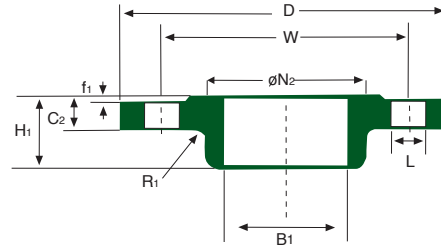


Welding Neck Flange (Type 2)



Hubbed Slip-on (Type 4)

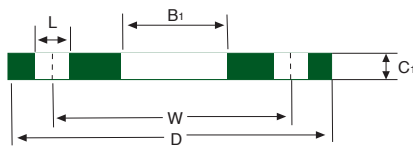
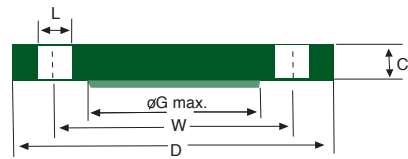


Plate Flange (Type 3)



Blind Flange (Type 8)

• Dimensions for PN6 Flanges

NP = Nominal Pressure 6, 10, 16, 25 & 40

• Nominal pressure 6 bar (1bar = 10 ⁵ N/m ² = 100kPa)																	Description			
Nom. Size	Pipe O.D.	Flange O.D. D	Flange Thickness			Length			Bolting		R ₁	Drilling		Neck Diameter		Spigot G max.	Bore Diameter B ₁	O.D/ Neck A	Raised Face f ₁	
			C ₁	C ₂	C ₄	H ₁	H ₂	H ₃	No.	L		W	N ₁	N ₂						
10	17.2	75	12	12	12	20	28	6	4	M10	4	11	50	26	25	-	18.0	17.2	2	
15	21.3	80	12	12	12	20	30	6	4	M10	4	11	55	30	30	-	22.0	21.3	2	
20	26.9	90	14	14	14	24	32	6	4	M10	4	11	65	38	40	-	27.5	26.9	2	
25	33.7	100	14	14	14	24	35	6	4	M10	4	11	75	42	50	-	34.5	33.7	2	
32	42.4	120	16	14	14	26	35	6	4	M12	6	14	90	55	60	-	43.5	42.5	2	
40	48.3	130	16	14	14	26	38	7	4	M12	6	14	100	62	70	-	49.5	48.3	3	
50	60.3	140	16	14	14	28	38	8	4	M12	6	14	110	74	80	-	61.5	60.3	3	
65	76.1	160	16	14	14	32	38	9	4	M12	6	14	130	88	100	55	77.5	76.1	3	
80	88.9	190	18	16	16	34	42	10	4	M16	8	18	150	102	110	70	90.5	88.9	3	
100	114.3	210	18	16	16	40	45	10	4	M16	8	18	170	130	130	90	116.0	114.3	3	
125	139.7	240	20	18	18	44	48	10	8	M16	8	18	200	155	160	115	141.5	139.7	3	
150	168.3	265	20	18	18	44	48	12	8	M16	10	18	225	184	185	140	170.5	168.3	3	
200	219.1	320	22	20	20	44	55	15	8	M16	10	18	280	236	240	190	221.5	219.1	3	
250	273.0	375	24	22	22	44	60	15	12	M16	12	18	335	290	295	235	276.5	273.0	3	
300	323.9	440	24	22	22	44	62	15	12	M20	12	22	395	342	355	285	327.5	323.9	4	
350	355.6	490	26	22	24	-	62	15	12	M20	12	22	445	385	-	325	359.5	355.6	4	
400	406.4	540	28	22	28	-	65	15	16	M20	12	22	495	438	-	375	411.0	406.4	4	
450	457.2	595	30	22	24	-	65	15	16	M20	12	22	550	492	-	425	462.0	457.0	4	
500	508.0	645	30	24	24	-	68	15	20	M20	12	22	600	538	-	475	508.0	508.0	4	
600	609.6	755	32	30	30	-	70	16	20	M24	12	26	705	640	-	575	609.6	609.6	5	

