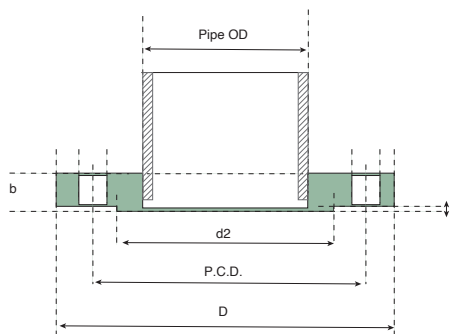


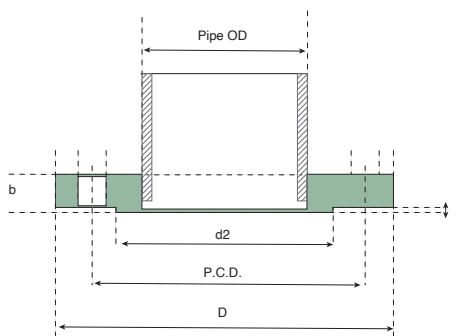


NOMINAL BORE 15 mm

PIPE OD 21,3mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092-1	PN 6	80,0	12,0	40,0	2,0	4	11,0	M10	55,0	0,40
	PN 10	95,0	14,0	45,0	2,0	4	14,0	M12	65,0	0,67
	PN 16	95,0	14,0	45,0	2,0	4	14,0	M12	65,0	0,67
	PN 25	95,0	14,0	45,0	2,0	4	14,0	M12	65,0	0,67
	PN 40	95,0	14,0	45,0	2,0	4	14,0	M12	65,0	0,67
SANS1123	600/3	80,0	10,0	40,0	2,0	4	11,0	M10	55,0	0,33
	1000/3	95,0	10,0	45,0	2,0	4	14,0	M12	65,0	0,48
	1600/3	95,0	10,0	45,0	2,0	4	14,0	M12	65,0	0,48
	2500/3	95,0	14,0	45,0	2,0	4	14,0	M12	65,0	0,76
	4000/3	95,0	14,0	45,0	2,0	4	14,0	M12	65,0	0,76
BS 10	T/D	95,3	4,8	-	-	4	14,3	M12	66,7	0,42
	T/E	95,3	6,3	-	-	4	14,3	M12	66,7	0,42
ASME B16.5	CL 150	88,9	11,1	34,9	1,6	4	15,9	M12	60,3	0,45
	CL 300	95,2	14,3	34,9	1,6	4	15,9	M12	66,7	0,91

NOMINAL BORE 20 mm

PIPE OD 26,7mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092-1	PN 6	90,0	14,0	50,0	2,0	4	11,0	M10	65,0	0,58
	PN 10	105,0	16,0	58,0	2,0	4	14,0	M12	75,0	0,93
	PN 16	105,0	16,0	58,0	2,0	4	14,0	M12	75,0	0,93
	PN 25	105,0	16,0	58,0	2,0	4	14,0	M12	75,0	0,93
	PN 40	105,0	16,0	58,0	2,0	4	14,0	M12	75,0	0,93
SANS1123	600/3	90,0	10,0	50,0	2,0	4	11,0	M10	65,0	0,42
	1000/3	105,0	10,0	58,0	2,0	4	14,0	M12	75,0	0,58
	1600/3	105,0	10,0	58,0	2,0	4	14,0	M12	75,0	0,58
	2500/3	105,0	14,0	58,0	2,0	4	14,0	M12	75,0	1,04
	4000/3	105,0	14,0	58,0	2,0	4	14,0	M12	75,0	1,04
BS 10	T/D	101,6	9,5	-	-	4	14,2	M12	73,0	0,53
	T/E	101,6	9,5	-	-	4	14,2	M12	73,0	0,53
ASME B16.5	CL 150	98,4	12,7	42,9	1,6	4	16	M12	69,8	0,68
	CL 300	117,5	15,9	42,9	1,6	4	19	M16	82,5	1,25

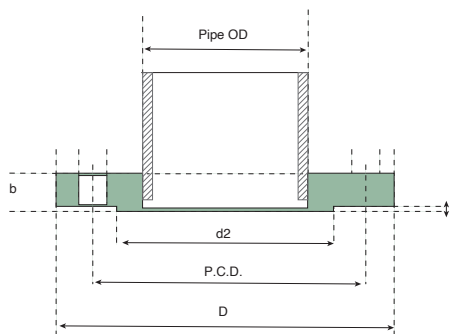


NOMINAL BORE 25 mm

PIPE OD 33,4mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092-1	PN 6	100,0	14,0	60,0	2,0	4	11,0	M10	75,0	0,69
	PN 10	115,0	16,0	68,0	2,0	4	14,0	M12	85,0	1,11
	PN 16	115,0	16,0	68,0	2,0	4	14,0	M12	85,0	1,11
	PN 25	115,0	16,0	68,0	2,0	4	14,0	M12	85,0	1,11
	PN 40	115,0	16,0	68,0	2,0	4	14,0	M12	85,0	1,11
SANS1123	600/3	100,0	10,0	60,0	2,0	4	11,0	M10	75,0	0,49
	1000/3	115,0	10,0	68,0	2,0	4	14,0	M12	85,0	0,69
	1600/3	115,0	10,0	68,0	2,0	4	14,0	M12	85,0	0,69
	2500/3	115,0	16,0	68,0	2,0	4	14,0	M12	85,0	1,24
	4000/3	115,0	16,0	68,0	2,0	4	14,0	M12	85,0	1,24
BS 10	T/D	114,3	4,8	-	-	4	14,3	M12	82,6	0,7
	T/E	114,3	7,1	-	-	4	14,3	M12	82,6	0,7
ASME B16.5	CL 150	107,9	14,3	50,8	1,6	4	16	M12	79,4	0,95
	CL 300	123,8	17,5	50,8	1,6	4	19	M16	66,7	1,36

