

RELIANCE FORGE (INDIA)



MANUFACTURERS OF :-
FORGED CARBON STEEL AND
STAINLESS STEEL FLANGES
& PIPE FITTINGS ETC...





COMPANY PROFILE

RELIANCE FORGE (INDIA) established in 1996 as a specialist in Manufacturing of FLANGES AND PIPE-FITTINGS made by Carbon Steel, Stainless Steel and special Alloy Steel etc.

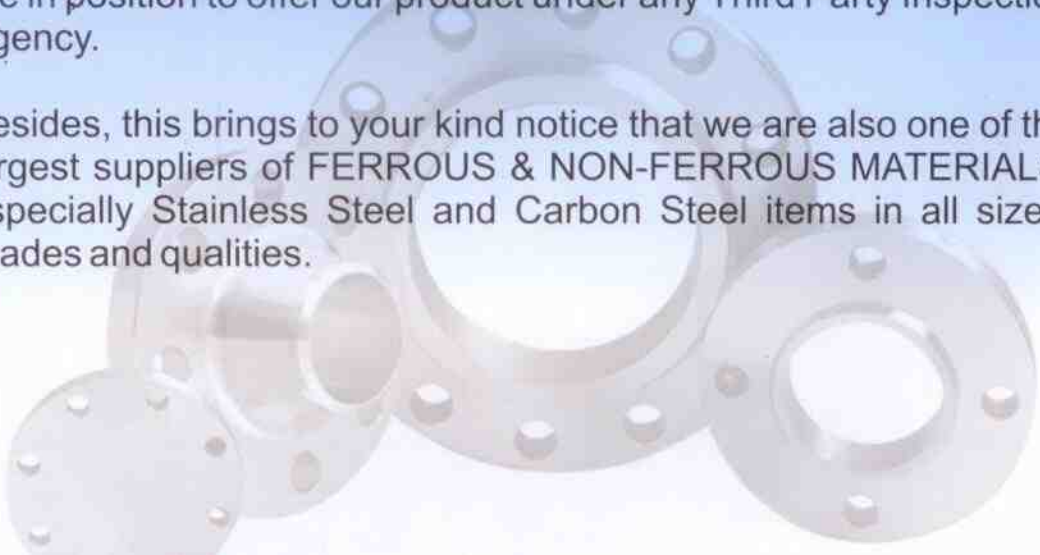
The Company been supplying these corrosion / heat resisting Fittings / Flanges to Chemical, Petrochemical, Petroleum Products, Fertilizer Companies, Nuclear Power, Thermal Power Stations, Equipment Industries and other Engg. Industries all over India.

In these short period, the company has made tremendous progress not only in business but also in quality improvement by having own internal Quality Assurance Systems with a team Inspection Engineers and Installing all types of machineries.

To-day the company is well equiped with all modern machineries and manufacturing standards to take up any type of job (within our limited range)

As the same are manufactured in accordance with the relevant International Standards like ANSI, BS, DIN, and IS standards, we are in position to offer our product under any Third Party Inspection Agency.

Besides, this brings to your kind notice that we are also one of the largest suppliers of FERROUS & NON-FERROUS MATERIALS, especially Stainless Steel and Carbon Steel items in all sizes, grades and qualities.





