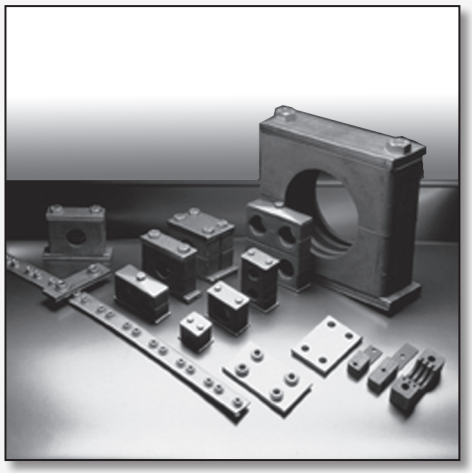
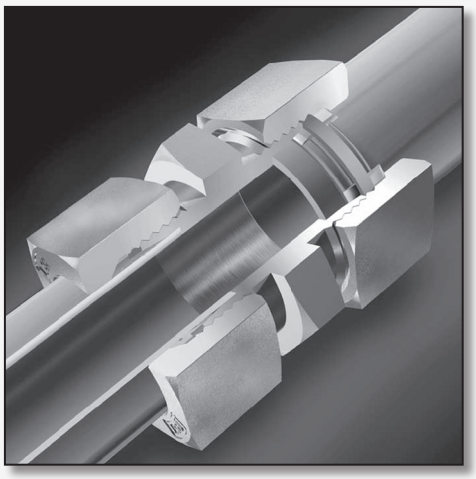
Click on Index Item to be Taken to That Page





INTRODUCTION

Tube and pipe merchants within Australia offer a range of products suited to hydraulic, pneumatic and instrumentation applications. The data included here is intended as a guide only to the products more commonly used, and should not be construed as representative of products offered for sale by Pirtek.
Specifications and technical data are typical.

Imperial Tube and Pipe

Tabulated burst pressures for imperial tube and pipe size of various sizes are derived from use of Barlow's Formula. Results are converted to bars for convenience.

BP (kg/cm²) = Wall Thickness (cm) x 2 x Tensile Strength (kg/cm²) / Outside Dia. (cm).

Material	Adopted tensile strength	Tabulated
Butt welded wrought steel pipe * (Sched. 40, 80, 160)	275 MPa (2812 kg/cm²)	Yes
Lap welded wrought steel pipe	345 MPa (3515 kg/cm²)	No. Add 20% to above.
Hydraulic Cold Drawn Steel Tube (CDS)	345 MPa (3515 kg/cm²)	Yes
Stainless Steel 302, 303, 304,309, 310, 316, 321, 416	510 MPa (273 kg/cm²)	Yes
Stainless Steel 410, 430	414 MPa (4222 kg/cm²)	No
Stainless Steel 202, 440C	690 MPa (7037 kg/cm²)	No
Copper	220 MPa (2 250 kg/cm²)	No
* Wrought iron pipe	Thicker than wrought steel. Adopt the same burst pressure as butt welded wrought steel.	

Flow Rate / Velocity

Flow rates given in the tables are based on the following guides:

Suction lines:	0.6 - 1.2 m/sec
Return lines:	3 - 4.5 m/sec
Medium Pressure (35 - 140 bar) lines:	4.5 - 6 m/sec
High Pressure lines (≥ 200 bar):	≤ 9 m/sec

Safety Factor

It's recommended that hydraulic systems subjected to shock loads incorporate a 6:1 factor of safety.
Use of a lower factor can be contemplated after due consideration of the system operating parameters.

Quoted working pressures for metric tubing are as per relevant DIN standards.

Copper Tube

Consult page E 8

Metric Tube

Metric steel tubing is designated by the combination of outside diameter and wall thickness. Pirtek recommends the use of precision cold drawn seamless tube manufactured to conform to the requirements of DIN 2391 Part 1. Material grade should be St 37.4, Type NBK, as described in DIN 1630. Maximum exterior hardness 75 HRB.
Tabulated pressure ratings are in accordance with :

DIN 2413-I (static loads using a tensile stress yield point of 235 N/mm²)
DIN 2413-III (dynamic loads using a yield point of 226 N/mm²).

For thick walled tube (ie the ratio of OD to ID exceeds 1.35), the tabulated pressure is as per DIN2413-III, but with the 235 N/mm² yield point. The applicable safety factor in all cases is 1.5.
Allowance factors are:
4 mm tube C = 0.8
6-8 mm tube C = 0.85
8mm tube and larger C = 0.9
No additional provision for corrosion is incorporated.

1.4571 stainless steel tubing is designated by the combination of outside diameter and wall thickness. It should be cold drawn precision seamless tube manufactured in accordance with the provisions of DIN 17458-X6CrNiMoTi17122-m or ASTM A269. Maximum exterior hardness 85 HRB. Tolerances as per DIN/EN/ISO 1127.
Tabulated pressure ratings are in accordance with DIN 2413-I (static loads using a tensile stress yield point of 245 N/mm²).
Pressure ratings for dynamic loads use a yield point of 190 N/mm². Note that no yield stress is published for DIN 17458, so this is a recommended guide only. Calculations are as per DIN 2423-III for dynamic loads.

For thick walled tube (ratio of OD to ID exceeds 1.35), the tabulated pressure is as per DIN2413-III, but with a 245 N/mm² yield point. The applicable safety factor in all cases is 1.5.
Allowance factors are:
C = 0.9
No additional provision for corrosion is incorporated.

Working Temperature

Carbon steel:

Use safely with no reduction in the range of -60° to +120° C. Maximum allowable working temperature 250° C.

Stainless steel:

Use stated working pressures within the range -60° to +20° C

Maximum allowable working temperature 400° C.

Reduce pressures as indicated for the range 20° to 400° C

50° C	4.5%
100° C	11%
200° C	20%
300° C	29%
400° C	33%

Tube Length

Imperial tube 6.1 metres

Metric tube 6 metres

Bending Tube

Use the guide:

Bend Radius ≥ 3 x Tube OD

Bending can cause wall thinning, with a consequent reduction in safe working pressure.

PIRTEK

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

ANSI / ASME B36.10M SCHEDULE 40 (API STANDARD WEIGHT) PIPE

Nominal Size	WP bar	BP bar	Oil flow capacity (lit/min) @ flow velocity (m/sec)				Dimensions mm			Flow Area cm²	Weight kg/m
	Safety Factor 6:1		0.6	1.2	3	4.5	OD	ID	Wall Thickness		
1/8”	154	926	1.3	2.6	6.6	9.9	10.3	6.8	1.73	0.366	
1/4”	150	899	2.4	4.8	12.1	18.1	13.7	9.3	2.24	0.671	0.62
3/8”	124	744	4.4	8.9	22.1	33.2	17.1	12.5	2.31	1.23	0.84
1/2”	119	716	7.1	14.1	35.3	52.9	21.3	15.8	2.77	1.96	1.28
3/4”	99	594	12.4	24.8	61.9	92.9	26.7	20.9	2.87	3.44	1.70
1”	93	558	20.1	40.2	100.4	150.7	33.4	26.6	3.38	5.58	2.52
1.1/4”	77	465	34.7	69.5	173.7	260.6	42.2	35.1	3.56	9.65	3.43
1.1/2”	70	421	47.3	94.5	236.3	354.5	48.3	40.9	3.68	13.13	4.07
2”	60	358	77.9	155.8	389.5	584.3	60.3	52.5	3.91	21.64	5.42
2.1/2”	65	389	111.1	222.3	555.7	833.5	73	62.7	5.16	30.87	8.69
3”	57	340	171.6	343.3	858.2	1287.4	88.9	77.9	5.49	47.68	11.31

ANSI / ASME B36.10M SCHEDULE 80 (API EXTRA STRONG WEIGHT) PIPE

Nominal Size	WP bar	BP bar	Oil flow capacity (lit/min) @ flow velocity (m/sec)				Dimensions mm			Flow Area cm²	Weight kg/m
	Safety Factor 6:1		0.6	1.2	3	4.5	OD	ID	Wall Thickness		
1/8”	220	1319	0.842	1.68	4.2	6.32	10.3	5.5	2.41	0.234	
1/4”	206	1240	1.66	3.33	8.3	12.5	13.7	7.7	3.02	0.462	
3/8”	175	1050	3.26	6.52	16.3	24.5	17.1	10.7	3.2	0.906	1.10
1/2”	164	984	5.44	10.9	27.2	40.8	21.3	13.9	3.73	1.51	1.61
3/4”	137	825	10.04	20.1	50.2	75.3	26.7	18.8	3.91	2.79	2.19
1”	127	766	16.7	33.4	83.5	125.3	33.4	24.3	4.55	4.64	3.21
1.1/4”	108	647	29.77	59.5	148.9	223.3	42.2	32.5	4.85	8.27	4.51
1.1/2”	99	592	41	82	205	307.5	48.3	38.1	5.08	11.39	5.43
2”	86	516	68.54	137.1	342.7	514.1	60.3	49.3	5.54	19.04	7.43
2.1/2”	90	540	98.39	196.8	491.9	737.9	73	59	7.01	27.33	11.39
3”	80	482	153.29	306.6	766.4	1149.7	88.9	73.7	7.62	42.58	15.24

ANSI / ASME B36.10M SCHEDULE 160 (API DOUBLE EXTRA HEAVY WEIGHT) PIPE

Nominal Size	WP bar	BP bar	Oil flow capacity (lit/min) @ flow velocity (m/sec)				Dimensions mm			Flow Area cm²	Weight kg/m
	Safety Factor 6:1		0.6	1.2	3	4.5	OD	ID	Wall Thickness		
1/8”	-	-	-	-	-	-	-	-	-	-	-
1/4”	-	-	-	-	-	-	-	-	-	-	-
3/8”	-	-	-	-	-	-	-	-	-	-	-
1/2”	210	1259	3.92	7.8	19.6	29.4	21.3	11.79	4.775	1.09	1.95
3/4”	195	1173	6.83	13.7	34.2	51.2	26.7	15.54	5.563	1.897	2.91
1”	178	1069	12.11	24.2	60.6	90.8	33.4	20.7	6.35	3.364	4.21
1.1/4”	141	847	24.53	49.1	122.6	184	42.2	29.46	6.35	6.813	5.58
1.1/2”	138.6	832	32.63	65.3	163.2	244.7	48.3	33.99	7.137	9.064	7.21
2”	135.7	815	51.89	103.8	259.4	389.2	60.3	42.85	8.738	14.413	11.1
2.1/2”	122.3	734	82.33	164.7	411.7	617.5	73	53.98	9.525	22.87	14.9
3”	117.2	704	125.54	251.1	627.7	941.5	88.9	66.65	11.125	34.871	21.3

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

PRECISION SEAMLESS HYDRAULIC TUBE (Imperial)