NOMINAL BORE 32 mm

PIPE OD 42,2mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092-1	PN 6	120,0	16,0	70,0	2,0	4	14,0	M10	90,0	1,14
	PN 10	140,0	18,0	78,0	2,0	4	18,0	M12	100,0	1,80
	PN 16	140,0	18,0	78,0	2,0	4	18,0	M12	100,0	1,80
	PN 25	140,0	18,0	78,0	2,0	4	18,0	M12	100,0	1,80
	PN 40	140,0	18,0	78,0	2,0	4	18,0	M12	100,0	1,80
SANS1123	600/3	120,0	10,0	70,0	2,0	4	14,0	M10	90,0	0,71
	1000/3	140,0	10,0	78,0	2,0	4	18,0	M12	100,0	1,01
	1600/3	140,0	10,0	78,0	2,0	4	18,0	M12	100,0	1,01
	2500/3	140,0	18,0	78,0	2,0	4	18,0	M12	100,0	1,80
	4000/3	140,0	18,0	78,0	2,0	4	18,0	M12	100,0	1,80
BS 10	T/D	120,7	6,3	-	-	4	14,2	M12	87,3	0,8
	T/E	120,7	7,9	-	-	4	14,2	M12	87,3	0,8
ASME B16.5	CL 150	117,5	15,9	73,9	1,6	4	15,9	M12	88,9	1,11
	CL 300	133,3	19	63,5	1,6	4	19	M16	98,4	2,04

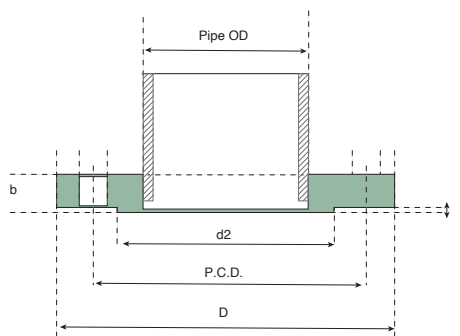


NOMINAL BORE 40 mm

Pipe OD 48,3mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092-1	PN 6	130,0	16,0	80,0	3,0	4	14,0	M12	100,0	1,34
	PN 10	150,0	18,0	88,0	3,0	4	18,0	M16	110,0	2,10
	PN 16	150,0	18,0	88,0	3,0	4	18,0	M16	110,0	2,10
	PN 25	150,0	18,0	88,0	3,0	4	18,0	M16	110,0	2,10
	PN 40	150,0	18,0	88,0	3,0	4	18,0	M16	110,0	2,10
SANS1123	600/3	130,0	10,0	80,0	3,0	4	14,0	M12	100,0	0,84
	1000/3	150,0	10,0	88,0	3,0	4	18,0	M16	110,0	1,15
	1600/3	150,0	10,0	88,0	3,0	4	18,0	M16	110,0	1,15
	2500/3	150,0	20,0	88,0	3,0	4	18,0	M16	110,0	2,30
	4000/3	150,0	20,0	88,0	3,0	4	18,0	M16	110,0	2,30
BS 10	T/D	133,4	6,3	-	-	4	14,2	M12	98,4	1,00
	T/E	133,4	8,7	-	-	4	18,0	M12	98,4	1,00
ASME B16.5	CL 150	127,0	17,5	73,0	1,6	4	16	M12	98,4	1,4
	CL 300	155,6	20,6	73,0	1,6	4	18	M16	114,3	2,81

NOMINAL BORE 50 mm

Pipe OD 60,3mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092	PN 6	140,0	16,0	90,0	3,0	4	14,0	M12	110,0	1,48
	PN 10	165,0	20,0	102,0	3,0	4	18,0	M16	125,0	2,72
	PN 16	165,0	20,0	102,0	3,0	4	18,0	M16	125,0	2,72
	PN 25	165,0	20,0	102,0	3,0	4	18,0	M16	125,0	2,72
	PN 40	165,0	20,0	102,0	3,0	4	18,0	M16	125,0	2,72
SANS1123	600/3	140,0	10,0	90,0	3,0	4	14,0	M12	110,0	0,92
	1000/3	165,0	10,0	102,0	3,0	4	18,0	M16	125,0	1,36
	1600/3	165,0	12,0	102,0	3,0	4	18,0	M16	125,0	1,63
	2500/3	165,0	20,0	102,0	3,0	4	18,0	M16	125,0	2,72
	4000/3	165,0	20,0	102,0	3,0	4	18,0	M16	125,0	2,72
BS 10	T/D	152,4	7,9	-	-	4	17,5	M16	114,3	0,88
	T/E	152,4	9,5	-	-	4	17,5	M16	114,3	1,06
ANSI B16.5	150lb	152,4	19,0	92,0	1,6	4	19,0	M16	120,6	2,3
	300lb	165,1	22,2	92,1	1,6	8	19	M16	127,0	3,13