FLANGES & PIPE FITTINGS

Type Item	Class 150	300	600	Din ND 10 /16	Din ND 40
SORF	15 - 600	15 - 350	15 - 200	15 - 600	15 - 350
BLRF	15 - 600	15 - 350	15 - 300	15 - 600	15 - 350
WNRF	15 - 300	15 - 200	15 - 300	15 - 300	15 - 300
SOCKET - WELD	15 - 100	15 - 100	15 - 100	15 - 100	15 - 100
SCREWED	15 - 100	15 - 100	15 - 100	15 - 100	15 - 100
ORIFICE B -16.36	15 - 100	15 - 300	15 - 200	15 - 300	15 - 300
STUB - ENDS (SMLS)					
SHORT	15 - 200	15 - 200	15 - 200	15 - 600	15 - 350
LONG	15 - 200	15 - 200	15 - 200	15 - 600	15 - 350
LONG (Welded)	15 - 200	15 - 300	15 - 200	15 - 600	15 - 350
UNION	-	-	-	15 - 50	15 - 50
COUPLING	-	-	-	15 - 50	15 - 50
CAP	-	-	-	15 - 50	15 - 50
SCREWED SW	-	-	-	15 - 50	15 - 50
BUT - WELDED	15 - 200	15 - 200	15 - 150	-	-
BARREL NIPPLE	15 - 50	15 - 200	15 - 50	-	-
HEX NIPPLE	-	-	-	15 - 50	15 - 50
PLUG	-	-	-	15 - 50	15 - 50
WELDOLET	-	-	-	15 - 50	15 - 50
THREADOLET	-	-	-	15 - 50	15 - 50
SOCKOLET	-	-	-	15 - 50	15 - 50
ELBOWLET	-	-	-	15 - 50	15 - 50
LETROLET	-	-	-	15 - 50	15 - 50

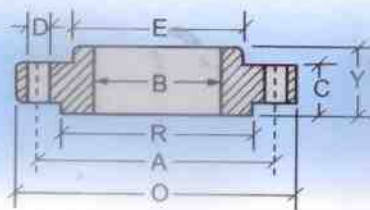
PIPE FITTINGS

ITEM	SCH.10	SCH.40	SCH.80	300 LBS.	600LBS.
ELBOW (WELDED)	15 - 400	15 - 400	-	-	-
ELBOW (SMLS)	15 - 200	15 - 200	15 - 200	-	-
ELBOW FORGED	-	-	-	15 - 50	15 - 50
TEE (SEAMLESS)	15 - 200	15 - 200	15 - 150	-	-
TEE (WELDED)	15 - 400	15 - 400	15 - 150	15 - 50	15 - 50
TEE (FORGED)	-	-	-	-	-
REDUCER (WELDED) (CONC. & ECCEN.)	15 - 40	80 - 400	80 - 100	-	-
REDUCER (SEAMLESS)	15 - 300	15 - 200	15 - 150	-	-
REDUCER (FORGED)	-	-	-	15 - 50	15 - 50

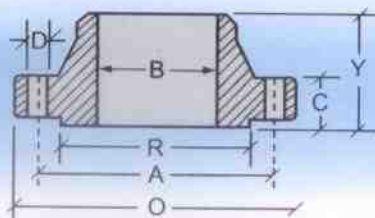


RELIANCE FORGE (INDIA)

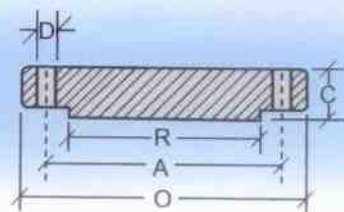
SLIP - ON FLANGE



WELDING NECK FLANGE



BLIND FLANGE



DIMENSIONS OF CLASS 150 FLANGES AS PER ANSI B 16.5

Nominal Flange Pipe Size	Dia of Bolt Circle	Dia of Bolt Holes	No. of Holes	Thk of Flange	Dia of Hub	Length through Hub			Dia of Bore			Dia of R/F	Depth of Socket
O	A	D		C	E	Y	Y	Y	B	B	R	F	
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	461.3	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

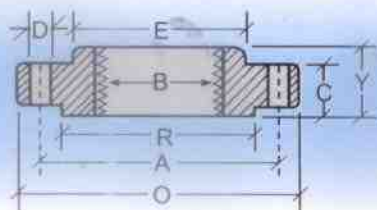
DIMENSIONS OF CLASS 300 FLANGES AS PER ANSI B 16.5

Nominal Flange Pipe Size	Dia of Bolt Circle	Dia of Bolt Holes	No. of Holes	Thk of Flange	Dia of Hub	Length through Hub			Dia of Bore			Dia of R/F	Depth of Socket
O	A	D		C	E	Y	Y	Y	B	B	R	F	
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	-
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	-
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	-

