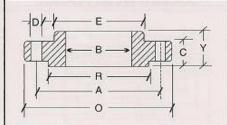
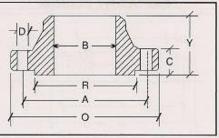
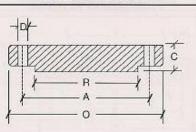
SLIP-ON FLANGE

WELDING NECK FLANGE

BLIND FLANGE





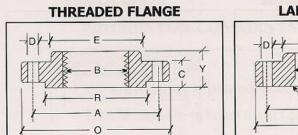


			DIMEN	SIONS	OF CL	ASS 1	50 FLANC	GES AS	PER AI	NSI B 16.	5		5.8°
Nominal	Flange	Dia of	Dia of	No, of	Thk of	Dia of	Length	through H	ub	Dia of E	lore	Dia of	Depth of
Pipe Size	Dia	Bolt Circle	Bolt Holes	Holes	Flange	Hub	S/O & SW	W/N	L/J	S/O & SW	L/J	Hub	Socket
	0	А	D		С	E	Y	Y	Y	В	В	R	R
15	88.9	60.3	15.9	4	11.1	30.2	15.9	47.6	15.9	22.3	22.9	34.9	9.5
20	98.4	69.8	15.9	4	12.7	38.1	15.9	52.4	15.9	27.7	28.2	42.9	11.1
25	107.9	79.4	15.9	4	14.3	49.2	17.5	55.6	17.5	34.5	35.0	50.8	12.7
32	117.5	88.9	15.9	4	15.9	58.7	20.6	57.1	20.6	43.2	43.7	63.5	14.3
40	127.0	98.4	15.9	4	17.5	65.1	22.2	61.9	22.2	49.5	50.0	73.0	15.9
50	152.4	120.6	19.0	4	19.0	77.8	25.4	63.5	25.4	62.0	62.5	92.1	17.5
65	177.8	139.7	19.0	4	22.2	90.5	28.6	69.8	28.6	74.7	75.4	104.8	19.0
80	190.5	152.4	19.0	4	23.8	107.9	30.2	69.8	30.2	90.7	91.4	127.0	20.6
100	228.6	190.5	19.0	8	23.8	134.9	33.3	76.2	33.3	116.1	116.8	157.2	23.8
125	254.0	215.9	22.2	8	23.8	163.5	36.5	88.9	36.5	143.8	144.5	185.7	23.8
150	279.4	241.3	22.2	8	25.4	192.1	39.7	88.9	39.7	170.7	171.4	215.9	27.0
200	342.9	298.4	22.2	8	28.6	246.1	44.4	101.6	44.4	221.5	222.2	269.9	31.7
250	406.4	361.9	25.4	12	30.2	304.8	49.2	101.6	49.2	276.3	277.4	323.8	33.3
300	482.6	431.8	25.4	12	31.8	365.1	55.6	114.3	55.6	327.1	328.2	381.0	39.7
350	533.4	476.2	28.6	12	34.9	400.0	57.1	127.0	79.4	359.1	360.2	412.7	41.3
400	596.9	539.7	28.6	16	36.5	457.2	63.5	127.0	87.3	410.5	411.2	469.9	44.4
450	635.0	577.8	31.7	16	39.7	504.8	68.3	139.7	96.8	461.8	462.3	533.4	49.2
500	698.5	635.0	31.7	20	42.9	558.8	73.0	144.5	103.2	513.1	514.3	584.2	54.0
600	812.8	749.3	34.9	20	47.6	663.6	82.5	152.4	111.1	615.9	615.9	692.1	63.5

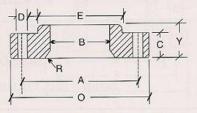
DIMENSIONS	OF	CL	222	300	FLANGES	SAS	PFR	ANST R	165
DATIENSTONS	U 1	~			I had to be been to		I DOLLAR		TOID

Nominal	Flange	Dia of	Dia of	No. of	Thk of	Dia of	Length	through H	ub	Dia of B	ore	Dia of	Depth of
Pipe Size	Dia	Bolt Circle	Bolt Holes	Holes	Flange	Hub	S/O & SW	W/N	L/J	S/O & SW	L/J	Hub	Socket
	0	А	D		С	E	Y	Y	Y	В	В	R	R
15	95.2	66.7	15.9	4	14.3	38.1	22.2	52.4	22.2	22.3	22.9	34.9	9.5
20	117.5	82.5	19.0	4	15.9	47.6	25.4	57.1	25.4	27.7	28.2	42.9	11.1
25	123.8	88.9	19.0	4	17.5	54.0	27.0	61.9	27.0	34.5	35.0	50.8	12.7
32	133.3	98.4	19.0	4	19.0	63.5	27.0	65.1	27.0	43.2	43.7	63.5	14.3
40	155.6	114.3	22.2	4	20.6	69.8	30.2	68.3	30.2	49.5	50.0	73.0	15.9
50	165.1	127.0	19.0	8	22.2	84.1	33.3	69.8	33.3	62.0	62.5	92.1	17.5
65	190.5	149.2	22.2	8	25.4	100.0	38.1	76.2	38.1	74.7	75.4	104.8	19.0
80	209.5	168.3	22.2	8	28.6	117.5	42.9	79.4	42.9	90.7	91.4	127.0	20.6
100	254.0	200.0	22.2	8	31.8	146.0	47.6	85.7	47.6	116.1	116.8	157.2	23.8
125	279.4	234.9	22.2	8	34.9	177.8	50.8	98.4	50.8	143.8	144.5	185.7	-
150	317.5	269.9	22.2	12	36.5	206.4	52.4	98.4	52.4	170.7	171.4	215.9	-24
200	381.0	330.2	25.4	12	41.3	260.3	61.9	111.1	61.9	221.5	222.2	269.9	-
250	444.5	387.3	28.6	16	47.6	320.7	66.7	117.5	95.2	276.3	277.4	323.8	
300	520.7	450.8	31.7	16	50.8	374.6	73.0	130.2	101.6	327.1	328.2	381.0	-
350	584.2	514.3	31.7	20	54.0	425.4	76.2	142.9	111.1	359.1	360.2	412.7	
400	647.7	571.5	34.9	20	57.2	482.6	82.5	146.0	120.6	410.5	411.2	469.9	(c
450	711.2	628.5	34.9	24	60.3	533.4	88.9	158.7	130.2	461.8	462.3	533.4	-
500	774.7	685.8	34.9	24	63.5	587.4	95.2	161.9	139.7	513.1	514.3	584.2	-
600	914.4	812.8	41.3	24	69.8	701.7	106.4	168.3	152.4	615.9	615.9	692.1	-

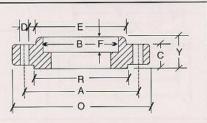
All dimensions are in Millimeters.
 Flanges except Lap Joint will be furnished with (1.6) Raised Face, which is included in "Thickness (C)" and "Length through Hub (Y)".