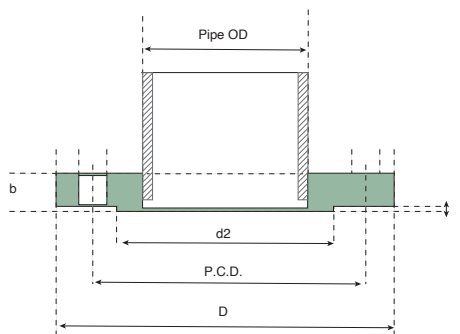


NOMINAL BORE 65 mm

PIPE OD 73mm	Flange		Raised Face		Holes		Bolt size	PCD	Mass kg	
	D	b	d2	f	No.	d1				
BS EN1092-1	PN 6	160,0	16,0	110,0	3,0	4	14,0	M12	130,0	1,85
	PN 10	185,0	20,0	122,0	3,0	4	18,0	M16	145,0	3,64
	PN 16	185,0	20,0	122,0	3,0	8	18,0	M16	145,0	3,64
	PN 25	185,0	22,0	122,0	3,0	8	18,0	M16	145,0	3,64
	PN 40	185,0	22,0	122,0	3,0	8	18,0	M16	145,0	3,64
SANS1123	600/3	160,0	10,0	110,0	3,0	4	14,0	M12	130,0	1,15
	1000/3	185,0	12,0	122,0	3,0	4	18,0	M16	145,0	1,98
	1600/3	185,0	12,0	122,0	3,0	4	18,0	M16	145,0	1,98
	2500/3	185,0	22,0	122,0	3,0	8	18,0	M16	145,0	3,64
	4000/3	185,0	22,0	122,0	3,0	8	18,0	M16	145,0	3,64
BS 10	T/D	165,1	7,9	-	-	4	17,5	M16	127,0	1,3
	T/E	165,1	10,3	-	-	4	17,5	M16	127,0	1,6
ASME B16.5	150lb	177,8	22,2	104,8	1,6	4	19,0	M16	139,7	3,82
	300lb	190,5	25,4	104,8	1,6	8	22	M20	149,2	4,54

NOMINAL BORE 80 mm

PIPE OD 88,9mm	Flange			Raised Face		Holes		Bolt size	PCD	Mass kg
	D	b	d2	f	No.	d1				
BS EN1092-1	PN 6	190,0	18,0	128,0	3,0	4	18,0	M16	150,0	2,95
	PN 10	200,0	20,0	138,0	3,0	8	18,0	M16	160,0	3,61
	PN 16	200,0	20,0	138,0	3,0	8	18,0	M16	160,0	3,61
	PN 25	200,0	24,0	138,0	3,0	8	18,0	M16	160,0	4,33
	PN 40	200,0	24,0	138,0	3,0	8	18,0	M16	160,0	4,33
SANS1123	600/3	190,0	10,0	128,0	3,0	4	18,0	M16	150,0	1,64
	1000/3	200,0	12,0	138,0	3,0	8	18,0	M16	160,0	2,17
	1600/3	200,0	14,0	138,0	3,0	8	18,0	M16	160,0	2,64
	2500/3	200,0	22,0	138,0	3,0	8	18,0	M16	160,0	3,95
	4000/3	200,0	22,0	138,0	3,0	8	18,0	M16	160,0	3,95
BS 10	T/D	184,1	9,5	-	-	4	17,5	M16	146,0	1,43
	T/E	184,1	11,1	-	-	4	17,5	M16	146,0	1,80
ASME B16.5	150lb	190,5	23,8	127,0	1,6	4	19,0	M16	152,4	4,08
	300lb	209,5	28,6	127,0	1,6	8	22	M20	168,3	6,12



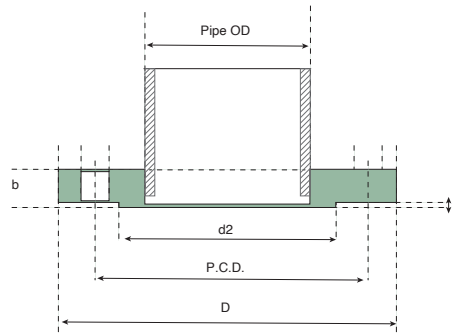
NOMINAL BORE 100 mm

Pipe OD 114,3mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092-1	PN 6	210.0	18.0	148.0	3,0	4	18,0	M16	170.0	3.25
	PN 10	220.0	22.0	158.0	3,0	8	18,0	M16	180.0	4.80
	PN 16	220.0	22.0	158.0	3,0	8	18,0	M16	180.0	4.80
	PN 25	235.0	26.0	162.0	3,0	8	22.0	M20	190.0	6.04
	PN 40	235.0	26.0	162.0	3,0	8	22.0	M20	190.0	6.04
SANS1123	600/3	210.0	10.0	148.0	3,0	4	18,0	M16	170.0	1.81
	1000/3	220.0	12.0	158.0	3,0	8	18,0	M16	180.0	2.39
	1600/3	220.0	14.0	158.0	3,0	8	18,0	M16	180.0	2.90
	2500/3	235.0	25.0	162.0	3,0	8	22.0	M20	190.0	6.04
	4000/3	235.0	25.0	162.0	3,0	8	22.0	M20	190.0	6.04
BS 10	T/D	215.9	9.5	-	-	4	17.5	M16	177.8	2.00
	T/E	215.9	13.7	-	-	8	17.5	M16	177.8	2.00
ASME B16.5	150lb	228.6	23.8	157.2	1,6	8	19.0	M16	190.5	5.94
	300lb	254.0	31.7	157.2	1,6	8	22	M20	200.0	9.53