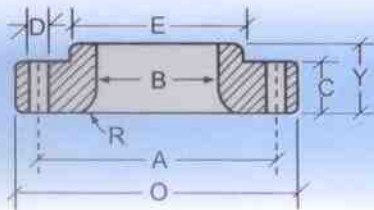
All Dimensions are in Millimeters



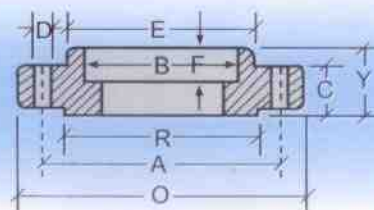
THREADED FLANGE



LAP JOINT FLANGE



SOCKET - WELD FLANGE



DIMENSIONS OF CLASS 600 FLANGES AS PER ANSI B 16.5

Nominal Flange Pipe Size	Dia of Pipe Dia	Dia of Bolt Circle	Dia of Bolt Holes	No. of Holes	Thk of Flange	Dia of Hub	Length through Hub			Dia of Bore			Dia of R/F	Depth of Socket
							S/O & S/W	W/N	L/J	S/O & S/W	S/W	L/J		
	O	A	D		C	E	Y	Y	Y	B	B		R	F
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	-

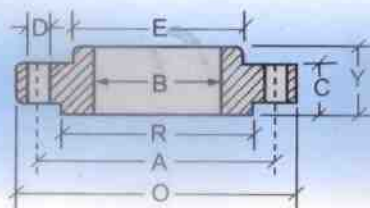
DIMENSIONS OF CLASS 900 FLANGES AS PER ANSI B 16.5

Nominal Flange Pipe Size	Dia of Pipe Dia	Dia of Bolt Circle	Dia of Bolt Holes	No. of Holes	Thk of Flange	Dia of Hub	Length through Hub			Dia of Bore			Dia of R/F	Depth of Socket
							S/O & S/W	W/N	L/J	S/O & S/W	S/W	L/J		
	O	A	D		C	E	Y	Y	Y	B	B		R	F
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	114.5		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	114.3	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	-

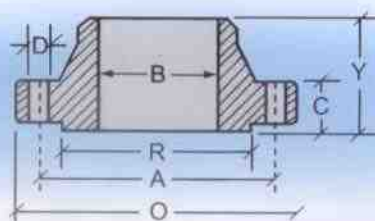


RELIANCE FORGE (INDIA)

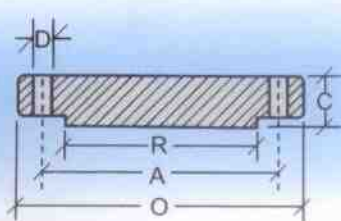
SLIP - ON FLANGE



WELDING NECK FLANGE



BLIND FLANGE



DIMENSIONS OF CLASS 1500 FLANGES AS PER ANSI B 16.5

Nominal Flange Pipe Dia Size	Dia of Bolt Circle	Dia of Bolt Holes	No. of Holes	Thk of Flange	Dia of Hub	Length through Hub			Dia of Bore		Dia of R/F	Depth of Socket	
						S/O & S/W	W/N L/J		S/O & S/W	L/J			
O	A	D		C	E	Y	Y	Y	B	B	R	F	
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	-

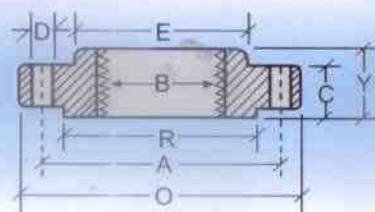
DIMENSIONS OF CLASS 2500 FLANGES AS PER ANSI B 16.5

Nominal Flange Pipe Size	Dia of Bolt Circle	Dia of Bolt Holes	No. of Holes	Thk of Flange	Dia of Hub	Length through Hub S/O & S/W W/N L/J				Dia of Bore S/O & S/W L/J		Dia of R/F	Depth of Socket
O	A	D		C	E	Y	Y	Y	B	B		R	F
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	-
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	-
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	-