LAP JOINT FLANGE



SOCKET-WELD FLANGE

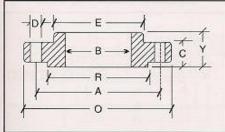


			DIMEN	SIONS	OF CL	ASS 6	00 FLANG	SES AS	PER AN	NSI B 16.	5		
Nominal	Flange	Dia of	Dia of	No. of	Thk of	Dia of	Length	through Hu	ub	Dia of B	ore	Dia of	Depth of
Pipe Size	Dia	Bolt Circle	Bolt Holes	Holes	Flange	Hub	S/O & SW	W/N	L/J	S/O & SW	L/J	Hub	Socket
Oize	0	А	D		С	E	Y	Y	Y	В	В	R	R
15	95.2	66.7	15.9	4	14.3	38.1	22.2	52.4	22.3	22.3	22.8	34.9	9.5
20	117.5	82.5	19.0	4	15.9	47.6	25.4	57.1	25.4	27.7	28.1	42.9	11.1
25	123.8	88.9	19.0	4	17.5	54.0	27.0	61.9	26.9	34.5	35.0	50.8	12.7
32	133.3	98.4	19.0	4	20.6	63.5	28.6	66.7	28.4	43.2	43.6	63.5	14.2
40	155.6	114.3	22.2	4	22.2	69.8	31.7	69.8	31.7	49.5	50.0	73.0	15.8
50	165.1	127.0	19.0	8	25.4	84.1	36.5	73.0	36.5	62.0	62.4	92.1	17.4
65	190.5	149.2	22.2	8	28.6	100.0	41.3	79.4	41.1	74.7	75.4	104.8	19.0
80	209.5	168.3	22.2	8	31.8	117.5	46.0	82.5	45.9	90.7	91.4	127.0	-
100	273.0	215.9	25.4	8	38.1	152.4	54.0	101.6	53.8	116.1	116.8	157.2	-
125	330.2	266.7	28.6	8	44.4	188.9	60.3	114.3	60.4	143.8	141.5	185.7	-
150	355.6	292.1	28.6	12	47.6	222.2	66.7	117.5	66.5	170.7	171.4	215.9	-
200	419.1	349.2	31.7	12	55.6	273.0	76.2	133.3	76.2	221.5	222.2	269.9	-
250	508.0	431.8	34.9	16	63.5	342.9	85.7	152.4	111.2	276.3	277.3	323.8	-
300	558.8	488.9	34.9	20	66.7	400.0	92.1	155.6	117.3	327.1	328.1	381.0	-
350	603.2	527.0	38.1	20	69.9	431.8	93.7	165.1	127.0	359.1	360.1	412.7	-
400	685.8	603.2	41.3	20	76.2	495.3	106.4	177.8	139.7	410.5	411.2	469.9	-
450	742.9	654.0	44.4	20	82.6	546.1	117.5	184.1	152.4	461.8	462.2	533.4	-
500	812.8	723.9	44.4	24	88.9	609.6	127.0	190.5	165.1	513.1	514.3	584.2	-
600	939.8	838.2	50.8	24	101.6	717.5	139.7	203.2	184.1	615.9	615.9	692.1	-

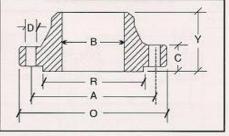
		1	DIMEN	SIONS	OF CL	ASS 9	00 FLANC	GES AS	PER A	NSI B 16.	5		
Mandard	Flange	Dia of	Dia of	No. of	Thk of	Dia of	Length	through H	ub	Dia of B	ore	Dia of	Depth of
Nominal Pipe Size	Dia	Bolt Circle	Bolt Holes	No. of Holes	Flange	Hub	S/O & SW	W/N	L/J	S/O & SW	L/J	Hub	Socket
OILC	0	А	D		С	E	Y	Y	Y	В	В	R	R
15	120.6	82.5	22.2	4	22.2	38.1	31.7	60.3	31.7	22.3	22.8	34.9	9.5
20	130.2	88.9	22.2	4	25.4	44.4	34.9	69.8	35.0	27.7	28.1	42.9	11.1
25	149.2	101.6	25.4	4	28.6	52.4	41.3	73.0	41.1	34.5	35.0	50.8	12.7
32	158.7	111.1	25.4	4	28.6	63.5	41.3	73.0	41.1	43.2	43.6	63.5	14.2
40	177.8	123.8	28.6	4	31.8	69.8	44.4	82.5	44.4	49.5	50.0	73.0	15.8
50	215.9	165.1	25.4	8	38.1	104.8	57.1	101.6	57.1	62.0	62.4	92.1	17.4
65	244.5	190.5	28.6	8	41.3	123.8	63.5	104.8	63.5	74.7	75.4	104.8	19.0
80	241.3	190.5	25.4	8	38.1	127.0	53.9	101.6	53.8	90.7	91.4	127.0	
100	292.1	234.9	31.7	8	44.4	158.7	69.8	114.3	69.8	116.0	116.8	157.1	-
125	349.2	279.4	35.0	8	50.8	190.5	79.3	127.0	79.2	143.7	144.5	185.7	-
150	381.0	317.5	31.7	12	55.6	234.9	85.8	139.7	85.8	170.6	171.4	215.9	-
200	469.9	393.7	38.1	12	63.5	298.4	101.6	162.0	144.3	221.4	222.2	269.8	-
250	546.1	469.9	38.1	16	69.8	368.3	107.9	184.1	127.0	276.3	277.3	323.8	-
300	609.6	533.4	38.1	20	79.3	419.1	117.4	200.0	142.7	327.1	328.1	381.0	-

All dimensions are in Millimeters.
 Flanges except Lap Joint will be furnished with (1.6) Raised Face, which is included in "Thickness (C)" and "Length through Hub (Y)".