NOMINAL BORE 125 mm

Pipe OD 141,3mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092	PN 6	240.0	20.0	178.0	3,0	8	18,0	M16	200.0	4.33
	PN 10	250.0	22.0	188.0	3,0	8	18,0	M16	210.0	5.42
	PN 16	250.0	22.0	188.0	3,0	8	18,0	M16	210.0	5.42
	PN 25	270.0	28.0	188.0	3,0	8	26.0	M24	220.0	8.21
	PN 40	270.0	28.0	188.0	3,0	8	26.0	M24	220.0	8.21
SANS1123	600/3	240.0	12.0	178.0	3,0	8	18,0	M16	200.0	2.60
	1000/3	250.0	14.0	188.0	3,0	8	18,0	M16	210.0	3.45
	1600/3	250.0	16.0	188.0	3,0	8	18,0	M16	210.0	4.07
	2500/3	270.0	28.0	188.0	3,0	8	26.0	M24	220.0	8.21
	4000/3	270.0	28.0	188.0	3,0	8	26.0	M24	220.0	8.21
BS 10	T/D	254.0	12.7	-	-	8	17,5	M16	209.6	3.48
	T/E	254.0	14.3	-	-	8	17,5	M20	209.6	3.48
ANSI B16.5	150lb	254.0	23.8	185.7	1,6	8	22	M20	215.9	6.25
	300lb	279.4	34.9	185.7	1,6	8	22	M20	234.9	12.70

FLANGES

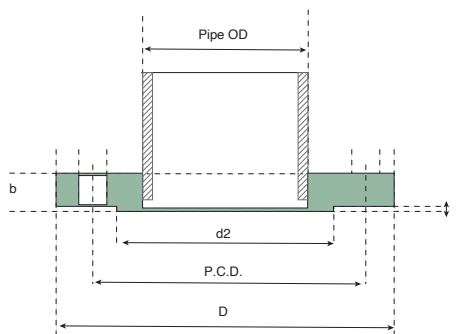


NOMINAL BORE 150 mm

PIPE OD 168,3mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092	PN 6	265.0	20.0	202.0	3,0	8	18,0	M16	225.0	4.86
	PN 10	285.0	24.0	212.0	3,0	8	22,0	M20	240.0	7.50
	PN 16	285.0	24.0	212.0	3,0	8	22,0	M20	240.0	7.50
	PN 25	300.0	30.0	218.0	3,0	8	26,0	M24	250.0	10.42
	PN 40	300.0	30.0	218.0	3,0	8	26,0	M24	250.0	10.42
SANS1123	600/3	265.0	12.0	202.0	3,0	8	18,0	M16	225.0	2.91
	1000/3	285.0	16.0	212.0	3,0	8	22.0	M20	240.0	4.81
	1600/3	285.0	18.0	212.0	3,0	8	22.0	M20	240.0	5.41
	2500/3	300.0	30.0	218.0	3,0	8	26,0	M24	250.0	10.42
	4000/3	300.0	30.0	218.0	3,0	8	26,0	M24	250.0	10.42
BS 10	T/D	279.4	12.7	-	-	8	17,5	M16	235.0	3.88
	T/E	279.4	17.5	-	-	8	22.2	M20	235.0	5.36
ANSI B 16,5	150lb	279.4	25.4	215.9	1,6	8	22.2	M20	241.3	8.16
	300lb	317.5	36.5	215.9	1,6	12	22.2	M20	269.9	16.33

NOMINAL BORE 200 mm

PIPE OD 219,1mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092	PN 6	320.0	22.0	258.0	3,0	8	18,0	M16	280.0	6.91
	PN 10	340.0	24.0	268.0	3,0	8	22.0	M20	295.0	9.30
	PN 16	340.0	26.0	268.0	3,0	12	22.0	M20	295.0	10.3
	PN 25	360.0	32.0	278.0	3,0	12	26.0	M24	310.0	14.4
	PN 40	375.0	36.0	285.0	3,0	12	30.0	M27	320.0	18.30
SANS1123	600/3	320.0	14.0	258.0	3,0	8	18,0	M16	280.0	4.4
	1000/3	340.0	18.0	268.0	3,0	8	22.0	M20	295.0	6.97
	1600/3	340.0	22.0	268.0	3,0	12	22.0	M20	295.0	7.51
	2500/3	360.0	28.0	278.0	3,0	12	26.0	M24	310.0	12.59
	4000/3	375.0	32.0	285.0	3,0	12	26.0	M24	320.0	16.96
BS 10	T/D	336.6	12.7	-	-	8	17,5	M16	292.1	4.91
	T/E	336.6	19.0	-	-	8	22.2	M20	292.1	7.59
ANSI B 16,5	150lb	342.9	28.6	269.9	1.6	8	22.2	M20	298.4	12.7
	300lb	381.0	41.3	269.9	1.6	12	22.2	M20	330.2	25.4