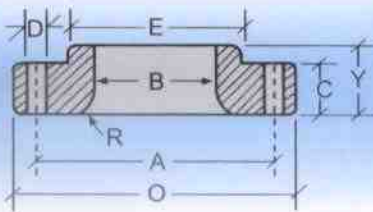
All Dimensions are in Millimeters



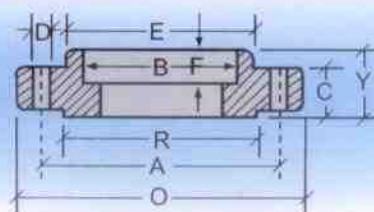
THREADED FLANGE



LAP JOINT FLANGE



SOCKET - WELD FLANGE



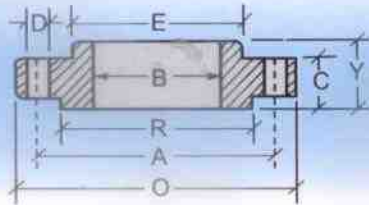
WELDING NECK FLANGE BORES (B)

Nominal Pipe Size	Outside Dia	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	-	-	35.0	35.0	32.4	32.4	-	29.4	22.7
40	48.26	-	-	40.8	40.8	38.1	38.1	-	33.7	27.9
50	60.31	-	-	52.3	52.3	49.2	49.2	-	42.8	38.1
65	73.02	-	-	62.4	62.4	59.0	59.0	-	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	174.6
250	273.05	260.3	257.4	254.5	254.5	247.6	242.8	230.1	215.9	222.2
300	323.85	311.1	307.0	304.8	303.2	298.4	288.8	273.0	257.2	273.0
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	

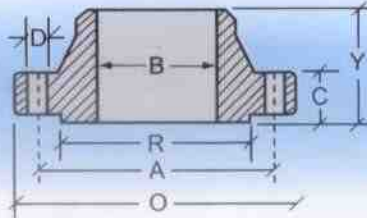
All Dimensions are in Millimeters



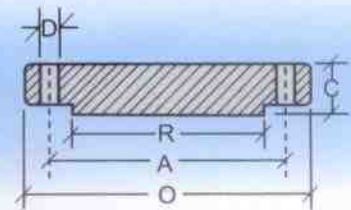
SLIP - ON FLANGE



WELDING NECK FLANGE



BLIND FLANGE



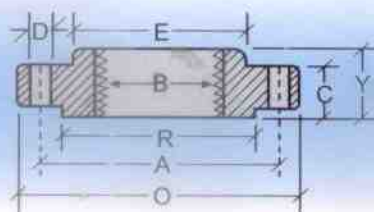
DIMENSIONAL TOLERANCES

Welding neck			Threaded slip on, lap joint, socket welding and blind		
* outside diameter	O.D. 600 or smaller O.D. over 600	± 1.6 ± 3.1	outside diameter	O.D. 50 or smaller O.D. over 600	± 1.6 ± 3.1
inside diameter (bore)	250 and smaller 12 through 450 500 and larger	± 0.7 ± 1.6 ± 3.1	inside diameter (bore)	threaded: to standard gauge limits slip-on: lap joint : socket - welding: 250 and smaller 300 and larger	± 0.7 ± 1.6 -0.0 -0.0
diameter of contact face	1.6 raised face 6.3 raised face : tongue & grooved male and female	± 0.7 ± 0.4	diameter of counter bore	threaded 250 and smaller 300, and larger	± 0.7 ± 1.6 -0.0 -0.0
diameter of hub at base	when E is 600 or smaller When E is over 600	± 1.6 ± 3.1	outside diameter of hub	300 and smaller 350 and larger	± 2.3 ± 3.1 -1.6
diameter of hub at point of welding	125 and smaller 150 and larger	± 0.7 ± 4.0	diameter of contact face	1.6 raised face 6.3 raised: tongue & grooved male & female	± 0.7 ± 0.4
thickness	450 and smaller 500 AND LARGER	± 3.1 ± 4.7	thickness	450 and smaller 500 and larger	± 3.1 ± 4.7 -0.0 -0.0
length through hub	250 and smaller 300 and larger	± 1.6 ± 3.1	length through hub	250 and smaller 300 and larger	± 1.6 ± 3.1
bolt circle		± 1.6	bolt circle		± 1.6
drilling	bolt hole spacing	± 0.7	drilling	bolt hole spacing	± 0.7
eccentricity with respect to bore		0.7max	eccentricity with respect to bore		0.7max