Size	Gauge	CDS LOW CARBON Note SF 3:1*		316 L STAINLESS STEEL Note SF 3:1*		Oil flow capacity (lit/min) @ flow velocity (m/sec)				Dimensions mm			Weight
		WP bar	BP bar	WP bar	BP bar	1.2 Suction	4.5 Return	6 Med. Press.	9 High Press.	OD	ID	Wall Thick.	Kg/m
1/8”	20G	724	2172	-	-	0.1	0.4	0.6	0.8	3.18	1.40	0.89	0.05
3/16”	20G	483	1448	-	-	0.5	1.9	2.5	3.8	4.76	2.98	0.89	0.08
1/4”	20G	362	1086	493	1478	1.2	4.4	5.9	8.9	6.35	4.57	0.89	0.12
	18G	496	1489	675	2026	0.9	3.2	4.3	6.5	6.35	3.91	1.22	0.15
	16G	663	1989	-	-	0.5	2.0	2.7	4.0	6.35	3.09	1.63	0.19
5/16”	20G	290	869	394	1182	2.1	8.0	10.7	16.1	7.94	6.16	0.89	0.15
	18G	397	1191	540	1620	1.7	6.4	8.5	12.8	7.94	5.50	1.22	0.20
	16G	530	1591	-	-	1.2	4.6	6.2	9.3	7.94	4.68	1.63	0.25
3/8”	20G	241	724	328	985	3.4	12.7	17.0	25.4	9.53	7.75	0.89	0.19
	18G	331	993	450	1350	2.8	10.6	14.2	21.3	9.53	7.09	1.22	0.25
	16G	442	1326	601	1804	2.2	8.3	11.1	16.6	9.53	6.27	1.63	0.32
1/2”	20G	181	543	246	739	6.7	25.3	33.7	50.6	12.70	10.92	0.89	0.26
	18G	248	744	338	1013	6.0	22.3	29.8	44.6	12.70	10.26	1.22	0.35
	16G	332	995	451	1354	5.0	18.9	25.2	37.8	12.70	9.44	1.63	0.45
	14G	-	-	562	1686	4.2	15.8	21.1	31.7	12.70	8.64	2.03	0.53
5/8”	18G	199	596	270	810	10.2	38.3	51.0	76.6	15.88	13.44	1.22	0.44
	16G	265	796	361	1082	9.0	33.7	45.0	67.5	15.88	12.62	1.63	0.57
	14G	330	991	449	1348	7.9	29.6	39.5	59.2	15.88	11.82	2.03	0.69
3/4”	18G	165	496	225	675	15.6	58.5	78.0	117.0	19.05	16.61	1.22	0.54
	16G	221	663	301	902	14.1	52.9	70.5	105.7	19.05	15.79	1.63	0.70
	14G	275	826	375	1124	12.7	47.7	63.5	95.3	19.05	14.99	2.03	0.85
7/8”	18G	-	-	193	579	22.1	83.1	110.7	166.1	22.23	19.79	1.22	0.63
	16G	189	568	258	773	20.3	76.3	101.7	152.5	22.23	18.97	1.63	0.83
	14G	236	708	321	963	18.7	70.0	93.3	139.9	22.23	18.17	2.03	1.01
	12G	-	-	438	1314	15.8	59.1	78.8	118.1	22.23	16.69	2.77	1.33
1”	18G	124	372	169	507	29.8	111.8	149.1	223.6	25.40	22.96	1.22	0.73
	16G	166	497	226	677	27.7	103.9	138.6	207.9	25.40	22.14	1.63	0.96
	14G	206	619	281	843	25.8	96.6	128.8	193.1	25.40	21.34	2.03	1.17
	12G	282	845	383	1150	22.3	83.6	111.5	167.3	25.40	19.86	2.77	1.55
	10G	331	992	-	-	20.2	75.8	101.0	151.5	25.40	18.90	3.25	1.78
1.1/4”	14G	165	496	225	674	43.4	162.6	216.8	325.2	31.75	27.69	2.03	1.49
	12G	225	676	307	920	38.8	145.7	194.2	291.4	31.75	26.21	2.77	1.98
	10G	264	793	360	1080	36.1	135.2	180.3	270.4	31.75	25.25	3.25	2.28
1.1/2”	14G	-	-	187	562	65.5	245.7	327.6	491.4	38.10	34.04	2.03	1.81
	12G	188	563	256	767	60.0	224.8	299.8	449.6	38.10	32.56	2.77	2.41
	10G	220	661	300	900	56.5	211.8	282.3	423.5	38.10	31.60	3.25	2.79
2”	12G	141	423	-	-	115.8	434.4	579.2	868.8	50.80	45.26	2.77	3.28
	10G	165	496	-	-	111.0	416.2	554.9	832.3	50.80	44.30	3.25	3.81
	7G	227	682	-	-	99.1	371.6	495.5	743.2	50.80	41.86	4.47	5.11

* Safety Factor

It’s recommended that hydraulic systems subjected to shock loads incorporate a 6:1 factor of safety.
Use of a lower factor can be contemplated after due consideration of the system operating parameters.

PIRTEK

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

PRECISION SEAMLESS HYDRAULIC STEEL TUBE (Metric)

Ø Tube	Tolerance	Working Pressure (bar) St. 37.4 Carbon steel		Working Pressure (bar) 1.4571 Stainless steel		Oil flow capacity (lit/min) @ flow velocity (m/sec)				Dimensions (mm)			Weight	†
mm	mm	Static DIN2413-I	Dynamic DIN2413-III	Static DIN2413-I	Dynamic (Guide)	1.2 Suction	4.5 Return	6 Med. Press.	9 High Press.	OD	ID	Wall Thick.	Kg/m	pref. size
4	± 0.1	409	467	426	358	0.4	1.3	1.8	2.7	4	2.5	0.75	0.060	†
		522	502	544	422	0.2	0.8	1.1	1.7	4	2	1	0.074	
6	± 0.1	389	374	406	314	0.9	3.4	4.5	6.8	6	4	1	0.123	†
		549	528	572	444	0.5	1.9	2.5	3.8	6	3	1.5	0.166	
		692	665	721	559	0.2	0.8	1.1	1.7	6	2	2	0.197	
8	± 0.1	333	289	347	243	2.0	7.6	10.2	15.3	8	6	1	0.173	†
		431	441	449	371	1.4	5.3	7.1	10.6	8	5	1.5	0.240	†
		549	528	572	444	0.9	3.4	4.5	6.8	8	4	2	0.296	
		658	632	686	561	0.5	1.9	2.5	3.8	8	3	2.5	0.339	
10	± 0.1	282	249	294	209	3.6	13.6	18.1	27.1	10	8	1	0.222	†
		373	358	389	301	2.8	10.4	13.9	20.8	10	7	1.5	0.314	†
		478	460	498	387	2.0	7.6	10.2	15.3	10	6	2	0.395	
		576	553	601	465	1.4	5.3	7.1	10.6	10	5	2.5	0.462	
		666	641	694	539	0.9	3.4	4.5	6.8	10	4	3	0.518	
12	± 0.08	235	210	245	176	5.7	21.2	28.3	42.4	12	10	1 [a]	0.271	†
		353	305	368	256	4.6	17.2	22.9	34.4	12	9	1.5	0.388	†
		409	393	426	330	3.6	13.6	18.1	27.1	12	8	2	0.493	†
		495	476	516	400	2.8	10.4	13.9	20.8	12	7	2.5	0.586	
		576	553	601	465	2.0	7.6	10.2	15.3	12	6	3	0.666	
		651	627	679	527	1.4	5.3	7.1	10.6	12	5	3.5	0.734	
14	± 0.08	302	265	315	223	6.8	25.7	34.2	51.3	14	11	1.5	0.462	
		403	343	420	288	5.7	21.2	28.3	42.4	14	10	2	0.592	†
		434	417	452	351	4.6	17.2	22.9	34.4	14	9	2.5	0.709	
		507	487	529	409	3.6	13.6	18.1	27.1	14	8	3	0.814	
		576	553	601	465	2.8	10.4	13.9	20.8	14	7	3.5	0.906	
15	± 0.08	188	171	196	143	9.6	35.8	47.8	71.7	15	13	1	0.345	
		282	249	294	209	8.1	30.5	40.7	61.1	15	12	1.5	0.499	†
		376	323	392	272	6.8	25.7	34.2	51.3	15	11	2	0.641	
		478	460	498	387	4.6	17.2	22.9	34.4	15	9	3	0.888	
16	± 0.08	264	234	275	196	9.6	35.8	47.8	71.7	16	13	1.5	0.536	†
		353	305	368	256	8.1	30.5	40.7	61.1	16	12	2	0.691	†
		386	372	402	312	6.8	25.7	34.2	51.3	16	11	2.5	0.832	†
		452	435	471	365	5.7	21.2	28.3	42.4	16	10	3	0.962	
18	± 0.08	157	143	130	-	14.5	54.3	72.4	108.6	18	16	1 [a]	0.419	
		235	210	245	177	12.7	47.7	63.6	95.4	18	15	1.5 [a]	0.610	†
		313	274	326	230	11.1	41.6	55.4	83.1	18	14	2	0.789	†
		392	335	409	282	9.6	35.8	47.8	71.7	18	13	2.5	0.956	
		409	393	426	330	8.1	30.5	40.7	61.1	18	12	3	1.110	
20	± 0.08	212	191	-	-	16.3	61.3	81.7	122.6	20	17	1.5	0.684	
		282	249	294	209	14.5	54.3	72.4	108.6	20	16	2	0.888	†
		353	305	368	256	12.7	47.7	63.6	95.4	20	15	2.5	1.079	†
		373	358	389	301	11.1	41.6	55.4	83.1	20	14	3	1.258	
		426	410	444	344	9.6	35.8	47.8	71.7	20	13	3.5	1.424	
		478	460	498	387	8.1	30.5	40.7	61.1	20	12	4	1.578	
22	± 0.08	192	174	200	146	20.4	76.6	102.1	153.1	22	19	1.5 [a]	0.758	
		256	228	267	192	18.3	68.7	91.6	137.4	22	18	2 [a]	0.986	†
		320	280	334	235	16.3	61.3	81.7	122.6	22	17	2.5	1.202	
		385	329	401	276	14.5	54.3	72.4	108.6	22	16	3	1.406	†
		385	329	-	-	11.1	41.6	55.4	83.1	22	14	4	1.776	
25	± 0.08	95	-	-	-	22.6	84.8	113.1	169.7	22	20	1 [a]	0.518	
		226	202	236	170	24.9	93.5	124.7	187.0	25	21	2 [a]	1.134	†
		282	249	294	209	22.6	84.8	113.1	169.7	25	20	2.5	1.387	†
		338	294	352	247	20.4	76.6	102.1	153.1	25	19	3	1.628	†
		394	379	411	318	16.3	61.3	81.7	122.6	25	17	4	2.072	†
		437	420	456	353	14.5	54.3	72.4	108.6	25	16	4.5	2.275	
28	± 0.08	151	139	158	117	35.3	132.5	176.7	265.1	28	25	1.5 [a]	0.980	
		201	182	210	153	32.6	122.1	162.9	244.3	28	24	2 [a]	1.282	†
		252	224	263	188	29.9	112.2	149.6	224.4	28	23	2.5	1.572	
		302	265	315	223	27.4	102.6	136.9	205.3	28	22	3	1.850	
30	± 0.08	168	171	175	144	38.2	143.4	191.1	286.7	30	26	2	1.381	
		235	210	245	476	35.3	132.5	176.7	265.1	30	25	2.5	1.696	
		282	249	294	209	32.6	122.1	162.9	244.3	30	24	3	1.998	†
		376	323	392	271	27.4	102.6	136.9	205.3	30	22	4	2.565	†
35	± 0.15	161	147	168	123	54.3	203.8	271.7	407.6	35	31	2 [a]	1.628	†
		201	182	210	153	50.9	190.9	254.5	381.7	35	30	2.5	2.004	
		242	216	252	182	47.6	178.3	237.8	356.7	35	29	3	2.368	†
		280	-	-	-	44.3	166.3	221.7	332.5	35	28	3.5	2.719	
		322	281	336	236	41.2	154.6	206.1	309.2	35	27	4	3.058	
38	± 0.15	223	200	232	168	57.9	217.2	289.5	434.3	38	32	3	2.590	
		297	261	310	219	50.9	190.9	254.5	381.7	38	30	4	3.354	†
		371	319	387	268	44.3	166.3	221.7	332.5	38	28	5	4.069	†
42	± 0.2	134	124	140	104	81.7	306.2	408.3	612.4	42	38	2	1.973	
		201	182	210	153	73.3	274.8	366.4	549.7	42	36	3	2.885	†
		269	238	280	200	65.4	245.1	326.9	490.3	42	34	4	3.749	†