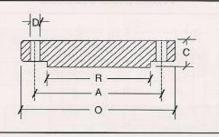
THREADED FLANGE



LAP JOINT FLANGE



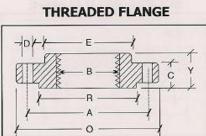
SOCKET-WELD FLANGE



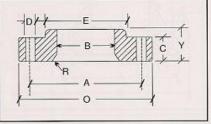
	125	C	DIMENS	SIONS	OF CL	ASS 1	500 FLAN	GES AS	FPER A	NSI B 16	.5		
Nominal	Flange	Dia of	Dia of	No. of	Thk of	Dia of	Length	through H	ub	Dia of B	lore	Dia of	Depth of
Pipe Size	Dia	Bolt Circle	Bolt Holes	Holes	Flange	Hub	S/O & SW	W/N	L/J	S/O & SW	L/J	Hub	Socket
OLC	0	А	D		С	E	Y	Y	Y	В	в	R	R
15	120.6	82.5	22.2	4	22.2	38.1	31.7	60.3	31.7	22.3	22.8	34.9	9.5
20	130.2	88.9	22.2	4	25.4	44.4	34.9	69.8	34.9	27.7	28.1	42.9	11.1
25	149.2	101.6	25.4	4	28.6	52.4	41.3	73.0	41.3	34.5	35.0	50.8	12.7
32	158.7	111.1	25.4	4	28.6	63.5	41.3	73.0	41.3	43.2	43.6	63.5	14.2
40	177.8	123.8	28.6	4	31.8	69.8	44.4	82.5	44.4	49.5.	50.0	73.0	15.8
50	215.9	165.1	25.4	8	38.1	104.8	57.1	101.6	57.1	62.0	62.0	92.1	17.4
65	244.5	190.5	28.6	8	41.3	123.8	63.5	104.8	63.5	74.7	75.4	104.8	19.0
80	266.7	203.2	31.7	8	47.6	133.3	73.0	117.5	73.0	90.7	91.4	127.0	-
100	311.1	241.3	34.9	8	54.0	161.9	90.5	123.0	90.4	116.1	116.8	157.2	-
125	374.6	292.1	41.3	8	73.0	196.8	104.8	155.6	104.8	143.8	144.5	185.7	-
150	393.7	317.5	38.1	12	82.6	228.6	119.1	171.4	119.1	170.7	171.4	215.9	-
200	482.6	393.7	44.4	12	92.1	292.1	142.9	212.7	142.8	221.5	222.2	269.9	_
250	584.2	482.6	50.8	12	107.9	368.3	158.7	254.0	177.8	276.3	277.3	323.8	-
300	673.1	571.5	54.0	16	123.8	450.8	181.0	282.5	218.9	327.1	328.1	381.0	

		-	The last	510113	UFUL	A35 Z:	500 FLAN	GES AS	PERA	NSI B 10	.5		-
Nominal	Flange	Dia of	Dia of	No, of	Thk of	Dia of	Length	through H	ub	Dia of B	lore	Dia of	Depth of
Pipe Size	Dia	Bolt Circle	Bolt Holes	Holes	Flange	Hub	S/O & SW	W/N	L/J	S/O & SW	L/J	Hub	Socket
	0	А	D		С	Е	Y	Y	Y	В	В	R	R
15	133.3	88.9	22.2	4	30.2	42.9	39.7	73.0	39.7	22.3	22.3	34.9	
20	139.7	95.2	22.2	4	31.7	50.8	42.9	79.4	42.9	27.7	27.7	42.9	2.1
25	158.7	107.9	25.4	4	34.9	57.1	47.7	88.9	47.7	34.5	34.5	50.8	
32	184.1	130.2	28.6	4	38.1	73.0	52.4	95.2	52.4	43.2	43.2	63.5	-
40	203.2	146.0	31.7	4	44.4	79.4	60.3	111.1	60.3	49.5	49.5	73.0	-
50	234.9	171.4	28.6	8	50.8	95.2	69.8	127.0	69.8	62.4	62.0	92.1	-
65	266.7	196.8	31.7	8	57.1	114.3	79.4	142.9	79.4	74.7	74.7	104.8	-
80	304.8	228.6	34.9	8	66.7	133.3	92.1	168.3	92.1	90.7	90.7	127.0	-1
100	355.6	273.0	41.3	8	76.2	165.1	107.9	190.5	107.9	116.1	116.1	157.2	-
125	419.1	323.8	47.6	8	92.1	203.2	130.0	228.6	130.0	143.8	143.8	185.7	-
150	482.6	368.3	54.0	8	107.9	234.9	152.4	273.0	152.4	170.7	170.7	215.9	-
200	552.4	438.1	54.0	12	127.0	304.8	177.8	317.5	177.8	221.5	221.5	269.9	-
250	673.1	539.7	66.7	12	165.1	374.6	228.6	419.1	228.6	276.3	276.3	323.8	-
300	762.0	619.1	73.0	12	184.1	441.3	254.0	463.5	254.0	327.1	327.1	381.0	ii-

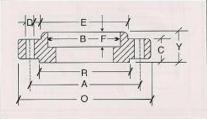
All dimensions are in Millimeters.
 Flanges except Lap Joint will be furnished with (1.6) Raised Face, which is included in "Thickness (C)" and "Length through Hub (Y)".



