	80.6	244.7	3160	3160	3160	3160	1900	1390	1140			M8-M30	
PA7-450-5-530	457.2	18	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	188	240	800	2500	101.4	280.5	4560	4560	4560	4560	2740	2010	1640			M12-M36	
PA7-450-6-530	457.2	18	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	188	280	800	2500	123.7	384.5	7300	7300	7300	7300	4380	3210	2630			M20-M48	
PA7-450-7-530	457.2	18	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	208	310	900	2500	182.7	501.8	10680	10680	10680	10680	6410	4700	3840			M24-M56	
PA7-450-8-530	457.2	18	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	220	340	900	2500	207.7	625.6	14800	14800	14800	8880	6510	5330				M36-M64	
PA7-450-9-530	457.2	18	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	264	380	900	2500	248.9	720.5	19300	19300	19300	11580	8490	6950				M36-M72	
PA7-450-10-530	457.2	18	86	30	26	1	140	294	420	1000	2500	353.5	921.7	26700	26700	26700	26700	16020	11750	9610			M36-M80	
PA7-450-11-530	457.2	18	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	330	460	1000	2500	426.6	1112.6	36000	36000	36000	36000	21600	15840	12960			M36-M80	
PA7-450-12-530	457.2	18	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	340	480	1000	2500	533.4	1409.8	46050	46050	46050	46050	27630	20260	16580			M36-M80	
PA7-450-2-560	457.2	18	18	8	-66	-2 <sup>9</sup> / <sub>8</sub>	30	158	158	700	2500	50.1	140.4	1060	1060	1060	1060	1060	830	610			M8-M16	
PA7-450-3-560	457.2	18	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	180	800	2500	65.4	203.9	2020	2020	2020	2020	2020	1580	1170			M8-M24	
PA7-450-4-560	457.2	18	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	230	800	2500	84.9	262.2	3160	3160	3160	3160	3160	2460	1830			M8-M30	
PA7-450-5-560	457.2	18	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	188	240	800	2500	119.4	330.8	4560	4560	4560	4560	4560	3560	2640			M12-M36	
PA7-450-6-560	457.2	18	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	200	280	800	2500	141.7	436.6	7300	7300	7300	7300	7300	5690	4230			M20-M48	
PA7-450-7-560	457.2	18	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	220	340	900	2500	204.6	539.4	10680	10680	10680	10680	10680	8330	6190			M24-M56	
PA7-450-8-560	457.2	18	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	250	360	900	2500	229.4	654.2	14800	14800	14800	14800	14800	11540	8580			M36-M64	
PA7-450-9-560	457.2	18	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	264	390	900	2500	299.2	823.8	19300	19300	19300	19300	19300	15050	11190			M36-M72	
PA7-450-10-560	457.2	18	86	30	26	1	140	300	450	1000	2500	399.8	970.6	26700	26700	26700	26700	26700	20830	15490			M36-M80	
PA7-450-11-560	457.2	18	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	350	500	1000	2500	472.3	1208.2	36000	36000	36000	36000	36000	28080	20880			M36-M80	
PA7-450-12-560	457.2	18	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	370	500	1000	2500	576.4	1454.1	46050	46050	46050	46050	46050	35920	26710			M36-M80	
PA7-450-2-600	457.2	18	18	8	-66	-2 <sup>9</sup> / <sub>8</sub>	30	158	190	700	2500	56.9	173.4	1060	1060	1060	1060	1060	1060	830	610			M8-M16
PA7-450-3-600	457.2	18	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	158	230	800	2500	80.5	256.6	2020	2020	2020	2020	2020	2020	2020			M8-M24	
PA7-450-4-600	457.2	18	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	260	800	2500	111.7	351.1	3160	3160	3160	3160	3160	3160	3160			M8-M30	
PA7-450-5-600	457.2	18	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	200	300	800	2500	140.3	404.2	4560	4560	4560	4560	4560	4560	4560			M12-M36	
PA7-450-6-600	457.2	18	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	220	350	800	2500	182.4	542.8	7300	7300	7300	7300	7300	7300	7300			M20-M48	
PA7-450-7-600	457.2	18	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	240	390	900	2500	253.5	704.1	10680	10680	10680	10680	10680	10680	10680			M24-M56	
PA7-450-8-600	457.2	18	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	280	420	900	2500	286.5	853.2	14800	14800	14800	14800	14800	14800	14800			M36-M64	
PA7-450-9-600	457.2	18	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	320	440	1000	2500	382.7	1012.6	19300	19300	19300	19300	19300	19300	19300			M36-M72	
PA7-450-10-600	457.2	18	86	30	26	1	140	340	450	1000	2500	497.5	1299.7	26700	26700	26700	26700	26700	26700				M36-M80	
PA7-450-11-600	457.2	18	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	400	520	1000	2500	585.6	1483.6	36000	36000	36000	36000	36000	36000				M36-M80	
PA7-450-12-600	457.2	18	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	420	590	1000	2500	704.7	1676.8</											



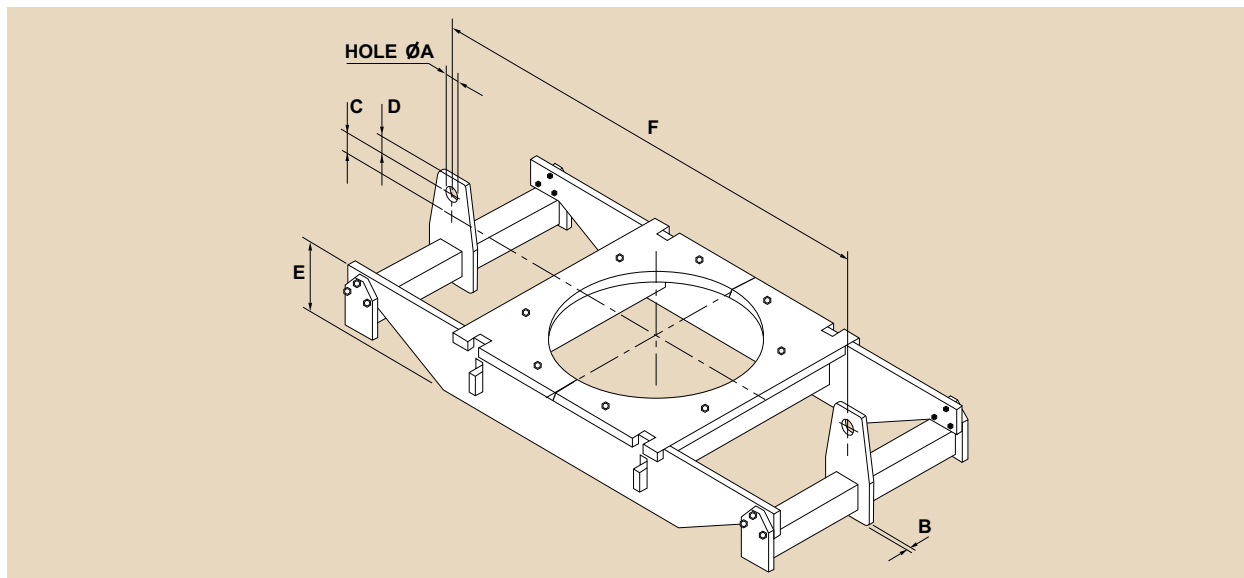
PA7 RISER CLAMP FLAT PLATE TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		D	E		F		Load Capacity (kgf) at Temperature C								Compatible with Rod Sizes			
	mm	in			mm	in		mm	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560		580	600	
PA7-500-2-400	508	20	18	8	-66	-2 <sup>9</sup> / <sub>8</sub>	30	158	158	800	2500	57.4	112.4	1060	1060								M8-M16
PA7-500-3-400	508	20	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	168	168	800	2500	62.2	159.5	2020	2020								M8-M24
PA7-500-4-400	508	20	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	200	800	2500	77.3	194.4	3160	3160								M8-M30
PA7-500-5-400	508	20	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	188	220	900	2500	104.4	274.6	4560	4560								M12-M36
PA7-500-6-400	508	20	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	208	260	900	2500	149.3	394.2	7300	7300								M20-M48
PA7-500-7-400	508	20	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	208	290	900	2500	176.0	495.8	10680	10680								M24-M56
PA7-500-8-400	508	20	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	228	340	1000	2500	244.9	589.5	14800	14800								M36-M64
PA7-500-9-400	508	20	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	264	360	1000	2500	277.2	717.3	19300	19300								M36-M72
PA7-500-10-400	508	20	86	30	26	1	140	294	400	1000	2500	367.6	919.5	26700	26700								M36-M80
PA7-500-11-400	508	20	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	330	440	1100	2500	468.6	1111.4	36000	36000								M36-M80
PA7-500-12-400	508	20	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	350	500	1100	2500	534.6	1264.1	46050	46050								M36-M80
PA7-500-13-400	508	20	86	40	-46	-1 <sup>13</sup> / <sub>16</sub>	140	396	520	1100	2500	674.5	1634.4	56250	56250								M36-M80
PA7-500-2-490	508	20	18	8	-66	-2 <sup>9</sup> / <sub>8</sub>	30	158	158	800	2500	57.4	112.4	1060	1060	1060	690	410	300	250			M8-M16
PA7-500-3-490	508	20	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	168	168	800	2500	62.2	159.5	2020	2020	2020	1310	790	570	480			M8-M24
PA7-500-4-490	508	20	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	200	800	2500	77.3	194.4	3160	3160	3160	2050	1230	880	760			M8-M30
PA7-500-5-490	508	20	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	188	220	900	2500	104.4	274.6	4560	4560	4560	2960	1780	1280	1090			M12-M36
PA7-500-6-490	508	20	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	208	260	900	2500	149.3	394.2	7300	7300	7300	4750	2850	2040	1750			M20-M48
PA7-500-7-490	508	20	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	208	290	900	2500	176.0	495.8	10680	10680	10680	6940	4170	2990	2560			M24-M56
PA7-500-8-490	508	20	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	228	340	1000	2500	244.9	589.5	14800	14800	14800	9620	5770	4140	3550			M36-M64
PA7-500-9-490	508	20	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	264	360	1000	2500	277.2	717.3	19300	19300	19300	12550	7530	5400	4630			M36-M72
PA7-500-10-490	508	20	86	30	26	1	140	294	400	1000	2500	367.6	919.5	26700	26700	26700	17360	10410	7480	6410			M36-M80
PA7-500-11-490	508	20	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	330	440	1000	2500	417.9	1111.4	36000	36000	36000	23400	14040	10080	8640			M36-M80
PA7-500-12-490	508	20	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	350	500	1100	2500	534.6	1264.1	46050	46050	46050	29930	17960	12890	11050			M36-M80
PA7-500-13-490	508	20	86	40	-46	-1 <sup>13</sup> / <sub>16</sub>	140	396	500	1100	2500	674.5	1560.6	56250	56250	56250	36560	21940	15750	13500			M36-M80
PA7-500-2-530	508	20	18	8	-66	-2 <sup>9</sup> / <sub>8</sub>	30	158	158	800	2500	57.4	113.0	1060	1060	1060	1060	640	470	380			M8-M16
PA7-500-3-530	508	20	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	168	180	800	2500	70.3	180.1	2020	2020	2020	2020	1210	890	730			M8-M24
PA7-500-4-530	508	20	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	200	800	2500	92.4	247.3	3160	3160	3160	3160	1900	1390	1140			M8-M30
PA7-500-5-530	508	20	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	188	240	900	2500	118.2	292.3	4560	4560	4560	4560	2740	2010	1640			M12-M36
PA7-500-6-530	508	20	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	208	270	900	2500	156.0	404.8	7300	7300	7300	7300	4380	3210	2630			M20-M48
PA7-500-7-530	508	20	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	208	300	900	2500	198.6	508.7	10680	10680	10680	10680	6410	4700	3840			M24-M56
PA7-500-8-530	508	20	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	230	330	1000	2500	249.3	650.5	14800	14800	14800	14800	8880	6510	5330			M36-M64
PA7-500-9-530	508	20	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	264	380	1000	2500	309.8	746.4	19300	19300	19300	19300	11580	8490	6950			M36-M72
PA7-500-10-530	508	20	86	30	26	1	140	294	420	1000	2500	390.9	952.7	26700	26700	26700	16020	11750	9610				M36-M80
PA7-500-11-530	508	20	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	340	470	1100	2500	513.8	1193.2	36000	36000	36000	36000	21600	15840	12960			M36-M80
PA7-500-12-530	508	20	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	350	470	1100	2500	592.9	1432.2	46050	46050	46050	46050	27630	20260	16580			M36-M80
PA7-500-13-530	508	20	86	40	-46	-1 <sup>13</sup> / <sub>16</sub>	140	396	520	1100	2500	691.1	1634.4	56250	56250	56250	33750	24750	20250				M36-M80
PA7-500-2-560	508	20	18	8	-66	-2 <sup>9</sup> / <sub>8</sub>	30	158	158	800	2500	57.4	147.1	1060	1060	1060	1060	1060	830	610			M8-M16
PA7-500-3-560	508	20	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	168	200	800	2500	89.8	194.2	2020	2020	2020	2020	2020	1580	1170			M8-M24
PA7-500-4-560	508	20	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	168	230	900	2500	108.8	273.6	3160	3160	3160	3160	3160	2460	1830			M8-M30
PA7-500-5-560	508	20	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	188	240	900	2500	135.6	355.6	4560	4560	4560	4560	4560	3560	2640			M12-M36
PA7-500-6-560	508	20	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	208	280	900	2500	173.6	481.0	7300	7300	7300	7300	7300	5690	4230			M20-M48
PA7-500-7-560	508	20	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	220	340	900	2500	222.8	571.1	10680	10680	10680	10680	10680	8330	6190			M24-M56
PA7-500-8-560	508	20	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	240	360	1000	2500	300.9	707.0	14800	14800	14800	14800	14800	11540	8580			M36-M64
PA7-500-9-560	508	20	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	270	380	1000	2500	338.1	835.3	19300	19300	19300	19300	19300	15050	11190			M36-M72
PA7-500-10-560	508	20	86	30	26	1	140	310	450	1100	2500	447.3	1015.5	26700	26700	26700	26700	26700	20830	15490			M36-M80
PA7-500-11-560	508	20	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	340	490	1100	2500	570.9	1230.3	36000	36000	36000	36000	36000	28080	20880			M36-M80
PA7-500-12-560	508	20	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	380	490	1100	2500	642.6	1477.0	46050	46050	46050	46050	46050	35920	26710			M36-M80
PA7-500-13-560	508	20	86	40	-46	-1 <sup>13</sup> / <sub>16</sub>	140	396	550	1100	2500	766.2	1701.7	56250	56250	56250	56250	56250	43880	32630			M36-M80
PA7-500-2-600	508	20	18	8	-66	-2 <sup>9</sup> / <sub>8</sub>	30	158	190	800	2500	69.9	181.6	1060	1060	1060	1060	1060	1060	1060			M8-M16
PA7-500-3-600	508	20	26	10	-48	-1 <sup>7</sup> / <sub>8</sub>	45	168	230	800	2500	103.5	273.4	2020	2020	2020	2020	2020	2020				M8-M24
PA7-500-4-600	508	20	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	170	250	900	2500	130.7	355.0	3160	3160	3160	3160	3160	3160				M8-M30
PA7-500-5-600	508	20	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	200	300	900	2500	159.7	431.8	4560	4560	4560	4560	4560	4560				M12-M36
PA7-500-6-600	508	20	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	220	340	900	2500	220.4	568.6	7300	7300	7300	7300	7300	7300				M20-M48
PA7-500-7-600	508	20	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	250	380	1000	2500	288.9	715.6	10680	10680	10680	10680	10680	10680				M24-M56
PA7-500-8-600	508	20	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	300	410	1000	2500	358.1	885.9	14800	14800	14800	14800	14800	14800				M36-M64
PA7-500-9-600	508	20	76	25	11	7 <sup>1</sup> / <sub>16</sub>																	

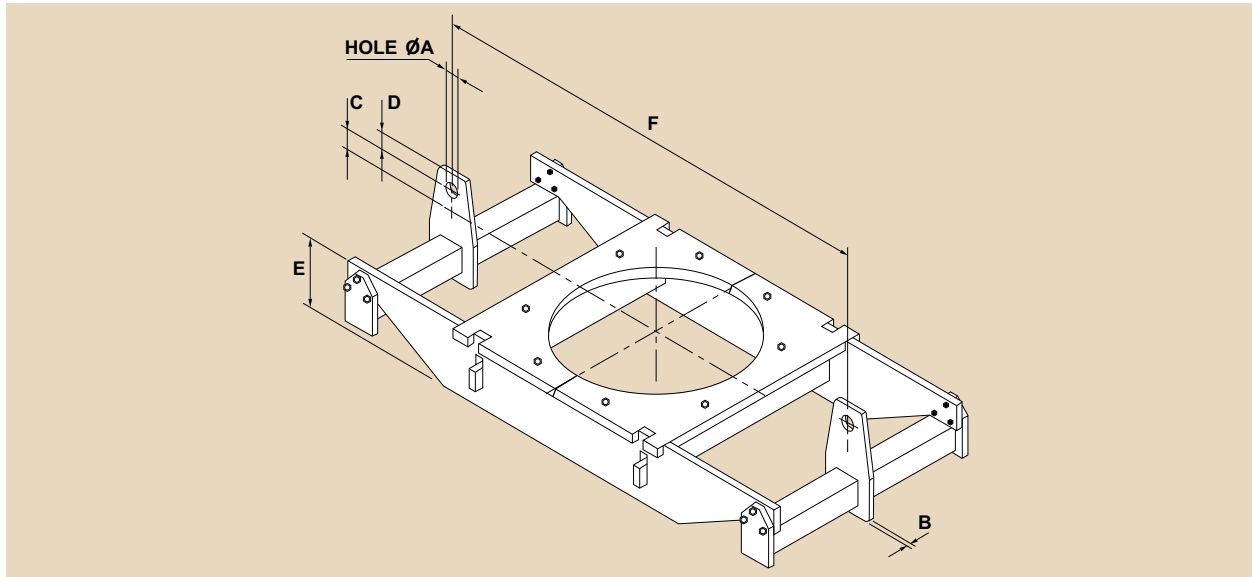
**PA7 RISER CLAMP** FLAT PLATE TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres 'F'

Part Number	Pipe O/D		A	B	C		D		E		F		Weight kgf		Load Capacity (kgf) at Temperature C									Compatible with Rod Sizes	
	mm	in			mm	in	mm	Min.	Max.	mm	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580	600		
PA7-550-3-400	558.8	22	26	10	-48	-17/8	45	168	170	900	2500	79.4	181.5	2020	2020									M8-M24	
PA7-550-4-400	558.8	22	33	10	-38	-1 1/2	55	168	190	900	2500	102.0	249.7	3160	3160									M8-M30	
PA7-550-5-400	558.8	22	39	12	-28	-1 1/8	65	188	220	900	2500	125.3	286.6	4560	4560									M12-M36	
PA7-550-6-400	558.8	22	52	16	-3	-1/8	85	208	250	1000	2500	170.2	399.0	7300	7300									M20-M48	
PA7-550-7-400	558.8	22	60	20	12	1/2	100	208	290	1000	2500	216.4	514.9	10680	10680									M24-M56	
PA7-550-8-400	558.8	22	68	25	32	7/16	115	228	330	1000	2500	264.3	598.8	14800	14800									M36-M64	
PA7-550-9-400	558.8	22	76	25	11	7/16	130	294	360	1100	2500	365.3	773.3	19300	19300									M36-M72	
PA7-550-10-400	558.8	22	86	30	26	1	140	294	400	1100	2500	409.0	951.0	26700	26700									M36-M80	
PA7-550-11-400	558.8	22	86	35	-10	-3/8	140	330	450	1100	2500	536.6	1208.1	36000	36000									M36-M80	
PA7-550-12-400	558.8	22	86	40	-10	-3/8	140	360	500	1100	2500	585.2	1339.0	46050	46050									M36-M80	
PA7-550-13-400	558.8	22	86	40	-46	-1 13/16	140	416	510	1200	2500	777.4	1697.4	56250	56250									M36-M80	
PA7-550-3-490	558.8	22	26	10	-48	-17/8	45	168	170	900	2500	79.4	181.5	2020	2020	2020	1310	790	570	480				M8-M24	
PA7-550-4-490	558.8	22	33	10	-38	-1 1/2	55	168	190	900	2500	102.0	249.7	3160	3160	3160	2050	1230	880	760				M8-M30	
PA7-550-5-490	558.8	22	39	12	-28	-1 1/8	65	188	220	900	2500	125.3	286.6	4560	4560	4560	2960	1780	1280	1090				M12-M36	
PA7-550-6-490	558.8	22	52	16	-3	-1/8	85	208	250	1000	2500	170.2	399.0	7300	7300	7300	4750	2850	2040	1750				M20-M48	
PA7-550-7-490	558.8	22	60	20	12	1/2	100	208	300	1000	2500	216.4	470.3	10680	10680	10680	6940	4170	2990	2560				M24-M56	
PA7-550-8-490	558.8	22	68	25	32	7/16	115	228	330	1000	2500	264.3	598.8	14800	14800	14800	9620	5770	4140	3550				M36-M64	
PA7-550-9-490	558.8	22	76	25	11	7/16	130	294	360	1100	2500	365.3	773.3	19300	19300	19300	12550	7530	5400	4630				M36-M72	
PA7-550-10-490	558.8	22	86	30	26	1	140	294	360	1100	2500	409.0	933.8	26700	26700	26700	17360	10410	7480	6410				M36-M80	
PA7-550-11-490	558.8	22	86	35	-10	-3/8	140	330	450	1100	2500	536.6	1086.9	36000	36000	36000	23400	14040	10080	8640				M36-M80	
PA7-550-12-490	558.8	22	86	40	-10	-3/8	140	360	490	1100	2500	585.2	1319.7	46050	46050	46050	29930	17960	12890	11050				M36-M80	
PA7-550-13-490	558.8	22	86	40	-46	-1 13/16	140	416	510	1200	2500	768.8	1697.4	56250	56250	56250	36560	21940	15750	13500				M36-M80	
PA7-550-3-530	558.8	22	26	10	-48	-17/8	45	168	180	900	2500	84.3	188.7	2020	2020	2020	2020	2020	1210	890	730				M8-M24
PA7-550-4-530	558.8	22	33	10	-38	-1 1/2	55	168	200	900	2500	107.0	258.8	3160	3160	3160	3160	1900	1390	1140				M8-M30	
PA7-550-5-530	558.8	22	39	12	-28	-1 1/8	65	188	240	900	2500	145.0	304.6	4560	4560	4560	4560	2740	2010	1640				M12-M36	
PA7-550-6-530	558.8	22	52	16	-3	-1/8	85	208	270	1000	2500	190.4	420.8	7300	7300	7300	3300	4380	3210	2630				M20-M48	
PA7-550-7-530	558.8	22	60	20	12	1/2	100	208	300	1000	2500	239.1	528.0	10680	10680	10680	10680	6410	4700	3840				M24-M56	
PA7-550-8-530	558.8	22	68	25	32	7/16	115	240	350	1000	2500	287.2	624.4	14800	14800	14800	14800	8880	6510	5330				M36-M64	
PA7-550-9-530	558.8	22	76	25	11	7/16	130	294	370	1100	2500	391.6	787.8	19300	19300	19300	19300	11580	8490	6950				M36-M72	
PA7-550-10-530	558.8	22	86	30	26	1	140	300	420	1100	2500	435.3	1000.2	26700	26700	26700	26700	16020	11750	9610				M36-M80	
PA7-550-11-530	558.8	22	86	35	-10	-3/8	140	330	460	1100	2500	544.1	1227.3	36000	36000	36000	36000	21600	15840	12960				M36-M80	
PA7-550-12-530	558.8	22	86	40	-10	-3/8	140	370	470	1200	2500	719.4	1515.5	46050	46050	46050	46050	27630	20260	16580				M36-M80	
PA7-550-13-530	558.8	22	86	40	-46	-1 13/16	140	416	520	1200	2500	786.8	1720.9	56250	56250	56250	56250	33750	24750	20250				M36-M80	
PA7-550-3-560	558.8	22	26	10	-48	-17/8	45	168	180	900	2500	104.4	227.3	2020	2020	2020	2020	2020	1580	1170				M8-M24	
PA7-550-4-560	558.8	22	33	10	-38	-1 1/2	55	168	220	900	2500	120.5	276.7	3160	3160	3160	3160	3160	2460	1830				M8-M30	
PA7-550-5-560	558.8	22	39	12	-28	-1 1/8	65	188	240	900	2500	151.8	370.7	4560	4560	4560	4560	4560	3560	2640				M12-M36	
PA7-550-6-560	558.8	22	52	16	-3	-1/8	85	208	300	1000	2500	218.4	467.8	7300	7300	7300	7300	7300	5690	4230				M20-M48	
PA7-550-7-560	558.8	22	60	20	12	1/2	100	230	330	1000	2500	252.8	580.0	10680	10680	10680	10680	10680	8330	6190				M24-M56	
PA7-550-8-560	558.8	22	68	25	32	7/16	115	250	360	1100	2500	337.6	733.3	14800	14800	14800	14800	14800	11540	8580				M36-M64	
PA7-550-9-560	558.8	22	76	25	11	7/16	130	294	380	1100	2500	403.9	912.3	19300	19300	19300	19300	19300	15050	11190				M36-M72	
PA7-550-10-560	558.8	22	86	30	26	1	140	310	440	1100	2500	504.2	1033.8	26700	26700	26700	26700	26700	20830	15490				M36-M80	
PA7-550-11-560	558.8	22	86	35	-10	-3/8	140	350	490	1100	2500	565.4	1283.0	36000	36000	36000	36000	36000	28080	20880				M36-M80	
PA7-550-12-560	558.8	22	86	40	-10	-3/8	140	400	500	1200	2500	746.3	1617.7	46050	46050	46050	46050	35920	26710					M36-M80	
PA7-550-13-560	558.8	22	86	40	-46	-1 13/16	140	416	540	1200	2500	911.1	1766.8	56250	56250	56250	56250	56250	43880	32630				M36-M80	
PA7-550-3-600	558.8	22	26	10	-48	-17/8	45	168	220	900	2500	120.4	276.5	2020	2020	2020	2020	2020	2020	2020				M8-M24	
PA7-550-4-600	558.8	22	33	10	-38	-1 1/2	55	180	250	900	2500	146.8	369.8	3160	3160	3160	3160	3160	3160	3160				M8-M30	
PA7-550-5-600	558.8	22	39	12	-28	-1 1/8	65	188	300	900	2500	192.8	449.7	4560	4560	4560	4560	4560	4560	4560				M12-M36	
PA7-550-6-600	558.8	22	52	16	-3	-1/8	85	240	340	1000	2500	268.7	590.6	7300	7300	7300	7300	7300	7300					M20-M48	
PA7-550-7-600	558.8	22	60	20	12	1/2	100	260	380	1000	2500	331.0	741.9	10680	10680	10680	10680	10680	10680					M24-M56	
PA7-550-8-600	558.8	22	68	25	32	7/16	115	280	410	1100	2500	415.2	917.0	14800	14800	14800	14800	14800	14800					M36-M64	
PA7-550-9-600	558.8	22	76	25	11	7/16	130	330	430	1100	2500	513.5	1097.3	19300	19300	19300	19300	19300	19300					M36-M72	
PA7-550-10-600	558.8	22	86	30	26	1	140	350	500	1100	2500	620.3	1265.1	26700	26700	26700	26700	26700	26700					M36-M80	
PA7-550-11-600	558.8	22	86	35	-10	-3/8	140	400	510	1200	2500	790.2	1595.7	36000	36000	36000	36000	36000	36000					M36-M80	
PA7-550-12-600	558.8	22	86	40	-10	-3/8	140	450	580	1200	2500	905.8	1833.5	46050	46050	46050	46050	46050	46050					M36-M80	
PA7-550-13-600	558.8	22	86	40	-46	-1 13/16	140	460	570	1200	2500	1051.3	2124.4	56250	56250	56250	56250								