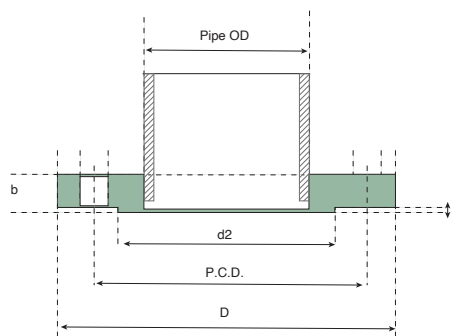


NOMINAL BORE 250 mm

Pipe OD 273,1mm	Flange			Raised Face		Holes		Bolt size	PCD	Mass kg
	D	b	d2	f	No.	d1				
BS EN1092-1	PN 6	375.0	24.0	312.0	3,0	12	18,0	M16	335.0	9.03
	PN 10	395.0	26.0	320.0	3,0	12	22,0	M20	350.0	11.95
	PN 16	405.0	29.0	320.0	3,0	12	26.0	M24	355.0	14.79
	PN 25	425.0	35.0	335.0	3,0	12	30.0	M27	370.0	20.43
	PN 40	450.0	42.0	345.0	3,0	12	33.0	M30	384.0	29.44
SANS1123	600/3	375.0	16.0	312.0	3,0	12	18,0	M16	335.0	6.02
	1000/3	395.0	20.0	320.0	3,0	12	22.0	M20	350.0	9.14
	1600/3	405.0	25.0	320.0	3,0	12	26.0	M24	355.0	12.36
	2500/3	425.0	30.0	335.0	3,0	12	26.0	M24	370.0	17.90
	4000/3	450.0	38.0	345.0	3,0	12	33.0	M30	385.0	29.44
BS 10	T/D	406.4	15.9	-	-	8	22.2	M20	355.6	8.70
	T/E	406.4	22.2	-	-	12	22.2	M20	355.6	12.05
ANSI B 16,5	150lb	406.4	30.2	323.8	1,6	12	25.4	M24	361.9	17.24
	300lb	444.5	47.6	323.8	1,6	16	31.7	M30	387.3	35.38

NOMINAL BORE 300 mm

Pipe OD 323,9mm	Flange			Raised Face		Holes		Bolt size	PCD	Mass kg
	D	b		d2	f	No.	d1			
BS EN1092	PN 6	440.0	24.0	365.0	4.0	12	22.0	M20	395.0	11.95
	PN 10	445.0	26.0	370.0	4.0	12	22.0	M20	400.0	13.66
	PN 16	460.0	32.0	378.0	4.0	12	26.0	M24	410.0	19.2
	PN 25	485.0	38.0	395.0	4.0	16	30.0	M27	430.0	26.66
	PN 40	515.0	52.0	410.0	4.0	16	33.0	M30	450.0	45.56
SANS1123	600/3	440.0	20.0	365.0	4.0	12	22.0	M20	395.0	9.96
	1000/3	445.0	22.0	370.0	4.0	12	22.0	M20	400.0	11.65
	1600/3	460.0	28.0	378.0	4.0	12	26.0	M24	410.0	16.65
	2500/3	485.0	32.0	395.0	4.0	16	26.0	M24	430.0	23.16
	4000/3	515.0	40.0	410.0	4.0	16	33.0	M30	450.0	43.39
BS 10	T/D	457.2	19.0	-	-	12	22.2	M20	406.4	12.05
	T/E	457.2	25.4	-	-	12	25.4	M24	406.4	16.07
ANSI B 16,5	150lb	482.6	31.7	381.0	1,6	12	25.4	M20	431.8	27.22
	300lb	520.7	50.8	381.0	1,6	16	31.7	M30	450.8	50.8

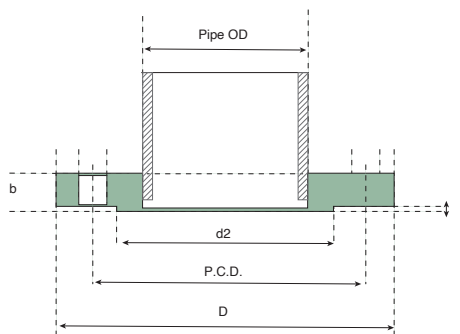


NOMINAL BORE 350 mm

Pipe OD 355,6mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092-1	PN 6	490.0	26.0	415.0	4.0	12	22.0	M20	445.0	16.88
	PN 10	505.0	30.0	430.0	4.0	16	22.0	M20	460.0	23.48
	PN 16	520.0	35.0	438.0	4.0	16	26.0	M24	470.0	28.34
	PN 25	555.0	42.0	450.0	4.0	16	33.0	M30	490.0	41.84
	PN 40	580.0	58.0	465.0	4.0	16	36.0	M33	510.0	67.65
SANS1123	600/3	490.0	22.0	415.0	4.0	12	22.0	M20	445.0	14.29
	1000/3	505.0	25.0	430.0	4.0	16	22.0	M20	460.0	18.23
	1600/3	520.0	30.0	438.0	4.0	16	26.0	M24	470.0	24.15
	2500/3	555.0	35.0	450.0	4.0	16	33.0	M30	490.0	34.87
	4000/3	580.0	45.0	465.0	4.0	16	33.0	M30	510.0	56.50
BS 10	T/D	527.1	22.2	-	-	12	25.4	M20	469.9	19.58
	T/E	527.1	28.6	-	-	12	25.4	M24	469.9	25.89
ANSI B 16,5	150lb	533.4	34.9	412.8	1,6	12	28.6	M24	476.2	35.71
	300lb	584.2	54.0	412.8	1,6	20	31.7	M30	514.0	75.0