[a] Use support tube

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

COPPER TUBE TO AS1432

Product Code			Imperial Size	DN Size	Gauge	O.D.	Wall thickness	Min wall thickness	I.D.	Oil Flow Capacity (Litre/min) @ Flow Velocity (m/sec)				Weight	W.P.	B.P.
Hard drawn 6m	Annealed coil 18m	Annealed coil 30m	ins			mm	mm	mm	mm	0.60	1.20	3.00	4.50	Kg/m	kPa	kPa
Z17122-02	-	Z17222-02	1/8"	DN 3	22 swg	3.18	0.71	0.60	1.76	0.09	0.17	0.44	0.65	0.05	19107	95534
Z17122-03	-	Z17222-03	3/16"	DN 5	22 swg	4.76	0.71	0.60	3.34	0.32	0.63	1.58	2.37	0.08	11820	59099
Z17120-03	Z17220-03	-	3/16"	DN 5	20 swg	4.76	0.91	0.77	2.94	0.24	0.49	1.22	1.84	0.10	15815	79073
Z17122-04	-	Z17222-04	1/4"	DN 6	22 swg	6.35	0.71	0.60	4.93	0.69	1.37	3.44	5.15	0.11	8557	42783
Z17120-04	Z17220-04	-	1/4"	DN 6	20 swg	6.35	0.91	0.77	4.53	0.58	1.16	2.90	4.35	0.14	11315	56577
-	-	●	1/4"	DN 6	20 swg	6.35	0.91	0.77	4.53	0.58	1.16	2.90	4.35	0.14	11315	56577
●	-		5/16"	DN 8	22 swg	7.94	0.71	0.60	6.52	1.20	2.40	6.01	9.01	0.14	6703	33515
-	-	Z17222-05	5/16"	DN 8	22 swg	7.94	0.71	0.60	6.52	1.20	2.40	6.01	9.01	0.14	6703	33515
Z17120-05	Z17220-05	-	5/16"	DN 8	20 swg	7.94	0.91	0.77	6.12	1.06	2.12	5.29	7.94	0.18	8806	44031
-	-	●	5/16"	DN 8	20 swg	7.94	0.91	0.77	6.12	1.06	2.12	5.29	7.94	0.18	8806	44031
●	-		3/8"	DN 10	22 swg	9.53	0.71	0.60	8.11	1.86	3.72	9.30	13.95	0.18	5510	27548
-	-	Z17222-06	3/8"	DN 10	22 swg	9.53	0.71	0.60	8.11	1.86	3.72	9.30	13.95	0.18	5510	27548
-	Z17220-06	-	3/8"	DN 10	20 swg	9.53	0.91	0.77	7.71	1.68	3.36	8.40	12.61	0.22	7208	36039
Z17120-06	-	-	3/8"	DN 10	20 swg	9.53	0.91	0.77	7.71	1.68	3.36	8.40	12.61	0.22	7208	36039
●	-	-	1/2"	DN 15	22 swg	12.70	0.71	0.60	11.28	3.60	7.20	17.99	26.98	0.24	4066	20331
●†	Z17220-08	-	1/2"	DN 15	20 swg	12.70	0.91	0.77	10.88	3.35	6.69	16.73	25.10	0.30	5293	26463
Z17120-08‡			1/2"	DN 15	20 swg	12.70	0.91	0.77	10.88	3.35	6.69	16.73	25.10	0.30	5293	26463
Bendable	-	-	1/2"	DN 15	19 swg	12.70	1.02	0.88	10.66	3.21	6.43	16.06	24.10	0.33	6105	30525
-	Z17220-10	-	5/8"	DN 18	20 swg	15.88	0.91	0.77	14.06	5.59	11.18	27.95	41.92	0.38	4179	20893
-	●	-	5/8"	DN 18	19 swg	15.88	1.02	0.88	13.84	5.42	10.83	27.08	40.62	0.43	4811	24053
●	-	-	5/8"	DN 18	18 swg	15.88	1.22	1.04	13.44	5.11	10.21	25.54	38.30	0.50	5747	28733
-	Z17220-12	-	3/4"	DN 20	20 swg	19.05	0.91	0.77	17.23	8.39	16.79	41.97	62.95	0.46	3454	17270
-	●	-	3/4"	DN 20	19 swg	19.05	1.02	0.88	17.01	8.18	16.36	40.90	61.36	0.52	3971	19857
-	●	-	3/4"	DN 20	17 swg	19.05	1.42	1.21	16.21	7.43	14.86	37.15	55.72	0.70	5562	27808
Bendable	-	-	3/4"	DN 20	17 swg	19.05	1.42	1.21	16.21	7.43	14.86	37.15	55.72	0.70	5562	27808
●		-	1"	DN 25	20 swg	25.40	0.91	0.77	23.58	15.72	31.44	78.60	117.91	0.63	2564	12818
-	Z17220-16	-	1"	DN 25	20 swg	25.40	0.91	0.77	23.58	15.72	31.44	78.60	117.91	0.63	2564	12818
●	-	-	1"	DN 25	18 swg	25.40	1.22	1.04	22.96	14.91	29.81	74.53	111.79	0.83	3501	17504
-	●	-	1"	DN 25	16 swg	25.40	1.63	1.39	22.14	13.86	27.72	69.30	103.95	1.09	4747	23736
●	-	-	1"	DN 25	16 swg	25.40	1.63	1.39	22.14	13.86	27.72	69.30	103.95	1.09	4747	23736
●	-	-	1.1/4"	DN 32	20 swg	31.75	0.91	0.77	29.93	25.33	50.66	126.64	189.96	0.79	2038	10190
●	-	-	1.1/4"	DN 32	18 swg	31.75	1.22	1.04	29.31	24.29	48.58	121.45	182.17	1.05	2777	13885
●	-	-	1.1/4"	DN 32	16 swg	31.75	1.63	1.39	28.49	22.95	45.90	114.75	172.12	1.38	3754	18771
●	-	-	1.1/2"	DN 40	20 swg	38.10	0.91	0.77	36.28	37.22	74.43	186.08	279.12	0.95	1691	8457
●	-	-	1.1/2"	DN 40	18 swg	38.10	1.22	1.04	35.66	35.95	71.91	179.77	269.66	1.26	2301	11506
●	-	-	1.1/2"	DN 40	16 swg	38.10	1.63	1.39	34.84	34.32	68.64	171.60	257.40	1.67	3105	15524
●	-	-	2"	DN 50	20 swg	50.80	0.91	0.77	48.98	67.83	135.66	339.16	508.73	1.28	1262	6310
●	-	-	2"	DN 50	18 swg	50.80	1.22	1.04	48.36	66.12	132.25	330.62	495.94	1.70	1714	8569
●	-	-	2"	DN 50	16 swg	50.80	1.63	1.39	47.54	63.90	127.80	319.51	479.26	2.25	2307	11534
●	-	-	2.1/2"	DN 65	20 swg	63.50	0.91	0.77	61.68	107.57	215.14	537.84	806.76	1.60	1007	5033
●	-	-	2.1/2"	DN 65	18 swg	63.50	1.22	1.04	61.06	105.42	210.83	527.08	790.62	2.13	1365	6827
●	-	-	2.1/2"	DN 65	16 swg	63.50	1.63	1.39	60.24	102.60	205.21	513.02	769.53	2.83	1835	9176
●	-	-	3"	DN 80	18 swg	76.20	1.22	1.04	73.76	153.83	307.66	769.14	1153.71	2.57	1135	5673
●	-	-	3"	DN 80	16 swg	76.20	1.63	1.39	72.94	150.43	300.85	752.13	1128.20	3.41	1524	7618
●	-	-	3"	DN 80	14 swg	76.20	2.03	1.73	72.14	147.14	294.29	735.72	1103.59	4.23	1905	9525
●	-	-	3.1/2"	DN 90	16 swg	88.90	1.63	1.39	85.64	207.37	414.74	1036.85	1555.27	4.00	1302	6512
●	-	-	4"	DN 100	18 swg	101.60	1.22	1.09	99.16	278.01	556.03	1390.07	2085.10	3.44	889	4446
●	-	-	4"	DN 100	16 swg	101.60	1.63	1.47	98.34	273.43	546.87	1367.17	2050.76	4.58	1204	6019
●	-	-	5"	DN 125	16 swg	127.00	1.63	1.47	123.74	432.92	865.85	2164.62	3246.94	5.74	960	4801
●	-	-	5"	DN 125	14 swg	127.00	2.03	1.83	122.94	427.35	854.69	2136.73	3205.09	7.13	1199	5994
●	-	-	6"	DN 150	16 swg	152.40	1.63	1.47	149.14	628.90	1257.80	3144.49	4716.74	6.90	799	3993
●	-	-	6"	DN 150	14 swg	152.40	2.03	1.83	148.34	622.17	1244.34	3110.85	4666.27	8.57	997	4983
●	-	-	6"	DN 150	12 swg	152.40	2.64	2.38	147.12	611.98	1223.96	3059.89	4589.84	11.10	1301	6504
●	-	-	8"	DN 200	12 swg	203.20	2.64	2.24	197.92	1107.57	2215.14	5537.86	8306.79	14.87	914	4570

† Annealed 6 m coil ‡ Bendable ● Available to order

Safe working pressures calculation

WP (kPa) = 2000 x Min. Wall Thickness (mm) x Tensile Strength (MPa) / O.D. (mm)

The design tensile strength is taken as 41MPa up to 50° C.