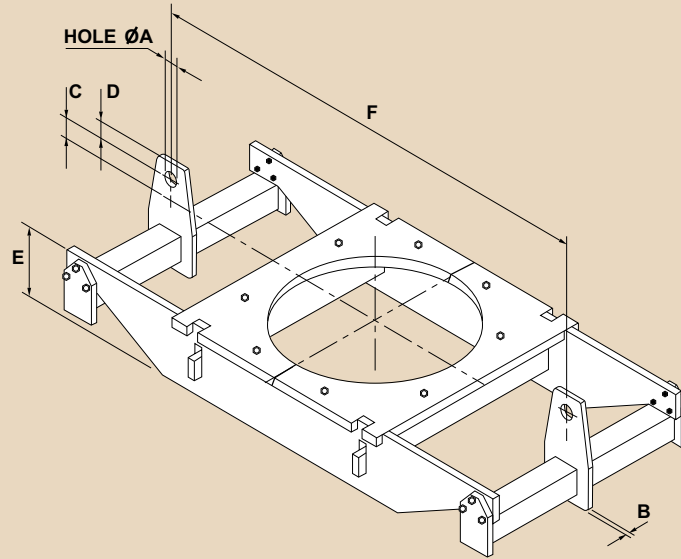
**PA7 RISER CLAMP** FLAT PLATE TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		D	E	F	Weight kgf				Load Capacity (kgf) at Temperature C							Compatible with Rod Sizes			
	mm	in			mm	in				mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490		530	560	580
PA7-600-3-400	609.6	24	26	10	-48	-17/8	45	168	168	900	2500	87.7	183.9	2020	2020									M8-M24
PA7-600-4-400	609.6	24	33	10	-38	-11/2	55	188	190	1000	2500	125.3	271.8	3160	3160									M8-M30
PA7-600-5-400	609.6	24	39	12	-28	-11/8	65	188	220	1000	2500	144.0	299.9	4560	4560									M12-M36
PA7-600-6-400	609.6	24	52	16	-3	-1/8	85	208	250	1000	2500	189.2	416.6	7300	7300									M20-M48
PA7-600-7-400	609.6	24	60	20	12	1/2	100	208	300	1100	2500	244.8	490.9	10680	10680									M24-M56
PA7-600-8-400	609.6	24	68	25	32	1 1/4	115	230	330	1100	2500	297.1	623.4	14800	14800									M36-M64
PA7-600-9-400	609.6	24	76	25	11	7/16	130	294	350	1200	2500	405.8	787.0	19300	19300									M36-M72
PA7-600-10-400	609.6	24	86	30	26	1	140	294	390	1200	2500	470.4	967.5	26700	26700									M36-M80
PA7-600-11-400	609.6	24	86	35	-10	-3/8	140	330	440	1200	2500	596.1	1235.3	36000	36000									M36-M80
PA7-600-12-400	609.6	24	86	40	-10	-3/8	140	360	490	1200	2500	645.8	1366.1	46050	46050									M36-M80
PA7-600-13-400	609.6	24	86	40	-46	-113/16	140	416	510	1200	2500	805.3	1753.5	56250	56250									M36-M80
PA7-600-3-490	609.6	24	26	10	-48	-17/8	45	168	168	900	2500	87.7	183.9	2020	2020	2020	1310	790	570	480				M8-M24
PA7-600-4-490	609.6	24	33	10	-38	-11/2	55	188	200	1000	2500	125.3	236.4	3160	3160	3160	2050	1230	880	760				M8-M30
PA7-600-5-490	609.6	24	39	12	-28	-11/8	65	188	220	1000	2500	144.0	299.9	4560	4560	4560	2960	1780	1280	1090				M12-M36
PA7-600-6-490	609.6	24	52	16	-3	-1/8	85	208	250	1000	2500	189.2	416.6	7300	7300	7300	4750	2850	2040	1750				M20-M48
PA7-600-7-490	609.6	24	60	20	12	1/2	100	208	300	1100	2500	244.8	490.9	10680	10680	10680	6940	4170	2990	2560				M24-M56
PA7-600-8-490	609.6	24	68	25	32	1 1/4	115	230	330	1100	2500	297.1	623.4	14800	14800	14800	9620	5770	4140	3550				M36-M64
PA7-600-9-490	609.6	24	76	25	11	7/16	130	294	350	1200	2500	405.8	787.0	19300	19300	19300	12550	7530	5400	4630				M36-M72
PA7-600-10-490	609.6	24	86	30	26	1	140	294	390	1200	2500	453.9	967.5	26700	26700	26700	17360	10410	7480	6410				M36-M80
PA7-600-11-490	609.6	24	86	35	-10	-3/8	140	330	440	1200	2500	596.1	1235.3	36000	36000	36000	23400	14040	10080	8640				M36-M80
PA7-600-12-490	609.6	24	86	40	-10	-3/8	140	360	490	1200	2500	645.8	1366.1	46050	46050	46050	29930	17960	12890	11050				M36-M80
PA7-600-13-490	609.6	24	86	40	-46	-113/16	140	416	500	1200	2500	805.3	1730.9	56250	56250	56250	36560	21940	15750	13500				M36-M80
PA7-600-3-530	609.6	24	26	10	-48	-17/8	45	168	180	1000	2500	97.6	198.3	2020	2020	2020	2020	1210	890	730				M8-M24
PA7-600-4-530	609.6	24	33	10	-38	-11/2	55	188	200	1000	2500	128.0	281.1	3160	3160	3160	3160	1900	1390	1140				M8-M30
PA7-600-5-530	609.6	24	39	12	-28	-11/8	65	188	240	1000	2500	166.6	333.9	4560	4560	4560	4560	2740	2010	1640				M12-M36
PA7-600-6-530	609.6	24	52	16	-3	-1/8	85	208	270	1000	2500	211.9	455.1	7300	7300	7300	7300	4380	3210	2630				M20-M48
PA7-600-7-530	609.6	24	60	20	12	1/2	100	210	300	1100	2500	270.7	565.8	10680	10680	10680	10680	6410	4700	3840				M24-M56
PA7-600-8-530	609.6	24	68	25	32	1 1/4	115	250	350	1100	2500	323.2	665.8	14800	14800	14800	14800	8880	6510	5330				M36-M64
PA7-600-9-530	609.6	24	76	25	11	7/16	130	294	370	1200	2500	435.5	834.2	19300	19300	19300	19300	11580	8490	6950				M36-M72
PA7-600-10-530	609.6	24	86	30	26	1	140	294	410	1200	2500	505.6	1019.6	26700	26700	26700	26700	16020	11750	9610				M36-M80
PA7-600-11-530	609.6	24	86	35	-10	-3/8	140	330	450	1200	2500	603.5	1253.8	36000	36000	36000	36000	21600	15840	12960				M36-M80
PA7-600-12-530	609.6	24	86	40	-10	-3/8	140	360	460	1200	2500	756.0	1542.3	46050	46050	46050	27630	20260	16580					M36-M80
PA7-600-13-530	609.6	24	86	40	-46	-113/16	140	416	510	1200	2500	823.6	1753.5	56250	56250	56250	56250	33750	24750	20250				M36-M80
PA7-600-3-560	609.6	24	26	10	-48	-17/8	45	168	200	1000	2500	117.9	227.9	2020	2020	2020	2020	2020	1580	1170				M8-M24
PA7-600-4-560	609.6	24	33	10	-38	-11/2	55	188	220	1000	2500	143.4	299.3	3160	3160	3160	3160	3160	2460	1830				M8-M30
PA7-600-5-560	609.6	24	39	12	-28	-11/8	65	188	240	1000	2500	170.2	387.4	4560	4560	4560	4560	4560	3560	2640				M12-M36
PA7-600-6-560	609.6	24	52	16	-3	-1/8	85	208	300	1000	2500	236.7	488.4	7300	7300	7300	7300	7300	5690	4230				M20-M48
PA7-600-7-560	609.6	24	60	20	12	1/2	100	240	330	1100	2500	301.8	604.2	10680	10680	10680	10680	6480	4830	3930				M24-M56
PA7-600-8-560	609.6	24	68	25	32	1 1/4	115	250	350	1100	2500	379.3	746.5	14800	14800	14800	14800	14800	11540	8580				M36-M64
PA7-600-9-560	609.6	24	76	25	11	7/16	130	300	400	1200	2500	472.1	879.7	19300	19300	19300	19300	19300	15050	11190				M36-M72
PA7-600-10-560	609.6	24	86	30	26	1	140	320	440	1200	2500	562.1	1071.0	26700	26700	26700	26700	20830	15490					M36-M80
PA7-600-11-560	609.6	24	86	35	-10	-3/8	140	340	480	1200	2500	673.7	1311.0	36000	36000	36000	36000	36000	28080	20880				M36-M80
PA7-600-12-560	609.6	24	86	40	-10	-3/8	140	380	490	1200	2500	774.1	1649.5	46050	46050	46050	46050	46050	35920	26710				M36-M80
PA7-600-13-560	609.6	24	86	40	-46	-113/16	140	420	540	1300	2500	997.8	1823.8	56250	56250	56250	56250	56250	43880	32630				M36-M80
PA7-600-3-600	609.6	24	26	10	-48	-17/8	45	168	220	1000	2500	135.1	289.4	2020	2020	2020	2020	2020	2020	2020				M8-M24
PA7-600-4-600	609.6	24	33	10	-38	-11/2	55	188	250	1000	2500	173.4	397.5	3160	3160	3160	3160	3160	3160	3160				M8-M30
PA7-600-5-600	609.6	24	39	12	-28	-11/8	65	190	290	1000	2500	220.1	458.4	4560	4560	4560	4560	4560	4560					M12-M36
PA7-600-6-600	609.6	24	52	16	-3	-1/8	85	250	340	1000	2500	296.8	615.0	7300	7300	7300	7300	7300	7300					M20-M48
PA7-600-7-600	609.6	24	60	20	12	1/2	100	270	370	1100	2500	373.3	755.2	10680	10680	10680	10680	10680	10680					M24-M56
PA7-600-8-600	609.6	24	68	25	32	1 1/4	115	280																

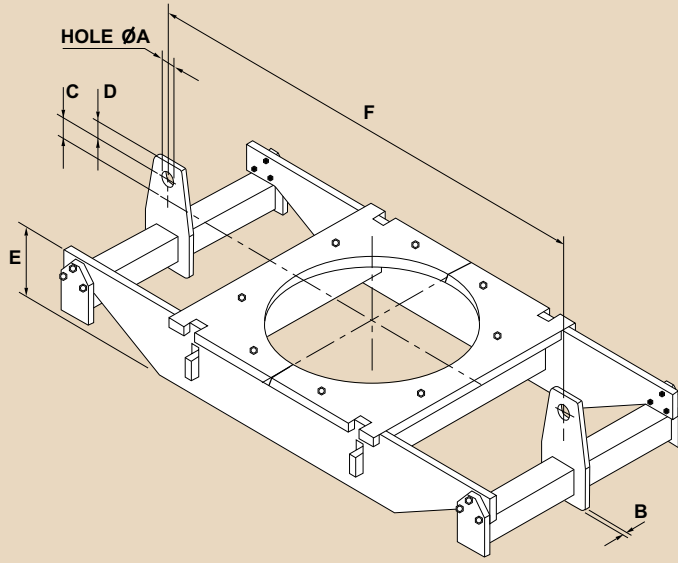
## PA7 RISER CLAMP FLAT PLATE TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		D	E		F		Weight kg		Load Capacity (kg) at Temperature C								Compatible with Rod Sizes	
	mm	in			mm	in		mm	in	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580		600
PA7-650-3-400	660.4	26	26	10	-48	-17/8	45	168	180	1000	3000	98.0	229.1	2020	2020								M8-M24
PA7-650-4-400	660.4	26	33	10	-38	-11/2	55	188	200	1000	3000	137.0	323.7	3160	3160								M8-M30
PA7-650-5-400	660.4	26	39	12	-28	-11/8	65	188	240	1100	3000	159.2	367.0	4560	4560								M12-M36
PA7-650-6-400	660.4	26	52	16	-3	-1/8	85	208	280	1100	3000	208.7	517.3	7300	7300								M20-M48
PA7-650-7-400	660.4	26	60	20	12	1/2	100	228	310	1100	3000	281.5	663.3	10680	10680								M24-M56
PA7-650-8-400	660.4	26	68	25	32	1 1/4	115	240	340	1200	3000	331.3	821.4	14800	14800								M36-M64
PA7-650-9-400	660.4	26	76	25	11	7/16	130	294	390	1200	3000	425.3	969.4	19300	19300								M36-M72
PA7-650-10-400	660.4	26	86	30	26	1	140	300	440	1200	3000	519.1	1236.5	26700	26700								M36-M80
PA7-650-11-400	660.4	26	86	35	-10	-3/8	140	330	490	1200	3000	635.6	1520.3	36000	36000								M36-M80
PA7-650-12-400	660.4	26	86	40	-10	-3/8	140	380	510	1300	3000	846.3	1968.4	46050	46050								M36-M80
PA7-650-13-400	660.4	26	86	40	-46	-113/16	140	416	550	1300	3000	880.2	2097.9	56250	56250								M36-M80
PA7-650-3-490	660.4	26	26	10	-48	-17/8	45	168	180	1000	3000	98.0	229.1	2020	2020	2020	1310	790	570	480			M8-M24
PA7-650-4-490	660.4	26	33	10	-38	-11/2	55	188	200	1000	3000	137.0	323.7	3160	3160	3160	2050	1230	880	760			M8-M30
PA7-650-5-490	660.4	26	39	12	-28	-11/8	65	188	240	1100	3000	159.2	367.0	4560	4560	4560	2960	1780	1280	1090			M12-M36
PA7-650-6-490	660.4	26	52	16	-3	-1/8	85	208	270	1100	3000	208.7	504.2	7300	7300	7300	4750	2850	2040	1750			M20-M48
PA7-650-7-490	660.4	26	60	20	12	1/2	100	228	310	1100	3000	281.5	663.3	10680	10680	10680	6940	4170	2990	2560			M24-M56
PA7-650-8-490	660.4	26	68	25	32	1 1/4	115	230	340	1200	3000	325.6	821.4	14800	14800	14800	9620	5770	4140	3550			M36-M64
PA7-650-9-490	660.4	26	76	25	11	7/16	130	294	390	1200	3000	425.3	969.4	19300	19300	19300	12550	7530	5400	4630			M36-M72
PA7-650-10-490	660.4	26	86	30	26	1	140	300	430	1200	3000	519.1	1216.3	26700	26700	26700	17360	10410	7480	6410			M36-M80
PA7-650-11-490	660.4	26	86	35	-10	-3/8	140	330	480	1200	3000	635.6	1498.7	36000	36000	36000	23400	14040	10080	8640			M36-M80
PA7-650-12-490	660.4	26	86	40	-10	-3/8	140	380	490	1300	3000	787.4	1870.6	46050	46050	46050	29930	17960	12890	11050			M36-M80
PA7-650-13-490	660.4	26	86	40	-46	-113/16	140	416	550	1300	3000	880.2	2097.9	56250	56250	56250	36560	21940	15750	13500			M36-M80
PA7-650-3-530	660.4	26	26	10	-48	-17/8	45	168	190	1000	3000	106.4	237.4	2020	2020	2020	1210	890	730				M8-M24
PA7-650-4-530	660.4	26	33	10	-38	-11/2	55	188	220	1100	3000	154.4	345.1	3160	3160	3160	1900	1390	1140				M8-M30
PA7-650-5-530	660.4	26	39	12	-28	-11/8	65	188	240	1100	3000	184.9	446.6	4560	4560	4560	2740	2010	1640				M12-M36
PA7-650-6-530	660.4	26	52	16	-3	-1/8	85	208	300	1100	3000	234.5	562.1	7300	7300	7300	4380	3210	2630				M20-M48
PA7-650-7-530	660.4	26	60	20	12	1/2	100	228	330	1100	3000	310.2	712.7	10680	10680	10680	6410	4700	3840				M24-M56
PA7-650-8-530	660.4	26	68	25	32	1 1/4	115	230	360	1200	3000	383.7	875.9	14800	14800	14800	14800	8880	6510	5330			M36-M64
PA7-650-9-530	660.4	26	76	25	11	7/16	130	294	390	1200	3000	464.2	1100.3	19300	19300	19300	13000	11580	8490	6950			M36-M72
PA7-650-10-530	660.4	26	86	30	26	1	140	294	450	1200	3000	548.6	1255.9	26700	26700	26700	26700	16020	11750	9610			M36-M80
PA7-650-11-530	660.4	26	86	35	-10	-3/8	140	340	500	1200	3000	651.4	1542.9	36000	36000	36000	36000	21600	15840	12960			M36-M80
PA7-650-12-530	660.4	26	86	40	-10	-3/8	140	380	520	1300	3000	855.7	1996.0	46050	46050	46050	27630	20260	16580				M36-M80
PA7-650-13-530	660.4	26	86	40	-46	-113/16	140	416	560	1300	3000	967.3	2125.5	56250	56250	56250	56250	33750	24750	20250			M36-M80
PA7-650-3-560	660.4	26	26	10	-48	-17/8	45	168	200	1000	3000	129.3	313.7	2020	2020	2020	2020	2020	1580	1170			M8-M24
PA7-650-4-560	660.4	26	33	10	-38	-11/2	55	188	240	1100	3000	184.2	366.4	3160	3160	3160	3160	3160	2460	1830			M8-M30
PA7-650-5-560	660.4	26	39	12	-28	-11/8	65	188	260	1100	3000	192.9	472.3	4560	4560	4560	4560	4560	3560	2640			M12-M36
PA7-650-6-560	660.4	26	52	16	-3	-1/8	85	208	300	1100	3000	266.2	630.5	7300	7300	7300	7300	7300	5690	4230			M20-M48
PA7-650-7-560	660.4	26	60	20	12	1/2	100	250	330	1100	3000	343.8	799.9	10680	10680	10680	10680	10680	8330	6190			M24-M56
PA7-650-8-560	660.4	26	68	25	32	1 1/4	115	260	390	1200	3000	422.8	927.8	14800	14800	14800	14800	14800	11540	8580			M36-M64
PA7-650-9-560	660.4	26	76	25	11	7/16	130	300	410	1200	3000	503.6	1139.9	19300	19300	19300	19300	19300	15050	11190			M36-M72
PA7-650-10-560	660.4	26	86	30	26	1	140	330	460	1200	3000	618.1	1425.3	26700	26700	26700	26700	26700	20830	15490			M36-M80
PA7-650-11-560	660.4	26	86	35	-10	-3/8	140	360	480	1300	3000	789.4	1764.1	36000	36000	36000	36000	36000	28080	20880			M36-M80
PA7-650-12-560	660.4	26	86	40	-10	-3/8	140	400	540	1300	3000	885.5	2050.0	46050	46050	46050	46050	46050	35920	26710			M36-M80
PA7-650-13-560	660.4	26	86	40	-46	-113/16	140	416	600	1300	3000	1041.0	2277.3	56250	56250	56250	56250	56250	43880	32630			M36-M80
PA7-650-3-600	660.4	26	26	10	-48	-17/8	45	168	240	1000	3000	171.8	356.1	2020	2020	2020	2020	2020	2020	2020			M8-M24
PA7-650-4-600	660.4	26	33	10	-38	-11/2	55	200	270	1100	3000	217.9	484.3	3160	3160	3160	3160	3160	3160	3160			M8-M30
PA7-650-5-600	660.4	26	39	12	-28	-11/8	65	200	300	1100	3000	248.8	610.5	4560	4560	4560	4560	4560	4560	4560			M12-M36
PA7-650-6-600	660.4	26	52	16	-3	-1/8	85	230	340	1100	3000	354.8	797.7	7300	7300	7300	7300	7300	7300	7300			M20-M48
PA7-650-7-600	660.4	26	60	20	12	1/2	100	280	380	1200	3000	432.3	1010.4	10680	10680	10680	10680	10680	10680	10680			M24-M56
PA7-650-8-600	660.4	26	68	25	32	1 1/4	115	290	440	1200	3000	497.2	1173.7	14800	14800	14800	14800	14800	14800	14800			M36-M64
PA7-650-9-600	660.4	26	76	25	11	7/16	130	340	470	1200	3000	610.7	1430.8	19300	19300	19300	19300	19300	19300	19300			M36-M72
PA7-650-10-600	660.4	26	86	30	26	1	140	380	480	1300	3000	781.4	1730.8	26700	26700	26700	26700	26700	26700	26700			M36-M80
PA7-650-11-600	660.4	26	86	35	-10	-3/8	140	410	560	1300	3000	960.8	2021.2	36000	36000	36000	36000	36000	36000	36000			M36-M80
PA7-650-12-600	660.4	26	86	40	-10	-3/8	140	430	560	1300	3000	1147.5	2436.3	46050	46050	46050	46050	46050	46050	46050			M36-M80
PA7-650-13-600	660.4	26	86	40	-46	-113/16	140	460	560	1300	3000	1201.8	2773.3	56250	56250	56250	56250	56250	56250	56250			M36-M80

PA7 RISER CLAMP FLAT PLATE TYPE

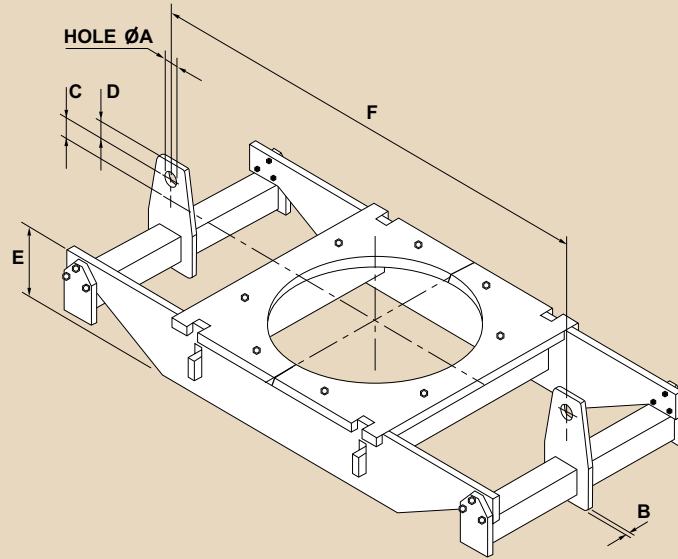


Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		D	E		F		Weight kgf		Load Capacity (kgf) at Temperature C						Compatible with Rod Sizes		
	mm	in			mm	in		mm	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560		580	600
PA7-700-3-400	711.2	28	26	10	-48	-1 <sup>13</sup> / <sub>16</sub>	45	168	180	1100	3000	117.8	239.3	2020	2020						M8-M24	
PA7-700-4-400	711.2	28	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	188	200	1100	3000	154.6	337.7	3160	3160						M8-M30	
PA7-700-5-400	711.2	28	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	188	240	1100	3000	176.0	381.4	4560	4560						M12-M36	
PA7-700-6-400	711.2	28	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	208	270	1100	3000	253.6	523.1	7300	7300						M20-M48	
PA7-700-7-400	711.2	28	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	228	310	1200	3000	334.0	686.3	10680	10680						M24-M56	
PA7-700-8-400	711.2	28	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	258	340	1200	3000	403.5	878.5	14800	14800						M36-M64	
PA7-700-9-400	711.2	28	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	294	390	1300	3000	497.4	1001.1	19300	19300						M36-M72	
PA7-700-10-400	711.2	28	86	30	26	1	140	294	430	1300	3000	587.0	1256.1	26700	26700						M36-M80	
PA7-700-11-400	711.2	28	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	360	480	1300	3000	720.0	1579.5	36000	36000						M36-M80	
PA7-700-12-400	711.2	28	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	380	500	1400	3000	922.9	2000.8	46050	46050						M36-M80	
PA7-700-13-400	711.2	28	86	40	-46	-1 <sup>13</sup> / <sub>16</sub>	140	416	550	1400	3000	986.9	2176.9	56250	56250						M36-M80	
PA7-700-3-490	711.2	28	26	10	-48	-1 <sup>13</sup> / <sub>16</sub>	45	168	180	1100	3000	114.6	239.3	2020	2020	2020	1310	790	570	480	M8-M24	
PA7-700-4-490	711.2	28	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	188	200	1100	3000	154.6	337.7	3160	3160	3160	2050	1230	880	760	M8-M30	
PA7-700-5-490	711.2	28	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	188	240	1100	3000	176.0	381.4	4560	4560	4560	2960	1780	1280	1090	M12-M36	
PA7-700-6-490	711.2	28	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	208	270	1100	3000	229.1	523.1	7300	7300	7300	4750	2850	2040	1750	M20-M48	
PA7-700-7-490	711.2	28	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	228	300	1200	3000	307.8	671.3	10680	10680	10680	6940	4170	2990	2560	M24-M56	
PA7-700-8-490	711.2	28	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	258	340	1200	3000	403.5	878.5	14800	14800	14800	9620	5770	4140	3550	M36-M64	
PA7-700-9-490	711.2	28	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	294	380	1300	3000	468.3	983.8	19300	19300	19300	12550	7530	5400	4630	M36-M72	
PA7-700-10-490	711.2	28	86	30	26	1	140	300	430	1300	3000	564.1	1256.1	26700	26700	26700	17360	10410	7480	6410	M36-M80	
PA7-700-11-490	711.2	28	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	360	470	1300	3000	720.0	1556.5	36000	36000	36000	23400	14040	10080	8640	M36-M80	
PA7-700-12-490	711.2	28	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	380	500	1400	3000	912.9	2000.8	46050	46050	46050	29930	17960	12890	11050	M36-M80	
PA7-700-13-490	711.2	28	86	40	-46	-1 <sup>13</sup> / <sub>16</sub>	140	416	540	1400	3000	976.1	2150.3	56250	56250	56250	36560	21940	15750	13500	M36-M80	
PA7-700-3-530	711.2	28	26	10	-48	-1 <sup>13</sup> / <sub>16</sub>	45	168	190	1100	3000	120.7	247.7	2020	2020	2020	2020	2020	1210	890	730	M8-M24
PA7-700-4-530	711.2	28	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	188	220	1100	3000	171.4	359.3	3160	3160	3160	3160	1900	1390	1140	M8-M30	
PA7-700-5-530	711.2	28	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	188	240	1100	3000	204.3	464.5	4560	4560	4560	4560	2740	2010	1640	M12-M36	
PA7-700-6-530	711.2	28	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	208	300	1200	3000	281.0	584.1	7300	7300	7300	7300	4380	3210	2630	M20-M48	
PA7-700-7-530	711.2	28	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	230	330	1200	3000	345.2	738.6	10680	10680	10680	10680	6410	4700	3840	M24-M56	
PA7-700-8-530	711.2	28	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	258	360	1300	3000	451.1	936.3	14800	14800	14800	14800	8880	6510	5330	M36-M64	
PA7-700-9-530	711.2	28	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	294	380	1300	3000	511.8	1116.3	19300	19300	19300	19300	11580	8490	6950	M36-M72	
PA7-700-10-530	711.2	28	86	30	26	1	140	300	450	1300	3000	603.9	1296.1	26700	26700	26700	26700	16020	11750	9610	M36-M80	
PA7-700-11-530	711.2	28	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	360	490	1300	3000	737.2	1601.4	36000	36000	36000	36000	21600	15840	12960	M36-M80	
PA7-700-12-530	711.2	28	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	380	510	1400	3000	933.8	2027.4	46050	46050	46050	46050	27630	20260	16580	M36-M80	
PA7-700-13-530	711.2	28	86	40	-46	-1 <sup>13</sup> / <sub>16</sub>	140	416	560	1400	3000	1127.6	2204.8	56250	56250	56250	56250	33750	24750	20250	M36-M80	
PA7-700-3-560	711.2	28	26	10	-48	-1 <sup>13</sup> / <sub>16</sub>	45	168	200	1100	3000	146.5	327.3	2020	2020	2020	2020	2020	1580	1170	M8-M24	
PA7-700-4-560	711.2	28	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	188	250	1100	3000	199.8	412.2	3160	3160	3160	3160	3160	2460	1830	M8-M30	
PA7-700-5-560	711.2	28	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	190	260	1100	3000	212.6	490.4	4560	4560	4560	4560	4560	3560	2640	M12-M36	
PA7-700-6-560	711.2	28	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	210	300	1200	3000	318.2	652.9	7300	7300	7300	7300	7300	5690	4230	M20-M48	
PA7-700-7-560	711.2	28	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	230	330	1200	3000	406.9	827.2	10680	10680	10680	10680	10680	8330	6190	M24-M56	
PA7-700-8-560	711.2	28	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	270	390	1300	3000	494.0	1011.5	14800	14800	14800	14800	14800	11540	8580	M36-M64	
PA7-700-9-560	711.2	28	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	294	410	1300	3000	570.7	1175.9	19300	19300	19300	19300	19300	15050	11190	M36-M72	
PA7-700-10-560	711.2	28	86	30	26	1	140	340	460	1300	3000	680.9	1472.9	26700	26700	26700	26700	26700	20830	15490	M36-M80	
PA7-700-11-560	711.2	28	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	360	470	1300	3000	864.3	1827.6	36000	36000	36000	36000	36000	28080	20880	M36-M80	
PA7-700-12-560	711.2	28	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	380	540	1400	3000	1022.0	2109.9	46050	46050	46050	46050	46050	35920	26710	M36-M80	
PA7-700-13-560	711.2	28	86	40	-46	-1 <sup>13</sup> / <sub>16</sub>	140	430	590	1400	3000	1162.5	2335.4	56250	56250	56250	56250	56250	43880	32630	M36-M80	
PA7-700-3-600	711.2	28	26	10	-48	-1 <sup>13</sup> / <sub>16</sub>	45	168	250	1100	3000	190.9	401.6	2020	2020	2020	2020	2020	2020	2020	M8-M24	
PA7-700-4-600	711.2	28	33	10	-38	-1 <sup>1</sup> / <sub>2</sub>	55	200	270	1100	3000	236.4	502.5	3160	3160	3160	3160	3160	3160	3160	M8-M30	
PA7-700-5-600	711.2	28	39	12	-28	-1 <sup>1</sup> / <sub>8</sub>	65	210	290	1100	3000	293.9	616.8	4560	4560	4560	4560	4560	4560	4560	M12-M36	
PA7-700-6-600	711.2	28	52	16	-3	-1 <sup>1</sup> / <sub>8</sub>	85	240	340	1200	3000	396.4	824.8	7300	7300	7300	7300	7300	7300	7300	M20-M48	
PA7-700-7-600	711.2	28	60	20	12	1 <sup>1</sup> / <sub>2</sub>	100	280	380	1200	3000	462.5	1066.0	10680	10680	10680	10680	10680	10680	10680	M24-M56	
PA7-700-8-600	711.2	28	68	25	32	1 <sup>1</sup> / <sub>4</sub>	115	320	440	1300	3000	637.4	1246.2	14800	14800	14800	14800	14800	14800	14800	M36-M64	
PA7-700-9-600	711.2	28	76	25	11	7 <sup>1</sup> / <sub>16</sub>	130	350	470	1300	3000	672.7	1478.0	19300	19300	19300	19300	19300	19300	19300	M36-M72	
PA7-700-10-600	711.2	28	86	30	26	1	140	380	480	1300	3000	830.1	1782.2	26700	26700	26700	26700	26700	26700	26700	M36-M80	
PA7-700-11-600	711.2	28	86	35	-10	-3 <sup>3</sup> / <sub>8</sub>	140	420	550	1400	3000	1081.5	2094.1	36000	36000	36000	36000	36000	36000	36000	M36-M80	
PA7-700-12-600	711.2	28	86	40	-10	-3 <sup>3</sup> / <sub>8</sub>	140	440	560	1400	3000	1251.7	2504.3	46050	46050	46050	46050	46050	46050	46050	M36-M80	
PA7-700-13-600	711.2	28	86	40	-46	-1 <sup>13</sup> / <sub>16</sub>	140	490	550	1400	3000	1399.2	2827.2	56250	56250	56250	56250	56250	56250	56250	M36-M80	



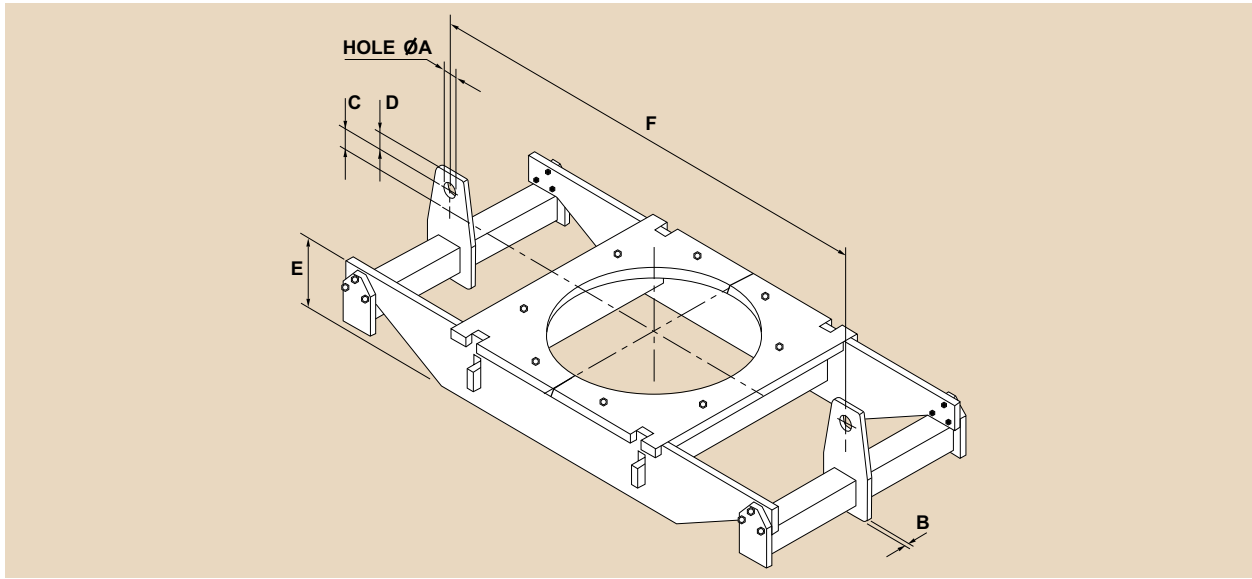
# PA7 RISER CLAMP FLAT PLATE TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres 'F'