NOMINAL BORE 400 mm

Pipe OD 406,4mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092-1	PN 6	540.0	28.0	465.0	4.0	16	22.0	M20	495.0	19.97
	PN 10	565.0	32.0	482.0	4.0	16	26.0	M24	515.0	27.65
	PN 16	580.0	38.0	490.0	4.0	16	30.0	M27	525.0	36.40
	PN 25	620.0	48.0	505.0	4.0	16	36.0	M33	550.0	58.60
	PN 40	660.0	65.0	535.0	4.0	16	39.0	M36	585.0	98.00
SANS1123	600/3	540.0	22.0	465.0	4.0	16	22.0	M20	495.0	15.69
	1000/3	565.0	25.0	482.0	4.0	16	26.0	M24	515.0	21.88
	1600/3	580.0	35.0	490.0	4.0	16	26.0	M24	525.0	34.13
	2500/3	620.0	40.0	505.0	4.0	16	33.0	M30	550.0	49.00
	4000/3	660.0	50.0	535.0	4.0	16	39.0	M36	585.0	74.58
BS 10	T/D	577.9	22.2	-	-	12	25.4	M20	520.7	22.32
	T/E	577.9	31.8	-	-	12	25.4	M24	520.7	32.59
ANSI B 16,5	150lb	596.9	36.5	470.0	1.6	16	28.6	M24	539.7	45.09
	300lb	647.7	57.1	470.0	1.6	20	34.9	M30	571.5	101.6



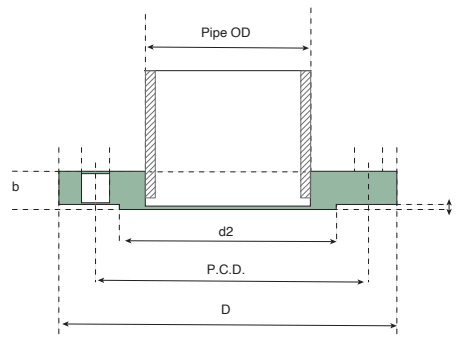
NOMINAL BORE 450 mm

Pipe OD 457mm	Flange			Raised Face		Holes		Bolt size	PCD	Mass kg
	D	b		d2	f	No.	d1			
BS EN1092-1	PN 6	595.0	30.0	520.0	4.0	16	22.0	M20	550.0	25.28
	PN 10	615.0	36.0	532.0	4.0	20	26.0	M24	565.0	34.16
	PN 16	640.0	42.0	550.0	4.0	20	30.0	M27	585.0	46.80
	PN 25	670.0	54.0	555.0	4.0	20	36.0	M33	600.0	70.80
	PN 40	685.0	68.0	560.0	4.0	20	39.0	M36	610.0	95.55
SANS1123	600/3	595.0	25.0	520.0	4.0	16	22.0	M20	550.0	21.07
	1000/3	615.0	30.0	532.0	4.0	20	26.0	M24	565.0	28.29
	1600/3	640.0	40.0	550.0	4.0	20	26.0	M24	585.0	45.68
	2500/3	670.0	45.0	555.0	4.0	20	33.0	M30	600.0	60.00
	4000/3	685.0	60.0	560.0	4.0	20	39.0	M36	610.0	85.00
BS 10	T/D	641.4	25.4	-	-	12	25.4	M20	584.2	30.8
	T/E	641.4	34.9	-	-	16	25.4	M20	584.2	42.86
ANSI B 16,5	150lb	635.0	39.7	533.4	1,6	16	31.7	M30	577.8	52.62
	300lb	711.2	60.3	533.4	1,6	24	34.9	M30	628.65	126.10

NOMINAL BORE 500 mm

Pipe OD 508mm	Flange			Raised Face		Holes		Bolt size	PCD	Mass kg
	D	b		d2	f	No.	d1			
BS EN1092-1	PN 6	645.0	30.0	570.0	4.0	20	22.0	M20	600.0	27.03
	PN 10	670.0	38.0	585.0	4.0	20	26.0	M24	620.0	41.03
	PN 16	715.0	46.0	610.0	4.0	20	33.0	M30	650.0	65.30
	PN 25	730.0	58.0	615.0	4.0	20	36.0	M33	660.0	88.20
	PN 40	755.0	72.0	615.0	4.0	20	42.0	M39	670.0	121.80
SANS1123	600/3	645.0	25.0	570.0	4.0	20	22.0	M20	600.0	22.52
	1000/3	670.0	32.0	585.0	4.0	20	26.0	M24	620.0	34.65
	1600/3	715.0	40.0	610.0	4.0	20	33.0	M30	650.0	56.51
	2500/3	730.0	50.0	615.0	4.0	20	33.0	M30	660.0	77.31
	4000/3	755.0	70.0	615.0	4.0	20	39.0	M36	670.0	121.50
BS 10	T/D	704.0	28.6	-	-	16	25.4	M20	641.4	41.07
	T/E	704.9	38.1	-	-	16	25.4	M20	641.1	55.80
ANSI B 16,5	150lb	698.5	42.9	584.2	1,6	20	31.7	M30	635.0	65.32
	300lb	774.7	63.5	584.2	1,6	24	34.9	M30	685.8	150.0