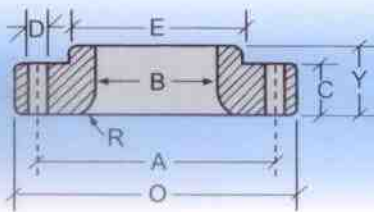


RELIANCE FORGE (INDIA)

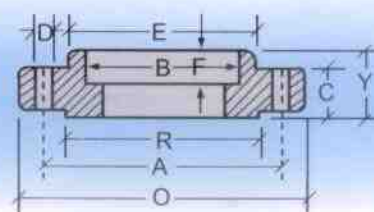
THREADED FLANGE



LAP JOINT FLANGE



SOCKET - WELD FLANGE



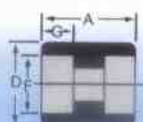
Material Specifications for Forged Components as per ASTM (Flanges, Fittings & others)

Chemical Composition										Physical Properties (Mandatory requirement)							
P S										Tensile Strength	Yield Strength	Reduction of area		Impact values		Test Temp	
	C	Si	Mn	Max	Max	Ni	Cr	Mo	Ti	PSI (kg/mm ²)	PSI (kg/mm ²)	%	%	lb(f)	lb(f)	°F(°C)	BHN
A105	0.35 Max	0.35 Max	0.60 1.05	0.040	0.050	-	-	-	-	70000 (49.3)	36000 (25.35)	22	30	-	-	-	-
A350LF1	0.30 Max	0.15 0.30	1.35 Max	0.035	0.040	-	-	-	-	60000 to 85000 (42.25 to 59.86)	30000 (21.13)	25	38	10(14)	13(18)	-20(-28.9)	197 Max
A350LF2	0.30 Max	0.15 0.30	1.35 Max	0.035	0.040	-	-	-	-	70000 to 95000 (49.3 to 66.9)	36000 (25.35)	22	30	12(16)	15(20)	-50(-45.6)	197 Max
A350LF3	0.20 Max	0.20 0.35	0.90 Max	0.035	0.040	3.25 3.75	-	-	-	70000 to 95000 (49.3 to 66.9)	37500 (26.4)	22	35	12(16)	15(20)	-150(-101.1)	197 Max
A182F1	0.28 Max	0.15 0.35	0.60 0.90	0.045	0.045	-	-	0.44 0.65	-	70000 (49.3)	40000 (28.17)	20	30	-	-	-	43 192
A182F12	0.10 0.20	0.10 0.60	0.30 0.80	0.040	0.040	-	0.80 1.25	0.44 0.65	-	70000 (49.3)	40000 (28.17)	20	30	-	-	-	143 207
A182F11	0.10 0.20	0.50 1.00	0.30 0.80	0.040	0.040	-	1.00 1.50	0.44 0.65	-	70000 (49.3)	40000 (28.17)	20	30	-	-	-	143 207
A182F22	0.15 Max	0.50 Max	0.30 0.60	0.040	0.040	-	2.00 2.50	0.87 1.13	-	75000 (52.8)	45000 (31.7)	20	30	-	-	-	156 207
A182F5	0.15 Max	0.50 Max	0.30 0.60	0.030	0.030	0.50 Max	4.0 6.0	0.44 0.65	-	70000 (49.3)	40000 (28.17)	20	35	-	-	-	143 217
A182F304	0.08 Max	1.00 Max	2.00 Max	0.040	0.030	8.00 11.00	18.00 20.00	-	-	75000 (52.8)	45000 (31.7)	30	50	-	-	-	-
A182F304L	0.035 Max	1.00 Max	2.00 Max	0.040	0.030	8.00 13.00	18.00 20.00	-	-	70000 (49.3)	40000 (17.6)	30	50	-	-	-	-
A182F316	0.08 Max	1.00 Max	2.00 Max	0.040	0.030	10.00 14.00	16.00 18.00	2.00 3.00	-	75000 (52.8)	30000 (21.13)	30	50	-	-	-	-
A182F316L	0.035 Max	1.00 Max	2.00 Max	0.040	0.030	10.00 15.00	16.00 18.00	2.00 3.00	-	70000 (49.3)	25000 (17.6)	30	50	-	-	-	-
A182F321	0.08 Max	1.00 Max	2.00 Max	0.040	0.030	9.00 12.00	17.00 Min	-	a	75000 (52.8)	30000 (21.13)	30	50	-	-	-	-
A182F316T1	0.08 Max	1.00 Max	2.00 Max	0.040	0.030	10.00 14.00	16.00 18.00	2.00 3.00	a	75000 (52.8)	30000 (21.13)	30	50	-	-	-	-