Part Number	Pipe O/D		A	B	C		D	E		F		Weight kg		Load Capacity (kg) at Temperature C								Compatible with Rod Sizes								
	mm	in			mm	mm		mm	in	mm	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560		580	600						
PA7-750-4-400	762	30	33	10	-38	-1 1/2	55	188	200	1200	3000	170.9	353.0	3160	3160														M8-M30	
PA7-750-5-400	762	30	39	12	-28	-1 1/8	65	208	230	1200	3000	236.6	403.1	4560	4560														M12-M36	
PA7-750-6-400	762	30	52	16	-3	-1/8	85	208	280	1200	3000	279.3	581.7	7300	7300														M20-M48	
PA7-750-7-400	762	30	60	20	12	1/2	100	228	310	1300	3000	371.6	736.1	10680	10680														M24-M56	
PA7-750-8-400	762	30	68	25	32	1 1/4	115	258	340	1300	3000	473.6	934.0	14800	14800														M36-M64	
PA7-750-9-400	762	30	76	25	11	7/16	130	294	390	1300	3000	537.8	1060.5	19300	19300														M36-M72	
PA7-750-10-400	762	30	86	30	26	1	140	294	430	1400	3000	659.0	1313.8	26700	26700														M36-M80	
PA7-750-11-400	762	30	86	35	-10	-3/8	140	360	480	1400	3000	788.6	1631.7	36000	36000														M36-M80	
PA7-750-12-400	762	30	86	40	-10	-3/8	140	380	500	1400	3000	976.4	2064.5	46050	46050														M36-M80	
PA7-750-13-400	762	30	86	40	-46	-1 13/16	140	416	540	1400	3000	1042.1	2216.1	56250	56250														M36-M80	
PA7-750-4-490	762	30	33	10	-38	-1 1/2	55	188	200	1200	3000	170.9	353.0	3160	3160	3160	2050	1230	880	760									M8-M30	
PA7-750-5-490	762	30	39	12	-28	-1 1/8	65	208	230	1200	3000	208.9	403.1	4560	4560	4560	2960	1780	1280	1090									M12-M36	
PA7-750-6-490	762	30	52	16	-3	-1/8	85	208	270	1200	3000	279.3	543.6	7300	7300	7300	4750	2850	2040	1750									M20-M48	
PA7-750-7-490	762	30	60	20	12	1/2	100	228	300	1300	3000	371.6	696.4	10680	10680	10680	6940	4170	2990	2560									M24-M56	
PA7-750-8-490	762	30	68	25	32	1 1/4	115	258	340	1300	3000	473.6	934.0	14800	14800	14800	9620	5770	4140	3550									M36-M64	
PA7-750-9-490	762	30	76	25	11	7/16	130	294	380	1300	3000	537.8	1043.0	19300	19300	19300	12550	7530	5400	4630									M36-M72	
PA7-750-10-490	762	30	86	30	26	1	140	294	420	1400	3000	659.0	1294.1	26700	26700	26700	17360	10410	7480	6410									M36-M80	
PA7-750-11-490	762	30	86	35	-10	-3/8	140	360	470	1400	3000	788.6	1608.5	36000	36000	36000	23400	14040	10080	8640									M36-M80	
PA7-750-12-490	762	30	86	40	-10	-3/8	140	380	490	1400	3000	976.4	2036.3	46050	46050	46050	29930	17960	12890	11050									M36-M80	
PA7-750-13-490	762	30	86	40	-46	-1 13/16	140	416	540	1400	3000	1042.1	2216.1	56250	56250	56250	36560	21940	15750	13500									M36-M80	
PA7-750-4-530	762	30	33	10	-38	-1 1/2	55	188	210	1200	3000	188.8	363.6	3160	3160	3160	3160	1900	1390	1140									M8-M30	
PA7-750-5-530	762	30	39	12	-28	-1 1/8	65	208	230	1200	3000	204.9	489.2	4560	4560	4560	2740	2010	1640											M12-M36
PA7-750-6-530	762	30	52	16	-3	-1/8	85	208	290	1200	3000	307.9	594.6	7300	7300	7300	7300	4380	3210	2630									M20-M48	
PA7-750-7-530	762	30	60	20	12	1/2	100	230	330	1300	3000	377.4	767.1	10680	10680	10680	10680	6410	4700	3840									M24-M56	
PA7-750-8-530	762	30	68	25	32	1 1/4	115	258	350	1300	3000	488.2	951.5	14800	14800	14800	14800	8880	6510	5330									M36-M64	
PA7-750-9-530	762	30	76	25	11	7/16	130	294	400	1300	3000	545.4	1078.8	19300	19300	19300	19300	11580	8490	6950									M36-M72	
PA7-750-10-530	762	30	86	30	26	1	140	320	440	1400	3000	735.5	1334.5	26700	26700	26700	26700	16020	11750	9610									M36-M80	
PA7-750-11-530	762	30	86	35	-10	-3/8	140	360	490	1400	3000	851.4	1653.8	36000	36000	36000	36000	21600	15840	12960									M36-M80	
PA7-750-12-530	762	30	86	40	-10	-3/8	140	380	510	1400	3000	987.4	2091.3	46050	46050	46050	46050	27630	20260	16580									M36-M80	
PA7-750-13-530	762	30	86	40	-46	-1 13/16	140	416	550	1400	3000	1191.8	2443.0	56250	56250	56250	56250	33750	24750	20250									M36-M80	
PA7-750-4-560	762	30	33	10	-38	-1 1/2	55	188	240	1200	3000	220.6	420.3	3160	3160	3160	3160	3160	2460	1830										M8-M30
PA7-750-5-560	762	30	39	12	-28	-1 1/8	65	208	260	1200	3000	277.6	529.0	4560	4560	4560	4560	4560	3560	2640										M12-M36
PA7-750-6-560	762	30	52	16	-3	-1/8	85	220	290	1200	3000	348.9	661.8	7300	7300	7300	7300	4380	3210	2630										M20-M48
PA7-750-7-560	762	30	60	20	12	1/2	100	240	330	1300	3000	451.9	856.6	10680	10680	10680	10680	10680	8330	6190										M24-M56
PA7-750-8-560	762	30	68	25	32	1 1/4	115	280	390	1300	3000	535.1	1048.4	14800	14800	14800	14800	14800	11540	8580										M36-M64
PA7-750-9-560	762	30	76	25	11	7/16	130	294	410	1300	3000	616.2	1242.0	19300	19300	19300	19300	19300	15050	11190										M36-M72
PA7-750-10-560	762	30	86	30	26	1	140	340	450	1400	3000	753.6	1515.1	26700	26700	26700	26700	26700	20830	15490										M36-M80
PA7-750-11-560	762	30	86	35	-10	-3/8	140	370	470	1400	3000	944.2	1883.6	36000	36000	36000	36000	36000	28080	20880										M36-M80
PA7-750-12-560	762	30	86	40	-10	-3/8	140	380	530	1400	3000	1078.4	2146.4	46050	46050	46050	46050	35920	26710											M36-M80
PA7-750-13-560	762	30	86	40	-46	-1 13/16	140	430	590	1400	3000	1227.2	2408.9	56250	56250	56250	56250	56250	43880	32630										M36-M80
PA7-750-4-600	762	30	33	10	38	-1 1/2	55	188	270	1200	3000	283.3	522.4	3160	3160	3160	3160	3160	3160	3160										M8-M30
PA7-750-5-600	762	30	39	12	-28	-1 1/8	65	220	290	1200	3000	347.1	660.1	4560	4560	4560	4560	4560	4560	4560										M12-M36
PA7-750-6-600	762	30	52	16	-3	-1/8	85	240	340	1200	3000	425.4	879.3	7300	7300	7300	7300	7300	7300	7300										M20-M48
PA7-750-7-600	762	30	60	20	12	1/2	100	300	400	1300	3000	544.4	1032.1	10680	10680	10680	10680	10680	10680	10680										M24-M56
PA7-750-8-600	762	30	68	25	32	1 1/4	115	320	440	1300	3000	681.2	1289.4	14800	14800	14800	14800	14800	14800	14800										M36-M64
PA7-750-9-600	762	30	76	25	11	7/16	130	330	460	1400	3000	780.2	1506.4	19300	19300	19300	19300	19300	19300	19300										M36-M72
PA7-750-10-600	762	30	86	30	26	1	140	390	470	1400	3000	924.2	1824.4	26700	26700	26700	26700	26700	26700	26700										M36-M80
PA7-750-11-600	762	30	86	35	-10	-3/8	140	420	540	1400	3000	1144.3	2131.8	36000	36000	36000	36000	36000	36000	36000										M36-M80
PA7-750-12-600	762	30	86	40	-10	-3/8	140	450	550	1500	3000	1361.1	2545.7	46050	46050	46050	46050	46050	46050	46050										M36-M80
PA7-750-13-600	762	30	86	40	-46	-1 13/16	140	500	540	1500	3000	1521.1	2869.3	56250	56250	56250	56250	56250	56250	56250										M36-M80

**PA7 RISER CLAMP** FLAT PLATE TYPE

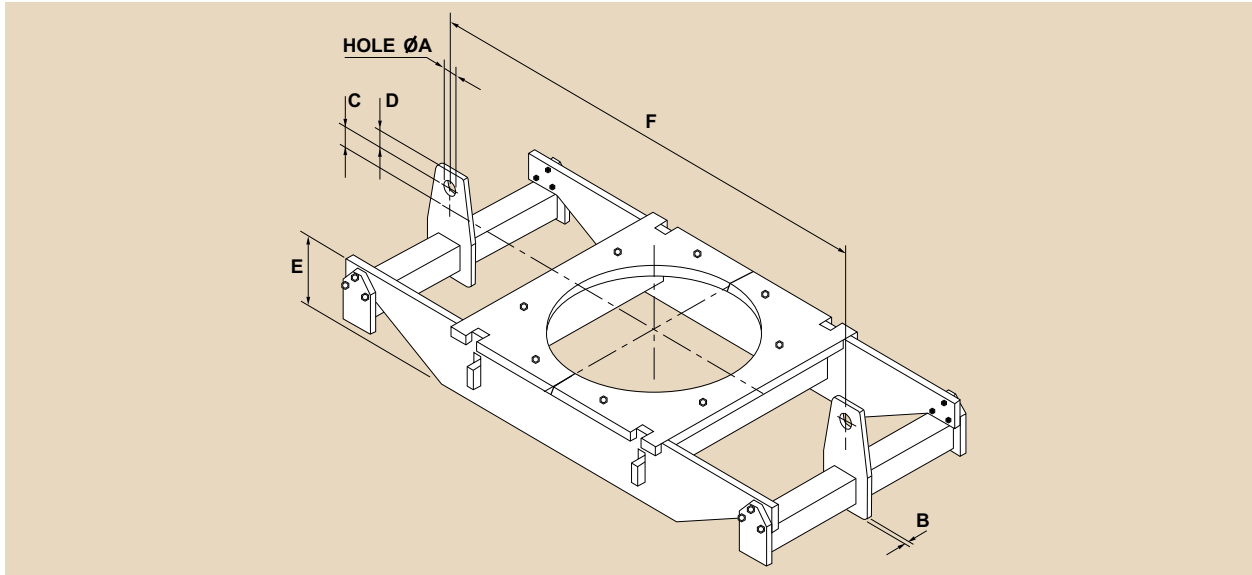


*Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres "F"*

Part Number	Pipe O/D		A	B	C		D	E	F	Weight kg		Load Capacity (kg) at Temperature C								Compatible with Rod Sizes						
	mm	in			mm	mm				in	mm	Min.	Max.	Min.	Max.	Min.	Max.	350	400		490	530	560	580	600	
PA7-800-4-400	812.8	32	33	10	-38	-1 1/2	55	188	200	1200	3000	198.8	369.0	3160	3160											M8-M30
PA7-800-5-400	812.8	32	39	12	-28	-1 1/8	65	208	240	1300	3000	259.1	458.4	4560	4560											M12-M36
PA7-800-6-400	812.8	32	52	16	-3	-1 1/8	85	208	270	1300	3000	330.6	592.9	7300	7300											M20-M48
PA7-800-7-400	812.8	32	60	20	12	1/2	100	228	310	1300	3000	398.3	765.6	10680	10680											M24-M56
PA7-800-8-400	812.8	32	68	25	32	1 1/4	115	258	340	1400	3000	521.3	969.0	14800	14800											M36-M64
PA7-800-9-400	812.8	32	76	25	11	7/16	130	294	380	1400	3000	590.6	1081.9	19300	19300											M36-M72
PA7-800-10-400	812.8	32	86	30	26	1	140	300	420	1400	3000	709.4	1340.4	26700	26700											M36-M80
PA7-800-11-400	812.8	32	86	35	-10	-3/8	140	360	470	1400	3000	845.4	1663.4	36000	36000											M36-M80
PA7-800-12-400	812.8	32	86	40	-10	-3/8	140	380	490	1500	3000	1082.7	2122.8	46050	46050											M36-M80
PA7-800-13-400	812.8	32	86	40	-46	-1 13/16	140	466	540	1600	3000	1378.4	2368.1	56250	56250											M36-M80
PA7-800-4-490	812.8	32	33	10	-38	-1 1/2	55	188	200	1200	3000	198.8	369.0	3160	3160	3160	2050	1230	880	760						M8-M30
PA7-800-5-490	812.8	32	39	12	-28	-1 1/8	65	208	240	1300	3000	259.1	458.4	4560	4560	4560	2960	1780	1280	1090						M12-M36
PA7-800-6-490	812.8	32	52	16	-3	-1 1/8	85	208	270	1300	3000	330.6	592.9	7300	7300	7300	4750	2850	2040	1750						M20-M48
PA7-800-7-490	812.8	32	60	20	12	1/2	100	228	300	1300	3000	398.3	750.4	10680	10680	10680	6940	4170	2990	2560						M24-M56
PA7-800-8-490	812.8	32	68	25	32	1 1/4	115	258	350	1400	3000	521.3	887.8	14800	14800	14800	9620	5770	4140	3550						M36-M64
PA7-800-9-490	812.8	32	76	25	11	7/16	130	294	380	1400	3000	582.5	1081.9	19300	19300	19300	12550	7530	5400	4630						M36-M72
PA7-800-10-490	812.8	32	86	30	26	1	140	300	420	1400	3000	709.4	1340.4	26700	26700	26700	17360	10410	7480	6410						M36-M80
PA7-800-11-490	812.8	32	86	35	-10	-3/8	140	360	460	1400	3000	845.4	1641.1	36000	36000	36000	23400	14040	10080	8640						M36-M80
PA7-800-12-490	812.8	32	86	40	-10	-3/8	140	380	490	1500	3000	1082.7	2122.8	46050	46050	46050	29930	17960	12890	11050						M36-M80
PA7-800-13-490	812.8	32	86	40	-46	-1 13/16	140	466	530	1600	3000	1291.5	2339.3	56250	56250	56250	36560	21940	15750	13500						M36-M80
PA7-800-4-530	812.8	32	33	10	-38	-1 1/2	55	188	210	1200	3000	203.6	379.7	3160	3160	3160	3160	1900	1390	1140						M8-M30
PA7-800-5-530	812.8	32	39	12	-28	-1 1/8	65	208	250	1300	3000	268.7	469.2	4560	4560	4560	4560	2740	2010	1640						M12-M36
PA7-800-6-530	812.8	32	52	16	-3	-1 1/8	85	208	290	1300	3000	342.6	619.5	7300	7300	7300	7300	4380	3210	2630						M20-M48
PA7-800-7-530	812.8	32	60	20	12	1/2	100	240	320	1300	3000	410.5	781.6	10680	10680	10680	10680	6410	4700	3840						M24-M56
PA7-800-8-530	812.8	32	68	25	32	1 1/4	115	258	350	1400	3000	528.8	986.7	14800	14800	14800	14800	8880	6510	5330						M36-M64
PA7-800-9-530	812.8	32	76	25	11	7/16	130	294	400	1400	3000	598.1	1118.1	19300	19300	19300	19300	11580	8490	6950						M36-M72
PA7-800-10-530	812.8	32	86	30	26	1	140	330	450	1400	3000	792.0	1461.0	26700	26700	26700	26700	16020	11750	9610						M36-M80
PA7-800-11-530	812.8	32	86	35	-10	-3/8	140	360	480	1500	3000	927.8	1686.8	36000	36000	36000	36000	21600	15840	12960						M36-M80
PA7-800-12-530	812.8	32	86	40	-10	-3/8	140	390	500	1500	3000	1093.5	2151.3	46050	46050	46050	46050	27630	20260	16580						M36-M80
PA7-800-13-530	812.8	32	86	40	-46	-1 13/16	140	466	550	1600	3000	1392.4	2458.0	56250	56250	56250	56250	33750	24750	20250						M36-M80
PA7-800-4-560	812.8	32	33	10	-38	-1 1/2	55	188	240	1200	3000	243.0	439.9	3160	3160	3160	3160	1900	1390	1140						M8-M30
PA7-800-5-560	812.8	32	39	12	-28	-1 1/8	65	208	250	1300	3000	304.4	536.8	4560	4560	4560	4560	4560	4560	4560						M12-M36
PA7-800-6-560	812.8	32	52	16	-3	-1 1/8	85	220	290	1300	3000	381.6	687.5	7300	7300	7300	7300	7300	7300	5690	4230					M20-M48
PA7-800-7-560	812.8	32	60	20	12	1/2	100	240	350	1300	3000	482.9	855.9	10680	10680	10680	10680	10680	8330	6190						M24-M56
PA7-800-8-560	812.8	32	68	25	32	1 1/4	115	280	380	1400	3000	580.3	1069.9	14800	14800	14800	14800	14800	11540	8580						M36-M64
PA7-800-9-560	812.8	32	76	25	11	7/16	130	300	400	1400	3000	677.0	1266.6	19300	19300	19300	19300	19300	15050	11190						M36-M72
PA7-800-10-560	812.8	32	86	30	26	1	140	350	450	1400	3000	810.3	1569.7	26700	26700	26700	26700	26700	20830	15490						M36-M80
PA7-800-11-560	812.8	32	86	35	-10	-3/8	140	380	460	1500	3000	1029.5	1914.2	36000	36000	36000	36000	36000	28080	20880						M36-M80
PA7-800-12-560	812.8	32	86	40	-10	-3/8	140	400	520	1500	3000	1263.5	2206.8	46050	46050	46050	46050	46050	35920	26710						M36-M80
PA7-800-13-560	812.8	32	86	40	-46	-1 13/16	140	466	580	1600	3000	1419.3	2543.1	56250	56250	56250	56250	56250	43880	32630						M36-M80
PA7-800-4-600	812.8	32	33	10	-38	-1 1/2	55	188	260	1300	3000	310.7	530.3	3160	3160	3160	3160	3160	3160	3160						M8-M30
PA7-800-5-600	812.8	32	39	12	-28	-1 1/8	65	220	290	1300	3000	379.9	685.7	4560	4560	4560	4560	4560	4560	4560						M12-M36
PA7-800-6-600	812.8	32	52	16	-3	-1 1/8	85	250	330	1300	3000	471.5	895.1	7300	7300	7300	7300	7300	7300	7300						M20-M48
PA7-800-7-600	812.8	32	60	20	12	1/2	100	270	400	1300	3000	569.1	1070.7	10680	10680	10680	10680	10680	10680	10680						M24-M56
PA7-800-8-600	812.8	32	68	25	32	1 1/4	115	330	430	1400	3000	749.3	1313.5	14800	14800	14800	14800	14800	14800	14800						M36-M64
PA7-800-9-600	812.8	32	76	25	11	7/16	130	340	460	1400	3000	838.8	1559.6	19300	19300	19300	19300	19300	19300	19300						M36-M72
PA7-800-10-600	812.8	32	86	30	26	1	140	400	460	1400	3000	991.9	1855.3	26700	26700	26700	26700	26700	26700	26700						M36-M80
PA7-800-11-600	812.8	32	86	35	-10	-3/8	140	430	540	1500	3000	1244.6	2197.8	36000	36000	36000	36000	36000	36000	36000						M36-M80
PA7-800-12-600	812.8	32	86	40	-10	-3/8	140	450	540	1500	3000	1456.7	2612.8	46050	46050	46050	46050	46050	46050	46050						M36-M80
PA7-800-13-600	812.8	32	86	40	-46	-1 13/16	140	466	600	1600	3000	1776.0	2990.4	56250	56250	56250	56250	56250	56250	56250						M36-M80



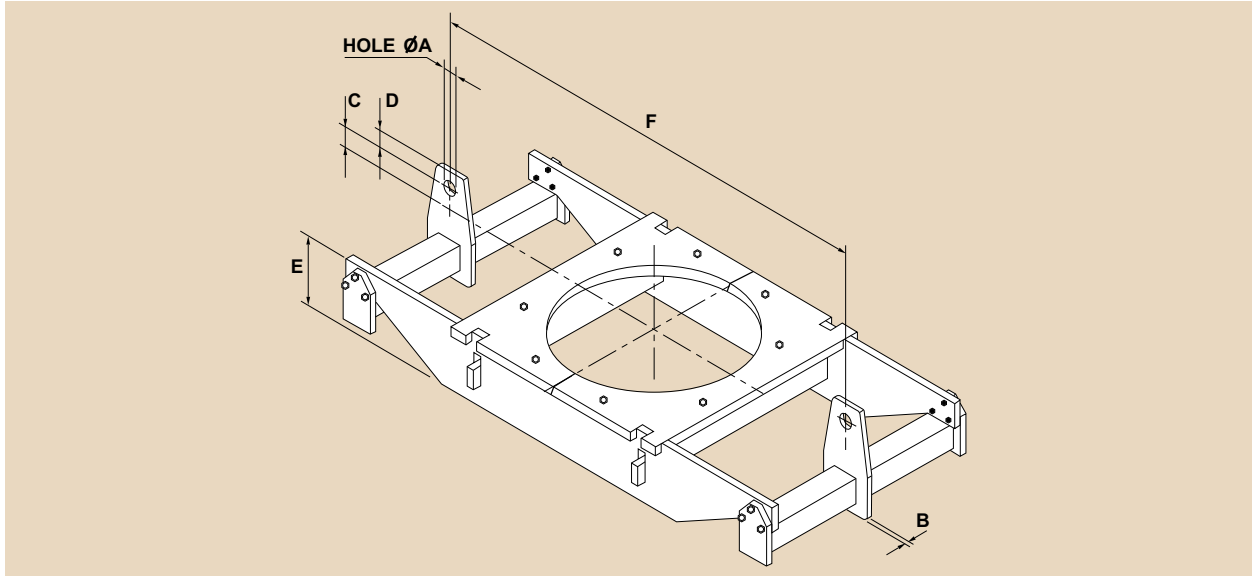
**PA7 RISER CLAMP FLAT PLATE TYPE**



Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A		B		C		D		E		F		Weight kg		Load Capacity (kg) at Temperature C							Compatible with Rod Sizes
	mm	in	mm	mm	mm	in	mm	in	mm	Min.	Max.	mm	Max.	Min.	Max.	350	400	490	530	560	580	600		
PA7-850-4-400	863.6	34	33	10	-38	-1 1/2	55	188	200	1300	3000	221.6	385.0	3160	3160								M8-M30	
PA7-850-5-400	863.6	34	39	12	-28	-1 1/8	65	208	240	1300	3000	282.4	478.5	4560	4560								M12-M36	
PA7-850-6-400	863.6	34	52	16	-3	-1/8	85	208	270	1300	3000	359.1	617.4	7300	7300								M20-M48	
PA7-850-7-400	863.6	34	60	20	12	1/2	100	230	300	1400	3000	437.6	780.0	10680	10680								M24-M56	
PA7-850-8-400	863.6	34	68	25	32	1 1/4	115	258	350	1400	3000	552.8	921.9	14800	14800								M36-M64	
PA7-850-9-400	863.6	34	76	25	11	7/16	130	294	380	1500	3000	648.9	1134.6	19300	19300								M36-M72	
PA7-850-10-400	863.6	34	86	30	26	1	140	300	420	1500	3000	763.2	1386.8	26700	26700								M36-M80	
PA7-850-11-400	863.6	34	86	35	-10	-3/8	140	380	470	1500	3000	1005.7	1751.1	36000	36000								M36-M80	
PA7-850-12-400	863.6	34	86	40	-10	-3/8	140	390	490	1500	3000	1152.3	2190.0	46050	46050								M36-M80	
PA7-850-13-400	863.6	34	86	40	-46	-1 13/16	140	466	540	1600	3000	1446.3	2506.1	56250	56250								M36-M80	
PA7-850-4-490	863.6	34	33	10	-38	-1 1/2	55	188	190	1300	3000	221.6	373.6	3160	3160	3160	2050	1230	880	760			M8-M30	
PA7-850-5-490	863.6	34	39	12	-28	-1 1/8	65	208	230	1300	3000	282.4	467.1	4560	4560	4560	2960	1780	1280	1090			M12-M36	
PA7-850-6-490	863.6	34	52	16	-3	-1/8	85	208	270	1300	3000	359.1	617.4	7300	7300	7300	4750	2850	2040	1750			M20-M48	
PA7-850-7-490	863.6	34	60	20	12	1/2	100	230	300	1400	3000	437.6	780.0	10680	10680	10680	6940	4170	2990	2560			M24-M56	
PA7-850-8-490	863.6	34	68	25	32	1 1/4	115	258	350	1400	3000	552.8	921.9	14800	14800	14800	9620	5770	4140	3550			M36-M64	
PA7-850-9-490	863.6	34	76	25	11	7/16	130	294	380	1500	3000	648.9	1134.6	19300	19300	19300	12550	7530	5400	4630			M36-M72	
PA7-850-10-490	863.6	34	86	30	26	1	140	300	420	1500	3000	763.2	1386.8	26700	26700	26700	17360	10410	7480	6410			M36-M80	
PA7-850-11-490	863.6	34	86	35	-10	-3/8	140	380	460	1500	3000	993.8	1728.5	36000	36000	36000	23400	14040	10080	8640			M36-M80	
PA7-850-12-490	863.6	34	86	40	-10	-3/8	140	380	480	1500	3000	1141.4	2162.8	46050	46050	46050	29930	17960	12890	11050			M36-M80	
PA7-850-13-490	863.6	34	86	40	-46	-1 13/16	140	466	530	1600	3000	1352.4	2047.7	56250	56250	56250	21940	15750	13500				M36-M80	
PA7-850-4-530	863.6	34	33	10	-38	-1 1/2	55	188	210	1300	3000	226.2	395.8	3160	3160	3160	1900	1390	1140				M8-M30	
PA7-850-5-530	863.6	34	39	12	-28	-1 1/8	65	208	250	1300	3000	287.5	489.4	4560	4560	4560	4560	2740	2010	1640			M12-M36	
PA7-850-6-530	863.6	34	52	16	-3	-1/8	85	208	290	1300	3000	365.5	644.2	7300	7300	7300	7300	4380	3210	2630			M20-M48	
PA7-850-7-530	863.6	34	60	20	12	1/2	100	240	320	1400	3000	444.3	811.5	10680	10680	10680	10680	6410	4700	3840			M24-M56	
PA7-850-8-530	863.6	34	68	25	32	1 1/4	115	260	350	1400	3000	568.7	1022.0	14800	14800	14800	8880	6510	5330				M36-M64	
PA7-850-9-530	863.6	34	76	25	11	7/16	130	300	400	1500	3000	665.5	1171.1	19300	19300	19300	19300	11580	8490	6950			M36-M72	
PA7-850-10-530	863.6	34	86	30	26	1	140	340	440	1500	3000	864.0	1494.5	26700	26700	26700	26700	16020	11750	9610			M36-M80	
PA7-850-11-530	863.6	34	86	35	-10	-3/8	140	380	480	1500	3000	1016.6	1774.9	36000	36000	36000	21600	15840	12960				M36-M80	
PA7-850-12-530	863.6	34	86	40	-10	-3/8	140	400	500	1500	3000	1164.2	2218.8	46050	46050	46050	46050	27630	20260	16580			M36-M80	
PA7-850-13-530	863.6	34	86	40	-46	-1 13/16	140	466	550	1600	3000	1460.5	2533.7	56250	56250	56250	56250	33750	24750	20250			M36-M80	
PA7-850-4-560	863.6	34	33	10	-38	-1 1/2	55	188	240	1300	3000	265.1	459.4	3160	3160	3160	3160	3160	2460	1830			M8-M30	
PA7-850-5-560	863.6	34	39	12	-28	-1 1/8	65	208	250	1300	3000	321.4	557.9	4560	4560	4560	4560	4560	3560	2640			M12-M36	
PA7-850-6-560	863.6	34	52	16	-3	-1/8	85	230	290	1300	3000	413.7	713.3	7300	7300	7300	7300	7300	5690	4230			M20-M48	
PA7-850-7-560	863.6	34	60	20	12	1/2	100	250	350	1400	3000	529.7	889.4	10680	10680	10680	10680	10680	8330	6190			M24-M56	
PA7-850-8-560	863.6	34	68	25	32	1 1/4	115	290	380	1400	3000	623.1	1109.1	14800	14800	14800	14800	14800	11540	8580			M36-M64	
PA7-850-9-560	863.6	34	76	25	11	7/16	130	300	400	1500	3000	742.6	1324.7	19300	19300	19300	19300	19300	15050	11190			M36-M72	
PA7-850-10-560	863.6	34	86	30	26	1	140	330	450	1500	3000	925.8	1624.4	26700	26700	26700	26700	26700	20830	15490			M36-M80	
PA7-850-11-560	863.6	34	86	35	-10	-3/8	140	390	470	1500	3000	1125.9	2106.7	36000	36000	36000	36000	36000	28080	20880			M36-M80	
PA7-850-12-560	863.6	34	86	40	-10	-3/8	140	410	520	1600	3000	1363.3	2274.9	46050	46050	46050	46050	46050	35920	26710			M36-M80	
PA7-850-13-560	863.6	34	86	40	-46	-1 13/16	140	466	570	1600	3000	1501.0	2590.5	56250	56250	56250	56250	56250	43880	32630			M36-M80	
PA7-850-4-600	863.6	34	33	10	-38	-1 1/2	55	190	270	1300	3000	338.4	594.8	3160	3160	3160	3160	3160	3160	3160			M8-M30	
PA7-850-5-600	863.6	34	39	12	-28	-1 1/8	65	230	280	1300	3000	411.9	696.3	4560	4560	4560	4560	4560	4560	4560			M12-M36	
PA7-850-6-600	863.6	34	52	16	-3	-1/8	85	260	330	1400	3000	519.0	929.1	7300	7300	7300	7300	7300	7300	7300			M20-M48	
PA7-850-7-600	863.6	34	60	20	12	1/2	100	280	400	1400	3000	625.4	1109.6	10680	10680	10680	10680	10680	10680				M24-M56	
PA7-850-8-600	863.6	34	68	25	32	1 1/4	115	340	430	1500	3000	819.7	1358.5	14800	14800	14800	14800	14800	14800				M36-M64	
PA7-850-9-600	863.6	34	76	25	11	7/16	130	350	450	1500	3000	927.4	1603.3	19300	19300	19300	19300	19300	19300				M36-M72	
PA7-850-10-600	863.6	34	86	30	26	1	140	380	470	1500	3000	1135.3	2009.7	26700	26700	26700	26700	26700	26700				M36-M80	
PA7-850-11-600	863.6	34	86	35	-10	-3/8	140	440	540	1600	3000	1379.5	2372.9	36000	36000	36000	36000	36000	36000				M36-M80	
PA7-850-12-600	863.6	34	86	40	-10	-3/8	140	460	600	1600	3000	1575.1	2568.4	46050	46050	46050	46050	46050	46050				M36-M80	
PA7-850-13-600	863.6	34	86	40	-46	-1 13/16	140	466	600	1700	3000	1925.4	3076.1	56250	56250	56250	56250	56250	56250				M36-M80	