FLANGES



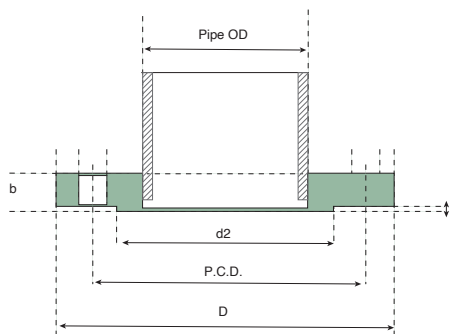
NOMINAL BORE 600 mm

Pipe OD 610mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092-1	PN 6	755.0	32.0	670.0	5.0	20	26.0	M24	705.0	35.87
	PN 10	780.0	42.0	685.0	5.0	20	30.0	M27	725.0	55.85
	PN 16	840.0	55.0	725.0	5.0	20	36.0	M33	770.0	104.00
	PN 25	845.0	68.0	720.0	5.0	20	39.0	M36	770.0	129.50
	PN 40	890.0	90.0	735.0	5.0	20	48.0	M45	795.0	207.00
SANS1123	600/3	755.0	30.0	670.0	5.0	20	26.0	M24	705.0	33.63
	1000/3	780.0	38.0	685.0	5.0	20	26.0	M24	725.0	51.58
	1600/3	840.0	50.0	725.0	5.0	20	33.0	M30	770.0	95.26
	2500/3	845.0	60.0	720.0	5.0	20	39.0	M36	770.0	114.86
	4000/3	890.0	84.0	735.0	5.0	20	48.0	M45	795.0	192.21
BS 10	T/D	825.5	31.8	-	-	16	28.6	M24	755.7	60.27
	T/E	825.5	47.6	-	-	16	31.8	M30	755.7	89.29
ANSI B 16,5	150lb	812.8	47.6	692.1	1,6	20	34.9	M30	749.3	91.63
	300lb	914.4	69.8	692.1	1,6	24	38.1	M36	812.8	222.26

*E&OE

NOMINAL BORE 700 mm

Pipe OD 711,2mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092-1	PN 6	860.0	40.0	775.0	5.0	24	26.0	M24	810.0	53.10
	PN 10	895.0	50.0	800.0	5.0	24	30.0	M27	840.0	84.00
	PN 16	910.0	63.0	795.0	5.0	24	36.0	M33	840.0	113.00
	PN 25	960.0	85.0	820.0	5.0	24	42.0	M39	875.0	195.00
	PN 40	995.0	96.0	840.0	5.0	24	48.0	M45	900.0	251.28
SANS1123	600/3	860.0	35.0	775.0	5.0	24	26.0	M24	810.0	46.05
	1000/3	895.0	45.0	800.0	5.0	24	26.0	M24	840.0	76.23
	1600/3	910.0	55.0	795.0	5.0	24	33.0	M30	840.0	98.50
	2500/3	960.0	74.0	820.0	5.0	24	42.0	M39	875.0	164.40
	4000/3	995.0	96.0	840.0	5.0	24	48.0	M45	900.0	253.87
BS 10	T/D	908.1	34.9	-	-	20	28.6	M24	844.6	64.17
	T/E	908.1	50.8	-	-	20	31.8	M30	844.6	92.19
ANSI B 16,5	150lb	-	-	-	-	-	-	-	-	-
	300lb	-	-	-	-	-	-	-	-	-

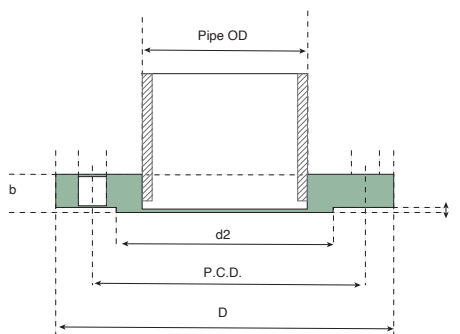


NOMINAL BORE 800 mm

Pipe OD 812,8mm	Flange			Raised Face		Holes		Bolt size	PCD	Mass kg
	D	b	d2	f	No.	d1				
BS EN1092-1	PN 6	975.0	44.0	880.0	5.0	24	30.0	M27	920.0	72.00
	PN 10	1015.0	56.0	905.0	5.0	24	33.0	M30	950.0	118.00
	PN 16	1025.0	74.0	900.0	5.0	24	39.0	M36	950.0	161.00
	PN 25	1085.0	95.0	930.0	5.0	24	48.0	M45	990.0	270.00
	PN 40	1140.0	108.0	960.0	5.0	24	56.0	M52	1030.0	372.62
SANS1123	600/3	975.0	38.0	880.0	5.0	24	26.0	M24	920.0	63.24
	1000/3	1015.0	50.0	905.0	5.0	24	33.0	M30	950.0	104.68
	1600/3	1025.0	65.0	900.0	5.0	24	39.0	M36	950.0	140.10
	2500/3	1085.0	82.0	928.0	5.0	24	48.0	M45	990.0	224.07
	4000/3	1140.0	108.0	960.0	5.0	24	56.0	M52	1030.0	375.34
BS 10	T/D	-	-	-	-	-	-	-	-	-
	T/E	-	-	-	-	-	-	-	-	-
ANSI B 16,5	150lb	-	-	-	-	-	-	-	-	-
	300lb	-	-	-	-	-	-	-	-	-