LAP JOINT FLANGE

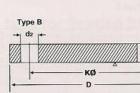


SOCKET-WELD FLANGE

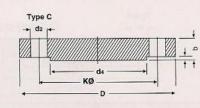


Nominal Pipe Size	Outside Diam	Sch 20	Sch 30	Std. Wall	Sch 40	Extra Strong	Sch 80	Sch 120	Sch 160	Double Extra Strong
15	21.33	-	-	15.7	15.7	13.8	13.8	-	11.7	6.4
20	26.67	-		20.8	20.8	18.8	18.8	-	15.5	11.0
25	33.40	•	-	26.6	25.4	24.3	24.3	-	20.7	15.2
32	42.16	-	1	35.0	35.0	32.4	32.4	-	29.4	22.7
40	48.26		1.1	40.8	40.8	38.1	38.1	-	33.7	27.9
50	60.31	- //	1-	52.3	52.3	49.2	49.2	-	42.8	38.1
65	73.02	-//	-	62.4	62.4	59.0	59.0	A-A	53.9	44.9
80	88.90			77.9	77.9	73.6	73.6		66.6	58.4
100	114.30	-		102.2	102.2	97.1	97.1	92.0	87.3	80.0
125	141.30	-	-	128.1	128.1	122.2	122.2	115.9	109.5	103.2
150	168.27			154.0	154.0	146.3	146.3	139.7	131.7	124.3
200	219.07	206.2	204.9	202.7	202.7	193.6	193.6	182.5	173.0	174.
250	273.05	260.3	257.4	254.5	254.5	247.6	242.8	230.1	215.9	222.
300	323.85	311.1	307.0	304.8	303.2	298.4	288.8	273.0	257.2	273.
350	355.60	337.8	336.5	336.5	333.3	330.2	317.5	300.0	284.1	-
400	406.40	390.3	387.3	387.3	381.0	381.0	363.5	344.5	325.4	-
450	457.20	441.1	434.9	438.1	428.6	431.8	409.5	387.3	366.7	-
500	508.00	488.9	482.6	488.9	477.8	482.6	455.6	431.8	407.9	-
600	609.60	590.5	581.0	590.5	574.6	584.2	547.6	517.5	490.5	-

All dimensions are in Millimeters.

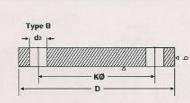


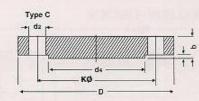
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			Flange		Raised	l face				Dia. of Bolt Hole	Weig One F (7.85 k Type-B	lange g/dm ³)
	NW	D	b	k	d ₄	f	No.	Bolt	s	d ₂	kg	kg
	10	75	12	50	35	2	4	M 10	-	11.5	0.38	0.33
	15	80	12	55	40	2	4	M 10	-	11.5	0.44	0.38
	20	90	14	65	50	2	4	M 10	-	11.5	0.65	0.59
	25	100	14	75	60	2	4	M 10	-	11.5	0.82	0.74
	32	120	14	90	70	2	4	M 12	(1/2*)	14	1.17	1.07
	40	130	14	100	80	3	4	M 12	(1/2*)	14	1.39	1.21
	50	140	14	110	90	3	4	M 12	(1/2")	14	1.62	1.43
	65	160	14	130	110	3	4	M 12	(1/2")	14	2.44	2.2
ND 6	80	190	16	150	128	3	4	M 16	(5/8")	18	3.43	3.09
ND-6	100	210	16	170	148	3	4	M 16	(5/8")	18	4.76	4.37
	125	240	18	200	178	3	8	M 16	(5/8")	18	6.11	5.68
	150	265	18	225	202	3	8	M 16	(5/8*)	18	7.51	7.02
	(175)	295	20	255	232	3	8	M 16	(5/8")	18	10.4	9.8
	200	320	20	280	258	3	8	M 16	(5/8")	18	12.3	11.
	250	375	22	335	312	3	12	M 16	(5/8 ⁿ)	18	18.3	17.6
	300	440	22	395	365	4	12	M 20	(3/4")	23	25.3	24.0
	350	490	22	445	415	4	12	M 20	(3/4")	23	31.6	30.
	400	540	22	495	465	4	16	M 20	(3/4")	23	38.4	36.4
	500	645	24	600	570	4	20	M 20	(3/4")	23	60.4	58.
	200	340	24	295	268	3	8	M 20	(3/4")	23	16.5	15.8
ND-10	250	395	26	350	320	3	12	M 20	(3/4")	23	24.0	23.
Note from 10 mm to 175 mm	300	445	26	400	370	4	12	M 20	(3/4")	23	30.9	29.
see ND-16	350	505	26	460	430	4	16	M 20	(3/4°)	23	40.6	38.
366 110-10	400	565	26	515	482	4	16	M 24	(7/ _B ")	27	49.4	47.
	500	670	28	620	585	4	20	M 24	(7/ ₈ ")	27	75.0	72.
	10	90	14	60	40	2	4	M 12	(1/2")	14	0.63	0.5
	15	95	14	65	45	2	4	M 12	(1/2")	14	0.72	0.6
	20	105	16	75	58	2	4	M 12	(1/2 ^a)	14	1.01	0.9
	25	115	16	85	68	2	4	M 12	(1/2")	14	1.23	1.1
	32	140	16	100	78	2	4	M 16	(5/8")	18	1.80	1.6
	40	150	6	110	88	3	4	M 16	(5/8")	18	2.09	1.8
	50	165	18	125	102	3	4	M 16	(5/8")	18	2.88	2.5
	65	185	18	145	122	3	4	M 16	(5/8")	18	3.66	3.3
ND-16	80	200	20	160	138	3	4/8	M 16	(5/8")	18	4.77	4.3
Note : For DIN 2527ND-10-4 Holes	100	220	20	180	158	3	8	M 16	(5/8")	18	5.65	5.2
	125	250	22	210	188	3	8	M 16	(5/8")	18	8.42	7.6
	150	285	22	240	212	3	8	M 20	(3/4")	23	10.4	9.8
	(175)	315	24	270	242	3	8	M 20	(3/4")	23	14.0	13.
	200	340	24	295	268	3	12	M 20	(3/4*)	23	16.1	15.
	250	405	26	355	320	3	12	M 24	(7/8")	27	24.9	23.
	300	460	28	410	378	4	12	M 24	(7/8")	27	35.1	33.
	350	520	30	470	438	4	16	M 24	(7/8")	27	47.8	46.
	400	580	32	525	490	4	16	M 27	(1")	30	63.5	61.
	500	715	34	650	610	4	20	M 30	(11/8")	33	102	99.