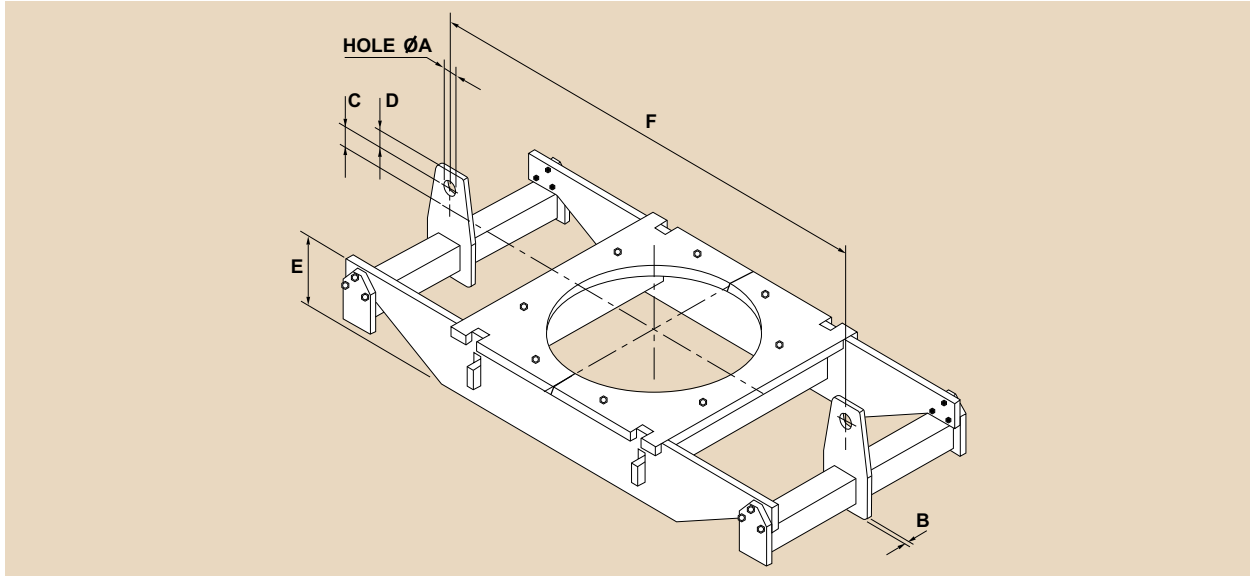
PA7 RISER CLAMP FLAT PLATE TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		D	E		F		Weight kg	Load Capacity (kg) at Temperature C						Compatible with Rod Sizes			
	mm	in			mm	in		mm	in	mm	in		mm	in	350	400	490	530		560	580	600
										Min.	Max.		Min.	Max.	Min.	Max.						
PA7-900-4-400	914.4	36	33	10	-38	-1 1/2	55	188	190	1400	3000	241.2	391.0	3160	3160						M8-M30	
PA7-900-5-400	914.4	36	39	12	-28	-1 1/8	65	208	230	1400	3000	307.1	489.1	4560	4560						M12-M36	
PA7-900-6-400	914.4	36	52	16	-3	-1/8	85	208	270	1400	3000	389.7	644.3	7300	7300						M20-M48	
PA7-900-7-400	914.4	36	60	20	12	1/2	100	240	300	1400	3000	473.8	811.5	10680	10680						M24-M56	
PA7-900-8-400	914.4	36	68	25	32	1 1/4	115	258	350	1500	3000	603.9	958.3	14800	14800						M36-M64	
PA7-900-9-400	914.4	36	76	25	11	7/16	130	294	380	1500	3000	696.4	1177.6	19300	19300						M36-M72	
PA7-900-10-400	914.4	36	86	30	26	1	140	324	420	1600	3000	849.3	1463.7	26700	26700						M36-M80	
PA7-900-11-400	914.4	36	86	35	-10	-3/8	140	380	460	1600	3000	1076.1	1787.4	36000	36000						M36-M80	
PA7-900-12-400	914.4	36	86	40	-10	-3/8	140	400	480	1600	3000	1246.8	2234.0	46050	46050						M36-M80	
PA7-900-13-400	914.4	36	86	40	-46	-1 13/16	140	466	540	1700	3000	1555.5	2586.0	56250	56250						M36-M80	
PA7-900-4-490	914.4	36	33	10	-38	-1 1/2	55	188	190	1400	3000	241.2	391.0	3160	3160	3160	2050	1230	880	760	M8-M30	
PA7-900-5-490	914.4	36	39	12	-28	-1 1/8	65	208	230	1400	3000	307.1	489.1	4560	4560	4560	2960	1780	1280	1090	M12-M36	
PA7-900-6-490	914.4	36	52	16	-3	-1/8	85	208	270	1400	3000	389.7	644.3	7300	7300	7300	4750	2850	2040	1750	M20-M48	
PA7-900-7-490	914.4	36	60	20	12	1/2	100	230	300	1400	3000	466.9	811.5	10680	10680	10680	6940	4170	2990	2560	M24-M56	
PA7-900-8-490	914.4	36	68	25	32	1 1/4	115	258	350	1500	3000	603.9	958.3	14800	14800	14800	9620	5770	4140	3550	M36-M64	
PA7-900-9-490	914.4	36	76	25	11	7/16	130	294	370	1500	3000	696.4	1158.7	19300	19300	19300	12550	7530	5400	4630	M36-M72	
PA7-900-10-490	914.4	36	86	30	26	1	140	324	410	1600	3000	849.3	1442.2	26700	26700	26700	17360	10410	7480	6410	M36-M80	
PA7-900-11-490	914.4	36	86	35	-10	-3/8	140	380	460	1600	3000	1076.1	1787.4	36000	36000	36000	23400	14040	10080	8640	M36-M80	
PA7-900-12-490	914.4	36	86	40	-10	-3/8	140	390	480	1600	3000	1234.3	2234.0	46050	46050	46050	29930	17960	12890	11050	M36-M80	
PA7-900-13-490	914.4	36	86	40	-46	-1 13/16	140	466	530	1700	3000	1555.5	2556.9	56250	56250	56250	36560	21940	15750	13500	M36-M80	
PA7-900-4-530	914.4	36	33	10	-38	-1 1/2	55	188	210	1400	3000	246.1	413.4	3160	3160	3160	1900	1390	1140		M8-M30	
PA7-900-5-530	914.4	36	39	12	-28	-1 1/8	65	208	250	1400	3000	312.5	511.6	4560	4560	4560	4560	2740	2010	1640		M12-M36
PA7-900-6-530	914.4	36	52	16	-3	-1/8	85	208	280	1400	3000	396.6	658.2	7300	7300	7300	7300	4380	3210	2630		M20-M48
PA7-900-7-530	914.4	36	60	20	12	1/2	100	250	310	1400	3000	480.1	827.0	10680	10680	10680	10680	6410	4700	3840		M24-M56
PA7-900-8-530	914.4	36	68	25	32	1 1/4	115	270	340	1500	3000	620.8	1042.3	14800	14800	14800	8880	6510	5330		M36-M64	
PA7-900-9-530	914.4	36	76	25	11	7/16	130	294	390	1500	3000	731.8	1195.5	19300	19300	19300	19300	11580	8490	6950		M36-M72
PA7-900-10-530	914.4	36	86	30	26	1	140	340	440	1600	3000	949.8	1579.3	26700	26700	26700	26700	16020	11750	9610		M36-M80
PA7-900-11-530	914.4	36	86	35	-10	-3/8	140	380	470	1600	3000	1100.2	1810.2	36000	36000	36000	36000	21600	15840	12960		M36-M80
PA7-900-12-530	914.4	36	86	40	-10	-3/8	140	380	490	1600	3000	1323.6	2261.5	46050	46050	46050	46050	27630	20260	16580		M36-M80
PA7-900-13-530	914.4	36	86	40	-46	-1 13/16	140	466	540	1700	3000	1569.3	2586.4	56250	56250	56250	56250	33750	24750	20250		M36-M80
PA7-900-4-560	914.4	36	33	10	-38	-1 1/2	55	188	230	1400	3000	294.4	469.3	3160	3160	3160	3160	3160	2460	1830		M8-M30
PA7-900-5-560	914.4	36	39	12	-28	-1 1/8	65	208	250	1400	3000	381.7	581.0	4560	4560	4560	4560	4560	3560	2640		M12-M36
PA7-900-6-560	914.4	36	52	16	-3	-1/8	85	240	290	1400	3000	456.2	775.3	7300	7300	7300	7300	7300	5690	4230		M20-M48
PA7-900-7-560	914.4	36	60	20	12	1/2	100	250	350	1500	3000	572.6	925.2	10680	10680	10680	10680	10680	8330	6190		M24-M56
PA7-900-8-560	914.4	36	68	25	32	1 1/4	115	300	370	1500	3000	680.9	1132.5	14800	14800	14800	14800	14800	11540	8580		M36-M64
PA7-900-9-560	914.4	36	76	25	11	7/16	130	310	390	1500	3000	795.4	1351.5	19300	19300	19300	19300	19300	15050	11190		M36-M72
PA7-900-10-560	914.4	36	86	30	26	1	140	340	440	1600	3000	1030.6	1688.7	26700	26700	26700	26700	26700	20830	15490		M36-M80
PA7-900-11-560	914.4	36	86	35	-10	-3/8	140	400	460	1600	3000	1219.2	2149.0	36000	36000	36000	36000	36000	28080	20880		M36-M80
PA7-900-12-560	914.4	36	86	40	-10	-3/8	140	420	510	1600	3000	1451.8	2318.1	46050	46050	46050	46050	46050	35920	26710		M36-M80
PA7-900-13-560	914.4	36	86	40	-46	-1 13/16	140	466	570	1700	3000	1645.2	2671.5	56250	56250	56250	56250	56250	43880	32630		M36-M80
PA7-900-4-600	914.4	36	33	10	-38	-1 1/2	55	190	260	1400	3000	368.4	607.8	3160	3160	3160	3160	3160	3160			M8-M30
PA7-900-5-600	914.4	36	39	12	-28	-1 1/8	65	230	280	1400	3000	447.6	723.7	4560	4560	4560	4560	4560	4560			M12-M36
PA7-900-6-600	914.4	36	52	16	-3	-1/8	85	260	350	1400	3000	552.9	904.8	7300	7300	7300	7300	7300	7300			M20-M48
PA7-900-7-600	914.4	36	60	20	12	1/2	100	290	390	1500	3000	718.9	1132.9	10680	10680	10680	10680	10680	10680			M24-M56
PA7-900-8-600	914.4	36	68	25	32	1 1/4	115	350	420	1500	3000	879.3	1386.3	14800	14800	14800	14800	14800	14800			M36-M64
PA7-900-9-600	914.4	36	76	25	11	7/16	130	350	450	1500	3000	980.6	1660.7	19300	19300	19300	19300	19300	19300			M36-M72
PA7-900-10-600	914.4	36	86	30	26	1	140	380	460	1600	3000	1245.3	2087.5	26700	26700	26700	26700	26700	26700			M36-M80
PA7-900-11-600	914.4	36	86	35	-10	-3/8	140	450	540	1600	3000	1464.3	2451.9	36000	36000	36000	36000	36000	36000			M36-M80
PA7-900-12-600	914.4	36	86	40	-10	-3/8	140	470	600	1600	3000	1671.4	2726.7	46050	46050	46050	46050	46050	46050			M36-M80
PA7-900-13-600	914.4	36	86	40	-46	-1 13/16	140	466	590	1700	3000	1990.7	3135.0	56250	56250	56250	56250	56250	56250			M36-M80

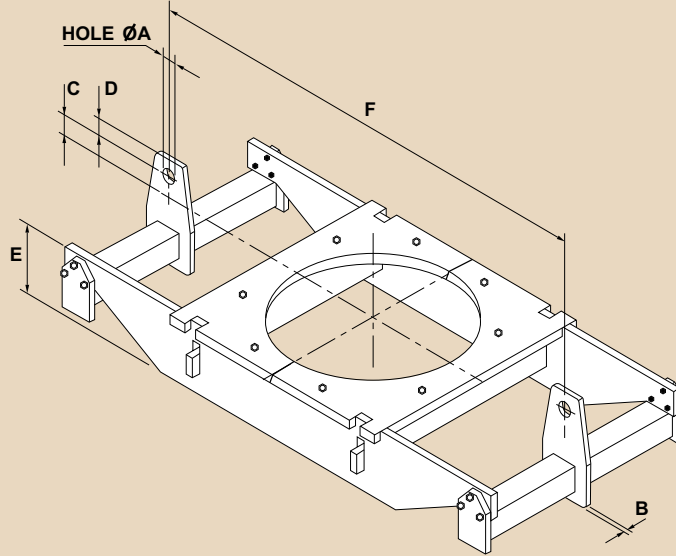
PA7 RISER CLAMP FLAT PLATE TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		D		E		F		Weight kg		Load Capacity (kg) at Temperature C							Compatible with Rod Sizes			
	mm	in			mm	in	mm	in	mm	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560	580		600		
PA7-950-4-400	965.2	38	33	10	-38	-1 1/2	55	188	190	1400	3000	258.2	409.1	3160	3160									M8-M30	
PA7-950-5-400	965.2	38	39	12	-28	-1 1/8	65	208	230	1400	3000	334.2	512.0	4560	4560									M12-M36	
PA7-950-6-400	965.2	38	52	16	-3	-1/8	85	228	260	1500	3000	443.6	675.7	7300	7300									M20-M48	
PA7-950-7-400	965.2	38	60	20	12	1/2	100	258	300	1500	3000	536.3	873.3	10680	10680									M24-M56	
PA7-950-8-400	965.2	38	68	25	32	1 1/4	115	260	350	1600	3000	658.3	996.7	14800	14800									M36-M64	
PA7-950-9-400	965.2	38	76	25	11	7/16	130	300	370	1600	3000	757.1	1202.7	19300	19300									M36-M72	
PA7-950-10-400	965.2	38	86	30	26	1	140	324	410	1600	3000	907.1	1493.8	26700	26700									M36-M80	
PA7-950-11-400	965.2	38	86	35	-10	-3/8	140	380	460	1700	3000	1160.2	1849.3	36000	36000									M36-M80	
PA7-950-12-400	965.2	38	86	40	-10	-3/8	140	380	480	1700	3000	1411.9	2308.8	46050	46050									M36-M80	
PA7-950-13-400	965.2	38	86	40	-46	-1 13/16	140	466	530	1700	3000	1646.2	2641.0	56250	56250									M36-M80	
PA7-950-4-490	965.2	38	33	10	-38	-1 1/2	55	188	190	1400	3000	258.2	409.1	3160	3160	3160	2050	1230	880	760				M8-M30	
PA7-950-5-490	965.2	38	39	12	-28	-1 1/8	65	208	230	1400	3000	328.7	512.0	4560	4560	4560	2960	1780	1280	1090				M12-M36	
PA7-950-6-490	965.2	38	52	16	-3	-1/8	85	228	260	1500	3000	443.6	675.7	7300	7300	7300	4750	2850	2040	1750				M20-M48	
PA7-950-7-490	965.2	38	60	20	12	1/2	100	258	290	1500	3000	536.3	856.6	10680	10680	10680	6940	4170	2990	2560				M24-M56	
PA7-950-8-490	965.2	38	68	25	32	1 1/4	115	260	340	1600	3000	658.3	980.9	14800	14800	14800	9620	5770	4140	3550				M36-M64	
PA7-950-9-490	965.2	38	76	25	11	7/16	130	294	370	1600	3000	747.8	1202.7	19300	19300	19300	12550	7530	5400	4630				M36-M72	
PA7-950-10-490	965.2	38	86	30	26	1	140	324	410	1600	3000	907.1	1493.8	26700	26700	26700	17360	10410	7480	6410				M36-M80	
PA7-950-11-490	965.2	38	86	35	-10	-3/8	140	380	450	1700	3000	1160.2	1825.0	36000	36000	36000	23400	14040	10080	8640				M36-M80	
PA7-950-12-490	965.2	38	86	40	-10	-3/8	140	400	470	1700	3000	1331.2	2279.4	46050	46050	46050	29930	17960	12890	11050				M36-M80	
PA7-950-13-490	965.2	38	86	40	-46	-1 13/16	140	466	530	1700	3000	1632.2	2641.0	56250	56250	56250	36560	21940	15750	13500				M36-M80	
PA7-950-4-530	965.2	38	33	10	-38	-1 1/2	55	188	200	1400	3000	263.2	420.7	3160	3160	3160	3160	1900	1390	1140				M8-M30	
PA7-950-5-530	965.2	38	39	12	-28	-1 1/8	65	208	240	1400	3000	339.3	523.7	4560	4560	4560	4560	2740	2010	1640				M12-M36	
PA7-950-6-530	965.2	38	52	16	-3	-1/8	85	228	280	1500	3000	450.3	703.2	7300	7300	7300	7300	4380	3210	2630				M20-M48	
PA7-950-7-530	965.2	38	60	20	12	1/2	100	258	310	1600	3000	588.4	889.0	10680	10680	10680	10680	6410	4700	3840				M24-M56	
PA7-950-8-530	965.2	38	68	25	32	1 1/4	115	270	340	1600	3000	666.8	1081.3	14800	14800	14800	14800	8880	6510	5330				M36-M64	
PA7-950-9-530	965.2	38	76	25	11	7/16	130	294	380	1600	3000	785.2	1221.8	19300	19300	19300	19300	11580	8490	6950				M36-M72	
PA7-950-10-530	965.2	38	86	30	26	1	140	350	430	1600	3000	1014.6	1617.5	26700	26700	26700	26700	16020	11750	9610				M36-M80	
PA7-950-11-530	965.2	38	86	35	-10	-3/8	140	380	470	1700	3000	1277.1	1872.3	36000	36000	36000	36000	21600	15840	12960				M36-M80	
PA7-950-12-530	965.2	38	86	40	-10	-3/8	140	390	480	1700	3000	1425.6	2308.8	46050	46050	46050	46050	27630	20260	16580				M36-M80	
PA7-950-13-530	965.2	38	86	40	-46	-1 13/16	140	466	540	1700	3000	1661.4	2670.7	56250	56250	56250	56250	33750	24750	20250				M36-M80	
PA7-950-4-560	965.2	38	33	10	-38	-1 1/2	55	188	230	1400	3000	315.4	491.5	3160	3160	3160	3160	1900	1390	1140				M8-M30	
PA7-950-5-560	965.2	38	39	12	-28	-1 1/8	65	208	240	1500	3000	419.7	591.7	4560	4560	4560	4560	4560	4560	4560	4560	3560	2640		M12-M36
PA7-950-6-560	965.2	38	52	16	-3	-1/8	85	240	280	1500	3000	508.8	809.7	7300	7300	7300	7300	7300	7300	7300	5690	4230		M20-M48	
PA7-950-7-560	965.2	38	60	20	12	1/2	100	260	340	1600	3000	653.6	976.3	10680	10680	10680	10680	10680	10680	10680	8330	6190		M24-M56	
PA7-950-8-560	965.2	38	68	25	32	1 1/4	115	300	370	1600	3000	732.1	1175.7	14800	14800	14800	14800	14800	14800	14800	11540	8580		M36-M64	
PA7-950-9-560	965.2	38	76	25	11	7/16	130	320	390	1600	3000	865.1	1401.9	19300	19300	19300	19300	19300	19300	19300	15050	11190		M36-M72	
PA7-950-10-560	965.2	38	86	30	26	1	140	340	430	1600	3000	1086.0	1725.5	26700	26700	26700	26700	26700	26700	26700	20830	15490		M36-M80	
PA7-950-11-560	965.2	38	86	35	-10	-3/8	140	400	500	1700	3000	1302.4	2025.3	36000	36000	36000	36000	36000	36000	36000	28080	20880		M36-M80	
PA7-950-12-560	965.2	38	86	40	-10	-3/8	140	430	500	1700	3000	1564.4	2365.9	46050	46050	46050	46050	46050	46050	46050	35920	26710		M36-M80	
PA7-950-13-560	965.2	38	86	40	-46	-1 13/16	140	466	560	1700	3000	1740.1	2728.5	56250	56250	56250	56250	56250	56250	56250	43880	32630		M36-M80	
PA7-950-4-600	965.2	38	33	10	-38	-1 1/2	55	200	260	1400	3000	400.8	635.0	3160	3160	3160	3160	1900	1390	1140				M8-M30	
PA7-950-5-600	965.2	38	39	12	-28	-1 1/8	65	240	270	1500	3000	492.0	736.1	4560	4560	4560	4560	4560	4560	4560	4560	4560	4560	4560	M12-M36
PA7-950-6-600	965.2	38	52	16	-3	-1/8	85	260	350	1500	3000	614.2	960.0	7300	7300	7300	7300	7300	7300	7300	7300	7300	7300	7300	M20-M48
PA7-950-7-600	965.2	38	60	20	12	1/2	100	290	380	1600	3000	803.5	1190.1	10680	10680	10680	10680	10680	10680	10680	10680	10680	10680	10680	M24-M56
PA7-950-8-600	965.2	38	68	25	32	1 1/4	115	350	410	1600	3000	947.0	1415.0	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	M36-M64
PA7-950-9-600	965.2	38	76	25	11	7/16	130	360	440	1600	3000	1064.4	1698.4	19300	19300	19300	19300	19300	19300	19300	19300	19300	19300	19300	M36-M72
PA7-950-10-600	965.2	38	86	30	26	1	140	390	460	1700	3000	1345.5	2160.1	26700	26700	26700	26700	26700	26700	26700	26700	26700	26700	26700	M36-M80
PA7-950-11-600	965.2	38	86	35	-10	-3/8	140	420	530	1700	3000	1595.6	2505.5	36000	36000	36000	36000	36000	36000	36000	36000	36000	36000	36000	M36-M80
PA7-950-12-600	965.2	38	86	40	-10	-3/8	140	480	590	1700	3000	1802.1	2790.9	46050	46050	46050	46050	46050	46050	46050	46050	46050	46050	46050	M36-M80
PA7-950-13-600	965.2	38	86	40	-46	-1 13/16	140	466	580	1800	3000	2112.3	3198.5	56250	56250	56250	56250	56250	56250	56250	56250	56250	56250	56250	M36-M80

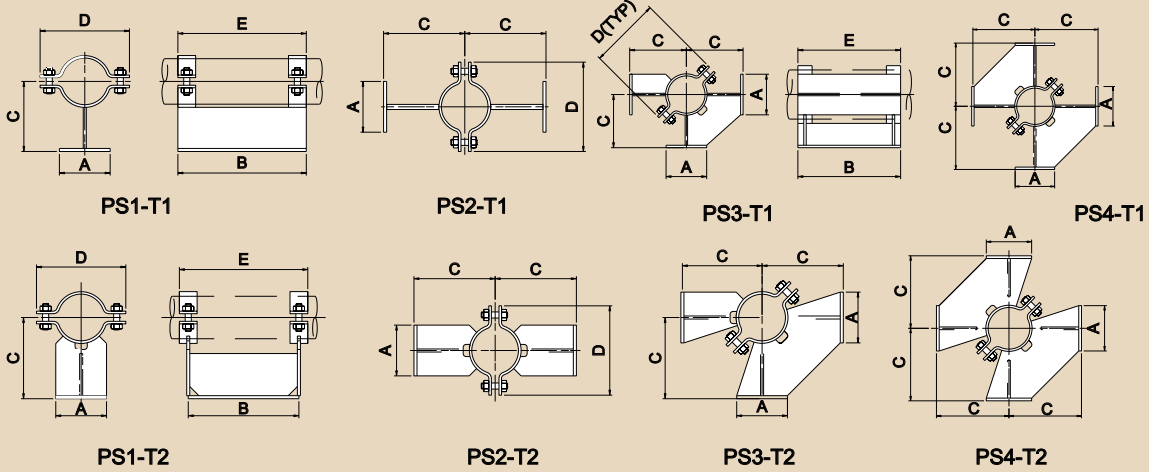
# PA7 RISER CLAMP FLAT PLATE TYPE



Material: Carbon Steel to 400°C Alloy Steel above 400°C End Beams and Lugs: Carbon Steel. Order by Part No. and Rod Centres "F"

Part Number	Pipe O/D		A	B	C		D	E		F		Weight kg		Load Capacity (kg) at Temperature C								Compatible with Rod Sizes				
	mm	in			mm	mm		mm	in	mm	Min.	Max.	Min.	Max.	Min.	Max.	350	400	490	530	560		580	600		
PA7-1000-4-400	1016	40	33	10	-38	-1 1/2	55	188	190	1500	3000	284.0	427.3	3160	3160											M8-M30
PA7-1000-5-400	1016	40	39	12	-28	-1 1/8	65	208	230	1500	3000	360.3	535.1	4560	4560											M12-M36
PA7-1000-6-400	1016	40	52	16	-3	-1/8	85	228	260	1500	3000	470.4	704.1	7300	7300											M20-M48
PA7-1000-7-400	1016	40	60	20	12	1/2	100	258	290	1600	3000	574.9	890.4	10680	10680											M24-M56
PA7-1000-8-400	1016	40	68	25	32	1 1/4	115	260	340	1600	3000	694.8	1019.2	14800	14800											M36-M64
PA7-1000-9-400	1016	40	76	25	11	7/16	130	300	370	1600	3000	798.6	1247.2	19300	19300											M36-M72
PA7-1000-10-400	1016	40	86	30	26	1	140	340	420	1700	3000	1073.3	1656.5	26700	26700											M36-M80
PA7-1000-11-400	1016	40	86	35	-10	-3/8	140	380	450	1700	3000	1230.5	1886.7	36000	36000											M36-M80
PA7-1000-12-400	1016	40	86	40	-10	-3/8	140	430	470	1800	3000	1576.1	2432.7	46050	46050											M36-M80
PA7-1000-13-400	1016	40	86	40	-46	-1 13/16	140	466	530	1800	3000	1761.9	2724.8	56250	56250											M36-M80
PA7-1000-4-490	1016	40	33	10	-38	-1 1/2	55	188	190	1500	3000	278.7	427.3	3160	3160	3160	2050	1230	880	760						M8-M30
PA7-1000-5-490	1016	40	39	12	-28	-1 1/8	65	208	230	1500	3000	360.3	535.1	4560	4560	4560	2960	1780	1280	1090						M12-M36
PA7-1000-6-490	1016	40	52	16	-3	-1/8	85	228	260	1500	3000	470.4	704.1	7300	7300	7300	4750	2850	2040	1750						M20-M48
PA7-1000-7-490	1016	40	60	20	12	1/2	100	258	290	1600	3000	574.9	890.4	10680	10680	10680	6940	4170	2990	2560						M24-M56
PA7-1000-8-490	1016	40	68	25	32	1 1/4	115	260	340	1600	3000	694.8	1019.2	14800	14800	14800	9620	5770	4140	3550						M36-M64
PA7-1000-9-490	1016	40	76	25	11	7/16	130	300	360	1600	3000	798.6	1229.0	19300	19300	19300	12550	7530	5400	4630						M36-M72
PA7-1000-10-490	1016	40	86	30	26	1	140	324	400	1700	3000	967.3	1524.6	26700	26700	26700	17360	10410	7480	6410						M36-M80
PA7-1000-11-490	1016	40	86	35	-10	-3/8	140	380	450	1700	3000	1230.5	1886.7	36000	36000	36000	23400	14040	10080	8640						M36-M80
PA7-1000-12-490	1016	40	86	40	-10	-3/8	140	430	470	1800	3000	1576.1	2432.7	46050	46050	46050	29930	17960	12890	11050						M36-M80
PA7-1000-13-490	1016	40	86	40	-46	-1 13/16	140	466	520	1800	3000	1746.0	2696.6	56250	56250	56250	21940	15750	13500	13500						M36-M80
PA7-1000-4-530	1016	40	33	10	-38	-1 1/2	55	188	200	1500	3000	289.8	439.1	3160	3160	3160	3160	1900	1390	1140						M8-M30
PA7-1000-5-530	1016	40	39	12	-28	-1 1/8	65	208	240	1500	3000	365.6	546.9	4560	4560	4560	4560	2740	2010	1640						M12-M36
PA7-1000-6-530	1016	40	52	16	-3	-1/8	85	228	280	1500	3000	484.6	731.9	7300	7300	7300	7300	4380	3210	2630						M20-M48
PA7-1000-7-530	1016	40	60	20	12	1/2	100	258	310	1600	3000	630.1	923.1	10680	10680	10680	10680	6410	4700	3840						M24-M56
PA7-1000-8-530	1016	40	68	25	32	1 1/4	115	280	340	1600	3000	754.8	1120.9	14800	14800	14800	14800	8880	6510	5330						M36-M64
PA7-1000-9-530	1016	40	76	25	11	7/16	130	300	380	1600	3000	890.2	1266.5	19300	19300	19300	13000	11580	8490	6950						M36-M72
PA7-1000-10-530	1016	40	86	30	26	1	140	330	430	1700	3000	1145.0	1677.2	26700	26700	26700	26700	16020	11750	9610						M36-M80
PA7-1000-11-530	1016	40	86	35	-10	-3/8	140	390	460	1700	3000	1354.4	1911.2	36000	36000	36000	36000	21600	15840	12960						M36-M80
PA7-1000-12-530	1016	40	86	40	-10	-3/8	140	430	480	1800	3000	1592.1	2462.7	46050	46050	46050	46050	27630	20260	16580						M36-M80
PA7-1000-13-530	1016	40	86	40	-46	-1 13/16	140	466	530	1800	3000	1776.6	2724.8	56250	56250	56250	56250	33750	24750	20250						M36-M80
PA7-1000-4-560	1016	40	33	10	-38	-1 1/2	55	188	230	1500	3000	340.8	513.9	3160	3160	3160	3160	3160	2460	1830						M8-M30
PA7-1000-5-560	1016	40	39	12	-28	-1 1/8	65	208	240	1500	3000	446.1	615.7	4560	4560	4560	4560	4560	3560	2640						M12-M36
PA7-1000-6-560	1016	40	52	16	-3	-1/8	85	240	280	1500	3000	539.7	842.8	7300	7300	7300	7300	7300	5690	4230						M20-M48
PA7-1000-7-560	1016	40	60	20	12	1/2	100	260	340	1600	3000	690.1	1014.6	10680	10680	10680	10680	10680	8330	6190						M24-M56
PA7-1000-8-560	1016	40	68	25	32	1 1/4	115	280	360	1600	3000	801.2	1201.3	14800	14800	14800	14800	14800	11540	8580						M36-M64
PA7-1000-9-560	1016	40	76	25	11	7/16	130	320	390	1600	3000	911.3	1452.3	19300	19300	19300	19300	19300	15050	11190						M36-M72
PA7-1000-10-560	1016	40	86	30	26	1	140	350	450	1700	3000	1170.5	1719.8	26700	26700	26700	26700	26700	20830	15490						M36-M80
PA7-1000-11-560	1016	40	86	35	-10	-3/8	140	380	500	1800	3000	1470.1	2095.8	36000	36000	36000	36000	36000	28080	20880						M36-M80
PA7-1000-12-560	1016	40	86	40	-10	-3/8	140	440	500	1800	3000	1742.6	2521.0	46050	46050	46050	46050	46050	35920	26710						M36-M80
PA7-1000-13-560	1016	40	86	40	-46	-1 13/16	140	466	550	1800	3000	1860.7	2783.1	56250	56250	56250	56250	56250	43880	32630						M36-M80
PA7-1000-4-600	1016	40	33	10	-38	-1 1/2	55	200	250	1500	3000	432.4	648.2	3160	3160	3160	3160	3160	3160	3160						M8-M30
PA7-1000-5-600	1016	40	39	12	-28	-1 1/8	65	240	300	1500	3000	522.5	782.4	4560	4560	4560	4560	4560	4560	4560						M12-M36
PA7-1000-6-600	1016	40	52	16	-3	-1/8	85	270	350	1600	3000	667.8	997.9	7300	7300	7300	7300	7300	7300	7300						M20-M48
PA7-1000-7-600	1016	40	60	20	12	1/2	100	300	380	1600	3000	859.6	1234.2	10680	10680	10680	10680	10680	10680	10680						M24-M56
PA7-1000-8-600	1016	40	68	25	32	1 1/4	115	330	420	1700	3000	1071.1	1576.1	14800	14800	14800	14800	14800	14800	14800						M36-M64
PA7-1000-9-600	1016	40	76	25	11	7/16	130	370	440	1700	3000	1149.3	1758.6	19300	19300	19300	19300	19300	19300	19300						M36-M72
PA7-1000-10-600	1016	40	86	30	26	1	140	400	450	1700	3000	1427.2	2203.1	26700	26700	26700	26700	26700	26700	26700						M36-M80
PA7-1000-11-600	1016	40	86	35	-10	-3/8	140	430	520	1800	3000	1713.1	2560.2	36000	36000	36000	36000	36000	36000	36000						M36-M80
PA7-1000-12-600	1016	40	86	40	-10	-3/8	140	490	590	1800	3000	1998.9	2967.3	46050	46050	46050	46050	46050	46050	46050						M36-M80
PA7-1000-13-600	1016	40	86	40	-46	-1 13/16	140	480	580	1800	3000	2357.4	3293.2	56250	56250	56250	56250	56250	56250	56250						M36-M80

# PS PIPE CLAMP BASE FOR USE AS A SLIDING BASE OR WITH TYPE TB7 SPREADER BEAMS



TYPE PS1 IS FOR USE AS A SLIDING BASE OR WITH SPREADER BEAMS. IF IT IS GUIDED AT THE BASE, THE LOAD CAPACITY IN THE HORIZONTAL DIRECTION IS 30% OF THE STATED VERTICAL LOAD CAPACITY.