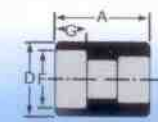
Grade F321 F316 T1 shall have T1 not less than 5 Times of Cand not more than 0.70%



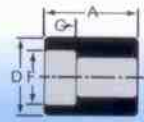
RELIANCE FORGE (INDIA)



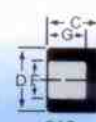
COUPLING



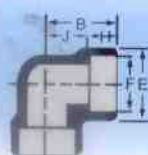
REDUCING COUPLING



HALF-COUPLING



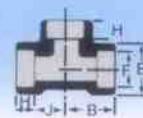
CAP



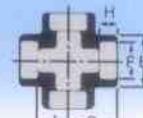
ELBOW-90°



ELBOW-45°



TEE



CROSS

DIMENSIONS SOCKET WELDING

Nominal Pipe Size		in	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
		mm	3.2	6.4	9.5	12.7	19.0	25.4	31.7	38.1	50.8	63.5	76.2	101.6
Length	A	mm	25.4	25.4	28.6	35.0	38.1	44.4	47.6	50.8	63.5	63.5	69.9	76.2
Centre to Face	B	mm	20.6	20.6	24.6	28.6	33.3	38.1	44.4	50.8	60.3	76.2	85.7	106.3
Cap Length	C	mm	17.46	17.46	19.05	22.23	25.4	26.99	30.16	31.75	38.10	38.10	44.45	47.63
Out side	D	mm	19.0	22.2	25.4	31.7	38.1	44.5	57.2	63.5	76.2	92.1	108.0	139.7
Diameter	E	mm	22.2	22.2	25.4	33.3	38.1	46.0	55.5	62.0	75.4	92.0	109.5	146.0
Socket Bore	F	mm	10.7	14.1	17.5	21.7	27.0	33.8	42.5	48.6	61.1	74.0	89.8	115.4
Depth of Socket	G/H MIN	mm	9.5	9.5	9.5	9.5	12.7	12.7	12.7	12.7	15.9	15.9	15.9	19.0
	G MAX	mm	9.5	9.5	11.1	12.7	14.3	15.9	17.5	19.0	22.2	22.2	25.4	28.6
	H MAX	mm	9.5	9.5	11.1	12.7	14.3	15.9	17.5	19.0	22.2	28.6	35.0	39.7
Centre to Socket	J	mm	11.1	11.1	13.5	15.8	19.0	22.2	27.0	31.7	38.1	41.2	57.1	66.6
Back face	K	mm	8.0	8.0	8.0	11.1	12.7	14.3	17.4	20.6	25.4	28.6	31.7	41.2
Centre to face	L	mm	17.46	19.0	19.0	22.2	25.4	28.6	33.3	35.0	42.8	52.4	63.5	79.3
Wall Thk minimum		mm	3.18	3.30	3.51	4.09	4.27	4.98	5.28	5.54	6.05	7.65	8.31	9.35
Bore		mm	6.45	8.86	12.14	15.42	20.55	26.26	34.67	40.51	52.12	61.95	77.17	101.50