DIN 2527



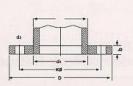


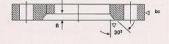
			Flange		Raise	d face				Dia. of Bolt Hole	Weig One F (7.85 k Type-B	lange
	NW	D	b	k	d ₄	f	No.	Bol	lts	d ₂	kg	kg
	(175)	330	28	280	248	3	12	M 24	(7/8°)	27	17.3	16.5
ND OF	200	360	30	310	278	3	12	M 24	(7/8")	27	22.3	21.5
ND-25	250	425	32	370	335	3	12	M 27	(1")	30	33.5	32.5
Note : From 10 mm to 150 mm	300	485	34	430	395	4	16	M 27	(1")	30	46.3	44.7
see ND-40	350	555	38	490	450	4	16	M 30	(1%)	33	68.0	65.9
	400	620	40	550	505	4	16	M 33	(1%4)	36	89.7	87.0
	500	730	44	660	615	4	20	M 33	(1%*)	36	138	134
	10	90	16	60	40	2	4	M 12	(1/2*)	14	0.72	0.62
	15	95	16	65	45	2	4	M 12	(1/2")	14	0.81	0.74
	20	105	18	75	58	2	4	M 12	(1/2*)	14	1.24	1.05
	25	115	18	85	68	2	4	M 12	(1/2*)	14	1.38	1.31
	32	140	18	100	78	2	4	M 16	(5/9*)	18	2.03	1.82
	40	150	18	110	88	3	4	M 16	(5/8*)	18	2.35	2.11
	50	165	20	125	102	3	4	M 16	(5/8")	18	3.20	2.91
	65	185	22	145	122	3	8	M 16	(5/8")	18	4.29	4.13
ND-40	80	200	24	160	138	3	8	M 16	(5/8")	18	5.88	5.21
	100	236	24	190	162	3	8	M 12	(3/4°)	23	7.54	7.08
	125	270	26	220	188	3	8	M 24	(7/6°)	27	10.8	10.4
A CONTRACTOR OF A CONTRACTOR O	150	300	28	250	218	3	8	M 24	(7/8°)	27	14.5	13.9
	175	350	32	295	260	3	12	M 27	(1")	30	22.1	21.3
	200	375	34	320	285	3	12	M 27	(1")	30	27.2	26.2
	250	450	38	385	345	3	12	M 30	(1½°)	33	43.8	43.1
	300	515	42	450	410	4	16	M 30	(1½°)	33	63.3	62.2
	350	580	46	510	465	4	16	M 33	(1 ¹ / ₄ ⁿ)	36	89.5	87.2
	400	660	50	585	535	4	16	M 36	(1%)	39	127	124
	500	755	52	670	615	4	20	M 39	(1 ^{1/2ⁿ})	42	172	168

FLANGE FACINGS	Nominal	Tongue	÷					Nominal	Tongu	e				
TONGUE AND GROOVE,	Pipe	d ₄₂	d ₄₃	f ₁	d ₄₁	d44	f ₂	Pipe	d ₄₂	d 43	f,	d ₄₁	d 44	f ₂
NOMINAL PRESSURE	Size	+0.5	-0.5	+0.5	-0.5	+0.5	-0.5	Size	+0.5	-0.5	+0.5	-0.5	+0.5	-0.5
10 TO 100 ACORDING	10	24	34	4	23	35	3	175	213	233	4.5	212	234	3.5
TO DIN 2512	15	29	39	4	28	40	3	200	239	259	4.5	238	260	3.5
	20	36	50	4	35	51	3	250	292	312	4.5	291	313	3.5
	f 25	47	57	4	42	58	3	300	343	363	4.5	342	364	3.5
4 − d42- 4	32	51	65	4	50	66	3	350	395	421	5	394	422	4
	40	61	75	4	60	76	3	400	447	473	5	446	474	4
TONGUE	50	73	87	4	72	88	3	500	549	575	5	548	576	4
⊌d44⊌	65	95	109	4	94	110	3	600	649	675	5	648	676	4
 ← d₄1 →	80	106	120	4	105	121	3	700	751	777	5	750	778	4
	f 100	129	149	4.5	128	150	3.5	800	856	882	5	855	883	4
CROOME	125	155	175	4.5	154	176	3.5	900	961	987	5	960	988	4
GROOVE	150	183	203	4.5	182	204	3.5	1000	1061	1091	6	1060	1092	5

P	lipe		Fla	nge			Bol	lts		Weight of one flange
NW	d ₁	ds	D	b ₁	k	No.	C)	d ₂	7.85 kg. /dm³) kg
10	14 17.2*)	14.5 17.7	90	14	60	4	M 12	(^{1/2"})	14	0.613 0.605
15	20 21.3*)	20.5 21.8	95	14	65	4	M 12	(^{1/} 2")	14	0.675 0.669
20	25 26.9*)	25.5 27.4	105	16	75	4	M 12	(1/2")	14	0.947 0.936
25	30 33.7*)	30.5 34.2	115	16	85	4	M 12	(^{1/} 2")	14	1.14
32	38 42.4*)	38.5 42.9	140	16	100	4	M 16	(5/8")	18	1.66 1.62
40	44.5 48.3*)	45 48.8	150	16	110	4	M 16	(5/8")	18	1.89 1.86
50	57 60.3*)	57.5 60.8	165	18	125	4	M 16	(^{5/} 8")	18	2.51 2.47
65	76.1*)	76.6	185	18	145	4	M 16	(⁵ /8")	18	3.00
80	88.9*)	89.4	200	20	160	4	M 16	(5/8")	18	3.79
100	108 114.3*)	108.5 114.8	220	20	180	8	M 16	(^{5/} 8")	18	47.20 4.03
125	133 139.7*)	133.5 140.2	250	22	210	8	M 16	(5/8")	18	5.71 5.46
150	159 168.3*)	159.5 168.8	285	22	240	8	M 20	(3/4")	23	6.72 6.57
175	191 193.7*)	192 194.7	315	24	270	8	M 20	(3/4*)	23	8.60 8.45
200	216 219.1*)	217 220.1	340	24	295	8	M 20	(^{3/} 4")	23	9.50 9.31
250	267 273*)	268 274	395	26	350	12	M 20	(3/4*)	23	12.5 11.9
300	318 323.9*)	319 324.9	445	26	400	12	M 20	(^{3/} 4")	23	14.4 13.8
350	355.6*) 368	356.6 369	505	28	460	18	M 20	(^{3/4} ")	23	20.6 19.0
400	406.4*) 419	407.4 420	565	32	515	16	M 24	(^{7/} 8")	27	27.9 25.9
500	508*) 521	509 522	670	38	620	20	M 24	(^{7/} 8")	27	37.9 41.1