TYPE PS2 IS FOR USE AS A GUIDE ON HORIZONTAL OR VERTICAL PIPES OR WHEN USED WITH THE LEGS VERTICAL AS A VERTICAL RESTRAINT ON HORIZONTAL PIPES IN CASES WHERE THE VERTICAL LOAD CAN ACT UPWARDS.

TYPE PS3 IS FOR USE AS A GUIDE ON HORIZONTAL PIPES. THE STATED LOAD CAPACITY IS APPLICABLE TO BOTH VERTICAL AND LATERAL LOADS ACTING CONCURRENTLY.

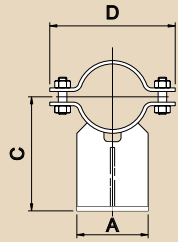
TYPE PS4 IS A TWO WAY GUIDE WHICH CAN BE USED FOR EITHER HORIZONTAL OR VERTICAL PIPES. ANY OF THE PIPE BASES CAN ALSO BE USED AS AXIAL RESTRAINTS IF SHEAR LUGS OR COLLARS ARE FITTED TO THE PIPE. THE LOAD CAPACITY IN THE DIRECTION OF THE PIPE AXIS IS LIMITED TO 30% OF THE LOAD CAPACITY IN THE VERTICAL DIRECTION.

FOR PS1 & PS2 UPTO 40 NB SIZE TYPE T1 SHALL BE USED. FOR PS3 & PS4 UPTO 65 NB SIZE TYPE T1 SHALL BE USED. FOR 80 NB AND ABOVE SIZE TYPE T2 SHALL BE USED FOR PS1, PS2, PS3 & PS4.

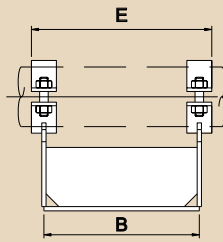
**Material: Carbon Steel to 400°C Alloy Steel above 400°C Base Plate Weldable Carbon Steel**

Part No. (Type PS1)	TYPE (REFER TYPICAL DRAWING)		Pipe O/D		A	B	C		D	E	Max. Temp. °C	Weight				Load Capacity (See Notes) kgf
	PS1&PS2	PS3&PS4	mm	in			mm	in				mm	kgf	PS2 kgf	PS3 kgf	
For Multi-Leg types, replace PS1 with PS2, PS3 or PS4																
PS1-15-1-400	T1	T1	21.3	0.84	54	185	90	3 9/16	120	185	400	2.0	3.0	4.7	6.1	360
PS1-15-1-530	T1	T1	21.3	0.84	70	190	110	4 5/16	120	190	530	2.6	4.0	6.4	8.2	360
PS1-15-1-600	T1	T1	21.3	0.84	84	190	140	5 1/2	120	190	600	3.0	4.7	8.2	10.7	360
PS1-20-1-400	T1	T1	26.7	1.05	54	185	90	3 9/16	120	185	400	2.0	3.0	4.6	5.9	360
PS1-20-1-530	T1	T1	26.7	1.05	70	190	110	4 5/16	120	190	530	2.5	3.9	6.3	8.1	360
PS1-20-1-600	T1	T1	26.7	1.05	84	190	140	5 1/2	120	190	600	2.9	4.7	8.1	10.6	360
PS1-25-1-400	T1	T1	33.4	1.32	54	185	90	3 9/16	120	185	400	2.1	3.3	4.5	5.8	360
PS1-25-1-530	T1	T1	33.4	1.32	72	190	120	4 3/4	120	190	530	2.9	4.6	6.7	8.6	360
PS1-25-1-600	T1	T1	33.4	1.32	84	190	140	5 1/2	120	190	600	3.2	5.3	8.0	10.5	360
PS1-32-1-400	T1	T1	42.2	1.66	60	185	100	3 15/16	126	185	400	2.3	3.6	5.0	6.5	360
PS1-32-1-530	T1	T1	42.2	1.66	72	190	120	4 3/4	126	190	530	2.9	4.6	6.6	8.5	360
PS1-32-1-600	T1	T1	42.2	1.66	90	190	150	5 7/8	126	190	600	3.4	5.6	8.6	11.3	360
PS1-40-1-400	T1	T1	48.3	1.90	60	185	100	3 15/16	126	185	400	2.3	3.6	5.0	6.4	360
PS1-40-1-530	T1	T1	48.3	1.90	80	190	130	5 1/8	136	190	530	3.2	5.0	7.3	9.5	360
PS1-40-1-600	T1	T1	48.3	1.90	90	190	150	5 7/8	136	190	600	3.5	5.7	8.6	11.3	360
PS1-50-2-400	T2	T1	60.3	2.38	70	*203/168	110	4 5/16	146	203	400	2.6	3.9	5.7	7.3	530
PS1-50-2-530	T2	T1	60.3	2.38	80	*208/168	130	5 1/8	146	208	530	3.3	5.1	7.2	9.3	530
PS1-50-2-600	T2	T1	60.3	2.38	100	*208/168	160	6 5/16	146	208	600	4.2	6.8	9.4	12.4	530
PS1-65-2-400	T2	T1	73.0	2.88	70	*253/218	110	4 5/16	166	253	400	2.9	4.4	6.4	8.3	530
PS1-65-2-530	T2	T1	73.0	2.88	84	*258/218	140	5 1/2	166	258	530	3.9	6.1	8.9	11.6	530
PS1-65-2-600	T2	T1	73.0	2.88	100	*268/218	160	6 5/16	176	268	600	6.2	9.1	12.4	15.7	530
PS1-80-2-400	T2	T2	88.9	3.50	100	218	160	6 5/16	176	253	400	4.3	7.1	10.0	13.1	530
PS1-80-2-530	T2	T2	88.9	3.50	102	218	170	6 11/16	176	258	530	4.8	7.9	11.0	14.4	530
PS1-80-2-600	T2	T2	88.9	3.50	110	218	180	7 1/16	196	268	600	7.1	10.4	13.8	17.6	530
PS1-90-2-400	T2	T2	101.6	4.00	100	218	160	6 5/16	186	253	400	4.3	7.0	9.8	12.9	530
PS1-90-2-530	T2	T2	101.6	4.00	110	218	180	7 1/16	196	258	530	5.3	8.6	12.0	15.7	530
PS1-90-2-600	T2	T2	101.6	4.00	114	218	190	7 1/2	206	268	600	7.5	11.0	14.6	18.7	530
PS1-100-3-400	T2	T2	114.3	4.50	102	218	170	6 11/16	206	253	400	4.7	7.5	10.5	13.8	1010
PS1-100-3-530	T2	T2	114.3	4.50	114	224	190	7 1/2	206	264	530	6.9	11.4	16.2	21.5	1010
PS1-100-3-600	T2	T2	114.3	4.50	120	224	200	7 7/8	226	274	600	9.5	14.5	19.6	25.3	1010
PS1-125-3-400	T2	T2	141.3	5.56	110	218	180	7 1/16	226	253	400	5.1	8.0	11.1	14.6	1010
PS1-125-3-530	T2	T2	141.3	5.56	120	224	200	7 7/8	236	264	530	7.4	12.0	17.0	22.6	1010
PS1-125-3-600	T2	T2	141.3	5.56	130	224	210	8 1/4	246	274	600	10.3	15.4	20.9	26.9	1010
PS1-150-4-400	T2	T2	168.3	6.63	120	224	200	7 7/8	288	264	400	8.4	12.6	17.3	22.4	1580
PS1-150-4-530	T2	T2	168.3	6.63	130	224	210	8 1/4	276	274	530	10.6	15.3	20.6	26.2	1580
PS1-150-4-600	T2	T2	168.3	6.63	140	224	230	9 1/16	276	274	600	11.5	17.2	23.3	30.1	1580
PS1-175-5-400	T2	T2	193.7	7.63	144	274	240	9 7/16	318	314	400	11.1	17.6	24.8	32.6	2280
PS1-175-5-530	T2	T2	193.7	7.63	150	274	250	9 13/16	306	324	530	13.6	20.6	28.3	36.7	2280
PS1-175-5-600	T2	T2	193.7	7.63	162	280	270	10 5/8	306	340	600	18.0	28.1	39.2	51.4	2280

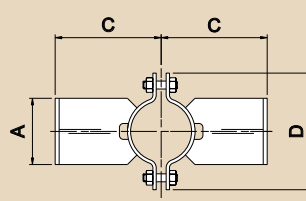
# PS PIPE CLAMP BASE FOR USE AS A SLIDING BASE OR WITH TYPE TB7 SPREADER BEAMS



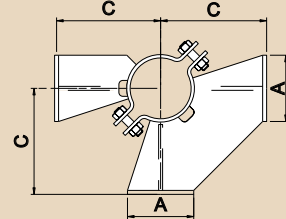
PS1-T2



PS2-T2



PS3-T2



PS4-T2

TYPE PS1 IS FOR USE AS A SLIDING BASE OR WITH SPREADER BEAMS. IF IT IS GUIDED AT THE BASE, THE LOAD CAPACITY IN THE HORIZONTAL DIRECTION IS 30% OF THE STATED VERTICAL LOAD CAPACITY.

TYPE PS2 IS FOR USE AS A GUIDE ON HORIZONTAL OR VERTICAL PIPES OR WHEN USED WITH THE LEGS VERTICAL AS A VERTICAL RESTRAINT ON HORIZONTAL PIPES IN CASES WHERE THE VERTICAL LOAD CAN ACT UPWARDS.

TYPE PS3 IS FOR USE AS A GUIDE ON HORIZONTAL PIPES. THE STATED LOAD CAPACITY IS APPLICABLE TO BOTH VERTICAL AND LATERAL LOADS ACTING CONCURRENTLY.

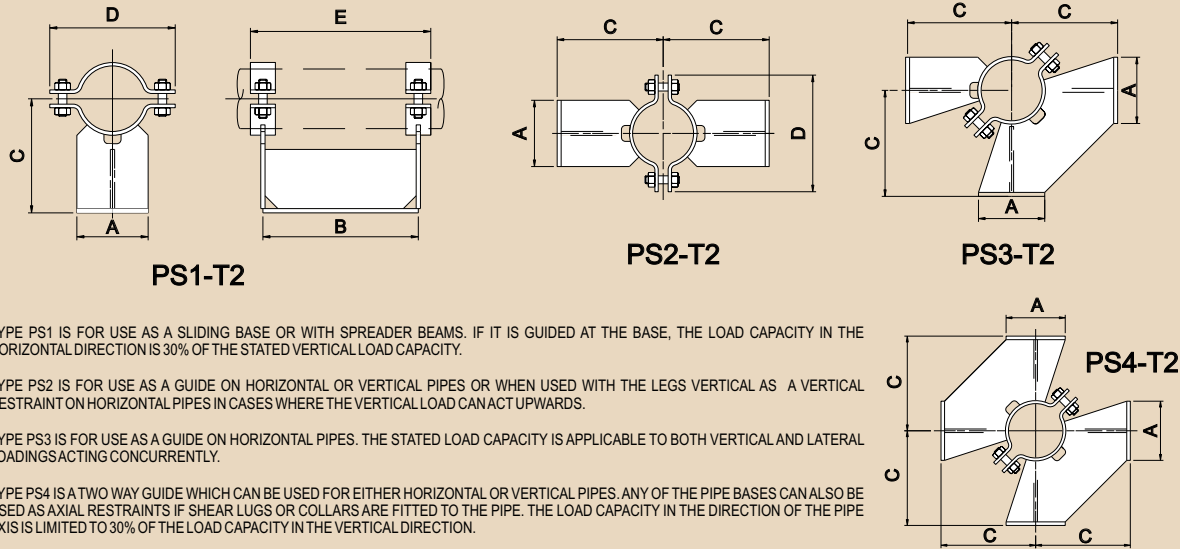
TYPE PS4 IS A TWO WAY GUIDE WHICH CAN BE USED FOR EITHER HORIZONTAL OR VERTICAL PIPES. ANY OF THE PIPE BASES CAN ALSO BE USED AS AXIAL RESTRAINTS IF SHEAR LUGS OR COLLARS ARE FITTED TO THE PIPE. THE LOAD CAPACITY IN THE DIRECTION OF THE PIPE AXIS IS LIMITED TO 30% OF THE LOAD CAPACITY IN THE VERTICAL DIRECTION.

Material: Carbon Steel to 400°C Alloy Steel above 400°C Base Plate Weldable Carbon Steel

Part No. (Type PS1)	TYPE (REFER TYPICAL DRAWING)		Pipe O/D		A	B	C		D	E	Max. Temp. °C	Weight				Load Capacity (See Notes) kgf
	PS1&PS 2	PS3&PS 4	mm	in			mm	in				mm	kgf	kgf	kgf	
For Multi-Leg types, replace PS1 with PS2, PS3 or PS4																
PS1-200-3-400	T2	T2	219.1	8.6	150	268	250	9 13/16	316	308	400	8.5	13.5	19.1	25.2	1010
PS1-200-6-400	T2	T2	219.1	8.6	150	286	250	9 13/16	380	346	400	21.3	30.9	41.9	53.6	3650
PS1-200-3-530	T2	T2	219.1	8.6	160	274	260	10 1/4	336	324	530	14.5	21.7	29.8	38.6	1010
PS1-200-6-530	T2	T2	219.1	8.6	162	286	270	10 5/8	336	356	530	23.1	34.4	47.2	61.0	3650
PS1-200-3-600	T2	T2	219.1	8.6	170	274	280	11	336	324	600	15.6	24.0	33.2	43.3	1010
PS1-200-6-600	T2	T2	219.1	8.6	170	295	280	11	356	375	600	34.6	50.9	68.9	88.5	3650
PS1-225-3-400	T2	T2	244.5	9.6	160	268	260	10 1/4	336	308	400	8.9	14.1	20.0	26.4	1010
PS1-225-6-400	T2	T2	244.5	9.6	162	286	270	10 5/8	410	346	400	23.3	33.9	46.2	59.3	3650
PS1-225-3-530	T2	T2	244.5	9.6	170	274	280	11	356	324	530	15.7	23.6	32.5	42.2	1010
PS1-225-6-530	T2	T2	244.5	9.6	170	286	280	11	366	356	530	24.6	36.2	49.5	63.8	3650
PS1-225-3-600	T2	T2	244.5	9.6	174	274	290	11 7/16	356	324	600	16.2	24.5	34.1	44.5	1010
PS1-225-6-600	T2	T2	244.5	9.6	180	295	300	11 13/16	398	375	600	38.9	56.6	76.5	98.0	3650
PS1-250-4-400	T2	T2	273.0	10.8	170	274	280	11	398	314	400	13.3	20.6	29.2	38.4	1580
PS1-250-7-400	T2	T2	273.0	10.8	170	286	280	11	440	346	400	24.5	35.3	47.9	61.2	5340
PS1-250-4-530	T2	T2	273.0	10.8	174	274	290	11 7/16	386	324	530	16.3	24.1	33.2	43.0	1580
PS1-250-7-530	T2	T2	273.0	10.8	180	295	300	11 13/16	396	365	530	30.8	47.4	66.6	87.2	5340
PS1-250-4-600	T2	T2	273.0	10.8	180	274	300	11 13/16	396	344	600	22.5	30.9	40.6	51.0	1580
PS1-250-7-600	T2	T2	273.0	10.8	190	295	310	12 3/16	428	395	600	46.6	64.6	85.1	107.3	5340
PS1-300-4-400	T2	T2	323.9	12.8	192	324	320	12 5/8	448	364	400	16.3	26.0	37.3	49.4	1580
PS1-300-6-400	T2	T2	323.9	12.8	192	336	320	12 5/8	490	396	400	29.6	43.8	60.5	78.1	3650
PS1-300-8-400	T2	T2	323.9	12.8	192	345	320	12 5/8	542	410	400	47.2	65.4	86.9	109.4	7400
PS1-300-4-530	T2	T2	323.9	12.8	200	324	330	13	446	374	530	20.3	30.6	42.6	55.5	1580
PS1-300-6-530	T2	T2	323.9	12.8	200	336	330	13	468	406	530	32.9	48.3	66.1	85.1	3650
PS1-300-8-530	T2	T2	323.9	12.8	204	345	340	13 3/8	478	425	530	47.5	68.8	93.8	120.3	7400
PS1-300-4-600	T2	T2	323.9	12.8	222	324	370	14 9/16	446	394	600	29.3	42.3	57.3	73.6	1580
PS1-300-6-600	T2	T2	323.9	12.8	222	345	370	14 9/16	478	445	600	58.4	84.2	113.8	145.8	3650
PS1-300-8-600	T2	T2	323.9	12.8	230	360	380	14 15/16	498	460	600	75.0	108.9	147.5	189.2	7400
PS1-350-6-400	T2	T2	355.6	14.0	210	336	340	13 3/8	520	396	400	32.1	47.6	65.8	85.2	3650
PS1-350-7-400	T2	T2	355.6	14.0	210	336	340	13 3/8	520	396	400	32.1	47.6	65.8	85.2	5340
PS1-350-9-400	T2	T2	355.6	14.0	210	360	340	13 3/8	572	425	400	55.9	80.8	110.0	140.7	9650
PS1-350-6-530	T2	T2	355.6	14.0	210	336	350	13 3/4	498	416	530	37.5	53.8	72.9	93.3	3650
PS1-350-7-530	T2	T2	355.6	14.0	210	345	350	13 3/4	498	425	530	42.9	64.6	90.0	117.0	5340
PS1-350-9-530	T2	T2	355.6	14.0	220	360	360	14 3/16	518	440	530	57.4	86.3	120.0	155.7	9650
PS1-350-6-600	T2	T2	355.6	14.0	234	345	390	15 3/8	538	445	600	71.6	98.3	129.7	163.4	3650
PS1-350-7-600	T2	T2	355.6	14.0	234	345	390	15 3/8	538	445	600	71.6	98.3	129.7	163.4	5340
PS1-350-9-600	T2	T2	355.6	14.0	234	360	390	15 3/8	538	460	600	78.1	111.6	150.7	192.7	9650
PS1-400-6-400	T2	T2	406.4	16.0	240	336	360	14 3/16	590	391	400	39.2	55.9	75.4	96.0	3650
PS1-400-8-400	T2	T2	406.4	16.0	240	345	360	14 3/16	622	410	400	55.9	77.6	103.2	130.0	7400
PS1-400-10-400	T2	T2	406.4	16.0	240	375	370	14 9/16	660	465	400	85.7	121.1	162.6	205.9	13350
PS1-400-6-530	T2	T2	406.4	16.0	240	336	370	14 9/16	568	416	530	49.2	66.6	87.2	109.0	3650
PS1-400-8-530	T2	T2	406.4	16.0	240	345	380	14 15/16	568	445	530	63.4	87.7	116.4	146.8	7400
PS1-400-10-530	T2	T2	406.4	16.0	240	375	390	15 1/8	610	475	530	90.2	128.9	174.6	222.6	13350
PS1-400-6-600	T2	T2	406.4	16.0	250	345	410	16 1/8	588	445	600	77.4	105.2	138.1	173.2	3650
PS1-400-8-600	T2	T2	406.4	16.0	252	360	420	16 9/16	588	460	600	85.7	121.9	164.9	210.9	7400
PS1-400-10-600	T2	T2	406.4	16.0	252	375	420	16 9/16	630	465	600	103.0	147.4	200.1	256.2	13350
PS1-450-6-400	T2	T2	457.2	18.0	270	336	390	15 3/8	640	391	400	43.4	62.2	84.3	107.5	3650
PS1-450-9-400	T2	T2	457.2	18.0	270	360	390	15 3/8	682	425	400	68.4	99.0	135.0	172.5	9650



# PS PIPE CLAMP BASE FOR USE AS A SLIDING BASE OR WITH TYPE TB7 SPREADER BEAMS



TYPE PS1 IS FOR USE AS A SLIDING BASE OR WITH SPREADER BEAMS. IF IT IS GUIDED AT THE BASE, THE LOAD CAPACITY IN THE HORIZONTAL DIRECTION IS 30% OF THE STATED VERTICAL LOAD CAPACITY.

TYPE PS2 IS FOR USE AS A GUIDE ON HORIZONTAL OR VERTICAL PIPES OR WHEN USED WITH THE LEGS VERTICAL AS A VERTICAL RESTRAINT ON HORIZONTAL PIPES IN CASES WHERE THE VERTICAL LOAD CAN ACT UPWARDS.

TYPE PS3 IS FOR USE AS A GUIDE ON HORIZONTAL PIPES. THE STATED LOAD CAPACITY IS APPLICABLE TO BOTH VERTICAL AND LATERAL LOADS ACTING CONCURRENTLY.

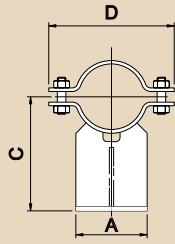
TYPE PS4 IS A TWO WAY GUIDE WHICH CAN BE USED FOR EITHER HORIZONTAL OR VERTICAL PIPES. ANY OF THE PIPE BASES CAN ALSO BE USED AS AXIAL RESTRAINTS IF SHEAR LUGS OR COLLARS ARE FITTED TO THE PIPE. THE LOAD CAPACITY IN THE DIRECTION OF THE PIPE AXIS IS LIMITED TO 30% OF THE LOAD CAPACITY IN THE VERTICAL DIRECTION.

**Material: Carbon Steel to 400°C Alloy Steel above 400°C Base Plate Weldable Carbon Steel**

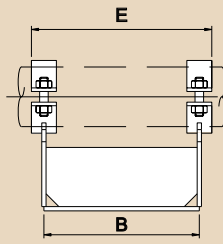
Part No. (Type PS1)	TYPE (REFER TYPICAL DRAWING)	Pipe O/D		A	B	C		D	E	Max. Temp.	Weight				Load Capacity (See Notes)
		mm	in			mm	in				PS1 kgf	PS2 kgf	PS3 kgf	PS4 kgf	
PS1-450-11-400	T2	457.2	18.0	270	390	400	15 3/4	738	500	400	117.7	165.4	221.1	279.1	18000
PS1-450-6-530	T2	457.2	18.0	270	336	400	15 3/4	618	416	530	54.5	74.1	97.2	121.7	3650
PS1-450-9-530	T2	457.2	18.0	270	360	410	16 1/8	618	460	530	77.2	111.3	151.4	193.7	9650
PS1-450-11-530	T2	457.2	18.0	270	390	420	16 9/16	692	480	530	117.1	167.9	228.0	290.9	18000
PS1-450-6-600	T2	457.2	18.0	270	345	440	17 5/16	638	445	600	84.6	114.5	150.5	189.0	3650
PS1-450-9-600	T2	457.2	18.0	270	360	450	17 11/16	638	460	600	93.3	132.2	179.0	229.0	9650
PS1-450-11-600	T2	457.2	18.0	280	390	460	18 1/8	700	490	600	145.4	205.5	277.1	353.0	18000
PS1-500-6-400	T2	508.0	20.0	300	436	440	17 5/16	690	491	400	53.6	80.3	111.3	143.9	3650
PS1-500-9-400	T2	508.0	20.0	300	460	450	17 11/16	732	525	400	86.4	131.8	184.4	239.6	9650
PS1-500-12-400	T2	508.0	20.0	300	490	460	18 1/8	788	600	400	145.6	215.8	297.0	381.9	23025
PS1-500-6-530	T2	508.0	20.0	300	436	450	17 11/16	668	516	530	65.8	93.5	125.7	159.7	3650
PS1-500-9-530	T2	508.0	20.0	300	460	460	18 1/8	668	560	530	94.9	142.8	198.2	256.8	9650
PS1-500-12-530	T2	508.0	20.0	300	520	480	18 7/8	752	610	530	170.6	268.8	382.7	501.8	23025
PS1-500-6-600	T2	508.0	20.0	300	445	490	19 5/16	698	545	600	101.7	143.1	192.1	244.3	3650
PS1-500-9-600	T2	508.0	20.0	300	460	500	19 11/16	698	570	600	119.4	173.0	236.2	303.6	9650
PS1-500-12-600	T2	508.0	20.0	312	520	520	20 1/2	772	630	600	219.3	332.8	465.4	605.7	23025
PS1-550-6-400	T2	558.8	22.0	330	436	460	18 1/8	740	491	400	57.4	85.9	118.8	153.4	3650
PS1-550-8-400	T2	558.8	22.0	330	445	470	18 1/2	782	510	400	82.8	121.3	166.2	213.3	7400
PS1-550-10-400	T2	558.8	22.0	330	475	480	18 7/8	810	565	400	126.0	188.4	260.7	336.3	13350
PS1-550-13-400	T2	558.8	22.0	330	520	490	19 5/16	896	650	400	225.9	326.9	443.4	564.6	28125
PS1-550-6-530	T2	558.8	22.0	330	436	480	18 7/8	718	516	530	71.7	102.2	137.7	175.2	3650
PS1-550-8-530	T2	558.8	22.0	330	445	480	18 7/8	760	545	530	106.4	146.4	193.0	242.0	7400
PS1-550-10-530	T2	558.8	22.0	330	475	490	19 5/16	760	575	530	130.9	195.5	270.5	349.3	13350
PS1-550-13-530	T2	558.8	22.0	330	520	500	19 11/16	830	650	530	222.0	326.6	447.6	573.8	28125
PS1-550-6-600	T2	558.8	22.0	330	445	520	20 1/2	748	545	600	110.5	156.0	209.7	266.8	3650
PS1-550-8-600	T2	558.8	22.0	330	460	520	20 1/2	768	550	600	129.8	185.8	252.0	322.2	7400
PS1-550-10-600	T2	558.8	22.0	330	475	530	20 7/8	780	575	600	155.5	227.7	313.0	403.4	13350
PS1-550-13-600	T2	558.8	22.0	330	550	550	21 5/8	890	670	600	320.5	466.4	638.3	818.5	28125
PS1-600-6-400	T2	609.6	24.0	360	436	490	19 5/16	800	491	400	62.5	93.5	129.7	167.3	3650
PS1-600-8-400	T2	609.6	24.0	360	445	490	19 5/16	842	510	400	88.5	129.2	176.8	226.0	7400
PS1-600-10-400	T2	609.6	24.0	360	475	500	19 11/16	870	565	400	134.5	200.4	277.0	356.1	13350
PS1-600-13-400	T2	609.6	24.0	360	520	520	20 1/2	946	650	400	243.3	353.8	482.1	614.4	28125
PS1-600-6-530	T2	609.6	24.0	360	436	500	19 11/16	778	516	530	76.9	109.0	146.5	185.7	3650
PS1-600-8-530	T2	609.6	24.0	360	445	500	19 11/16	820	545	530	114.1	156.2	205.7	257.0	7400
PS1-600-10-530	T2	609.6	24.0	360	475	510	20 1/16	820	575	530	140.0	208.2	287.7	370.1	13350
PS1-600-13-530	T2	609.6	24.0	360	520	530	20 7/8	910	630	530	241.7	354.1	485.2	620.7	28125
PS1-600-6-600	T2	609.6	24.0	360	445	540	21 1/4	798	545	600	117.9	165.7	222.6	282.4	3650
PS1-600-8-600	T2	609.6	24.0	360	460	550	21 5/8	818	550	600	140.2	201.1	273.5	349.5	7400
PS1-600-10-600	T2	609.6	24.0	360	475	550	21 5/8	840	585	600	175.3	251.5	341.5	436.1	13350
PS1-600-13-600	T2	609.6	24.0	360	550	580	22 13/16	950	670	600	347.6	506.5	694.4	890.1	28125
PS1-650-6-400	T2	660.4	26.0	390	436	540	21 1/4	870	501	400	85.2	120.8	162.5	206.5	3650
PS1-650-8-400	T2	660.4	26.0	390	445	540	21 1/4	892	510	400	98.4	145.9	201.4	259.9	7400
PS1-650-10-400	T2	660.4	26.0	390	475	550	21 5/8	920	565	400	149.7	226.4	315.8	409.7	13350
PS1-650-13-400	T2	660.4	26.0	390	520	570	22 7/16	996	670	400	289.5	418.0	567.5	724.1	28125
PS1-650-6-530	T2	660.4	26.0	390	436	580	22 13/16	828	516	530	88.6	129.3	177.3	228.7	3650
PS1-650-8-530	T2	660.4	26.0	390	445	580	22 13/16	848	545	530	128.2	181.7	245.0	312.5	7400
PS1-650-10-530	T2	660.4	26.0	390	475	590	23 1/4	870	575	530	163.1	249.5	351.1	459.2	13350



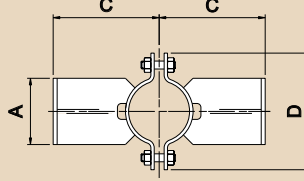
# PS PIPE CLAMP BASE FOR USE AS A SLIDING BASE OR WITH TYPE TB7 SPREADER BEAMS



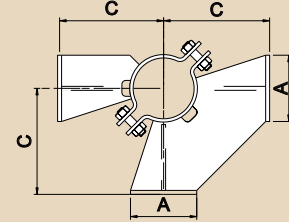
**PS1-T2**



**PS2-T2**



**PS3-T2**



**PS4-T2**

TYPE PS1 IS FOR USE AS A SLIDING BASE OR WITH SPREADER BEAMS. IF IT IS GUIDED AT THE BASE, THE LOAD CAPACITY IN THE HORIZONTAL DIRECTION IS 30% OF THE STATED VERTICAL LOAD CAPACITY.