• Dimensions for PN10 Flanges

• Nominal pressure 10 bar (1bar = 10 ⁵ N/m ² = 100kPa) NOTE: For nominal sizes 10 to 175 use Table 16 on the next page																	Description			
Nom. Size	Pipe O.D.	Flange O.D. D	Flange Thickness			Length			Bolting		R ₁	Drilling		Neck Diameter		Spigot G max.	Bore Diameter B ₁	O.D/ Neck A	Raised Face f ₁	
			C ₁	C ₂	C ₄	H ₁	H ₂	H ₃	No.	L		W	N ₁	N ₂						
200	219.1	340	24	24	24	44	62	16	8	M20	10	22	295	234	246	190	221.5	219.1	3	
250	273.0	395	26	26	26	46	68	16	12	M20	12	22	350	292	298	235	276.5	273.0	3	
300	323.9	445	26	26	26	46	68	16	12	M20	12	22	400	342	350	285	327.5	323.9	4	
350	355.6	505	28	26	26	53	68	16	16	M20	12	22	460	385	400	325	359.5	355.6	4	
400	406.4	565	32	26	26	57	72	16	16	M24	12	26	515	440	456	375	411	406.4	4	
450	457.2	615	36	28	28	63	72	16	20	M24	12	26	565	488	502	425	462	457.2	4	
500	508.0	670	38	28	28	67	75	16	20	M24	12	26	620	542	559	475	513.5	508.0	4	
600	609.6	780	42	30	34	75	80	18	20	M27	12	30	725	642	658	575	616.5	609.6	5	

• Note: "S" - to be specified by purchaser

Forged & Plate Flanges (cont.)

BS EN 1092 - 1 (Replaces BS 4504)

• Dimensions for PN16 Flanges

• Nominal pressure 16 bar (1bar = 10 ⁵ N/m ² = 100kPa)															Description				
Nom. Size	Pipe O.D.	Flange O.D. D	Flange Thickness			Length			Bolting		Drilling		Neck Diameter		Spigot G max.	Bore Diameter B ₁	O.D Neck A	Raised Face f ₁	
			C ₁	C ₂	C ₃	H ₁	H ₂	H ₃	No.	R ₁	L	W	N ₁	N ₂					
10	17.2	90	14	16	16	22	35	6	4	M12	4	14	60	28	30	-	18.0	17.2	2
15	21.3	95	14	16	16	22	38	6	4	M12	4	14	65	32	35	-	22.0	21.3	2
20	26.9	105	16	18	18	26	40	6	4	M12	4	14	75	40	45	-	27.5	26.9	2
25	33.7	115	16	18	18	28	40	6	4	M12	4	14	85	46	52	-	34.5	33.7	2
32	42.4	140	18	18	18	30	42	6	4	M16	6	18	100	56	60	-	43.5	42.4	2
40	48.3	150	18	18	18	32	45	7	4	M16	6	18	110	64	70	-	49.5	48.36	3
50	60.3	165	20	20	18	28	45	8	4	M16	6	18	125	74	84	-	61.5	0.3	3
65	76.1	185	20	20	18	32	45	10	8	M16	6	18	145	92	104	55	77.5	76.1	3
80	88.9	200	20	20	20	34	50	10	8	M16	8	18	160	105	118	70	90.5	88.9	3
100	114.3	220	22	20	20	40	52	12	8	M16	8	18	180	131	140	90	116.0	114.3	3
125	139.7	250	22	22	22	44	55	12	8	M16	8	18	210	156	168	115	141.5	139.7	3
150	168.3	285	24	22	22	44	55	12	8	M20	10	22	240	184	195	140	170.5	168.3	3
200	219.1	340	26	24	24	44	62	16	12	M20	10	22	295	235	246	190	221.5	219.1	3
250	273.0	405	29	26	26	46	70	16	12	M24	12	26	355	292	298	235	276.5	273.0	3
300	323.9	460	32	28	28	46	78	16	12	M24	12	26	410	344	350	285	327.5	323.9	4
350	355.6	520	35	30	30	57	82	16	16	M24	12	26	470	390	400	330	359.5	355.6	4
400	406.4	480	38	32	32	63	83	16	16	M27	12	30	525	445	456	380	411.0	406.4	4
450	457.0	640	42	34	40	68	83	16	20	M27	12	30	585	490	502	425	462.0	457.0	4
500	508.0	715	46	36	44	73	84	16	20	M30	12	33	650	548	559	475	613.5	508.0	4
600	610.0	840	55	40	54	83	88	18	20	M33	12	36	770	670	658	575	616.5	610.0	4