Temperature Allowance

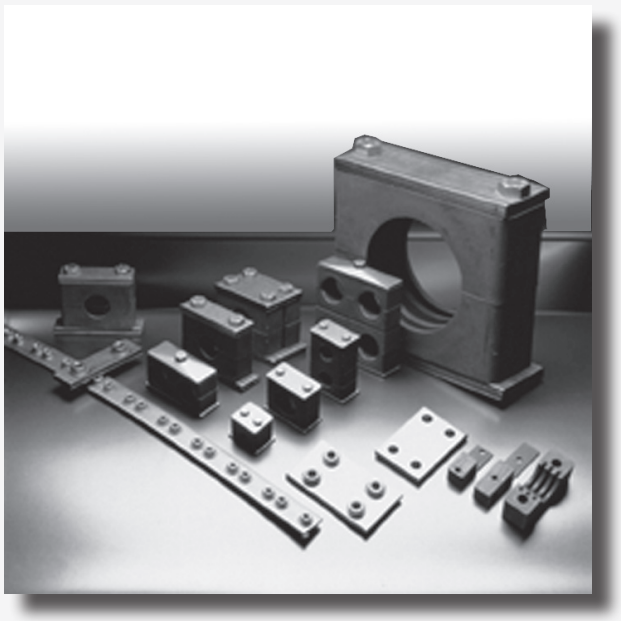
Adjust tabulated working pressures as shown at right

Temp. Range	% of WP
0 - 50° C	100
50° - 75° C	83
75° - 125° C	80
125° - 150° C	74
150° - 175° C	68
175° - 200° C	51

PIRTEK

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

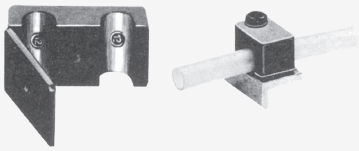
TUBE CLAMPS



Pirtek offers a comprehensive and diversified range designed to meet the practical mounting needs of single or large networks of tubes and pipes.

Materials used in the manufacture of the supports should be chosen according to the application, from a range that includes Polypropylene for temperatures up to 90°C, Polyamide for temperatures up to 140°C and flame retardant with VO rating and aluminium for operating temperatures up to 400°C.

Top and base mounting plates are available in galvanised and CR6-free plated mild steel to maximise corrosion resistance. Steel components can be supplied as AISI 316L stainless steel on request.



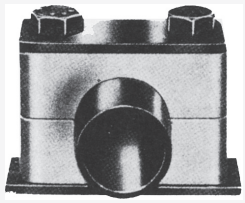
LIGHTWEIGHT SERIES

In polypropylene (PP) for the sizes shown.

Recommended for the fixing of tubes in pneumatic plants.
The clamp can be supplied in either single or double styles, and is available for differing tube diameters within the same clamp.

Low fittings costs, together with the wide range of clamping combinations, make these lightweight supports an essential element of all industrial installations.

Metric • PP from 4 to 25.4 mm
Gas • PP from 1/8" to 1/2"
Imperial • PP from 3/8" to 1/2"



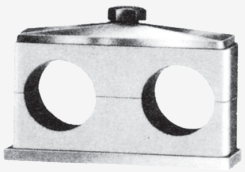
¨CC¨ OR STANDARD SERIES:

In polypropylene (PP), Polyamide (PA) or aluminium (AL) in a range of sizes
and mounting systems:

• weldable plate • elongated plate • double plate • multiple plate
• mounting rail • stacked with upper plate.
This series is recommended for oil-hydraulic installations up to 200 bar

Clamp shells with vibration dampening rubber inserts are available on request

Metric • PP from 6 to 102 mm • AL from 6 to 102 mm
Gas • PP from 1/8" to 3.1/2" • AL from 1/8" to 1.1/2"
Imperial • PP from 1/4" to 4" • AL from 1/4" to 2"



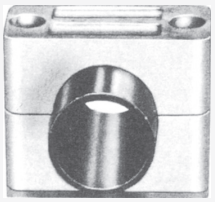
¨CF¨ OR STANDARD TWIN SERIES:

In polypropylene for pipe pairs.

It is recommended that only equally sized pipes be mounted in twin clamps. However, on request, clamps for 2 pipes of different diameter can be supplied. Again, various mounting systems are possible.

• weldable plate • elongated plate • double plate • multiple plate
• mounting rail • stacked with upper plate.
The twin series is recommended for oil-hydraulic installations up to 200 bar.

Metric • PP from 6 to 42.4 mm
Gas • PP from 1/8" to 1-1/4"
Imperial • PP from 1/4" to 1-1/2"



"CP" and "CH" HEAVYWEIGHT SERIES:

In polypropylene (CP) or aluminium (CH) in a range of sizes.

Recommended for complex systems, for high pressures and considerable oil velocities. Upper plates are supplied in this series. High hexagon head bolts VACP are used in stacked mounting configurations
Clamp shells with vibration dampening rubber inserts are available on request.

A rail mounting option applies only in Size Groups 1-4 (jaw diameters from 12.7 mm to 63 mm)
Double width welded base plates available up to Size Group 5 (88 mm tube)

Metric • CP from 6 to 324 mm • CH from 6 to 324 mm
Gas • CP from 1/8" to 12" • CH from 1/8" to 12"
Imperial • CP from 1/4" to 8" • CH from 1/4" to 8"

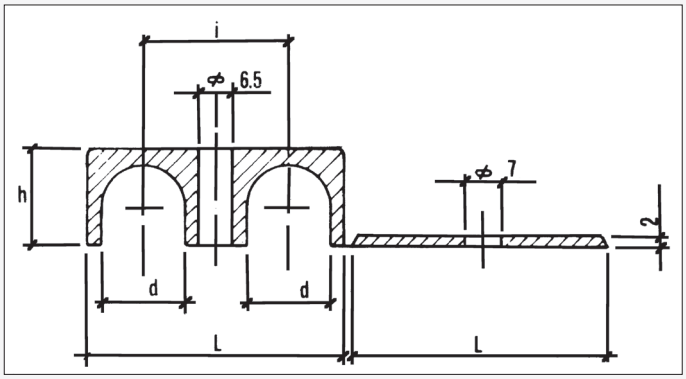
PIRTEK

**This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice**

CCA

Lightweight Twin Tube Support for Pneumatic Systems

Material: Polypropylene



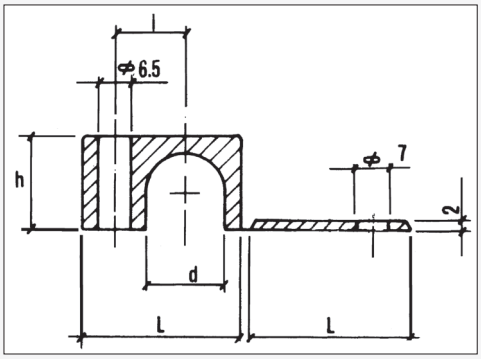
Product Code	Dimension (mm)						
	Ø Tube d	Ø Tube d	h	L	i	Ø Hole	Width
CCA-04	4	4	10.5	31	18	6.5	12.8
CCA-06	6	6	10.5	31	18	6.5	12.8
CCA-08	8	8	10.5	31	18	6.5	12.8
CCA-10	10	10	15	39	22	6.5	16
CCA-12	12	12	15	39	22	6.5	16
CCA-15	15	15	22.5	53	30	6.5	20

Other sizes on request

CCB

Lightweight Single Tube Support for Pneumatic Systems

Material: Polypropylene



Product Code	Dimension (mm)						
	Ø Tube d		h	L	i	Ø Hole	Width
CCB-04	4		10.5	22	9	6.5	12.8
CCB-06	6		10.5	22	9	6.5	12.8
CCB-08	8		10.5	22	9	6.5	12.8
CCB-10	10		15	27	11	6.5	16
CCB-12	12		15	27	11	6.5	16
CCB-15	15		22.5	34	15	6.5	20

Other sizes on request

PIRTEK

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

CCx

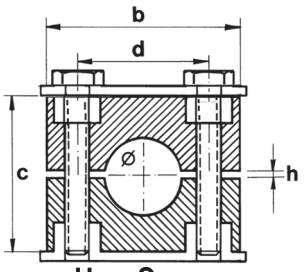
Standard Tube Support
Weld Plate & Cover Plate Configurations

Material: Polypropylene

*Polyamide black flame retardant clamps add PA to part number, eg. CC2PA-13

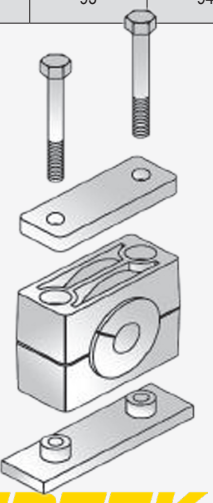
The cover plate can be substituted by 2 CC-B bushes in conjunction with 2 hex screws.

*Elongated weld plates available, refer to page 11



Hex. Screw & Cover Plate

Clamp Jaws Product Code	Product Codes and Dimensions (mm)									
	Ø Tube	b	c	d	h	Width	Weld Plate	Cover Plate	Hex. Screw (2 needed)	Bushing (2 needed in lieu of cover plate)
CC2-06	6	37	28	20	0.6	30	CC2-01 41 x 30 x 3 Nut 7.5 high	CC2-02 35 x 30 x 3	CC2-03 M6 x 30	CC-B bush 11.5 OD x 6.5 ID x 8 Thick
CC2-07	6.35	37	28	20	0.6	30				
CC2-08	8	37	28	20	0.6	30				
CC2-09	9.52	37	28	20	0.6	30				
CC2-10	10	37	28	20	0.6	30				
CC2-12	12	37	28	20	0.6	30				
CC2-13	12.7	37	28	20	0.6	30				
CC3-14	14	43	33	26	0.8	30	CC3-01 47 x 30 x 3 Nut 7.5 high	CC3-02 41 x 30 x 3	CC3-03 M6 x 35	
CC3-15	15	43	33	26	0.8	30				
CC3-16	16	43	33	26	0.8	30				
CC3-18	18	43	33	26	0.8	30				
CC4-19	19.05	50	36	33	0.8	30	CC4-01 54 x 30 x 3 Nut 7.5 high	CC4-02 48 x 30 x 3	CC4-03 M6 x 40	
CC4-20	20	50	36	33	0.8	30				
CC4-21.3	21.3	50	36	33	0.8	30				
CC4-22	22	50	36	33	0.8	30				
CC4-23	23	50	36	33	0.8	30				
CC4-25	25	50	36	33	0.8	30				
CC4-25.4	25.4	50	36	33	0.8	30				
CC5-27	26.9	57	44	40	1	30	CC5-01 61 x 30 x 3 Nut 7.5 high	CC5-02 56 x 30 x 3	CC5-03 M6 x 45	
CC5-28	28	57	44	40	1	30				
CC5-29	29	57	44	40	1	30				
CC5-30	30	57	44	40	1	30				
CC5-32	31.75	57	44	40	1	30				
CC6-34	33.7	69.5	57	52	1	30	CC6-01 73 x 30 x 3 Nut 7.5 high	CC6-02 69.5 x 30 x 3	CC6-03 M6 x 60	
CC6-35	35	69.5	57	52	1	30				
CC6-38	38	69.5	57	52	1	30				
CC6-42	42	69.5	57	52	1	30				
CC7-48	48.25	86	66	66	1.4	30	CC7-01 88 x 30 x 3 Nut 7.5 high	CC7-02 85.5 x 30 x 3	CC7-03 M6 x 70	
CC7-50	50.8	86	66	66	1.4	30				
CC8-60.3	60.3	121	93	94	2	30				
CC8-63.5	63.5	121	93	94	2	30	CC8-01 122 x 30 x 5	CC8--02 118 x 30 x 5	CC8-03 M6 x 100	



Please enquire about our range of clamp shells with vibration dampening rubber inserts Available in the CCx Series to a maximum tube size of 48.3mm for medium duty applications. Available as a special order only.