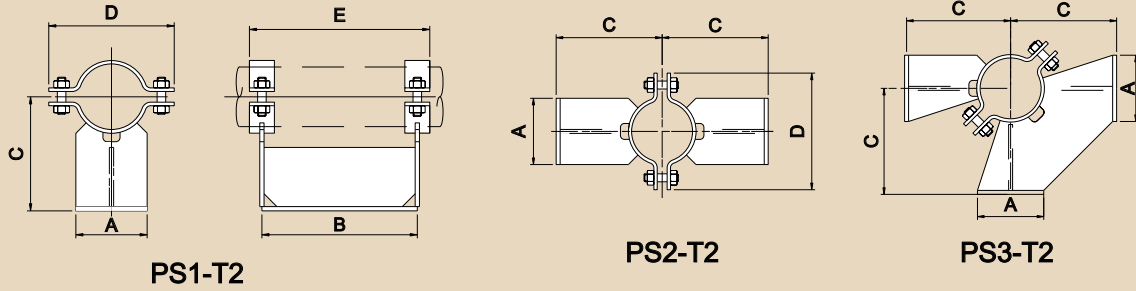
TYPE PS2 IS FOR USE AS A GUIDE ON HORIZONTAL OR VERTICAL PIPES OR WHEN USED WITH THE LEGS VERTICAL AS A VERTICAL RESTRAINT ON HORIZONTAL PIPES IN CASES WHERE THE VERTICAL LOAD CAN ACT UPWARDS.

TYPE PS3 IS FOR USE AS A GUIDE ON HORIZONTAL PIPES. THE STATED LOAD CAPACITY IS APPLICABLE TO BOTH VERTICAL AND LATERAL LOADS ACTING CONCURRENTLY.

TYPE PS4 IS A TWO WAY GUIDE WHICH CAN BE USED FOR EITHER HORIZONTAL OR VERTICAL PIPES. ANY OF THE PIPE BASES CAN ALSO BE USED AS AXIAL RESTRAINTS IF SHEAR LUGS OR COLLARS ARE FITTED TO THE PIPE. THE LOAD CAPACITY IN THE DIRECTION OF THE PIPE AXIS IS LIMITED TO 30% OF THE LOAD CAPACITY IN THE VERTICAL DIRECTION.

Part No. (Type PS1)	TYPE (REFER TYPICAL DRAWING)	Pipe O/D		A	B	C		D	E	Max. Temp. °C	Weight				Load Capacity (See Notes) kgf
		mm	in			mm	in				PS1 kgf	PS2 kgf	PS3 kgf	PS4 kgf	
PS1-650-13-530	T2	660.4	26.0	390	520	600	23 5/8	960	630	530	275.7	414.1	576.8	748.4	28125
PS1-650-6-600	T2	660.4	26.0	390	445	620	24 7/16	848	545	600	134.6	194.2	265.5	342.3	3650
PS1-650-8-600	T2	660.4	26.0	390	460	620	24 7/16	868	550	600	158.6	232.4	320.6	415.3	7400
PS1-650-10-600	T2	660.4	26.0	390	475	630	24 13/16	890	595	600	210.0	304.8	418.1	539.6	13350
PS1-650-13-600	T2	660.4	26.0	390	550	650	25 9/16	1000	670	600	393.0	585.8	815.8	1059.6	28125
PS1-700-6-400	T2	711.2	28.0	420	536	560	22 1/16	920	601	400	95.5	138.2	187.3	238.7	3650
PS1-700-8-400	T2	711.2	28.0	420	545	570	22 7/16	942	610	400	112.8	171.4	238.9	309.6	7400
PS1-700-10-400	T2	711.2	28.0	420	575	580	22 13/16	970	665	400	171.8	266.2	374.4	487.6	13350
PS1-700-13-400	T2	711.2	28.0	420	620	590	23 1/4	1046	770	400	323.0	475.7	650.4	832.2	28125
PS1-700-6-530	T2	711.2	28.0	420	536	600	23 5/8	878	616	530	99.6	148.0	204.1	263.6	3650
PS1-700-8-530	T2	711.2	28.0	420	545	610	24	920	645	530	147.4	212.9	289.0	369.6	7400
PS1-700-10-530	T2	711.2	28.0	420	575	620	24 7/16	920	675	530	186.9	292.2	414.1	542.9	13350
PS1-700-13-530	T2	711.2	28.0	420	620	630	24 13/16	1010	730	530	313.7	482.1	676.9	881.4	28125
PS1-700-6-600	T2	711.2	28.0	420	545	640	25 3/16	898	645	600	150.5	221.2	303.9	392.2	3650
PS1-700-8-600	T2	711.2	28.0	420	560	650	25 9/16	918	650	600	179.9	269.5	374.7	486.7	7400
PS1-700-10-600	T2	711.2	28.0	420	575	650	25 9/16	960	675	600	234.4	345.1	475.0	612.9	13350
PS1-700-13-600	T2	711.2	28.0	420	650	680	26 3/4	1050	770	600	444.4	676.9	949.4	1236.9	28125
PS1-750-6-400	T2	762.0	30.0	450	536	590	23 1/4	970	601	400	101.9	147.7	200.7	256.0	3650
PS1-750-8-400	T2	762.0	30.0	450	545	590	23 1/4	992	610	400	118.5	179.7	249.7	323.1	7400
PS1-750-10-400	T2	762.0	30.0	450	575	600	23 5/8	1020	665	400	180.3	278.8	391.8	509.6	13350
PS1-750-13-400	T2	762.0	30.0	450	620	620	24 7/16	1096	770	400	343.6	507.7	695.8	891.5	28125
PS1-750-6-530	T2	762.0	30.0	450	536	630	24 13/16	928	616	530	106.2	158.1	218.0	281.6	3650
PS1-750-8-530	T2	762.0	30.0	450	545	630	24 13/16	970	645	530	155.0	223.2	302.4	386.0	7400
PS1-750-10-530	T2	762.0	30.0	450	575	640	25 3/16	970	675	530	196.4	306.3	433.3	567.3	13350
PS1-750-13-530	T2	762.0	30.0	450	620	660	26	1060	730	530	333.8	514.2	723.2	942.6	28125
PS1-750-6-600	T2	762.0	30.0	450	545	670	26 3/8	948	645	600	160.3	235.8	323.9	418.1	3650
PS1-750-8-600	T2	762.0	30.0	450	560	670	26 3/8	978	650	600	190.0	283.5	393.0	509.3	7400
PS1-750-10-600	T2	762	30.0	450	575	680	26 3/4	1010	675	600	249.4	367.7	506.7	654.2	13350
PS1-750-13-600	T2	762	30.0	450	650	700	27 9/16	1100	770	600	466.3	709.1	993.0	1291.8	28125
PS1-800-6-400	T2	812.8	32.0	480	536	610	24	1020	601	400	107.0	154.6	209.7	267.1	3650
PS1-800-8-400	T2	812.8	32.0	480	545	620	24 7/16	1042	610	400	125.9	191.2	266.7	345.4	7400
PS1-800-10-400	T2	812.8	32.0	480	575	630	24 13/16	1070	685	400	210.2	315.6	436.9	563.4	13350
PS1-800-13-400	T2	812.8	32.0	480	620	640	25 3/16	1176	770	400	395.9	564.2	757.8	958.3	28125
PS1-800-6-530	T2	812.8	32.0	480	536	650	25 9/16	978	616	530	111.4	165.3	227.8	293.8	3650
PS1-800-8-530	T2	812.8	32.0	480	545	660	26	1020	645	530	164.6	237.4	322.1	411.5	7400
PS1-800-10-530	T2	812.8	32.0	480	575	670	26 3/8	1042	685	530	221.2	338.4	474.2	617.5	13350
PS1-800-13-530	T2	812.8	32.0	480	620	680	26 3/4	1110	730	530	349.3	537.0	754.4	982.1	28125
PS1-800-6-600	T2	812.8	32.0	480	545	690	27 3/16	1008	645	600	168.9	247.3	339.0	436.6	3650
PS1-800-8-600	T2	812.8	32.0	480	560	700	27 9/16	1050	660	600	215.5	315.0	431.9	556.0	7400
PS1-800-10-600	T2	812.8	32.0	480	575	700	27 9/16	1070	675	600	262.5	385.6	530.0	682.9	13350
PS1-800-13-600	T2	812.8	32.0	480	650	730	28 3/4	1160	770	600	495.7	754.5	1057.5	1376.4	28125
PS1-850-6-400	T2	863.6	34.0	510	536	640	25 3/16	1070	601	400	113.5	164.5	223.7	285.3	3650
PS1-850-8-400	T2	863.6	34.0	510	545	640	25 3/16	1092	610	400	131.8	199.7	278.3	360.1	7400
PS1-850-10-400	T2	863.6	34.0	510	575	650	25 9/16	1120	685	400	219.9	329.5	455.8	587.2	13350
PS1-850-13-400	T2	863.6	34.0	510	620	670	26 3/8	1226	770	400	418.8	599.1	806.9	1022.3	28125
PS1-850-6-530	T2	863.6	34.0	510	536	680	26 3/4	1028	616	530	118.1	175.6	242.4	313.0	3650

**PS PIPE CLAMP BASE** FOR USE AS A SLIDING BASE OR WITH TYPE TB7 SPREADER BEAMS

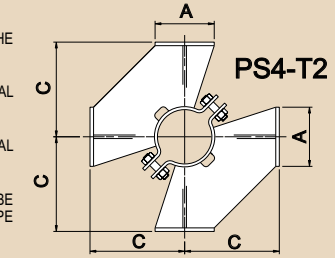


TYPE PS1 IS FOR USE AS A SLIDING BASE OR WITH SPREADER BEAMS. IF IT IS GUIDED AT THE BASE, THE LOAD CAPACITY IN THE HORIZONTAL DIRECTION IS 30% OF THE STATED VERTICAL LOAD CAPACITY.

TYPE PS2 IS FOR USE AS A GUIDE ON HORIZONTAL OR VERTICAL PIPES OR WHEN USED WITH THE LEGS VERTICAL AS A VERTICAL RESTRAINT ON HORIZONTAL PIPES IN CASES WHERE THE VERTICAL LOAD CAN ACT UPWARDS.

TYPE PS3 IS FOR USE AS A GUIDE ON HORIZONTAL PIPES. THE STATED LOAD CAPACITY IS APPLICABLE TO BOTH VERTICAL AND LATERAL LOADS ACTING CONCURRENTLY.

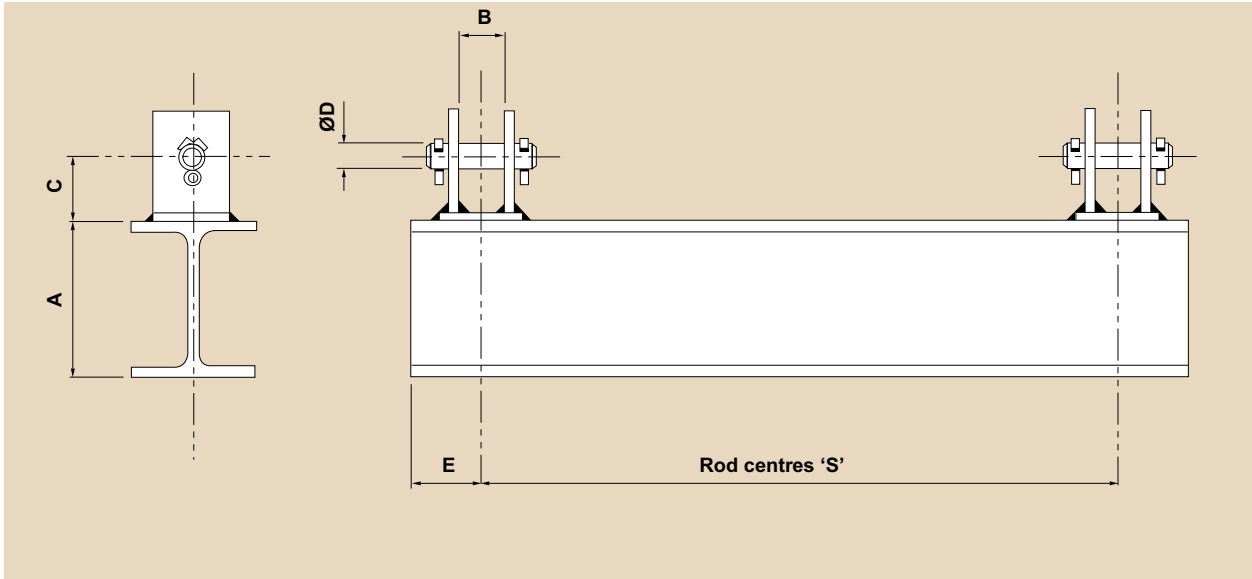
TYPE PS4 IS A TWO WAY GUIDE WHICH CAN BE USED FOR EITHER HORIZONTAL OR VERTICAL PIPES. ANY OF THE PIPE BASES CAN ALSO BE USED AS AXIAL RESTRAINTS IF SHEAR LUGS OR COLLARS ARE FITTED TO THE PIPE. THE LOAD CAPACITY IN THE DIRECTION OF THE PIPE AXIS IS LIMITED TO 30% OF THE LOAD CAPACITY IN THE VERTICAL DIRECTION.



*Material: Carbon Steel to 400°C Alloy Steel above 400°C Base Plate Weldable Carbon Steel*

Part No. (Type PS1)	TYPE (REFER TYPICAL DRAWING)	Pipe O/D		A	B	C		D	E	Max. Temp. °C	Weight				Load Capacity (See Notes) kgf
		mm	in			mm	in				PS1 kgf	PS2 kgf	PS3 kgf	PS4 kgf	
PS1-850-8-530	T2	863.6	34.0	510	545	680	26 3/4	1070	645	530	172.5	248.2	336.3	429.0	7400
PS1-850-10-530	T2	863.6	34.0	510	575	690	27 3/16	1092	685	530	231.3	353.2	494.6	643.3	13350
PS1-850-13-530	T2	863.6	34.0	510	620	710	27 15/16	1170	740	530	386.0	586.3	818.8	1062.4	28125
PS1-850-6-600	T2	863.6	34.0	510	545	720	28 3/8	1058	645	600	178.9	262.4	360.2	464.3	3650
PS1-850-8-600	T2	863.6	34.0	510	560	720	28 3/8	1100	660	600	225.6	329.2	450.6	579.3	7400
PS1-850-10-600	T2	863.6	34.0	510	575	730	28 3/4	1120	675	600	277.9	409.0	563.1	726.1	13350
PS1-850-13-600	T2	863.6	34.0	510	650	750	29 1/2	1210	770	600	517.9	787.4	1102.3	1433.2	28125
PS1-900-6-400	T2	914.4	36.0	540	636	670	26 3/8	1130	701	400	127.0	187.8	257.5	329.9	3650
PS1-900-8-400	T2	914.4	36.0	540	645	670	26 3/8	1142	710	400	148.1	229.1	321.7	417.7	7400
PS1-900-10-400	T2	914.4	36.0	540	675	680	26 3/4	1180	785	400	246.7	377.0	525.4	679.3	13350
PS1-900-13-400	T2	914.4	36.0	540	720	690	27 3/16	1276	870	400	457.7	665.7	902.5	1146.5	28125
PS1-900-6-530	T2	914.4	36.0	540	636	700	27 9/16	1088	736	530	146.4	212.8	288.9	368.7	3650
PS1-900-8-530	T2	914.4	36.0	540	645	710	27 15/16	1130	745	530	191.9	281.5	384.5	492.5	7400
PS1-900-10-530	T2	914.4	36.0	540	675	720	28 3/8	1172	765	530	260.9	403.0	566.3	736.9	13350
PS1-900-13-530	T2	914.4	36.0	540	720	730	28 3/4	1220	850	530	440.2	670.3	933.8	1208.1	28125
PS1-900-6-600	T2	914.4	36.0	540	645	740	29 1/8	1108	745	600	196.4	292.4	403.3	520.4	3650
PS1-900-8-600	T2	914.4	36.0	540	660	750	29 1/2	1150	760	600	250.0	371.8	512.7	661.3	7400
PS1-900-10-600	T2	914.4	36.0	540	675	750	29 1/2	1170	775	600	304.8	455.3	629.6	812.8	13350
PS1-900-13-600	T2	914.4	36.0	540	750	780	30 11/16	1260	870	600	575.5	890.6	1254.6	1635.4	28125
PS1-950-6-400	T2	965.2	38.0	570	636	690	27 3/16	1180	701	400	132.2	195.1	267.2	341.9	3650
PS1-950-8-400	T2	965.2	38.0	570	645	690	27 3/16	1202	735	400	181.0	264.7	360.5	459.6	7400
PS1-950-10-400	T2	965.2	38.0	570	675	700	27 9/16	1230	785	400	256.5	391.1	544.7	703.6	13350
PS1-950-13-400	T2	965.2	38.0	570	720	720	28 3/8	1336	870	400	483.0	703.6	955.6	1215.3	28125
PS1-950-6-530	T2	965.2	38.0	570	636	730	28 3/4	1138	736	530	154.2	224.5	305.2	389.8	3650
PS1-950-8-530	T2	965.2	38.0	570	645	730	28 3/4	1180	745	530	200.0	292.7	399.4	511.0	7400
PS1-950-10-530	T2	965.2	38.0	570	675	740	29 1/8	1222	765	530	271.2	418.0	586.9	763.0	13350
PS1-950-13-530	T2	965.2	38.0	570	720	760	29 15/16	1270	850	530	463.3	706.9	986.4	1277.5	28125
PS1-950-6-600	T2	965.2	38.0	570	645	770	30 5/16	1158	745	600	206.9	308.5	426.1	550.3	3650
PS1-950-8-600	T2	965.2	38.0	570	660	780	30 11/16	1200	760	600	263.0	391.7	540.8	698.0	7400
PS1-950-10-600	T2	965.2	38.0	570	675	780	30 11/16	1220	775	600	320.7	479.8	664.3	858.3	13350
PS1-950-13-600	T2	965.2	38.0	570	750	810	31 7/8	1320	880	600	628.9	961.9	1347.2	1750.3	28125
PS1-1000-6-400	T2	1016	40.0	600	636	720	28 3/8	1230	701	400	139.2	205.9	282.6	362.1	3650
PS1-1000-8-400	T2	1016	40.0	600	645	720	28 3/8	1252	735	400	190.7	279.6	381.8	487.5	7400
PS1-1000-10-400	T2	1016	40.0	600	675	730	28 3/4	1280	785	400	270.1	412.9	576.3	745.3	13350
PS1-1000-13-400	T2	1016	40.0	600	720	740	29 1/8	1386	870	400	501.6	729.8	990.8	1259.2	28125
PS1-1000-6-530	T2	1016.0	40.0	600	636	750	29 1/2	1188	736	530	160.5	233.1	316.6	404.0	3650
PS1-1000-8-530	T2	1016.0	40.0	600	645	760	29 15/16	1230	745	530	210.3	308.5	421.6	540.0	7400
PS1-1000-10-530	T2	1016	40.0	600	675	770	30 5/16	1272	765	530	285.3	440.8	619.9	806.7	13350
PS1-1000-13-530	T2	1016	40.0	600	720	780	30 11/16	1320	850	530	481.2	733.1	1022.4	1323.0	28125
PS1-1000-6-600	T2	1016	40.0	600	645	800	31 1/2	1208	755	600	228.5	335.8	460.2	591.6	3650
PS1-1000-8-600	T2	1016	40.0	600	660	800	31 1/2	1250	770	600	287.4	420.3	574.5	736.7	7400
PS1-1000-10-600	T2	1016	40.0	600	675	810	31 7/8	1270	775	600	337.1	505.2	700.5	905.7	13350
PS1-1000-13-600	T2	1016	40.0	600	750	830	32 11/16	1370	890	600	676.3	1020.7	1419.1	1835.2	28125

# TB6 SPREADERBEAM



Material: Carbon Steel

Order by Part No., Beam Reference and Rod Centres "S"

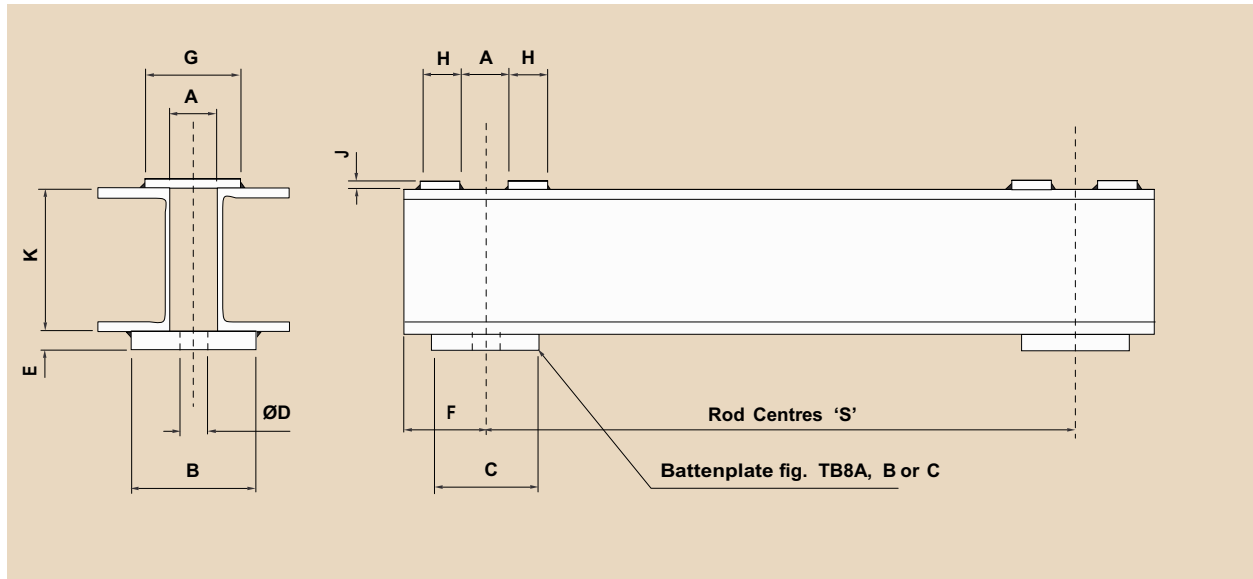
PART No.	ROD DIA	LOAD CAPACITY		LOAD GROUP	B	C	D	E	WEIGHT EXCLUDING BEAM
		kg	kN						kg
TB6M10	10	720	7.0	1	30	36	10	50	0.78
TB6M12	12	1060	10.4	2	30	36	12	50	0.80
TB6M16	16	2020	19.8	3	30	42	16	50	1.0
TB6M20	20	3160	31.0	4	35	60	20	60	2.2
TB6M24	24	4560	44.8	5	40	70	24	60	4.0
TB6M30	30	7300	71.6	6	40	82	30	60	6.9
TB6M36	36	10680	104.8	7	55	95	36	75	11.5
TB6M42	42	14800	145.2	8	65	105	42	80	15.7
TB6M48	48	19300	189.2	9	70	125	48	90	27.2
TB6M56	56	26700	261.8	10	80	140	56	95	37.5
TB6M64	64	36000	353.0	11	90	160	64	105	48.3
TB6M72	72	46050	451.6	12	100	180	72	110	71.0

BEAM REFERENCE	DEPTH 'A' (NOM.) mm	WEIGHT PER METRE (NOM.) kgf
A	125	13.5
B	150	14.6
C	175	19.9
D	200	22.7
E	250	32.7
F	300	40.4
G	350	47.9
H	400	61.8
J	450	72.5
K	515	87.7
L	600	108.0

ORDER BY PART NUMBER AND ROD CENTRES 'S'

ROD DIA	LOAD CAPACITY		LOAD GROUP	BEAM REFERENCE FOR SPAN S = mm															
	kgf	kN		250	500	750	1000	1250	1500	1750	2000	2250	2500	2750	3000				
10	720	7.0	1							A		B		C					
12	1060	10.4	2							A		B		C	D				
16	2020	19.8	3				A	B		C		D		E					
20	3160	31.0	4			A	B		C	D		E		F					
24	4560	44.8	5			B		C	D	E		F		G					
30	7300	71.6	6				D		E	F		G	H	J					
36	10680	104.8	7					E	F	G		H	J	K					
42	14800	145.2	8						F	G	H	J		K	L				
48	19300	189.2	9						G	H	J								
56	26700	261.8	10							J	K	L							
64	36000	353.0	11							K	L								
72	46050	451.6	12								L								

# TB7 SPREADER BEAM & TB8 BATTEN PLATE



Material: Carbon Steel

Order by Part No., Beam Reference and Rod Centres "S"

PART No.	ROD DIA	LOAD CAPACITY		LOAD GROUP	Fig. TB7A — PFC SPREADER BEAM FOR NO ROD ANGULATION										WEIGHT EXCLUDING CHANNELS kgf
		kg	kN		A	B	C	D	E	F	G	H	J		
TB7AM10	10	720	7.0	1	14	60	40	12	6	35	60	20	6	0.5	
TB7AM12	12	1060	10.4	2	16	65	50	14	8	35	65	20	6	0.7	
TB7AM16	16	2020	19.8	3	20	85	60	18	10	40	85	20	6	1.1	
TB7AM20	20	3160	31.0	4	24	85	60	22	10	50	85	30	8	1.4	
TB7AM24	24	4560	44.8	5	28	85	85	26	12	65	85	40	8	2.2	
TB7AM30	30	7300	71.6	6	36	120	100	33	16	80	120	50	8	4.3	
TB7AM36	36	10680	104.8	7	42	150	100	39	20	85	150	50	10	7.1	
TB7AM42	42	14800	145.2	8	48	170	110	45	25	85	170	50	10	10.0	
TB7AM48	48	19300	189.2	9	54	180	130	51	25	100	180	60	12	13.3	
TB7AM56	56	26700	261.8	10	64	200	150	60	30	125	200	80	12	20.2	
TB7AM64	64	36000	353.0	11	72	200	180	68	35	150	200	100	16	29.2	
TB7AM72	72	46050	451.6	12	80	200	200	76	40	160	200	100	20	37.7	

PART No.	ROD DIA	LOAD CAPACITY		LOAD GROUP	Fig. TB7B — PFC SPREADER BEAM FOR USE WITH Fig. RA9 SPHERICAL WASHERS AND FOR MAX 5 Deg. ROD ANGULATION										WEIGHT EXCLUDING CHANNELS kgf
		kg	kN		A	B	C	D	E	F	G	H	J		
TB7BM10	10	720	7.0	1	38	90	60	16	10	55	90	30	6	1.4	
TB7BM12	12	1060	10.4	2	40	90	60	18	10	60	90	30	6	1.4	
TB7BM16	16	2020	19.8	3	48	100	80	22	12	70	100	40	6	2.3	
TB7BM20	20	3160	31.0	4	58	110	100	30	16	85	110	50	8	4.0	
TB7BM24	24	4560	44.8	5	68	120	100	33	20	95	120	50	8	5.3	
TB7BM30	30	7300	71.6	6	84	160	110	43	25	100	160	50	8	8.9	
TB7BM36	36	10680	104.8	7	98	200	150	48	30	135	200	75	10	18.8	
TB7BM42	42	14800	145.2	8	120	250	180	56	35	145	250	75	10	30.6	
TB7BM48	48	19300	189.2	9	135	260	200	64	40	180	260	100	12	42.5	
TB7BM56	56	26700	261.8	10	145	275	250	74	40	185	275	100	12	53.5	
TB7BM64	64	36000	353.0	11	155	300	250	84	50	195	300	100	16	73.0	
TB7BM72	72	46050	451.6	12	165	300	250	94	60	205	300	100	20	89.5	

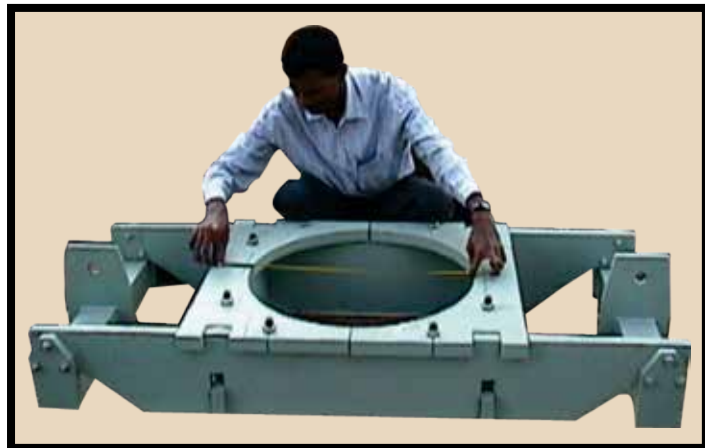
PART No.	ROD DIA	LOAD CAPACITY		LOAD GROUP	Fig. TB7C — PFC SPREADER BEAM FOR USE WITH Fig. 281 DUAL FACED ROCKER WASHERS AND FOR MAX 5 Deg. ROD ANGULATION										WEIGHT EXCLUDING CHANNELS kgf
		kg	kN		A	B	C	D	E	F	G	H	J		
TB7CM12	12	1060	10.4	2	40	90	90	38	10	60	90	30	6	1.8	
TB7CM16	16	2020	19.8	3	48	100	100	38	16	70	100	40	6	3.1	
TB7CM20	20	3160	31.0	4	58	110	110	49	20	85	110	50	8	5.2	
TB7CM24	24	4560	44.8	5	68	120	120	49	20	95	120	50	8	6.0	
TB7CM30	30	7300	71.6	6	84	160	160	66	25	100	160	50	8	12.1	
TB7CM36	36	10680	104.8	7	98	200	200	66	30	135	200	75	10	23.5	
TB7CM42	42	14800	145.2	8	120	250	250	74	35	145	250	75	10	40.2	
TB7CM48	48	19300	189.2	9	135	260	260	82	40	180	260	100	12	52.2	
TB7CM56	56	26700	261.8	10	145	275	275	93	50	185	275	100	12	69.7	
TB7CM64	64	36000	353.0	11	155	300	300	104	50	195	300	100	16	84.8	