• Dimensions for PN25 Flanges

• Nominal pressure 25 bar															Description				
Nom. Size	Pipe O.D.	Flange O.D. D	Flange Thickness			Length			Bolting		Drilling		Neck Diameter		Spigot G max.	Bore Diameter B ₁	O.D Neck A	Raised Face f ₁	
			C ₁	C ₂	C ₃	H ₁	H ₂	H ₃	No.	R ₁	L	W	N ₁	N ₂					
200	219.1	360	32	30	30	52	80	16	12	M24	10	26	310	244	256	190	221.5	219.1	3
250	273.0	425	35	32	32	60	88	18	12	M27	12	30	370	298	310	235	276.5	273.0	3
300	323.9	485	38	34	34	67	92	18	16	M30	12	30	430	352	364	285	327.5	323.9	4
350	355.6	555	42	38	38	72	100	20	16	M30	12	33	490	398	418	332	359.5	355.6	4
400	406.4	620	48	40	40	78	110	20	16	M33	12	36	550	452	472	380	411.0	406.4	4
450	457.2	670	54	46	50	84	110	20	20	M33	12	36	600	500	520	425	462.0	457.2	4
500	508.0	730	58	48	51	90	125	20	20	M33	12	36	660	558	580	475	513.5	508.0	4
600	610.0	845	68	48	60	100	125	20	20	M36	12	39	770	660	684	575	616.5	610.0	5

• Dimensions for PN40 Flanges

• Nominal pressure 40 bar (1bar = 10 ⁵ N/m ² = 100kPa)															Description				
Nom. Size	Pipe O.D.	Flange O.D. D	Flange Thickness			Length			Bolting		Drilling		Neck Diameter		Spigot G max.	Bore Diameter B ₁	O.D Neck A	Raised Face f ₁	
			C ₁	C ₂	H ₁	H ₂	H ₃	No.	R ₁	L	W	N ₁	N ₂						
10	17.2	90	14	16	16	22	35	6	4	M12	4	14	60	28	30	-	18.0	17.2	2
15	21.3	95	14	16	16	22	38	6	4	M12	4	14	65	32	35	-	22.0	21.3	2
20	26.9	105	16	18	18	26	40	6	4	M12	4	14	75	40	45	-	27.5	26.9	2
25	33.7	115	16	18	18	28	40	6	4	M12	4	14	85	46	52	-	34.5	33.7	2
32	42.4	140	18	18	18	30	42	6	4	M16	6	18	100	56	60	-	43.5	42.4	2
40	48.3	150	18	18	18	32	45	7	4	M16	6	18	110	64	70	-	49.5	48.3	3
50	60.3	165	20	20	18	28	45	8	4	M16	6	18	125	74	84	-	61.5	60.3	3
65	76.1	185	22	22	22	38	52	10	8	M16	6	18	145	90	104	55	77.5	76.1	3
80	88.9	200	24	24	24	40	58	12	8	M16	8	18	160	105	118	70	90.5	88.9	3
100	114.3	235	26	24	24	44	65	12	8	M20	8	22	190	134	145	90	116.0	114.3	3
125	139.7	270	28	26	26	48	68	12	8	M24	8	26	220	162	170	115	141.5	139.7	3
150	168.3	300	30	28	28	52	75	12	8	M24	10	26	250	192	200	140	170.5	168.3	3
200	219.1	375	36	36	36	52	88	16	12	M27	10	30	320	244	260	190	221.5	219.1	3
250	273.0	450	42	38	38	60	105	18	12	M30	12	33	385	306	312	235	276.5	273.0	3
300	323.9	515	52	42	42	67	115	18	16	M30	12	33	450	362	380	285	327.5	323.9	4
350	355.6	580	58	46	46	72	125	20	16	M33	12	36	510	408	424	325	359.5	355.6	4
400	406.4	660	65	50	50	78	135	20	16	M36	12	39	585	462	478	375	411.0	406.4	4
450	457.2	685	"S"	57	57	84	135	20	20	M36	12	39	610	500	522	425	462.0	457.2	4
500	508.0	755	"S"	57	57	90	140	20	20	M39	12	42	670	562	576	475	513.5	508.0	4
600	610.0	890	"S"	72	72	100	150	20	20	M45	12	48	795	666	686	575	616.5	610.0	5

• Note: "S" - to be specified by purchaser

Forged & Plate Flanges (cont.)