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

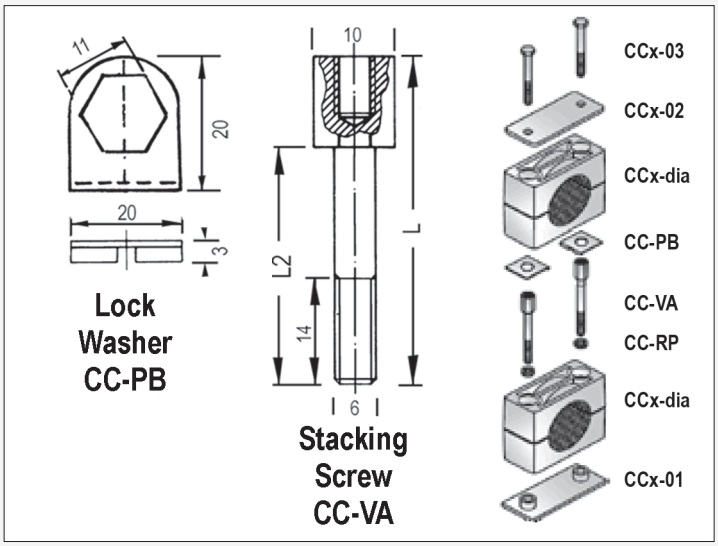
CCx

Standard Tube Support

Stacked Configuration *

Material: Polypropylene

* Please note that the arrangement of hex screws with cover plate CCx-02 as illustrated can be substituted with hex screws and bushes CC-B



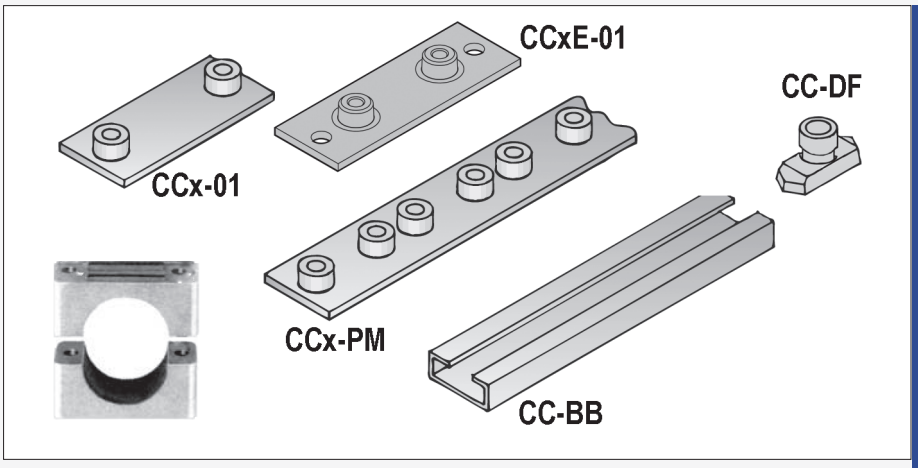
Clamp Jaws Product Code	Product Codes and Dimensions mm						
	Ø Tube	Weld Plate	Cover Plate	Hex. Screw	Stacking Screw	Flat Washer (2 needed)	Lock Washer (2 needed)
CC2-07	6.35	CC2-01 41 x 30 x 3 Nut 7.5 high	CC2-02 35 x 30 x 3	CC2-03 M6 x 30	CC2-VA M6 x 21 L = 35 L2 = 21	CC-RP 11.5 x 6.3 Round 1.5 thick	CC-PB 20 x 20 with 11 mm AF Hex. Hole
CC2-08	8						
CC2-09	9.52						
CC2-10	10						
CC2-12	12						
CC2-13	12.7						
CC3-14	14	CC3-01 47 x 30 x 3 Nut 7.5 high	CC3-02 41 x 30 x 3	CC3-03 M6 x 35	CC3-VA M6 x 27 L = 41 L2 = 27		
CC3-15	15						
CC3-16	16						
CC3-17.2	17.2						
CC3-18	18						
CC4-19	19.05	CC4-01 54 x 30 x 3 Nut 7.5 high	CC4-02 48 x 30 x 3	CC4-03 M6 x 40	CC4-VA M6 x 29 L = 43 L2 = 29		
CC4-20	20						
CC4-22	22						
CC4-23	23						
CC4-25	25						
CC5-27	26.9	CC5-01 61 x 30 x 3 Nut 7.5 high	CC5-02 56 x 30 x 3	CC5-03 M6 x 45	CC5-VA M6 x 39 L = 53 L2 = 39		
CC5-28	28						
CC5-30	30						
CC5-32	31.75						
CC6-34	33.7	CC6-01 73 x 30 x 3 Nut 7.5 high	CC6-02 69.5 x 30 x 3	CC6-03 M6 x 60	CC6-VA M6 x 49 L = 63 L2 = 49		
CC6-35	35						
CC6-38	38						
CC6-42	42						
CC7-48	48.25	CC7-01 88 x 30 x 3 Nut 7.5 high	CC7-02 85.5 x 30 x 3	CC7-03 M6 x 70	CC7-VA M6 x 59 L=73 L2=59		
CC7-50	50.8						
CC8-60.3	60.3	CC8-01 122x30x5	CC8-02 118x30x5	CC8-03 M6x100	CC8-VA M6x85 L=99 L2=85		
CC8-63.5	63.5						

****NEW** - NOW AVAILABLE - STAINLESS STEEL HARDWARE FOR STANDARD SERIES SINGLE CLAMPS and TWIN CLAMPS - WELD PLATES, COVER PLATES, SCREWS & STACKING SCREWS AISI 316L GRADE.** **See Page E21**

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

CCx

Standard Tube Support
Bottom Mount Options

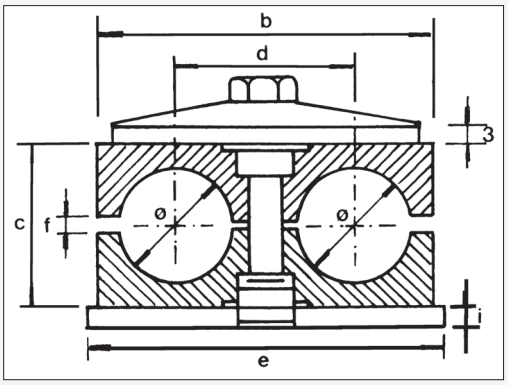


Clamp Jaws Product Code	Product Codes and Dimensions (mm)								
	Ø Tube	Width	Single Weld Plate	Multiple Weld Plate			Rail Mount (fully variable)		
				Details	Max. No. of Clamps	Clamp Spacings	Mounting Nut	O Ring	Rail
CC2-07	6.35	30	CC2-01 41 x 30 x 3 Nut 7.5 high CC2E-01 64 x 30 x 3 7mm fixing holes	CC2-PM 384 x 30 x 4 Nut 6.5 high	10	39	Rhombus 24.5 x 11 with nut 8 mm high (2 req'd per stack)	O Ring NBR 70 15 OD x 10 ID (2 req'd per stack)	Channel 28 x 14 2 mm thick 2 meter long
CC2-08	8	30							
CC2-09	9.52	30							
CC2-10	10	30							
CC2-12	12	30							
CC2-13	12.7	30							
CC3-14	14	30	CC3-01 47 x 30 x 3 Nut 7.5 high CC3E-01 70 x 30 x 3 7mm fixing holes	CC3-PM 443 x 30 x 4 Nut 6.5 high	10	45			
CC3-15	15	30							
CC3-16	16	30							
CC3-17.2	17.2	30							
CC3-18	18	30							
CC4-19	19.05	30	CC4-01 54 x 30 x 3 Nut 7.5 high CC4E-01 78 x 30 x 3 7mm fixing holes	CC4-PM 513 x 30 x 4 Nut 6.5 high	10	52			
CC4-20	20	30							
CC4-22	22	30							
CC4-23	23	30							
CC4-25	25	30							
CC5-27	26.9	30	CC5-01 61 x 30 x 3 Nut 7.5 high CC5E-01 87 x 30 x 3 7mm fixing holes	CC5-PM 301x 30 x 4 Nut 6.5 high	5	59			
CC5-28	28	30							
CC5-30	30	30							
CC5-32	31.75	30							
CC6-34	33.7	30	CC6-01 73 x 30 x 3 Nut 7.5 high CC6E-01 100 x 30 x 3 7mm fixing holes	CC6-PM 373 x 30 x 4 Nut 6.5 high	5	72			
CC6-35	35	30							
CC6-38	38	30							
CC6-42	42	30							
CC7-48	48.25	30	CC7-01 88 x 30 x 3 Nut 7.6 high	CC7-PM 447 x 30 x 4 Nut 6.5 high	5	86			
CC7-50	50.8	30							

CFx

Twin Tube Support
Weld Plate & Top Plate Configuration

Material: Polypropylene



Clamp Jaws Product Code	Product Codes and Dimensions (mm)								
	Ø Tube	b	c	d	f	Width	Weld Plate	Top Plate	Hex. Screw
CF1-07	6.35	36	27	20	0.6	30	CF1-01 37 x 30 x 4 Nut 6.5 high	CF1-02 33.5 x 30 x 7 Hole Ø 7mm	CF1-03 M6 x 35
CF1-08	8	36	27	20	0.6	30			
CF1-09	9.52	36	27	20	0.6	30			
CF1-10	10	36	27	20	0.6	30			
CF1-12	12	36	27	20	0.6	30			
CF1-13	12.7	36	27	20	0.6	30			
CF2-13	12.7	54	27	29	0.8	30	CF2-01 55 x 30 x 4 Nut 6.5 high	CF2-02 50 x 30 x 7 Hole Ø 9 mm	CF2-03 M8 x 35
CF2-13.5	13.5	54	27	29	0.8	30			
CF2-14	14	54	27	29	0.8	30			
CF2-15	15	54	27	29	0.8	30			
CF2-16	16	54	27	29	0.8	30			
CF2-17.2	17.2	54	27	29	0.8	30			
CF2-18	18	54	27	29	0.8	30			
CF3-19	19.05	67	37	36	1	30	CF3-01 70 x 30 x 4 Nut 6.5 high	CF3-02 64 x 30 x 7 Hole Ø 9 mm	CF3-03 M8 x 45
CF3-20	20	67	37	36	1	30			
CF3-21.3	21.3	67	37	36	1	30			
CF3-22	22	67	37	36	1	30			
CF3-23	23	67	37	36	1	30			
CF3-25	25	67	37	36	1	30			
CF4-26.9	26.9	81	42	45	1	30	CF4-01 85 x 30 x 4 Nut 6.5 high	CF4-02 79 x 30 x 7 Hole Ø 9 mm	CF4-03 M8 x 50
CF4-28	28	81	42	45	1	30			
CF4-30	30	81	42	45	1	30			
CF5-32	31.75	106	53	56	1.2	30	CF5-01 110 x 30 x 3 Nut 6.5 high	CF5-02 103 x 30 x 7	CF5-03 M8 x 65
CF5-35	35	106	53	56	1.2	30			
CF5-38	38	106	53	56	1.2	30			
CF5-42	42	106	53	56	1.2	30			