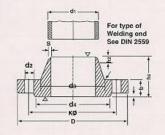
DIN 2576 Flanges, Slip-on type for Brasing or Welding nominal pressure 10

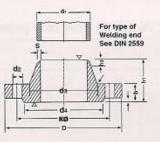




DIN 2632 Welding Neck Flanges for Nominal pressure 10

Pip	e		Fla	inge		Neck Raised Bolts Face				Bolts			Weight of one flange 7.85 kg.			
NW	d ₁	D	b	k	h ₁	d ₃	S	-S	h ₂	d ₄	f	No.	Threa	ad	d ₂	/dm³) kg
200	216 219.1	340	24	295	62	232 235	5.9	10	16	268	3	8			8	11.3
250	267 273	395	26	350	68	285 292	6.3	12	16	320	3	a.				14.7
300	318 323.9	445	26	400	68	335 344	7.1	12	16	370	4	12	M 20	(3/4")	23	17.6
350	355.6 368	505	26	460	68	385	7.1	12	16	430	4	1				21.4
400	406.4	565	26	515	72	440	7.1	12	16	482	4	16				26.1
500	508 521	670	28	620	75	542	7.1	12	16	585	4		M 24	(7/8ª)	27	34.7
600	609.6 622	780	28	725	80	642	7.1	12	18	685	5	20	M 27	(1")	30	42.2





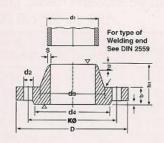
DIN 2633 Welding Neck Flanges for Nominal pressure 10

Pipe			Fla	nge			Neck			Raisd f	ace		Bo	lts		Weight of one flange 7.85 kg.
NW	d ₁	D	b	k	h,	d ₃	s	r	h ₂	d ₄	ſ	No.	Thr	ead	d ₂	/dm³) kg
10	14 17.2	90	14	60	35	25 28	1.8	4	6	40	2					0.580
15	20. 21.3	95	14	65	35	30 32	2	4	6	45	2					0.648
20	25 26.9	105	16	75	38	38 40	2.3	4	6	58	2		M 12	(1/2*)	14	0.952
25	30 33.7	115	16	85	38	42 45	2.6	4	6	68	2	4				1.14
32	38 42.4	140	16	100	40	52 56	2.6	6	6	78	2					1.69
40	44.5	150	16	110	42	60 64	2.6	6	7	88	3		1			1.86
50	57 60.3	165	18	125	45	72 75	2.9	6	8	102	3		26			2.53
65	76.1	185	18	145	45	90	2.9	6	10	122	3	4*/0				3.06
80	88.9	200	20	160	50	105	3.2	8	10	138	3	4*/8	M 16	(5/8ª)	18	3.70
100	108 114.3	220	20	180	52	125 131	3.6	8	12	158	3		A			4.62
125	133 139.7	250	22	210	55	150 156	4	8	12	188	3	8				6.30
150	159 168.3	285	22	240	55	175 184	4.5	10	12	212	3	17	M 20	(3/4*)	23	7.75
175	191 193.7	315	24	270	60	208 210	5.4	10	12	242	3	8				10.0
200	216 219.1	340	24	295	62	232 235	5.9	10	16	268	3		M 20	(3/4*)	23	11.0
250	267 273	405	26	355	70	285 292	6.3	12	16	320	3	12	1			15.6
300	318 323.9	460	28	410	78	338 344	7.1	12	16	378	4		M 24	(^{7/} 8")	27	22.0
350	355.6 368	520	30	470	82	390	8	12	16	438	4	16	91	1		28.7
400	406.4 419	580	32	525	85	445	8	12	16	490	4	1	M 27	(1")	30	36.3
500	508 521	715	34	650	90	548	8	12	16	610	4	20	M 30	(11/8")	33	59.3
600	609.6 622	840	36	770	95	652	8.8	12	18	725	5		M 33	(1 ^{1/4*})	36	73.4
700	711.2	910	36	840	100	755	8.8	12	18	795	5	24	M 36	(13/8*)	39	75.0
800	812.8 820	1025	38	950	105	855	10	12	20	900	5			(1.0)	00	99.0
900	914.4 920	1125	40	1050	110	955	10	12	20	1000	5	28				119
1000	1016 1020	1255	42	1170	120	1058	10	16	22	1115	5		M 39	(11/2")	42	159

* 4 bolts for ND 10 (nominal pressure) (the order than reeds welding neck flange 80/88.9 ND 10 DIN 2633)

DIN 2634 Welding Neck Flanges for Nominal pressure 25

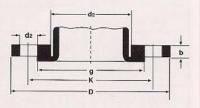
Pi	Pipe Flange										Bolt	s			Weight of one flange	
NW	d ₁	D	b	k	h ₁	d ₃	S	r	h ₂	h ₄	f	No.	Thr	ead	d ₂	7.85 kg. /dm³) kg
175	(191) 193.7	330	28	280	75	215 218	5.6	10	15	248	3					13.4
200	216	360	30	310	80	240 244	6.3	10	16	278	3	12	M 24	(^{7/} 8")	27	17.0
250	267 273	425	32	370	88	292 298	7.1	12	18	335	3	No.				24.4
300	318 323.9	485	34	430	92	345 352	8	12	18	395	4		M 27	(1*)	30	31.2
350	355.6 368	555	38	490	100	398	8	12	20	450	4	16	M 30	(11/8")	33	45.0
400	406.4	620	40	550	110	452	8.8	12	20	505	4					58.7
500	508 521	730	44	660	125	558	10	12	20	615	4		M 33	(1 ^{1/4^a})	36	86.1
600	609.6 622	845	46	770	125	660	11	12	20	720	5	20	M 36	(13/8")	39	101