Approximate Weights

BS EN 1092 - 1 (Replaces BS 4504)

Flanges in kilograms

Nom. Pressure 6 Bar					Nom. Pressure 10 Bar				Nom. Pressure 16 Bar			
Nom. Size (mm)	6/2 (W/N)	6/3 (Slip-on)	6/4 (Scrwd)	6/8 (Blind)	10/2 (W/N)	10/3 (Slip-on)	10/4 (Scrwd)	10/8 (Blind)	16/2 (W/N)	16/3 (Slip-on)	16/4 (Scrwd)	16/8 (Blind)
10	0.335	0.31	0.323	0.38	0.58	0.53	0.544	0.63	0.58	0.53	0.544	0.63
15	0.392	0.35	0.373	0.44	0.648	0.59	0.613	0.71	0.648	0.59	0.613	0.71
20	0.592	0.53	0.590	0.66	0.952	0.85	0.910	1.0	0.952	0.85	0.910	1.0
25	0.747	0.65	0.743	0.82	1.14	1.0	1.1	1.2	1.14	1.0	1.1	1.2
32	1.05	1.1	1.05	1.2	1.69	1.5	1.60	1.8	1.69	1.5	1.6	1.8
40	1.18	1.2	1.20	1.4	1.86	1.6	1.78	2.1	1.86	1.6	1.78	2.1
50	1.34	1.3	1.37	1.6	2.53	2.2	2.43	2.9	2.53	2.2	2.43	2.9
65	1.67	1.6	1.92	2.1	3.06	2.7	3.18	3.6	3.06	2.7	3.18	3.6
80	2.71	2.6	2.85	3.4	3.7	3.3	4.12	4.6	3.7	3.3	4.12	4.6
100	3.24	2.9	3.19	4.2	4.62	3.6	4.47	5.6	4.62	3.6	4.47	5.6
125	4.49	3.9	4.47	6.1	6.3	5.0	6.13	8.1	6.3	5.0	6.13	8.1
150	5.15	4.4	5.3	7.5	7.75	6.0	7.92	10.5	7.75	6.0	7.92	10.5
175	-	-	-	-	10.0	7.9	-	14.2	10.0	7.9	-	14.2
200	7.78	6.4	-	12.5	11.3	8.4	-	16.5	11.0	8.7	-	16.5
250	10.8	8.5	-	18.5	14.7	11.0	-	24.0	15.6	12.0	-	25.0
300	14.0	11.0	-	25.5	17.6	12.5	-	31.0	22.0	15.5	-	35.0
350	16.1	15.5	-	32.0	21.4	19.5	-	39.5	28.7	24.5	-	48.0
400	18.3	19.0	-	38.5	26.1	26.5	-	49.5	36.3	33.0	-	63.0
450	24.6	24.5	-	52.0	-	36.0	-	65.0	-	48.0	-	85.0
500	-	25.5	-	60.0	34.7	39.0	-	75.0	59.3	60.0	-	110.0
600	31.5	33.0	-	-	42.2	53.0	-	-	73.4	94.0	-	-

Nom. Pressure 25 Bar					Nom. Pressure 40 Bar			
Nom. Size (mm)	25/2 (W/N)	25/3 (Slip-on)	25/4 (Scrwd)	25/8 (Blind)	40/2 (W/N)	40/3 (Slip-on)	40/4 (Scrwd)	40/8 (Blind)
10	0.661	0.62	0.630	0.72	0.661	0.62	0.630	0.72
15	0.746	0.69	0.71	0.81	0.746	0.69	0.710	0.81
20	1.06	0.97	1.03	1.1	1.06	0.97	1.03	1.1
25	1.29	1.2	1.28	1.4	1.29	1.2	1.28	1.4
32	1.88	1.7	1.87	2.0	1.88	1.7	1.87	2.0
40	2.33	2.1	2.14	2.4	2.33	2.1	2.14	2.4
50	2.82	2.5	2.86	3.2	2.82	2.5	2.86	3.2
65	3.74	3.2	3.85	4.3	3.74	3.2	3.85	4.3
80	4.75	4.0	4.80	5.5	4.75	4.0	4.80	5.5
100	6.52	5.7	6.43	7.6	6.52	5.7	6.43	7.6
125	9.07	7.7	8.77	11.0	9.07	7.7	8.77	11.0
150	11.8	9.7	10.5	14.5	11.8	9.7	10.5	14.5
175	13.4	11.0	-	18.3	18.2	15.7	-	24.0
200	17.0	12.0	-	22.5	21.5	16.0	-	37.0
250	24.4	17.5	-	33.5	34.9	28.5	-	44.5
300	31.2	25.5	-	46.0	49.7	42.0	-	64.0
350	45.0	40.5	-	68.0	68.1	63.0	-	89.0
400	58.7	54.0	-	90.0	96.5	94.0	-	125.0
450	-	75.3	-	115.5	-	107.0	-	155.5
500	86.1	86.0	-	140.0	117.0	120.00	-	185.0
600	101.0	120.0	-	-	-	-	-	-