****NEW** - NOW AVAILABLE - STAINLESS STEEL HARDWARE FOR STANDARD SERIES SINGLE CLAMPS and TWIN CLAMPS - WELD PLATES, COVER PLATES, SCREWS & STACKING SCREWS AISI 316L GRADE.** **See Page E21**

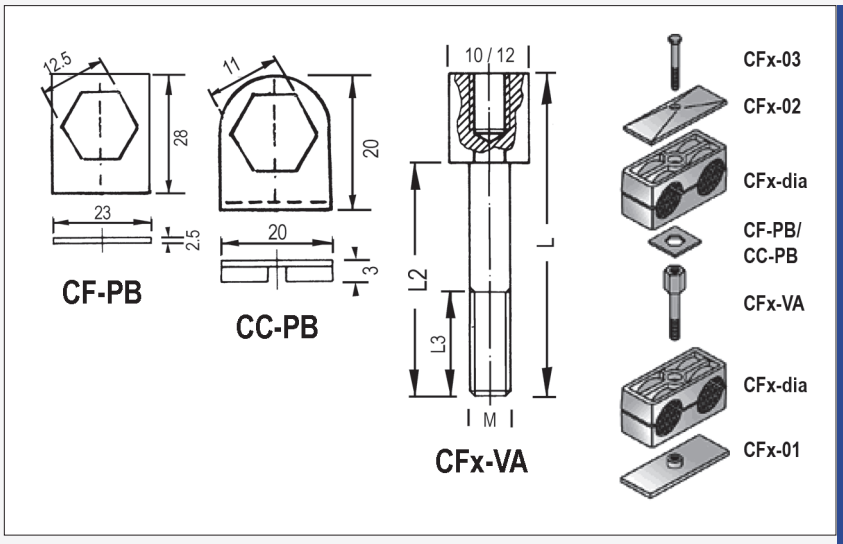
PIRTEK

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

CFx

Twin Tube Support
Stacked Configuration

Material: Polypropylene

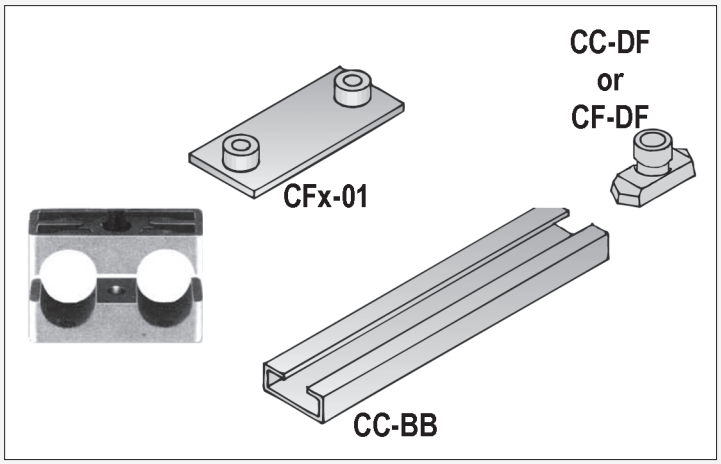


Twin PP Jaws Product Code	Product Codes and Dimensions (mm)					
	Ø Tube	Twin Weld Plate	Cover Plate	Hex. Screw	Stacking Screw	Lock Washer
CF1-07	6.35	CF1-01 37 x 30 x 4 Nut 6.5 high	CF1-02 33.5 x 30 x 7 Hole Ø 7mm	CF1-03 M6 x 35	CF1-VA M6 x 21 L = 35 L2 = 21 L3 = 14	CC-PB 20 x 20 with 11 mm AF Hex. Hole
CF1-08	8					
CF1-09	9.52					
CF1-10	10					
CF1-12	12					
CF1-13	12.7					
CF2-13	12.7	CF2-01 55 x 30 x 4 Nut 6.5 high	CF2-02 50 x 30 x 7 Hole Ø 9 mm	CF2-03 M8 x 35	CF2-VA M8 x 19.5 L = 30.5 L2 = 19.5 L3 = 15.0	CF-PB 28 x 23 with 12.5 mm AF Hex Hole
CF2-13.5	13.5					
CF2-14	14					
CF2-15	15					
CF2-16	16					
CF2-17.2	17.2					
CF2-18	18					
CF3-19	19.05	CF3-01 70 x 30 x 4 Nut 6.5 high	CF3-02 64 x 30 x 7 Hole Ø 9 mm	CF3-03 M8 x 45	CF3-VA M8 x 29 L = 44.5 L2 = 29.0 L3 = 15.0	
CF3-20	20					
CF3-21.3	21.3					
CF3-22	22					
CF3-23	23					
CF3-25	25					
CF4-28	28	CF4-01 85 x 30 x 4 Nut 6.5 high	CF4-02 79 x 30 x 7 Hole Ø 9 mm	CF4-03 M8 x 50	CF4-VA M8 x 33 L = 48.5 L2 = 39.0 L3 = 15.0	
CF4-30	30					
CF5-32	33.7	CF5-01 110 x 30 x 3 Nut 6.5 high	CF5-02 103 x 30 x 7 Hole Ø 9 mm	CF5-03 M8 x 65	CF5-VA M8 x 45 L = 60.5 L2 = 45.0 L3 = 15.0	
CF5-35	35					
CF5-38	35					
CF5-42	38					

PIRTEK

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

CFx
Twin Tube Support
Bottom Mount Options



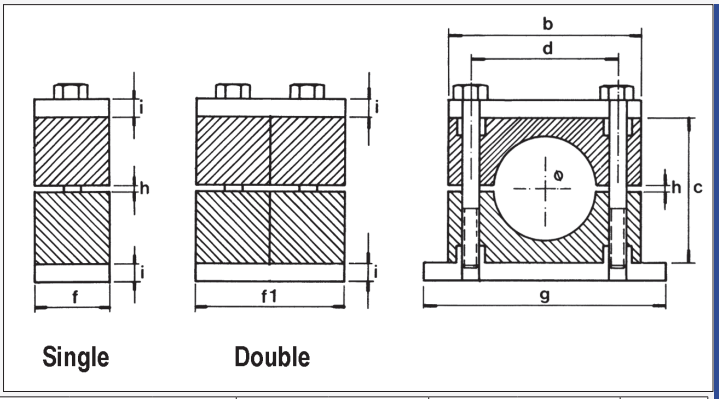
Twin PP Jaws Product Code	Product Codes and Dimensions (mm)							
	Ø Tube	Jaw Width	Weld Plate			Rail Mount (fully variable)		
			Twin Weld Plate	Cover Plate	Hex. Screw	Mounting Nut	O Ring	Rail
CF1-07	6.35	30	CF1-01 37 x 30 x 4 Nut 6.5 high	CF1-02 33.5 x 30 x 7 Hole Ø 7mm	CF1-03 M6 x 35	CC-DF Rhombus with 6 mm Nut	CC-AG O Ring NBR 70 15 OD x 10 ID	CC-BB Channel 28 x 14 2 mm thick 2 meter long
CF1-08	8	30						
CF1-09	9.52	30						
CF1-10	10	30						
CF1-12	12	30						
CF1-13	12.7	30						
CF2-13	12.7	30	CF2-01 55 x 30 x 4 Nut 6.5 high	CF2-02 50 x 30 x 7 Hole Ø 9 mm	CF2-03 M8 x 35	CF-DF Rhombus with 8 mm Nut	CC-AG O Ring NBR 70 15 OD x 10 ID	
CF2-14	14	30						
CF2-15	15	30						
CF2-16	16	30						
CF2-18	18	30						
CF3-19	19.05	30	CF3-01 70 x 30 x 4 Nut 6.5 high	CF3-02 64 x 30 x 7 Hole Ø 9 mm	CF3-03 M8 x 45			
CF3-20	20	30						
CF3-22	22	30						
CF3-23	23	30						
CF3-25	25	30						
CF4-28	28	30	CF4-01 85 x 30 x 4 Nut 6.5 high	CF4-02 79 x 30 x 7 Hole Ø 9 mm	CF4-03 M8 x 50			
CF4-30	30	30						
CF5-32	31.75	30	CF5-01 110 x 30 x 3 Nut 6.5 high	CF5-02 103 x 30 x 7 Hole Ø 9 mm	CF5-03 M8 x 65			
CF5-35	35	30						
CF5-38	38	30						
CF5-42	42	30						

PIRTEK

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

CPx
Heavy Tube Support
Weld Plate & Top Plate Configuration

Material: Polypropylene



Clamp Jaws Product Code	Dimensions (mm)									Weld Plate		Cover Plate		Hex. Screw
	Ø Tube	b	c	d	g	h	i	f	f1	Single	Double	Single	Double	
CP1-13	12.7	57	33	33	70	1	8	30	60	CP1-01	CP1-DP	CP1-02	CP1-DC	CP1-03 M10 x 45
CP1-16	16	57	33	33	70	1	8	30	60					
CP2-19	19.05	69	49	45	87	1	8	30	60	CP2-01	CP2-DP	CP2-02	CP2-DC	CP2-03 M10 x 60
CP2-20	20	69	49	45	87	1	8	30	60					
CP2-21	21.25	69	49	45	87	1	8	30	60					
CP2-25	25	69	49	45	87	1	8	30	60					
CP2-26	26.75	69	49	45	87	1	8	30	60					
CP3-30	30	84	60	60	105	1.2	8	30	60	CP3-01	CP3-DP	CP3-02	CP3-DC	CP3-03 M10 x 70
CP3-32	31.75	84	60	60	105	1.2	8	30	60					
CP3-33	33.5	84	60	60	105	1.2	8	30	60					
CP3-36	36	84	60	60	105	1.2	8	30	60					
CP3-38	38	84	60	60	105	1.2	8	30	60					
CP3-42	42	84	60	60	105	1.2	8	30	60					
CP4-45	45	117	88	91	140	2	10	45	90	CP4-01	CP4-DP	CP4-02	CP4-DC	CP4-03 M12 x 100
CP4-48	48	117	88	91	140	2	10	45	90					
CP4-50	50.8	117	88	91	140	2	10	45	90					
CP4-53	53	117	88	91	140	2	10	45	90					
CP4-54	53.74	117	88	91	140	2	10	45	90					
CP4-56	56	117	88	91	140	2	10	45	90					
CP4-57	57	117	88	91	140	2	10	45	90					
CP4-60	60	117	88	91	140	2	10	45	90					
CP4-63	63	117	88	91	140	2	10	45	90					
CP4-65	65	117	88	91	140	2	10	45	90					
CP5-66	66	155	118	122	180	3	10	60	120	CP5-01	CP5-DP	CP5-02	CP5-DC	CP5-03 M16 x 130
CP5-73 †	73.0	155	118	122	180	3	10	60	120					
CP5-76 †	75.5	155	118	122	180	3	10	60	120					
CP5-80	80.0	155	118	122	180	3	10	60	120					
CP5-88	88.25	155	118	122	180	3	10	60	120					
CP6-101	101.2	205	165	168	226	3	15	80	160	CP6-01	not available	CP6-02	not available	CP6-03 M20 x 190
CP6-114	113.5	205	165	168	226	3	15	80	160					
CP6-127	126.5	205	165	168	226	3	15	80	160					
CP7-139	139	245	200	205	270	4	15	80	160	CP7-01	not available	CP7-02	not available	CP7-03 M20 x 220
CP7-152	152	245	200	205	270	4	15	80	160					
CP7-168	168	245	200	205	270	4	15	80	160					
CP8-203	203	320	270	265	340	4	25	120	240	CP8-01	not available	CP8-02	not available	CP8-03 M30 x 300
CP8-219	219	320	270	265	340	4	25	120	240					
CP9-219	219	470	410	395	520	10	30	160	320	CP9-01	not available	CP9-02	not available	CP9-03 M30 x 450