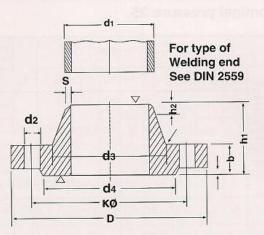


For nominal sizes 10 up to 150 see DIN 2635

Loose Flange for Flange Collar PN 10 (DIN 2642, DIN Connections)

Nom	Flange					Drilling		Weight	Collar
Pipe	D	d5	b	r	k	Number	d2		&
size	mm	mm	mm	mm	mm		mm	kg	mm
10	90	16	16	5	60	4	15	0.23	45
15	95	23	16	5	65	4	15	0.26	50
20	105	28	16	5	75	4	15	0.30	60
25	115	33	16	5	85	4	15	0.37	70
32	140	42	16	5	100	4	18	0.54	82
40	150	50	16	5	110	4	18	0.59	92
50	165	62	18	5	125	4	18	0.80	107
65	185	81	18	5	145	4	18	0.90	127
80	200	94	20	5	160	4	18	1.28	142
100	220	113	20	5	180	8	18	1.37	162
125	250	138	22	6	210	8	18	1378	192
150	285	164	22	6	240	8	22	2.27	218
175	315	195	24	6	270	8	22	2.90	248
200	340	222	24	7	295	8	22	3.16	273
250	395	273	26	7	350	12	22	4.22	328
300	445	324	26	7	400	12	22	4.80	378
350	505	374	26	8	460	16	22	5.85	438
400	565	426	32	8	515	16	25	8.45	490
450	615	475	32	8	565	20	25	9.45	540
500	670	530	34	8	620	20	25	11.35	595
600	780	630	36	10	725	20	30	15.30	695
700	895	730	40	10	840	24	30	21.40	810
800	1015	832	44	10	950	24	34	30.50	916





DIN 2635 Welding Neck Flanges for Nominal pressure 10

Pipe	,		Flai	nge			Neck			Raisd	face		Bol	ts		Weight of one flange 7.85 kg.
NW	d,	D	b	k	h ₁	d ₃	S	r	h ₂	d ₄	f	No.	Thre	ead	d ₂	/dm³) kg
10	14	90	16	60	35	25 28	1.8	4	6	40	2					0.661
15	20. 21.3	95	16	65	38	30 32	2	4	6	45	2					0.746
20	25 26.9	105	18	75	40	38 40	2.3	4	6	58	2		M 12	(^{1/2^a})	14	1.06
25	30 33.7	115	18	85	40	42 45	2.6	4	6	68	2	4		117		1.29
32	38 42.4	140	18	100	42	52 56	2.6	6	6	78	2					1.88
40	44.5 48.3	150	18	110	45	60 64	2.6	6	7	88	3	11	M 16	(^{5/8} ^a)	18	2.33
50	57 60.3	165	20	125	48	72 75	2.9	6	8	102	3					2.82
65	76.1	185	22	145	52	90	2.9	6	10	122	3					3.74 4.75
80	88.9 108	200	24	160	58	105 128	3.2	8	100	Concession in the	1			(0/ 11)	00	6.52
100	114.3	235	24	190	65	134	3.6	8	12	162	3	8	M 20	(3/4")	23	
125	133 139.7	270	26	220	68	155 162	4	8	12	188	3	8	M 24	(7/8*)	27	9.07
150	159 168.3	300	28	250	75	182 192	4.5	10	12	218	3	13				11.8
175	191 193.7	350	32	295	82	215 218	5.6	10	15	260	3		M 27	(1")	30	18.2
200	216 219.1	375	34	320	88	240 244	6.3	10	16	285	3	12	101 27	(1)	00	21.5
250	267 273	450	38	385	105	298 306	7.1	12	18	345	3					34.9
300	318 323.9	515	42	450	115	352 362	8	12	18	410	4		M 30	(1 ^{1/8*})	33	49.7
350	355.6 368	580	46	510	125	408	8.8	12	20	460	4	16	M 33	(1 ^{1/4°})	36	68.1
400	406.4	660	50	585	135	462	11	12	20	535	4		M 36	(13/8")	39	96.5
500	508 521	755	52	670	140	562	14.2	12	20	615	4	20	M 39	(11/2*)	42	117

British Standard Pipe Flanges DIMENSION OF PIPE FLANGES AS PER TABLE BS-10

Nominal

Pipe Size

1/2"

3/4"

1"

Dia. of

Flange

3.3/4"

4.1/2"

4"

Table D : For Working Steam Pressure upto 50 Ibs per sg. inch
 Table E : For Working Steam Pressure 50 Ibs and upto 100 Ibs per sq. inch.

No. of

Bolt

4

4

4

Dia. of

Bolt

1/2"

1/2"

1/2"

Thickness

1/4"

1/4"

9/32"

Dia. of

Bolt Circle

2.5/8"

2.7/8"