NOMINAL BORE 900 mm

Pipe OD 914,4mm	Flange			Raised Face		Holes		Bolt size	PCD	Mass kg
	D	b	d2	f	No.	d1				
BS EN1092-1	PN 6	1075.0	48.0	980.0	5.0	24	30.0	M27	1020.0	87.10
	PN 10	1115.0	62.0	1005.0	5.0	28	33.0	M30	1050.0	136.77
	PN 16	1125.0	82.0	1000.0	5.0	28	39.0	M36	1050.0	187.42
	PN 25	1185.0	90.0	1030.0	5.0	28	48.0	M45	1090.0	268.55
	PN 40	1250.0	120.0	1070.0	5.0	28	56.0	M52	1140.0	469.85
SANS1123	600/3	1075.0	40.0	980.0	5.0	24	26.0	M24	1020.0	74.00
		1115.0	55.0	1005.0	5.0	28	33.0	M30	1050.0	125.98
		1125.0	70.0	1000.0	5.0	28	39.0	M36	1050.0	164.78
		1185.0	90.0	1028.0	5.0	28	48.0	M45	1090.0	268.54
		1250.0	120.0	1070.0	5.0	28	56.0	M52	1140.0	451.53
BS 10	T/D	1174.7	47.6	-	-	24	35.0	M30	1092.2	156.25
	T/E	1174.7	63.5	-	-	24	35.0	M30	1092.2	203.13
ANSI B 16,5	150lb	-	-	-	-	-	-	-	-	-
	300lb	-	-	-	-	-	-	-	-	-



NOMINAL BORE 1000 mm

Pipe OD 1016mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092-1	PN 6	1175.0	52.0	1080.0	5.0	28	30.0	M27	1120.0	102.00
	PN 10	1230.0	70.0	1110.0	5.0	28	36.0	M33	1160.0	190.00
	PN 16	1255.0	90.0	1115.0	5.0	28	42.0	M39	1170.0	271.00
	PN 25	1320.0	98.0	1140.0	5.0	28	56.0	M52	1210.0	376.20
	PN 40	1360.0	132.0	1080.0	5.0	28	56.0	M52	1250.0	593.72
SANS1123	600/3	1175.0	45.0	1080.0	5.0	28	26.0	M24	1020.0	89.63
	1000/3	1230.0	60.0	1110.0	5.0	28	33.0	M30	1160.0	164.87
	1600/3	1255.0	75.0	1115.0	5.0	28	39.0	M36	1170.0	228.26
	2500/3	1320.0	98.0	1140.0	5.0	28	56.0	M52	1210.0	357.89
	4000/3	1360.0	132.0	1180.0	5.0	28	56.0	M52	1250.0	569.30
BS 10	T/D	1257.3	50.8	-	-	24	35.0	M30	1174.7	167.00
	T/E	1257.3	60.7	-	-	24	38.1	M36	1174.7	214.00
ANSI B 16,5	150lb	-	-	-	-	-	-	-	-	-
	300lb	-	-	-	-	-	-	-	-	-

*E&OE

NOMINAL BORE 1200 mm

Pipe OD 1220mm		Flange		Raised Face		Holes		Bolt size	PCD	Mass kg
		D	b	d2	f	No.	d1			
BS EN1092-1	PN 6	1405.0	60.0	1295.0	5.0	32	33.0	M30	1340.0	164.00
	PN 10	1455.0	83.0	1330.0	5.0	32	39.0	M36	1380.0	294.00
	PN 16	1485.0	94.0	1390.0	5.0	32	48.0	M45	1390.0	368.13
	PN 25	1530.0	116.0	1350.0	5.0	32	56.0	M52	1420.0	531.21
	PN 40	1575.0	154.0	1380.0	5.0	32	62.0	M56	1460.0	817.61
SANS1123	600/3	1405.0	55.0	1295.0	5.0	32	33.0	M30	1340.0	150.24
	1000/3	1455.0	70.0	1328.0	5.0	32	39.0	M36	1380.0	246.91
	1600/3	1485.0	85.0	1238.0	5.0	32	45.0	M42	1390.0	337.56
	2500/3	1530.0	116.0	1350.0	5.0	32	56.0	M52	1420.0	357.89
	4000/3	1575.0	154.0	1380.0	5.0	32	62.0	M56	1450.0	813.69
BS 10	T/D	1492.2	60.3	-	-	32	35.0	M30	1409.7	258.94
	T/E	1492.2	79.4	-	-	32	38.1	M36	1409.7	334.78
ANSI B 16,5	150lb	-	-	-	-	-	-	-	-	-
	300lb	-	-	-	-	-	-	-	-	-