SPREADER BEAM ASSEMBLY INCLUDES TWO BATTENPLATES AS SHOWN  
BATTENPLATES CAN ALSO BE ORDERED SEPARATELY



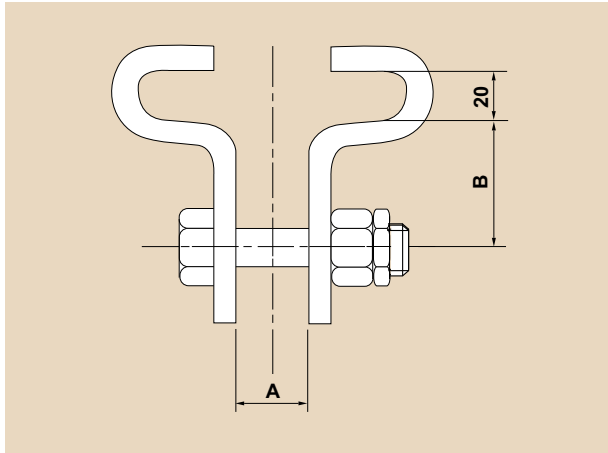


Clamps being hot formed in 150T press



Flat plate type riser clamp

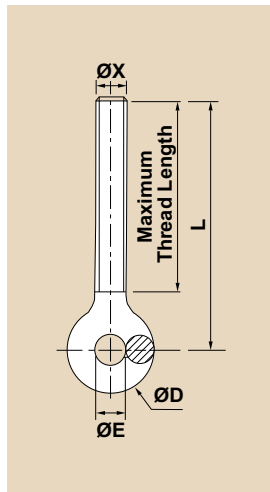
## UA6 BEAM CLAMP



PART No.	FLANGE WIDTH	STEEL SIZE	A	B	BOLT SIZE	LOAD CAPACITY	
						kgf	kN
UA6-1	63-152	35x8	10	40	M10	360	3.5
	203 max.	40x10					
UA6-2	63-152	40x10	12	40	M12	500	4.9
	203 max.	45x10					
UA6-3	63-152	45x10	16	45	M16	650	6.4
	203 max.	60x10					
UA6-4	63-178	55x12	20	55	M20	900	8.8
	254 max.	70x12					
UA6-5	63-178	70x12	20	65	M20	1200	11.8
	254 max.	60x15					
UA6-6	63-178	60x15	20	65	M20	1550	15.2
	254 max.	80x15					

Material: Carbon Steel Order by Part No. & Beam Size

## RA16 FORGED EYEBOLT RIGHT HAND RA16A FORGED EYEBOLT LEFT HAND



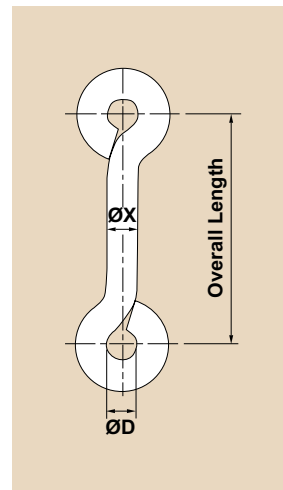
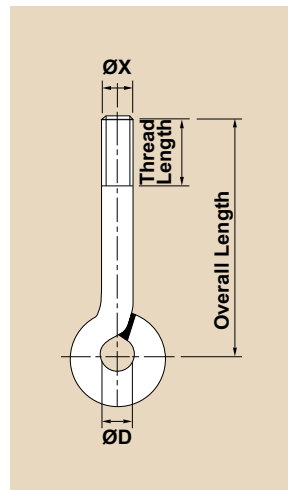
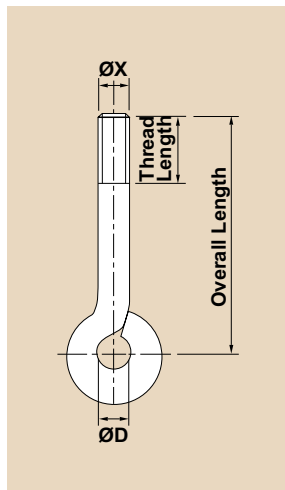
PART Nos.		DIA X	L	MAX TREAD LENGTH	MIN DIA D	DIA E	LOAD CAPACITY	
RH THREAD	LH THREAD						kgf	kN
RA16 M10	RA16 AM10	10	300	275	7	16	360	3.5
RA16 M12	RA16 AM12	12	300	270	9	18	530	5.2
RA16 M16	RA16 AM16	16	300	270	12	22	1010	9.9
RA16 M20	RA16 AM20	20	300	260	14	26	1580	15.5
RA16 M24	RA16 AM24	24	300	260	17	30	F2280	22.4
RA16 M30	RA16 AM30	30	300	255	21	36	3650	35.8
RA16 M36	RA16 AM36	36	300	245	26	42	5340	52.4
RA16 M42	RA16 AM42	42	300	235	30	48	7400	72.6
RA16 M48	RA16 AM48	48	340	220	35	44	9650	94.6
RA16 M56	RA16 AM56	56	355	230	41	57	13350	130.9
RA16 M64	RA16 AM64	64	370	230	47	60	18000	176.5
RA16 M72	RA16 AM72	72	420	240	57	76	23025	225.8
RA16 M80	RA16 AM80	80	500	260	60	90	28125	275.8
RA16 M90	RA16 AM90	90	600	320	70	100	35595	349.1

Material: Forged Steel Sizes M42 and above are oval eye pattern. Equivalent fabricated design is also available

BENT EYE ROD  
RA17 RH  
RA17A LH

BENT EYE ROD  
WELDED  
RA18 RH  
RA18A LH

RA 19 DOUBLE BENT EYE ROD



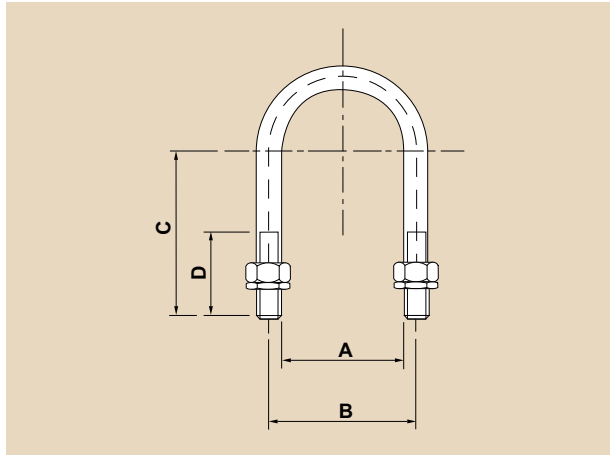
DIA X	DIA D	LOAD CAPACITY	
		kgf	kN
10	12	105	1.0
12	15	160	1.6
16	19	285	2.8
20	24	430	4.2
24	28	660	6.5
30	43	1080	10.6
36	49	2100	20.6
42	55	2950	28.9

For Thread lengths see Fig RA2 Hanger Rod (Page 8)

Material: Carbon Steel Order by Figure number, size and overall length



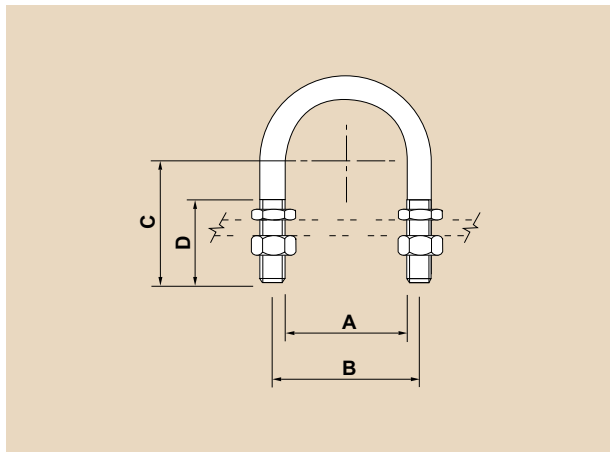
## PA8 U BOLT GRIP TYPE $-20^{\circ}\text{C}$ to $350^{\circ}\text{C}$



Material: Carbon Steel. Also available in Stainless Steel

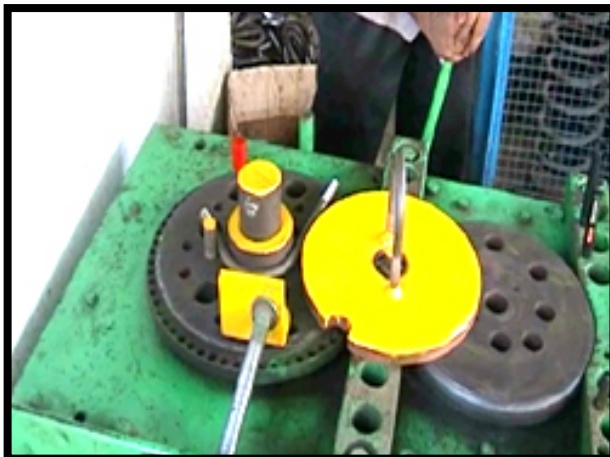
PART No.	PIPE NB		Thread Size	A	B	C	D	Load capacities (kg)		
	mm	in						Vertical	Lateral	Axial
PA8-10	10	3/8	8	19	27	34	23	460	210	100
PA8-15	15	1/2	8	23	31	36	25	460	170	80
PA8-20	20	3/4	8	29	37	43	25	460	140	70
PA8-25	25	1	8	37	45	44	25	460	100	50
PA8-32	32	1 1/4	8	47	55	50	25	460	80	40
PA8-40	40	1 1/2	10	50	60	61	35	720	140	70
PA8-50	50	2	10	65	75	65	35	720	110	60
PA8-65	65	2 1/2	12	78	90	86	45	1060	160	80
PA8-80	80	3	16	92	108	98	50	2020	330	170
PA8-100	100	4	16	119	135	110	50	2020	250	120
PA8-125	125	5	16	144	160	123	50	2020	210	100
PA8-150	150	6	20	170	190	141	55	3160	340	170
PA8-200	200	8	20	225	245	176	65	3160	260	130
PA8-250	250	10	20	280	300	203	65	3160	210	100
PA8-300	300	12	20	330	350	228	65	3160	170	90
PA8-350	350	14	24	361	385	251	75	4560	280	140
PA8-400	400	16	24	411	435	285	80	4560	240	120
PA8-450	450	18	24	461	485	300	70	4560	220	110
PA8-500	500	20	24	516	540	334	75	4560	190	100
PA8-600	600	24	24	616	640	383	75	4560	160	80

## PA9 U BOLT NON GRIP TYPE $-20^{\circ}\text{C}$ to $350^{\circ}\text{C}$



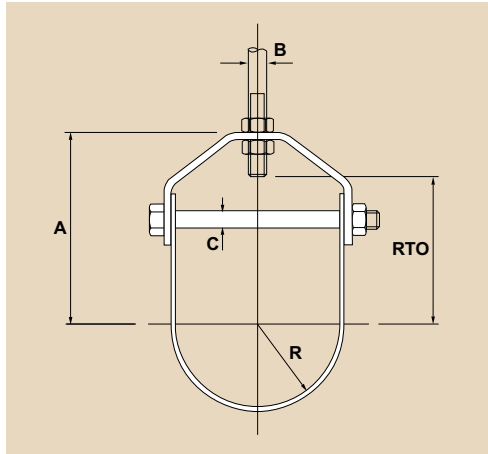
Material: Carbon Steel. Also available in Stainless Steel

PART No.	PIPE NB		Thread Size	A	B	C	D	Load Capacities (kg)		
	mm	in						Vertical	Lateral	Axial
PA9-10	10	3/8	8	28	36	23	23	170	130	70
PA9-15	15	1/2	8	32	40	25	25	150	120	60
PA9-20	20	3/4	8	37	45	33	30	140	100	50
PA9-25	25	1	8	42	50	35	30	130	90	40
PA9-32	32	1 1/4	8	52	60	40	30	110	70	40
PA9-40	40	1 1/2	10	55	65	53	40	190	130	70
PA9-50	50	2	10	70	80	60	40	160	100	50
PA9-65	65	2 1/2	12	83	95	73	50	230	150	80
PA9-80	80	3	16	94	110	85	55	470	310	160
PA9-100	100	4	16	124	140	95	55	380	240	120
PA9-125	125	5	16	149	165	108	55	330	200	100
PA9-150	150	6	20	175	195	128	65	540	330	160
PA9-200	200	8	20	230	250	150	65	430	250	130
PA9-250	250	10	20	285	305	183	75	350	200	100
PA9-300	300	12	20	335	355	208	75	310	170	90
PA9-350	350	14	24	366	390	230	80	480	270	140
PA9-400	400	16	24	416	440	255	80	430	240	120
PA9-450	450	18	24	471	495	278	80	380	210	110
PA9-500	500	20	24	521	545	303	80	350	190	100
PA9-600	600	24	24	621	645	353	80	300	160	80



U Bolt forming M/C

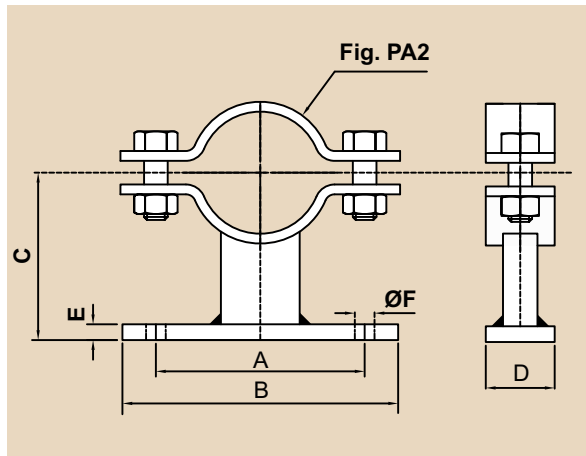
## PA10 CLEVIS HANGER -20°C TO 100°C



Material: Carbon Steel

PART No.	PIPE NB		A	B	C	R	RTO	SWL		TOP STEEL SIZE	BOTTOM STEEL SIZE
	mm	in						Kgf	KN		
PA10-15	15	1/2	60	M6	M6	11.0	39	250	2.45	25x3	25x3
PA10-20	20	3/4	64	M6	M6	13.5	42	250	2.45	25x3	25x3
PA10-25	25	1	65	M6	M6	17.0	45	250	2.45	25x3	25x3
PA10-32	32	1 1/4	72	M10	M10	21.5	50	250	2.45	30x3	30x3
PA10-40	40	1 1/2	76	M10	M10	24.5	54	250	2.45	30x3	30x3
PA10-50	50	2	79	M10	M10	30.5	58	250	2.45	30x3	30x3
PA10-65	65	2 1/2	105	M12	M12	38.0	74	500	4.9	40x5	40x3
PA10-80	80	3	115	M12	M12	44.5	82	500	4.9	40x5	40x3
PA10-100	100	4	140	M12	M12	57.5	101	500	4.9	40x5	40x3
PA10-125	125	5	160	M16	M16	70.0	117	600	5.88	50x6	50x6
PA10-150	150	6	183	M16	M16	86.0	137	850	8.34	50x6	50x6
PA10-175	175	7	200	M20	M16	99.0	148	850	8.34	50x10	50x6
PA10-200	200	8	215	M20	M16	112.0	162	850	8.34	50x10	50x6
PA10-250	250	10	255	M20	M20	139.0	197	1550	15.2	50x10	50x6
PA10-300	300	12	283	M24	M20	165.0	221	1550	15.2	50x12	50x10
PA10-350	350	14	305	M24	M20	181.0	240	1750	17.2	60x12	60x10
PA10-400	400	16	336	M24	M24	206.0	270	1850	18.1	60x12	60x10
PA10-450	450	18	390	M24	M24	232.0	310	2000	19.6	80x12	80x10
PA10-500	500	20	440	M30	M24	258.0	344	2000	19.6	80x15	80x12
PA10-600	600	24	495	M30	M24	309.0	397	2000	19.6	80x15	80x12
PA10-750	750	30	610	M30	M42	385.0	499	2000	19.6	80x20	80x12

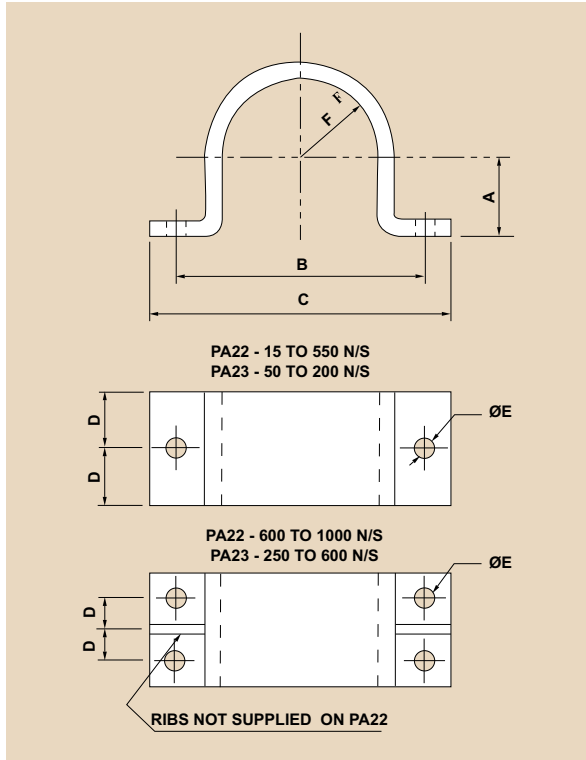
## PA20 OFFSET PIPE CLAMP -20°C TO 350°C



Material: Carbon Steel

PART No.	PIPE SIZE	A	B	C	D	E	F	LOAD CAPACITY	
								kgf	kN
PA20-15	15	60	100	55	35	5	12	280	2.7
PA20-20	20	70	110	55	35	5	12	280	2.7
PA20-25	25	70	110	60	35	5	12	280	2.7
PA20-32	32	80	120	70	35	8	14	280	2.7
PA20-40	40	90	130	80	35	8	14	280	2.7
PA20-50	50	100	140	85	35	8	14	280	2.7
PA20-65	65	110	160	90	45	10	18	450	4.4
PA20-80	80	120	170	95	45	10	18	450	4.4
PA20-100	100	140	190	110	45	10	18	450	4.4
PA20-125	125	160	210	120	45	10	18	450	4.4
PA20-150	150	180	230	135	45	10	18	450	4.4
PA20-200	200	220	270	160	60	10	18	520	5.1

**PA22 HOLD DOWN PIPE CLAMP  
PA23 ANCHOR HOLD DOWN CLAMP**

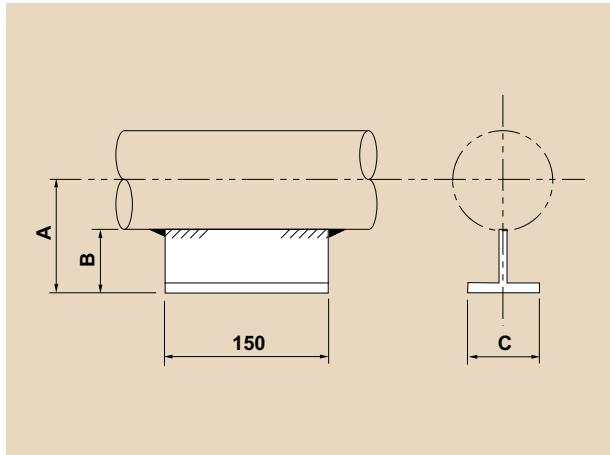


Material: Carbon Steel

PART No.	PIPE SIZE	PIPE O/D	A	B	C	D	ØE	F	STEEL SIZE
PA22-15	15	21.3	10	70	110	17.5	12	11.5	35x5
PA22-20	20	26.9	13	80	120	17.5	12	14	35x5
PA22-25	25	33.7	16	90	130	17.5	12	18	35x5
PA22-32	32	42.4	20	110	140	17.5	15	22	35x8
PA22-40	40	48.3	23	120	160	17.5	15	25	35x8
PA22-50	50	60.3	29	130	170	17.5	15	31	35x8
PA22-65	65	76.1	36	160	210	22.5	19	40	45x10
PA22-80	80	88.9	43	180	230	22.5	19	46	45x10
PA22-100	100	114.3	55	210	260	22.5	19	59	45x10
PA22-125	125	139.7	68	240	300	30.0	24	72	60x10
PA22-150	150	168.3	82	270	330	30.0	24	86	60x10
PA22-175	175	193.7	95	310	370	27.5	24	99	55x15
PA22-200	200	219.1	107	340	400	27.5	24	112	55x15
PA22-225	225	244.5	122	360	420	27.5	24	124	55x15
PA22-250	250	273.0	135	390	450	27.5	24	138	55x15
PA22-300	300	323.9	162	440	500	27.5	24	164	55x15
PA22-350	350	355.6	172	480	540	27.5	24	180	55x15
PA22-400	400	406.4	202	530	600	30.0	28	205	60x15
PA22-450	450	457.0	228	590	660	30.0	28	231	60x15
PA22-500	500	508.0	258	640	710	30.0	28	256	60x15
PA22-550	550	559.0	278	690	760	30.0	28	282	60x15
PA22-600	600	610	305	730	790	30.0	24	308	100x15
PA22-650	650	660	328	780	840	30.0	24	333	100x15
PA22-700	700	711	355	830	890	30.0	24	358	100x15
PA22-750	750	762	380	890	950	30.0	24	385	100x15
PA22-800	800	813	405	970	1040	33.0	28	410	110x20
PA22-850	850	864	430	1020	1090	33.0	28	435	110x20
PA22-900	900	914	455	1070	1140	33.0	28	460	110x20
PA22-1000	1000	1016	507	1170	1240	33.0	28	511	110x20

PART No.	PIPE SIZE	PIPE O/D	A	B	C	D	ØE	F	STEEL SIZE
PA23-50	50	60.3	27	150	210	40	22	31	80x10
PA23-65	65	76.1	34	170	230	40	22	40	80x10
PA23-80	80	88.9	40	180	240	40	22	46	80x10
PA23-100	100	114.3	53	210	270	40	22	59	80x10
PA23-125	125	139.7	65	240	300	40	22	72	80x10
PA23-150	150	168.3	80	280	350	75	27	86	150x12
PA23-200	200	219.1	105	330	400	75	27	112	150x12
PA23-250	250	273.0	131	390	460	65	27	139	200x12
PA23-300	300	323.9	156	440	510	65	27	165	200x12
PA23-350	350	355.6	172	470	540	75	27	181	250x12
PA23-400	400	406.4	198	520	590	75	27	206	250x12
PA23-450	450	457.0	222	570	640	90	27	232	300x12
PA23-500	500	508.0	247	620	690	90	27	258	300x12
PA23-600	600	610	298	730	800	90	27	309	300x12

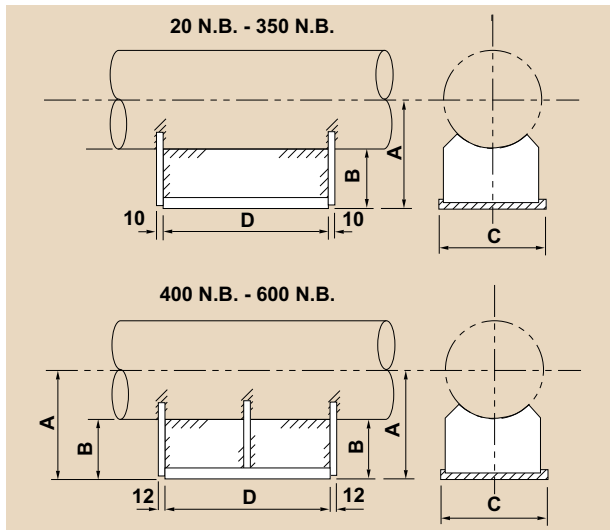
## PBL PIPE BASE LIGHT DUTY MAX. 150 N.B.



PART No.	PIPE N.B.	A	B	C	LOAD CAPACITY	
					kgf	kN
PBL-20	20	76	62	76	150	1.5
PBL-25	25	79	62	76	150	1.5
PBL-32	32	83	62	76	150	1.5
PBL-40	40	86	62	76	150	1.5
PBL-50	50	92	62	76	150	1.5
PBL-65	65	100	62	76	150	1.5
PBL-80	80	106	62	76	150	1.5
PBL-100	100	132	75	89	150	1.5
PBL-125	125	170	100	102	150	1.5
PBL-150	150	184	100	102	150	1.5

Material: Carbon Steel

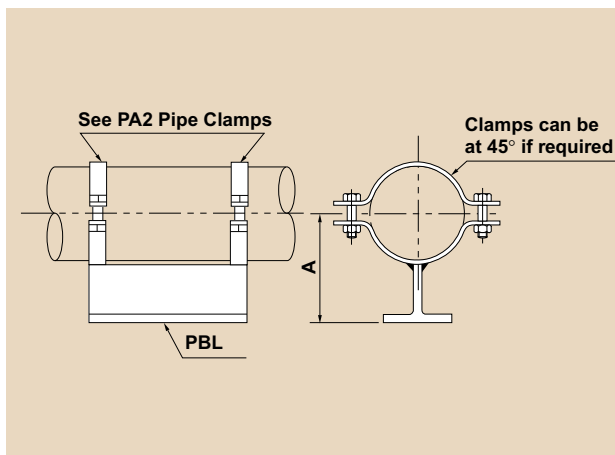
## PBH PIPE BASE HEAVY DUTY



Material: Carbon Steel

PART No.	PIPE N.B.	A	B	C	D	LOAD CAPACITY	
						kgf	kN
PBH-20	20	76	62	76	150	1200	11.8
PBH-25	25	79	62	76	150	1200	11.8
PBH-32	32	83	62	76	150	1200	11.8
PBH-40	40	86	62	76	150	1200	11.8
PBH-50	50	92	62	76	150	1200	11.8
PBH-65	65	100	62	76	150	1200	11.8
PBH-80	80	106	62	76	150	1200	11.8
PBH-100	100	132	75	89	150	1200	11.8
PBH-125	125	170	100	102	150	1200	11.8
PBH-150	150	184	100	102	150	1200	11.8
PBH-175	175	197	100	203	200	2000	19.6
PBH-200	200	210	100	203	200	2000	19.6
PBH-225	225	222	100	203	200	2000	19.6
PBH-250	250	237	100	203	200	2000	19.6
PBH-300	300	262	100	203	200	4000	39.2
PBH-350	350	278	100	203	200	4000	39.2
PBH-400	400	304	100	203	300	9000	88.3
PBH-450	450	329	100	203	300	12000	117.7
PBH-500	500	354	100	203	300	12000	117.7
PBH-550	550	380	100	203	300	12000	117.7
PBH-600	600	405	100	203	300	14000	137.3

## PCL PIPE CLAMP BASE LIGHT DUTY MAX. 150 N.B.



Material: Carbon Steel

PART No.	PIPE N.B.	A	LOAD CAPACITY	
			kgf	kN
PCL-20	20	81	150	1.5
PCL-25	25	85	150	1.5
PCL-32	32	89	150	1.5
PCL-40	40	92	150	1.5
PCL-50	50	98	150	1.5
PCL-65	65	107	150	1.5
PCL-80	80	113	150	1.5
PCL-100	100	139	150	1.5
PCL-125	125	177	150	1.5
PCL-150	150	191	150	1.5

## LOW FRICTION SLIDE BEARINGS

### WHY USE SLIDE BEARINGS

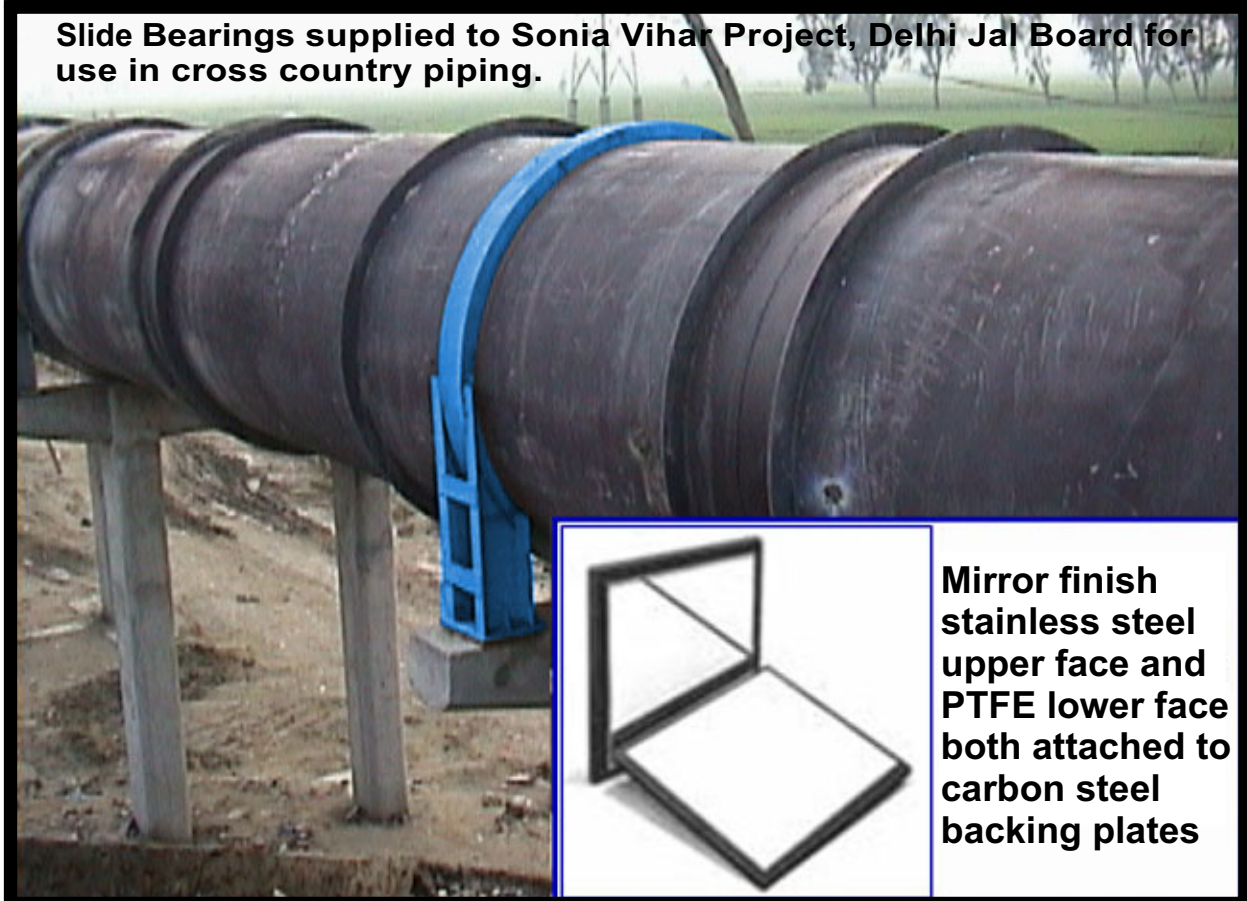
When pipe lines / structures are subjected to heat by external means due to difference in day & night temperatures or due to weather changes or due to temperatures of fluids carried in them as in the case of pipe lines, they will expand and contract by an amount decided by the geometry / shape and co-eff of thermal expansion of the material used in building them.