3.1/4"

	upto 50 fbs per sq. inch												
Nominal Pipe Size	O.D. of Pipe	Dia. of Flange	Dia. of Bolt Circle	No. of Bolt	Dia. of Bolt	Thickness							
1/2"	27/32"	3.3/4"	2.5/8"	4	1/2"	3/16"							
3/4"	1.1/16"	4"	2.7/8"	4	1/2"	3/16"							
1"	1.11/32"	4.1/2"	3.1/4"	4	1/2"	3/16"							
1.1/4"	1.11/16"	4.3/4"	3.7/16"	4	1/2"	1/4"							
1.1/2"	1.29/32"	5.1/4"	3.7/8"	4	1/2"	1/4"							
2"	2.3/8"	6"	4.1/2"	4	5/8"	5/16"							
2.1/2"	3"	6.1/2"	5"	4	5/8"	5/16"							
3"	3.1/2"	7.1/4"	5.3/4"	4	5/8"	3/8"							
3.1/2"	4 ^u	8"	6.1/2"	4	5/8"	3/8"							
4"	4.1/2"	8.1/2"	7"	4	5/8"	3/8"							
5"	5.1/2"	10 ^u	8.1/4"	8	5/8"	1/2"							
6"	6.1/2"	11"	9.1/4"	8	5/8"	1/2"							
7"	7.1/2"	12"	10.1/4"	8	5/8"	1/2"							
8"	8.5/8"	13.1/4"	11.1/2"	8	5/8"	1/2"							
9"	9.5/8"	14.1/2"	12.3/4"	8	5/8"	5/8"							
10"	10.3/4"	16"	14"	8	3/4"	5/8"							
12"	12.3/4*	18"	16"	12	3/4"	5/8"							
14"	14"	20.3/4"	18.1/2"	12	7/8"	3/4"							
16"	16"	22.3/4"	20.1/2"	12	7/8"	3/4"							
18"	18"	25.1/4"	23"	12	7/8"	7/8"							
20"	20"	27.3/4"	25.1/4"	16	7/8"	1"							
24"	24"	32.1/2"	29.3/4"	16	1"	1.1/8"							

1.1/4" 4.3/4" 3.7/16* 4 1/2" 5/16" 1.1/2" 5.1/4" 3.7/8" 4 1/2" 11/32" 4.1/2" 2" 6" 4 5/8" 3/8" 2.1/2" 6.1/2" 5* 4 5/8" 13/32" 7.1/4" 5.3/4* 5/8" 3" 4 7/16" 3.1/2" 8" 6.1/2" 8 5/8" 15/32" 4" 8.1/2" 8 5/8" 1/2" 7" 5" 10" 8.1/4" 8 9/16" 5/8" 6" 11" 9.1/4" 8 3/4" 11/16" 7" 12" 10.1/4" 8 3/4* 3/4" 8" 13.1/4" 11.1/2" 8 3/4* 3/4" 9" 14.1/2" 12.3/4" 12 3/4" 13/16" 10" 12 16" 14" 3/4" 7/8" 12" 18" 12 7/8" 16" 1" 14" 20.3/4" 12 18.1/2" 7/8" 1" 16" 22.3/4" 20.1/2" 12 7/8* 1" 18" 25.1/4" 23" 16 7/8* 1.1/8" 20" 27.3/4" 25.1/4" 16 7/8* 1.1/4" 24" 32.1/2" 29.3/4" 16 1.1/8" 1.1/2"

Table F : For Working Steam Pressure above 100 Ibs and upto 150 Ibs per sq. inch

		20			
Nominal Pipe Size	Dia. of Flange	Dia. of Bolt Circle	No. of Bolt	Dia. of Bolt	Thickness
1/2"	3.3/4"	2.5/8"	4	1/2"	3/8"
3/4"	4"	2.7/8"	4	1/2"	3/8"
1"	4.1/2"	3.7/16"	4	5/8"	3/8"
1.1/4"	5.1/4"	3.7/8"	4	5/8"	1/2"
1.1/2"	5.1/2"	4.1/2"	4	5/8"	1/2"
2"	6.1/2"	5"	4	5/8"	5/8"
2.1/2"	7.1/4"8"	5.3/4"	8	5/8"	5/8"
3"	8"	6.1/2"	8	5/8"	5/8"
3.1/2"	8.1/2"	7"	8	5/8"	3/4"
4"	9"	7.1/2"	8	5/8"	3/4"
5"	11"	9.1/4"	8	3/4"	7/8"
6"	12"	10.1/4"	12	3/4"	7/8"
7"	13.1/4"	11.1/2"	12	3/4"	7/8"
8"	14.1/2"	12.3/4"	12	3/4"	1"
9"	16"	14"	12	7/8"	1"
10"	17"	15"	12	7/8"	1"
12"	19.1/4"	17.1/2"	16	7/8"	1.1/8"
14"	21.3/4"	19.1/2"	16	1"	1.1/4"
16"	24"	21.3/4"	20	1"	1.1/4"
18"	26.1/2"	24"	20	1.1/8"	1.3/8"
20"	29"	26.1/2"	24	1.1/8"	1.1/2"
24"	33.1/2"	30.3/4"	24	1.1/4"	1.5/8"

Table H : For Working Steam Pressure 50 Ibs above 150 Ib and upto 250 Ibs per sq. inch

				o por o	
Nominal Pipe Size	Dia. of Flange	Dia. of Bolt Circle	No. of Bolt	Dia. of Bolt	Thickness
1/2"	4.1/2"	3.1/4"	4	5/8"	1/2"
3/4"	4.1/2"	3.1/4"	4	5/8"	1/2"
1"	4.3/4"	3.7/16"	4	5/8"	9/16"
1.1/4"	5.1/4"	3.7/8"	4	5/8"	11/16"
1.1/2"	5.1/2"	4.1/8"	4	5/8"	11/16"
2"	6.1/2"	5"	4	5/8"	3/4"
2.1/2"	7.1/4"8"	5.3/4"	8	5/8"	3/4"
3"	8"	6.1/2"	8	5/8"	7/8"
3.1/2"	8.1/2"	7"	8	5/8"	7/8"
4"	9"	7.1/2"	8	5/8"	1"
5"	11"	9.1/4"	8	3/4"	1.1/8"
6"	12"	10.1/4"	12	3/4"	1.1/8"
7"	13.1/4"	11.1/2"	12	3/4"	1.1/4"
8"	14.1/2"	12.3/4"	12	3/4"	1.1/4"
9"	16"	14"	12	7/8"	1.3/8"
10"	17"	15"	12	7/8"	1.3/8"
12"	19.1/4"	17.1/4"	16	7/8"	1.1/2"
14"	21.3/4"	19.1/2"	16	1"	1.5/8"
16"	24"	21.3/4"	20	1"	1.3/4"
18"	26.1/2"	24"	20	1.1/8"	1.7/8"
20"	29"	26.1/2"	24	1.1/8"	2*
24"	33.1/2"	30.3/4"	24	1.1/4"	2.1/4"