† 2 1/2" NB can be either 73mm OD for ANSI / ASME B36.10M pipe or 76mm OD if DIN 2248 pipe is used

Please enquire about our range of clamp shells with vibration dampening rubber inserts Available in the CPx Series to a maximum tube size of 103mm for heavy duty applications Available as a special order only

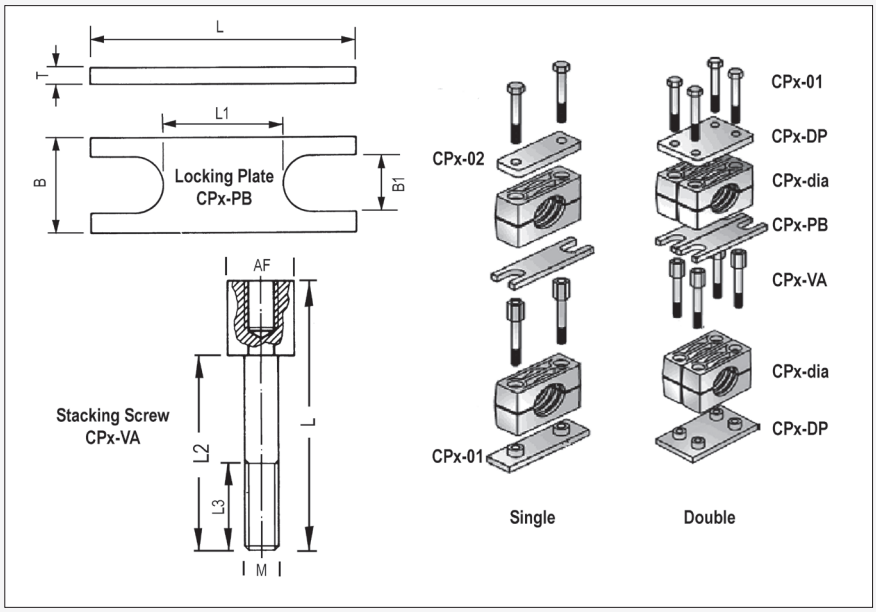
PIRTEK

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

CPx

Heavy Tube Support Stacked Configuration (Single or Double)

Material: Polypropylene

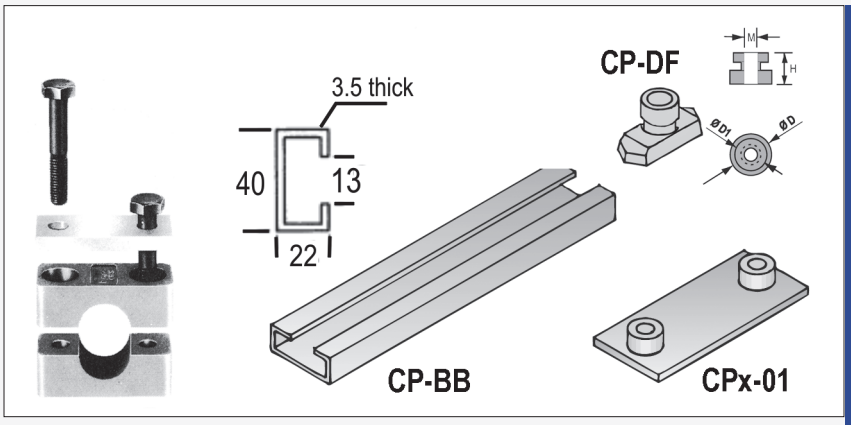


Clamp Jaws Product Code	Product Codes and Dimensions (mm)								
	Ø Tube	Jaw Width	Weld Plate		Cover Plate		Screws		Locking Plate
			Single	Double	Single	Double	Hex.	Stacking	
CP1-13	12.7	30	CP1-01	CP1-DP	CP1-02	CP1-DC	CP1-03 M10 x 45	CP1-VA M10 x 49 L = 49 L2 = 28 L3 = 20 AF = 15	CP1-PB L = 55 L1 = 11 B = 30 B1 = 16 T = 6
CP1-16	16	30							
CP2-19	19.05	30	CP2-01	CP2-DP	CP2-02	CP2-DC	CP2-03 M10 x 60	CP2-VA M10 x 65 L = 65 L2 = 42 L3 = 20 AF = 15	CP2-PB L = 69 L1 = 25 B = 30 B1 = 16 T = 6
CP2-20	20	30							
CP2-21	21.25	30							
CP2-25	25	30							
CP2-26	26.75	30							
CP3-30	30	30	CP3-01	CP3-DP	CP3-02	CP3-DC	CP3-03 M10 x 70	CP3-VA M10 x 75 L = 75 L2 = 52 L3 = 20 AF = 15	CP3-PB L = 83 L1 = 39 B = 30 B1 = 16 T = 6
CP3-32	31.75	30							
CP3-33	33.5	30							
CP3-38	38	30							
CP3-42	42	30							
CP4-45	45	45	CP4-01	CP4-DP	CP4-02	CP4-DC	CP4-03 M12 x 100	CP4-VA M12 x 108 L = 108 L2 = 78 L3 = 25 AF = 17	CP4-PB L = 114 L1 = 66 B = 45 B1 = 18 T = 6
CP4-48	48	45							
CP4-50	50.8	45							
CP4-54	53.74	45							
CP4-57	57	45							
CP4-60	60	45							
CP4-63	63	45							
CP4-65	65	45							
CP5-66	66	60	CP5-01	CP5-DP	CP5-02	CP5-DC	CP5-03 M16 x 130	CP5-VA M16 x 139 L = 139 L2 = 105 L3 = 25 AF = 21	CP5-PB L = 148 L1 = 95 B = 60 B1 = 22 T = 6
CP5-73 †	73.0	60							
CP5-76 †	75.5	60							
CP5-88	88.25	60							

† 2 1/2" NB can be either 73mm OD for ANSI / ASME B36.10M pipe or 76mm OD if DIN 2248 pipe is used

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

CPx
Heavy Tube Support
Bottom Mount Options



Clamp Jaws Product Code	Product Codes and Dimensions (mm)							
	Ø Tube	Jaw Width	Weld Plate	Cover Plate	Hex Screws	Rail Mount (fully variable)		
						Mounting Nut	O Ring	Rail
CP1-13	12.7	30	CP1-01	CP1-02	CP1-03 M10 x 45	CP-DF10 (2 req'd per clamp M = M10 D = 26 D1 = 17.7 H = 20.5	CP-AG O Ring NBR 70 20.24 OD x 15 ID (2 req'd per clamp)	CP-BB Channel 40 x 22 3.5 mm thick 2 meter long
CP1-16	16	30						
CP2-19	19.05	30	CP2-01	CP2-02	CP2-03 M10 x 60			
CP2-20	20	30						
CP2-21	21.25	30						
CP2-25	25	30						
CP2-26	26.75	30						
CP3-30	30	30	CP3-01	CP3-02	CP3-03 M10 x 70			
CP3-32	31.75	30						
CP3-33	33.5	30						
CP3-38	38	30						
CP3-42	42	30						
CP4-45	45	45	CP4-01	CP4-02	CP4-03 M12 x 100	CP-DF12 (2 req'd per clamp) M = M12 D = 26 D1 = 19.6 H = 23		
CP4-48	48	45						
CP4-50	50.8	45						
CP4-54	53.74	45						
CP4-57	57	45						
CP4-60	60	45						
CP4-63	63	45						
CP4-65	65	45						
CP5-66	66	60	CP5-01	CP5-02	CP5-03 M16 x 130	Rail Mounting not available in these sizes		
CP5-73 †	73.0	60						
CP5-76 †	75.5	60						
CP5-88	88.25	60						
CP6-101	101.2	80	CP6-01	CP6-02	CP6-03 M20 x 190			
CP6-114	113.5	80						
CP6-127	126.5	80						
CP7-139	139	80	CP7-01	CP7-02	CP7-03 M20 x 220			
CP7-152	152	80						
CP7-168	168	80						
CP8-203	203	120	CP8-01	CP8-02	CP8-03 M30 x 300			
CP8-219	219	120						
CP9-219	219	160	CP9-01	CP9-02	CP9-03 M30 x 450			

† 2 1/2" NB can be either 73mm OD for ANSI / ASME B36.10M pipe or 76mm OD if DIN 2248 pipe is used

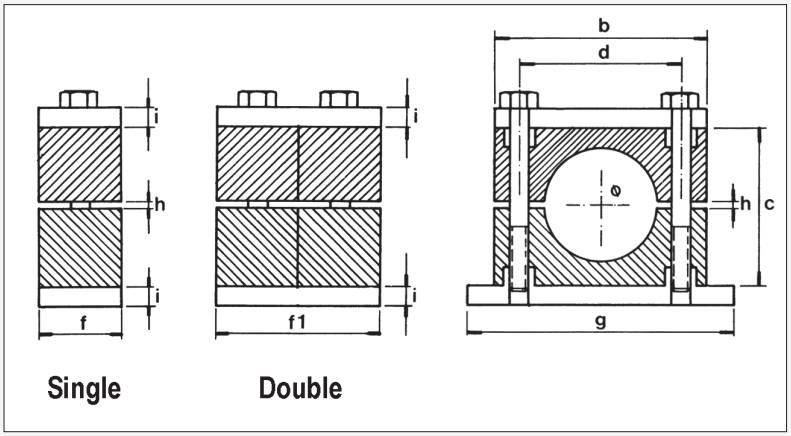
CHx

Heavy Tube Support
Weld Plate & Top Plate Configuration

Material: Aluminium Jaws

PLEASE NOTE:

All mounting configurations (weld plate, rail, and stack configurations) are as for heavy duty polypropylene PP clamps, but limited to the tube sizes given below

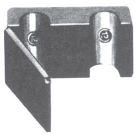
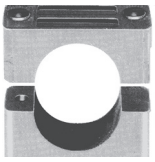


Aluminium Jaws Product Code	Dimensions (mm)									Weld Plate		Cover Plate		Hex. Screw
	Ø Tube	b	c	d	g	h	i	f	f1	Single	Double	Single	Double	
CH2-20	20	69	49	45	87	1	8	30	60	CP2-01	CP2-DP	CP2-02	CP2-DC	CP2-03 M10 x 60
CH2-25	25	69	49	45	87	1	8	30	60					
CH3-32	31.75	84	60	60	105	1.2	8	30	60	CP3-01	CP3-DP	CP3-02	CP3-DC	CP3-03 M10 x 70
CH3-38	38	84	60	60	105	1.2	8	30	60					
CH3-42	42	84	60	60	105	1.2	8	30	60					

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

TECHNICAL

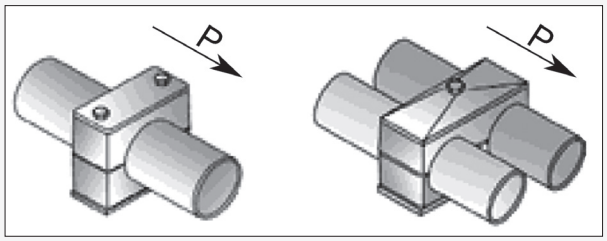
Material Specifications of Components

Component	Appearance	Product Code	Material	Composition	Applicable Standard	Corrosion Prevention
Clamps Light		**CCA, CCB**	Polypropylene			
Clamp Jaws		**CC2 - CC7** *(Std.)* **CF1 - CF5** *(Twin)* **CP1 - CP9** *(Hvy.)*	Polypropylene	Vibration dampening polypropylene shells with NBR70 rubber inserts are available in the CCx and CPx Series		
Clamp Jaws		**CH2 - CH3** *(Alum)*	Aluminium			
Bottom Weld Plate Standard		**CC2-01** to **CC7-01**	Steel	Fe P11	UNI EN 10111	CF6 Free
Bottom Weld Plate Heavy		**CP2-01** to **CP9-01** **CP2-DP** to **CP9-DP**	Steel	Fe 430 B	UNI EN 10025	CF6 Free
Cover Plate Standard		**CC2-02** to **CC7-02**	Steel	Fe P11	UNI EN 10111	CF6 Free
Cover Plate Heavy		**CP1-02** to **CP9-02** **CP1-DC** to **CP9-DC**	Steel	Fe 430 B	UNI EN 10025	CF6 Free
Mounting Rail Standard		**CC - BB**	Steel	Fe 360	UNI EN 10025	Galvanised Sendizimir
Mounting Rail Heavy		**CP - BB**	Steel	Fe P11	UNI EN 10111	CF6 Free
Mounting Nuts Standard		**CC - DF** **CC - DF**	Pressure die-cast alloy Zinc	Gp-ZN AL4 Cu1	UNI 3718	
Mounting Nuts Heavy		**CP - DF10** **CP - DF12**	Steel AVP		UNI EN 10277-3	CF6 Free
O-Rings		**CC - AG** **CP - AG**	Rubber	NBR 70	UNI ISO 3601-1	
Locking Plates Standard		**CC - PB** **CF - PB**	Steel	Fe P11	UNI EN 10111	CF6 Free
Locking Plates Heavy		**CP1 - PB** to **CP5 - PB**	Steel	Fe 430 B	UNI EN 10025	CF6 Free
Hex. Screws		**CC2-03** to **CC7-03** **CF1-03** to **CF5-03**	Steel		UNI 24014	
Stacking Screws Standard		**CC2-VA** to **CC7-VA** **CF1-VA** to **CF5-VA**	Steel AVP		UNI EN 10277-3	CF6 Free
Stacking Screws Heavy		**CP1-VA** to **CP5-VA**	Steel AVP		UNI EN 10277-3	CF6 Free
Flat Washers Standard		**CC - RP**	Steel		UNI 6592	
Bushings Standard		**CC - B**	Steel AVP		UNI EN 10277-3	CF6 Free

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

TECHNICAL

Clamp Shear Force Capability



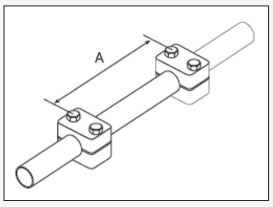
The tabulated data applies for steel pipe St. 35.4.
In each case, hex screws and cover plates have been used to maximise the load capability.

Sliding starts when the shear force 'P' is reached.

Clamp Series	Type	Jaw Material	Bolt	Tightening Torque (Nm)	Max. Shear Force P in the direction of the pipe (kN)
CC2	Standard Single	Polypropylene	M6	8	1.2
CC3	Standard Single		M6	8	1.5
CC4	Standard Single		M6	8	1.7
CC5	Standard Single		M6	8	1.8
CC6	Standard Single		M6	8	2
CC7	Standard Single		M6	8	2.2
CF1	Standard Twin	Polypropylene	M6	6	1.1
CF2	Standard Twin		M8	13	2.5
CF3	Standard Twin		M8	13	2.1
CF4	Standard Twin		M8	13	2.9
CF5	Standard Twin		M8	9	2.2
CP1	Heavy Single	Polypropylene	M10	13	1.8
CP2	Heavy Single		M10	13	3
CP3	Heavy Single		M10	15	3.5
CP4	Heavy Single		M12	30	8.5
CP5	Heavy Single		M16	46	11.5
CP6	Heavy Single		M20	80	15
CP7	Heavy Single		M20	100	30
CP8	Heavy Single		M30	190	41
CP9	Heavy Single		M30	210	125
CH2	Heavy Single	Aluminium	M10	32	16
CH3	Heavy Single		M10	37	16.5

Recommended Clamp Spacings

Tabulated data represents standard values for static loads.
Clamps should always be applied at each side of a bend.



Clamp Series / Pipe OD (mm)	Clamp pitch A (m)
CC2 6 – 13.25	1
CC3 14 – 18	1.2
CC4 20 – 25.4	1.5
CC5 28 – 32	1.5
CC6 32 – 45	2.2
CC7 45 – 54	2.7

Clamp Series / Pipe OD (mm)	Clamp pitch A (m)
CP1 6 - 20	1.0
CP2 20 - 30	1.5
CP3 / CP4 30 - 50	2.2
CP4 / CP5 53 - 73	3
CP5 80 - 90	3.5
CP6 100 - 121	4.5
CP7 133 - 168	5
CP8 / CP9 168 - 219	6

PIRTEK

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

NEW - STAINLESS STEEL HARDWARE FOR STANDARD SERIES SINGLE CLAMPS and TWIN CLAMPS - WELD PLATES, COVER PLATES, SCREWS & STACKING SCREWS - AISI 316L GRADE

Product Code	Description
CC2SS-01	S.D. WELD PLATE (P) 1 REQ'D - STAINLESS STEEL
CC2SS-02	S.D. COVER PLATE (PS) 1 REQ'D - STAINLESS STEEL
CC2SS-03	S.D. HEX SCREW (VE) 2 REQ'D - STAINLESS STEEL
CC2SS-VA	S.D. STACKING SCREW - STAINLESS STEEL
CC3SS-01	S.D. WELD PLATE (P) 1 REQ'D - STAINLESS STEEL
CC3SS-02	S.D. COVER PLATE (PS) 1 REQ'D - STAINLESS STEEL
CC3SS-03	S.D. HEX SCREW (VE) 2 REQ'D - STAINLESS STEEL
CC3SS-VA	S.D. STACKING SCREW - STAINLESS STEEL
CC4SS-01	S.D. WELD PLATE (P) 1 REQ'D - STAINLESS STEEL
CC4SS-02	S.D. COVER PLATE (PS) 1 REQ'D - STAINLESS STEEL
CC4SS-03	S.D. HEX SCREW (VE) 2 REQ'D - STAINLESS STEEL
CC4SS-VA	S.D. STACKING SCREW - STAINLESS STEEL
CC5SS-01	S.D. WELD PLATE (P) 1 REQ'D - STAINLESS STEEL
CC5SS-02	S.D. COVER PLATE (PS) 1 REQ'D - STAINLESS STEEL
CC5SS-03	S.D. HEX SCREW (VE) 2 REQ'D - STAINLESS STEEL
CC5SS-VA	S.D. STACKING SCREW - STAINLESS STEEL
CC6SS-01	S.D. WELD PLATE (P) 1 REQ'D - STAINLESS STEEL
CC6SS-02	S.D. COVER PLATE (PS) 1 REQ'D - STAINLESS STEEL
CC6SS-03	S.D. HEX SCREW (VE) 2 REQ'D - STAINLESS STEEL
CC6SS-VA	S.D. STACKING SCREW - STAINLESS STEEL
CF1SS-01	T.C. WELD PLATE 1 REQ'D - STAINLESS STEEL
CF1SS-02	T.C. COVER PLATE 1 REQ'D - STAINLESS STEEL
CF1SS-03	T.C. HEX SCREW 1 REQ'D - STAINLESS STEEL
CF1SS-VA	T.C. STACKING SCREW - STAINLESS STEEL
CF2SS-01	T.C. WELD PLATE 1 REQ'D - STAINLESS STEEL
CF2SS-02	T.C. COVER PLATE 1 REQ'D - STAINLESS STEEL
CF2SS-03	T.C. HEX SCREW 1 REQ'D - STAINLESS STEEL
CF2SS-VA	T.C. STACKING SCREW - STAINLESS STEEL
CF3SS-01	T.C. WELD PLATE 1 REQ'D - STAINLESS STEEL
CF3SS-02	T.C. COVER PLATE 1 REQ'D - STAINLESS STEEL
CF3SS-03	T.C. HEX SCREW 1 REQ'D - STAINLESS STEEL
CF3SS-VA	T.C. STACKING SCREW - STAINLESS STEEL
CF4SS-01	T.C. WELD PLATE 1 REQ'D - STAINLESS STEEL
CF4SS-02	T.C. COVER PLATE 1 REQ'D - STAINLESS STEEL
CF4SS-03	T.C. HEX SCREW 1 REQ'D - STAINLESS STEEL
CF4SS-VA	T.C. STACKING SCREW - STAINLESS STEEL
CF5SS-01	T.C. WELD PLATE 1 REQ'D - STAINLESS STEEL
CF5SS-02	T.C. COVER PLATE 1 REQ'D - STAINLESS STEEL
CF5SS-03	T.C. HEX SCREW 1 REQ'D - STAINLESS STEEL
CF5SS-VA	T.C. STACKING SCREW - STAINLESS STEEL

S.D. = Standard Duty Single Clamp
T.C. = Twin Clamp - Standard Duty

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice

This page is intentionally blank

This page is part of a complete catalogue containing technical and safety data.
All data must be reviewed when selecting a product.
Pirtek reserve the right to change technical specifications without notice