By not allowing them to expand and contract freely, severe stresses get induced leading to failures or over loadings.

A sensible & cost effective way of accommodating such expansion is to allow one item to move with respect to another — and this can be achieved by using low friction slide bearings to separate the expanding item from the supporting structure.

It is imperative that slide bearing is designed to keep frictional force to a minimum, to prevent the development of high loads and stresses.

### Slide Bearings supplied to Sonia Vihar Project, Delhi Jal Board for use in cross country piping.



**Mirror finish stainless steel upper face and PTFE lower face both attached to carbon steel backing plates**

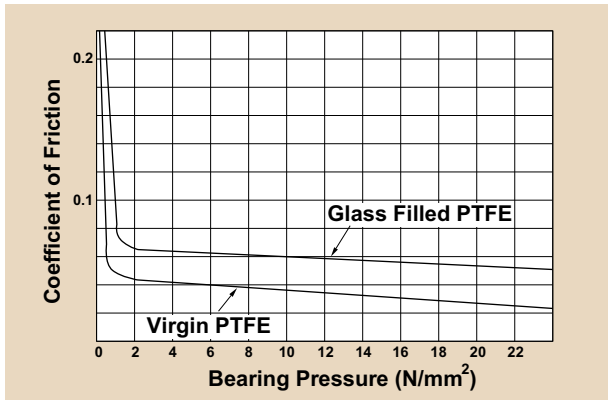
### WHY USE EASISLIDE BEARINGS?

- They incorporate PTFE — which has a coefficient of friction lower than any other solid material.
- The bearings are designed to achieve optimum performance, by carefully designing bearing pad dimensions to achieve ideal workable compressive stress.
- No routine maintenance required can work completely dry, require no lubrication.
- Designed to withstand a wide range of environmental conditions — operating at temperatures from minus 200°C to plus 150°C and are resistant to a wide range of organic and inorganic chemicals and vagaries of nature.
- Can tolerate some embedment of small particles in the bearing pad without causing failure.
- Compact design — fit into areas unsuitable for other types of bearing.
- Designed for easy on-site installation. No special tools or tackles required
- Long and maintenance free life.
- Operating successfully in a wide range of installations.

## THE RIGHT MATERIALS

The Slide Bearing standard range uses a PTFE pad (or pads) counterfaced by a larger polished stainless steel plate — the PTFE is bonded to a carbon steel backing plate for attachment to existing steelwork either by means of countersunk bolts or by welding. The stainless steel pad is similarly attached to a carbon steel backing plate. For corrosive environments, units can be supplied manufactured entirely in stainless steel with a PTFE slider pad.

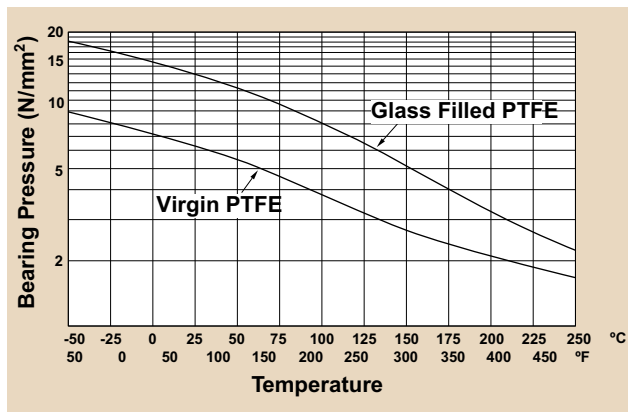
Alternatively, other combinations of material, Different slider materials such as bronze based or Graphite based for High temperature applications are also available.



## THE RIGHT BEARING SIZE

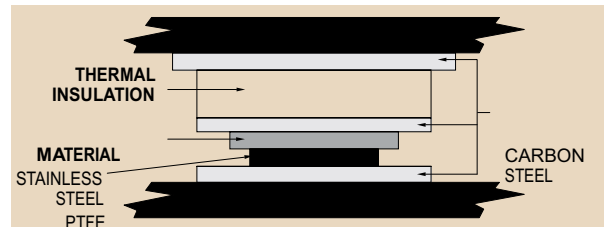
The PTFE pad is sized based on allowable bearing pressure at the working temperature or ambient temperature. PTFE bearing pads will not function well at low bearing pressures and co-eff of friction may increase defeating the purpose of providing them. Bearing pressures can be read off the curve below, but as a thumb rule 60 kg / cm<sup>2</sup> at normal ambient temperature is recommended.

The inputs for calculating will be the load, the movement in transverse and axial directions, the ambient temperature and the space available to accommodate the bearing. Sometimes filled PTFE slide bearings with a higher bearing pressure may be used in order to reduce size and operating at higher temperatures. Typical fillers are 25% Glass or 60% Bronze. The size of the counter facing stainless plate ( AISI SS304 mirror finished on one side) is calculated by adding 2 x expected movements to the size of the bearing PTFE pad + 25 mm over travel .



## THE RIGHT CONDITIONS

PTFE is suitable for continuous operation at temperatures up to 150°C — at greater temperatures load bearing thermal insulation material can be used to reduce the temperature of the bearing.



## SELECTING THE RIGHT LOW FRICTION SLIDE BEARING

- Decide the style of bearing required and check that the imposed load is within the recommended operating load range of the bearing assembly.
- The standard bearing may be used at loadings below the recommended minimum, but an increased coefficient of friction will result.
- For loadings in excess of the recommended maximum, please state the load capacity required, and we will design an assembly to suit.
- Select the appropriate axial and lateral movement ranges to accommodate the maximum anticipated movements.
- Where the bearing gives a choice of height dimensions, these should be specified.
- If no standard bearing suits your application, please contact our design service with your requirements.

## THE RIGHT DESIGN

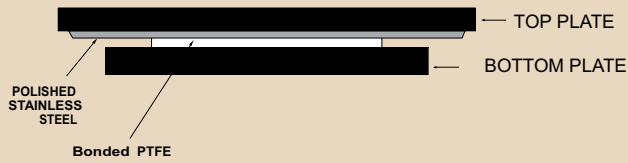
Low Friction Slide Bearings are designed and produced by Pipe Hangers & Supports Pvt Ltd.

We have the expertise and experience to design bearings for larger loads or movements or those with special operating requirements (Whether you need a bearing for a larger load or movement than those covered by our standard range, or even to a totally different style, our experienced team can design a) to meet your needs exactly.

So whatever your slide bearing requirements, call PHSPL and ask for Low Friction Slide Bearings.



SL07



Slide bearings can be used as stand alone or in conjunction with spring hangers or pipe shoes



## SLIDER ASSEMBLY-SL07

The Slider assembly is selected/offered for the following condition:

Normally rest supports are used in piping system, to take care of the vertical load having no vertical movements. But, these rest supports may have horizontal movements(axial & lateral with respect to pipe axis).When these supports are permitted to move/slide, it causes FRICTION. This friction is measured/defined as Coefficient of friction & is termed as " $\mu$ " which is a mere no. and has no unit. This value will be normally 0.3 or above, between steel to steel as sliding surfaces. This friction causes some load in the horizontal/lateral axis(frictional load) which normally any client would try to keep it minimum. When it is required to reduce this friction Slider assemblies are recommended.

Nowadays the slider assembly is offered as a substitute for rollers, as its performance will be considerably better than the latter. In case of rollers, even though galvanized carbon steel rollers are used, it gets rusted soon & it ceases to function in due course of time. This is not advisable technically.

Depending on the type of slider used the coefficient of friction is reduced to 0.16/0.1.

The sliders normally offered are PTFE or Graphite

PTFE is offered for temp  $\leq 150^{\circ}\text{C}$  on the face of top plate used along with slider assembly to reduce the Coefficient of friction as low as 0.1(between PTFE & Polished Stainless steel face).

PTFE supplied by PHSPPL will be normally of circular shape and thickness used is 5.5mm. The bearing stress varies depending on the applicable temperature & the type of PTFE selected (viz- virgin/Glass filled/bronze filled). Unless requested specifically, PHSPPL offers virgin PTFE only.

Graphite will be selected for temperatures  $\geq 150^{\circ}\text{C}$  and upto  $250^{\circ}\text{C}$  on the face of top plate used, to reduce the Coefficient of friction to around 0.15/0.16 (between Graphite & Polished Stainless steel face). Graphite supplied is square or rectangular in shape & thickness used is 12.7mm.



## SLIDER ASSEMBLY-SL07

Generally, slider assembly can be categorized into 3 types, depending on the usage.

1. Exclusive slider assembly.

2. Slider assembly used along with pipe clamp base/pipe shoe/saddle

3. Slider assembly used along with spring/constant support(bottom supported)

The slider assembly mainly consists of Top plate, SS sheet, PTFE or Graphite & Bottom plate.

1-Top plate (material- normally carbon steel with 10 mm thick)

(sizes-length & width suitable to accommodate the SS sheet, fixed by tack weld, to the bottom face of top plate). This top plate will be normally welded to the bottom plate of pipe clamp base/ pipe shoe/ saddle, existing or supplied by PHSPL as the case may be. In some cases, SS sheet is directly tack welded to the bottom plate of pipe clamp base/pipe shoe/saddle if its size is suitable. In such case, the top plate will be absent. This is based on client requirement.

2. SS sheet with one side mirror finish of 2.5 mm thick(material SS304/J4)

3a.If PTFE, it is 5.5mm thick & Circular in shape.

3b.If Graphite, it is 12.7mm thick & square/rectangular in shape.

4-Bottom plate (material-carbon steel with 10 mm thick normally)

4a. When used with PTFE, it is square in size & plate is grooved to a depth of 3mm to house PTFE in the groove and is fixed by gluing.

4b. When used with Graphite, it is square/rectangular in size so as to fix graphite by gluing, along with a retainer strip of 6mm square

cross section kept all around the graphite and tack welded to the bottom plate.

Normally, sizing of PTFE/Graphite is done not only for the given vertical load, but also considering the horizontal movements (lateral & axial). Apart from that, although it is not mandatory, it is a good practice to size it considering the pipe size (parent pipe or trunnion in certain cases) also.

Final PTFE size will be greater of the above considerations. The minimum size will be 50 mm diameter, rounded off to the nearest 10mm & to suit market availability.

Final graphite size will be greater of the above considerations. The minimum size will be 50mm square rounded off to the nearest 10mm & to suit market availability.

When PTFE or Graphite is used along with Bottom supported spring/constant support, there is a limitation on fixing the size of PTFE/Graphite, as it is housed on the load flange of the selected spring or constant support. In such situations, PHSPL can accommodate the slider with increased load flange size upto a certain extent, on case to case basis. This is because the spring load flange size cannot be increased indefinitely.

Care has to be taken that at least the slider sized based on vertical load, can be accommodated with the increased load flange. In such case the slider size may not satisfy fully the horizontal movements. This is only the best possible solution in such a condition. For this reason only, it is not advisable to use Bottom support spring ("F" type) arrangement at support locations having very high horizontal movements. In such cases, it is preferred to choose hanging type support for better performance of support, unless it is unavoidable & in exceptional cases.

Typical arrangement of slider assembly is shown below, for the understanding purpose. Tailor made design of slider assembly is also possible to meet the specific needs of the client.

Note-

In slider assembly, normally the top plate will be tack welded to the bottom plate of either pipe clamp base or saddle/pipe shoe.

(As stated above in some cases, the SS sheet is directly tack welded to bottom plate of pipe clamp base or saddle/pipe shoe).

The bottom plate of slider assembly is welded to the structure. As such both top & bottom plate are not directly load bearing members as they are being integral part of any one of the afore said item. Hence its thickness is not very critical & normally can be taken as 10mm, to arrive at the final assembly height of slider. With the above points in mind, the normal assembly height will be

For Types 1 & 2, approximate assembly height will be

a-With top plate & PTFE=25mm; With top plate & graphite =35mm.

b-Without top plate & PTFE=15mm; With top plate & graphite =25mm.

For type 3, approximate assembly height will be (there is no bottom plate as slider is fixed on load flange)

a-With top plate & PTFE=15mm; With top plate & graphite =25mm.

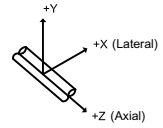
b-Without top plate & PTFE=5mm; With top plate & graphite =15mm.

However, varying thickness of top, bottom plate, PTFE can also be offered to meet client's specific requirement or to match the client's specific assembly height. The bottom plate is welded to the structure (beam/channel under client scope) and when its size is big, then it may be over hanging on the structure. This is not advisable. To avoid overhanging of bottom plate, it is to be suitably supported by vertical stiffener plates by client, welded at site.

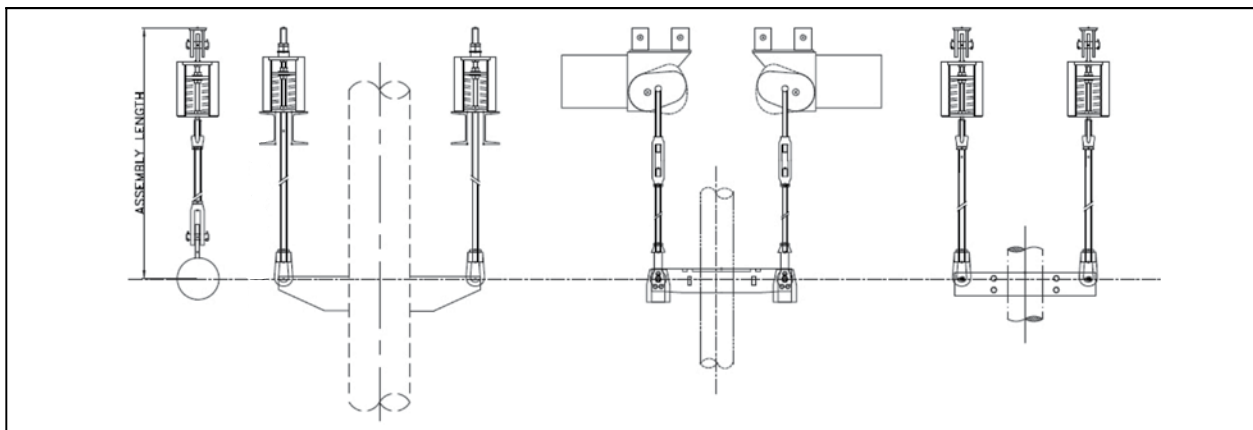


# Pipe Hangers & Supports Private Limited

## Ordering Information



- 1) Hot Load (Operating Load) in Kgs :
- 2) Thermal Movement / Travel (Direction + or -) in mm : UP (+) mm
- 3) Type of Hanger Variable / Constant /Rigid : VariableEffort Support
- 4) For Constant Add Over Travel :  Yes  No
- 5) For Variable Springs Max Allowable % Load Variation : %
- 6) Horizontal / Lateral Movement (If any) : 'X' Dir mm / 'Z' Dir mm
- 7) Hydro Load ( If any) : Kgs
- 8) Model & Type of Support :
- 9) Assembly Length (From BOS/TOS to Pipe CL ) : mm
- 10) Operating Temperature : Deg C
- 11) Pipe Insulation Thk : mm
- 12) Pipe Material :
- 13) Require Pipe Shoe for Foot Mounted Support :  Yes  No
- 14) For Foot Mounted Support Match Height :  Yes  No
- 15) Attachments like Lugs, Cleats Welded to Pipe in Scope :  Yes  No
- 16) Operating Load includes Wt of Accessories like Clamp, Tie Rods, Cleats, Lugs etc. :  Yes  No
- 17) Preferred Surface Protection / Painting :
- 18) For 'G' Type / Double / Trapeze type Hanger the Load Given above is for 1 assembly consisting of 2 Hangers / Individual Hanger :  Yes  No





## PIPE HANGERS & SUPPORTS PRIVATE LIMITED

### SOME FACTORS REQUIRED FOR PROPER SELECTION OF SUPPORT ITEMS

1. a) Plant is close to the sea Yes  NO   
b) If yes, proximity of the plant from the sea \_\_\_\_\_ Km
2. Is the atmosphere corrosive? Yes  NO
3. Plant under consideration: (Tick applicable plant)  
a) Power  / Process  / Petrochemical  / Nuclear  / Chemical industry  Others   
b) Is there any corrosive chemical plant nearby? Yes  NO
4. What is the preferred surface preparation / paint specification based on recommendation from your consultants for this location  
a) For spring \_\_\_\_\_  
b) Other components \_\_\_\_\_
5. Approx ambient temperature in °C of the plant under consideration \_\_\_\_\_ °C
6. Storage: It is strongly recommended that all our products are stored in tact under covered roof only even after boxes are opened and awaiting erection. In no case, should it be kept exposed to open atmosphere. Kindly confirm. Yes

# Nuclear Power Plants & Sites in India

Supplied By



## Pipe Hangers & Supports Private Limited

रावतभाटा ( राजस्थान )  
Rajasthan Atomic  
Power Station (RAPS),  
Rawatbhata Rajasthan

- 1 x 100 MW
- 1 x 200 MW
- 4 x 220 MW
- ▲ 2 x 700 MW

काकरापार ( गुजरात )  
Kakrapar Atomic Power  
Station (KAPS), Gujarat

- 2 x 220 MW
- ▲ 2 x 700 MW

कैगा ( कर्नाटक )  
Kaiga Generating Stations  
(KGS), Karnataka

- 4 x 220 MW
- 2 x 700 MW

नरोरा ( उत्तर प्रदेश )  
Narora Atomic Power Station  
(NAPS) Uttar Pradesh

- 2 x 220 MW

कलपक्कम ( तमिलनाडु )  
Madras Atomic Power  
Station (MAPS),  
Kalpakkam, Tamil Nadu

- 2 x 220 MW

Kudankulam Nuclear  
Power Project  
Tirunelveli, Tamil Nadu

- 2 x 1000 MW



# Additional Services



- Design and Detail of complete Pipe Support Systems
- Survey of existing pipe supports
- Inspection at site prior to commissioning
- Assist customers with innovative ideas to provide unique solutions



- Stress analysis & detail support engineering
- Conduct training programs on Hangers & Supports

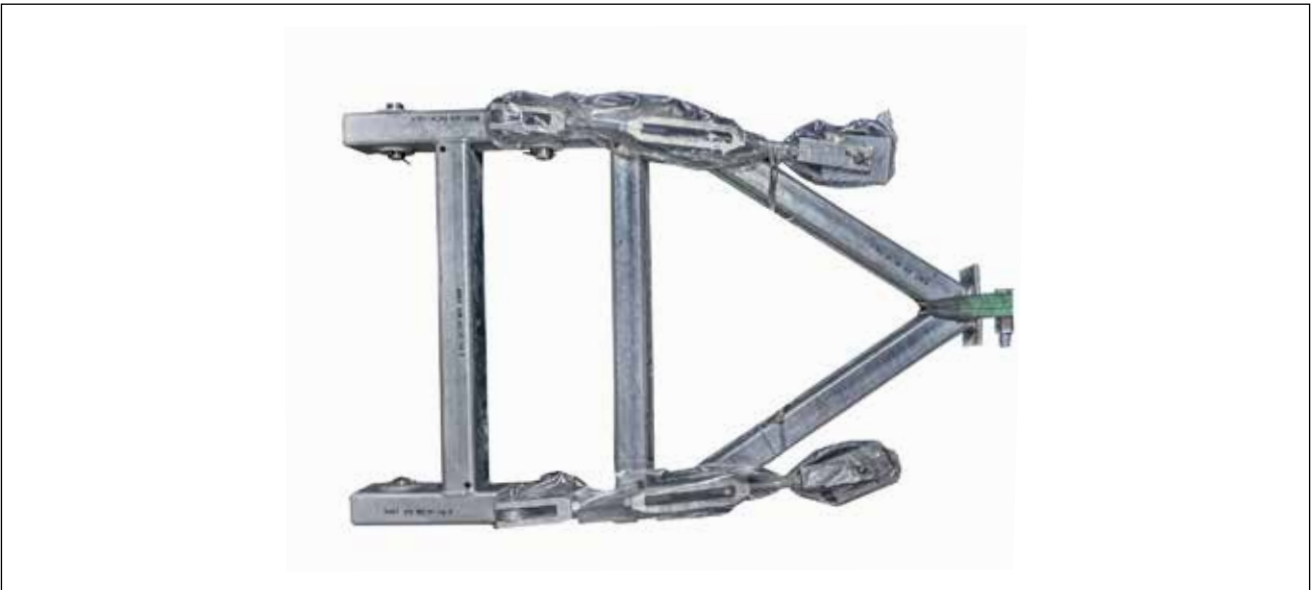




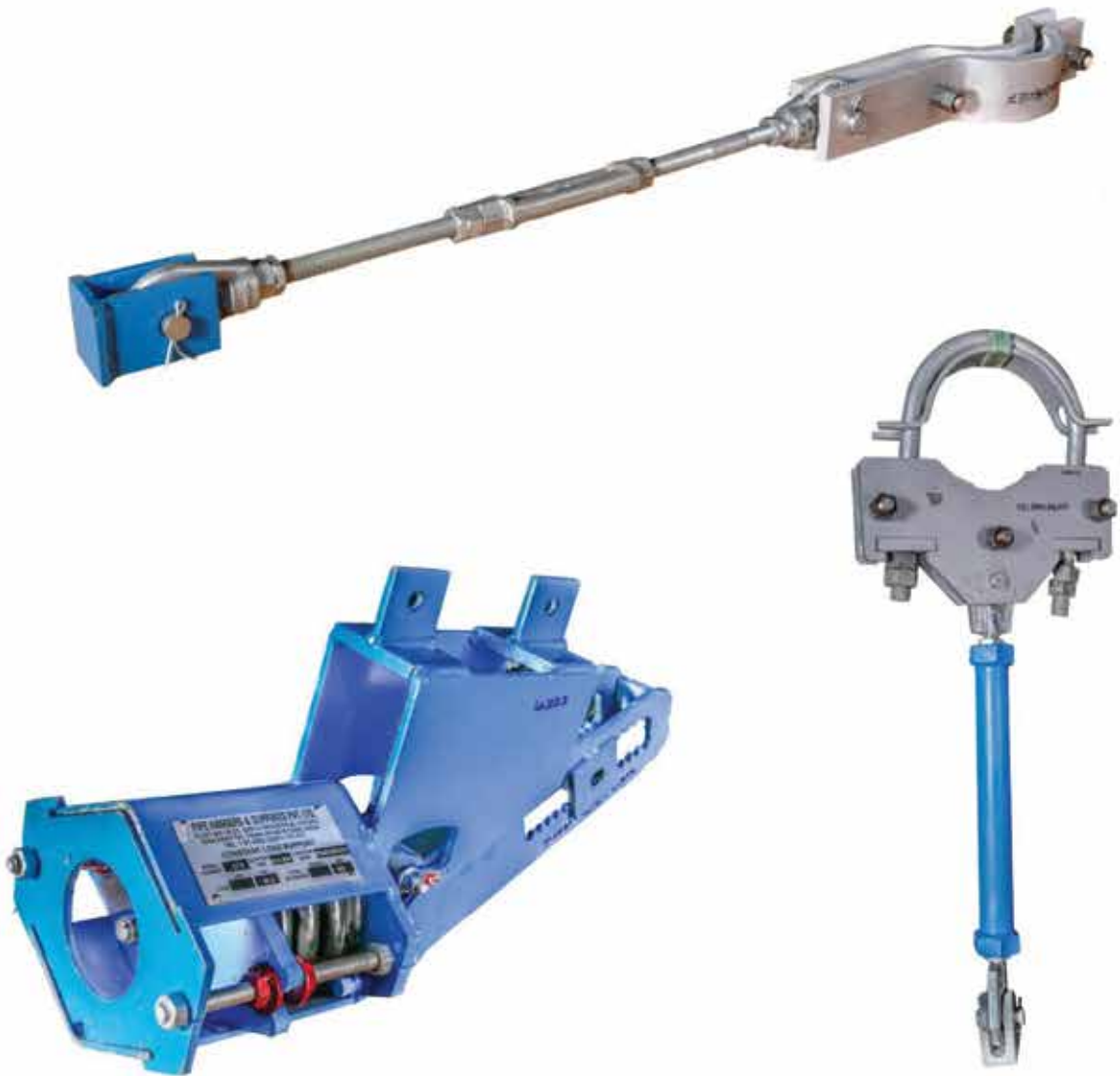
**PIPE HANGERS & SUPPORTS**



# COUNTER WEIGHT SUPPORTS

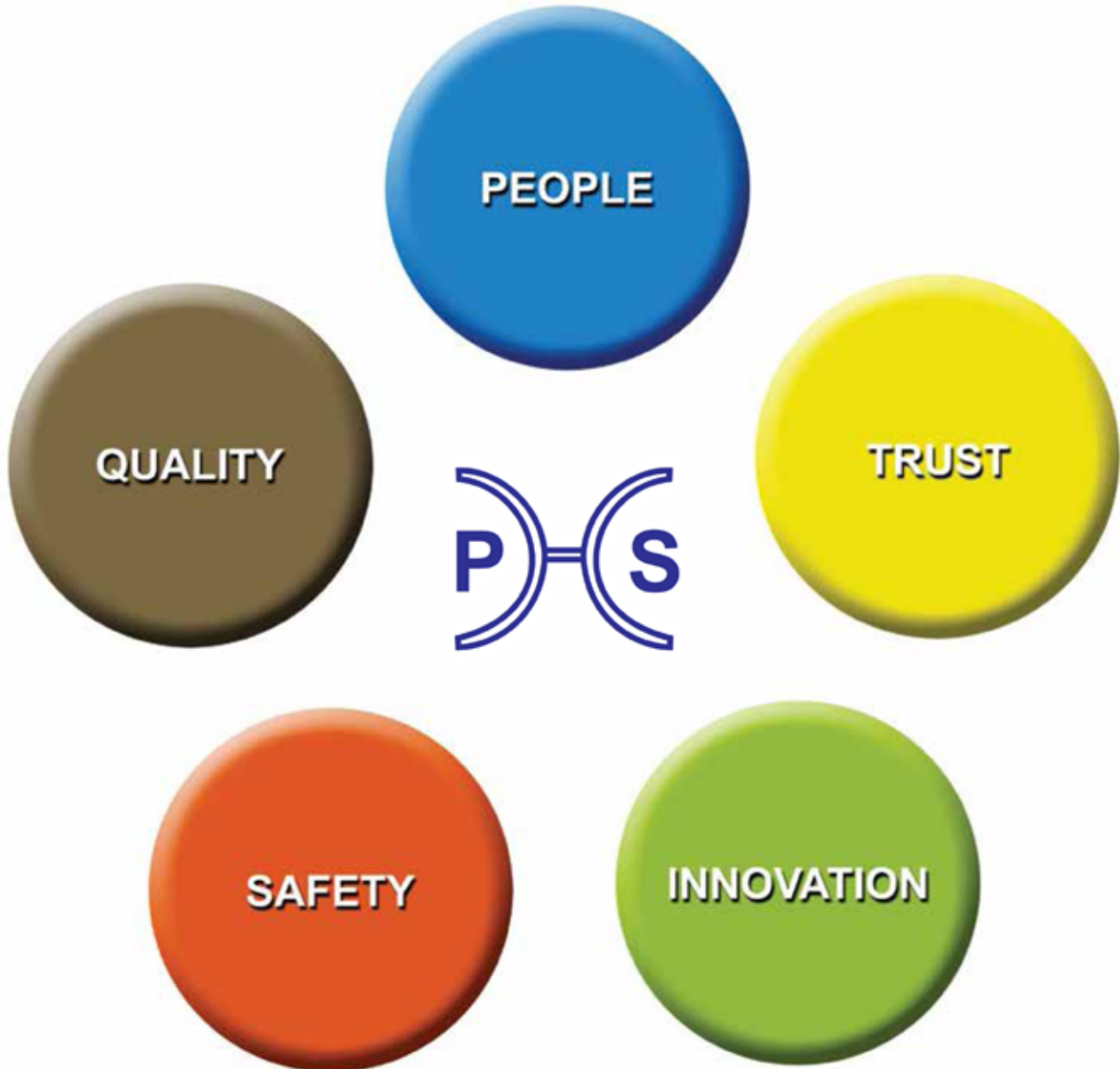








## VALUES



**Our People:** By fostering teamwork, nurturing talent, enhancing leadership capability & acting with pace, pride & passion

**Our Offer:** By becoming the supplier of choice, delivering premium products & services & creating value for our customers

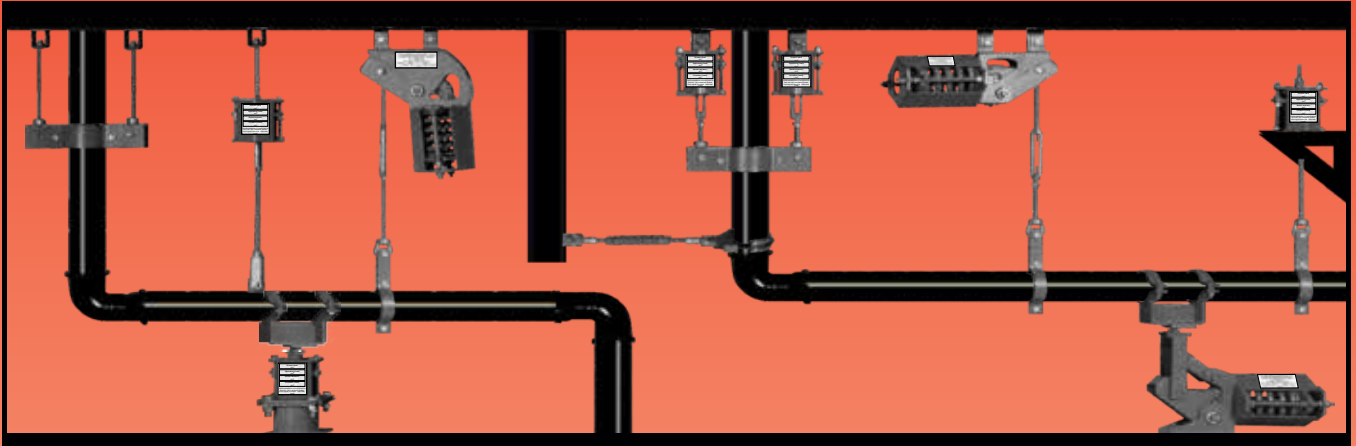
**Our Innovative Approach:** By developing leading edge solutions in technology, process & products

**Our Conduct:** By providing a safe workplace, respecting the environment, caring for our communities & demonstrating high ethical standards

**Quality Vision:** We aspire to be the most trusted & preferred supplier of choice to our valuable customers

# Pipe Hangers & Supports Private Limited

GIVE PIPEWORK THE SUPPORT IT DESERVES



## Corporate office

Plot No. 40, 1st Floor,  
Industrial Estate, Perungudi,  
Chennai - 600 096,  
India

## Thanjavur factory

Plot No. 18-20, 22, 23  
SIDCO Industrial Estate,  
Nanjikottai, Thanjavur - 613 006  
India

Website: [www.pipehangers.in](http://www.pipehangers.in)