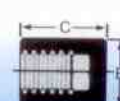
COUPLING



REDUCING COUPLING



HALF-COUPLING



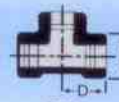
CAP



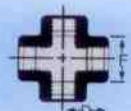
ELBOW-90°



ELBOW-45°



TEE



CROSS

DIMENSIONS THREADED

Nominal Pipe Size		in	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
		mm	3.2	6.4	9.5	12.7	19.0	25.4	31.7	38.1	50.8	63.5	76.2	101.6
Face to face length	A	mm	31.7	35.0	38.1	47.6	50.8	60.3	66.7	79.4	85.7	92.1	108.0	120.7
	B	mm	15.9	17.5	19.0	23.8	25.4	30.2	33.3	39.7	42.9	46.0	54.0	60.3
	C	mm	19.0	25.4	25.4	31.7	36.5	41.3	44.5	44.5	47.6	60.3	65.1	68.3
Face to Centre Length	D	mm	20.6	24.6	28.6	33.3	38.1	44.4	50.8	60.3	63.5	82.5	95.2	114.3
Outside Diameter	E	mm	15.9	19.0	22.2	28.6	35.0	44.5	57.2	63.5	76.2	92.1	108.0	139.7
	F	mm	22.2	25.4	33.3	38.1	46.0	55.5	62.0	75.4	84.1	101.6	120.6	152.4
Length of Thread	G	mm	6.35	8.13	9.14	10.92	12.70	14.73	17.02	17.78	19.05	23.67	25.81	27.79
45° Elbow Face to Centre	H	mm	17.5	19.0	22.2	25.4	28.6	33.3	35.0	42.8	43.6	52.4	63.5	79.3

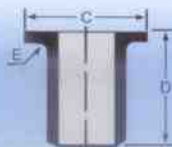


RELIANCE FORGE (INDIA)

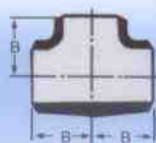
DIMENSIONS



ELBOW-90°



LONG-STUBEND

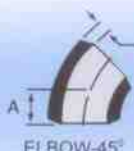


TEE

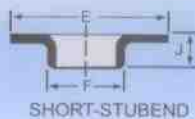


CONCENTRIC-REDUCER

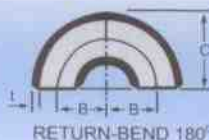
Nominal Bore		in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12
		mm	12.7	19.0	25.4	31.7	38.1	50.8	63.5	76.2	88.9	101.6	127.0	152.4	203.2	254.0	304.8
SHORT STUB ENDS	Outside Dia at bevel	mm	21.3	26.7	33.4	42.2	48.3	60.3	73.0	88.9	101.6	114.3	141.3	168.3	219.1	273.0	324
	Centre To end	A mm	19.0	28.6	38.1	47.6	57.1	76.2	95.2	114.3	133.3	152.4	190.5	228.6	304.8	381.0	457.2
	Lap Dia	B mm	25.4	28.5	38.1	47.6	57.1	63.5	76.2	85.7	95.2	104.8	123.8	142.9	177.8	215.9	254.0
	Length	C mm	34.9	42.8	50.8	63.5	73	92.1	104.8	127.0	139.7	157.2	185.7	215.9	269.9	323.8	381.0
	Radius	D mm	50.8	50.8	50.8	50.8	50.8	63.5	63.5	63.5	76.2	76.2	76.2	88.9	101.6	127.0	152.4
	Reducer Length	E mm	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6	1.6	1.6
	Thickness	F mm	25.4	38.1	50.8	50.8	63.5	76.2	88.9	88.9	101.6	101.6	127.0	139.7	152.4	177.8	203.2
THICKNESS	SCH 5s	t mm	1.65	1.65	1.65	1.65	1.65	1.65	2.11	2.11	2.11	2.11	2.77	2.77	2.77	3.40	3.96
	SCH 10s	t mm	2.11	2.11	2.77	2.77	2.77	2.77	3.05	3.05	3.05	3.05	3.40	3.40	3.76	4.19	4.57
	SCH 40s	t mm	2.7	2.8	3.3	3.5	3.6	3.9	5.1	5.4	5.7	6.0	6.5	7.1	8.1	9.2	9.5
	SCH 80s	t mm	3.7	3.9	4.5	4.8	5.0	5.5	7.0	7.6	8.0	8.5	9.5	10.9	12.7	12.7	12.7



ELBOW-45°



SHORT-STUBEND



RETURN-BEND 180°



CAP

DIMENSIONS

Nominal Bore		in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12
		mm	12.7	19.0	25.4	31.7	38.1	50.8	63.5	76.2	88.9	101.6	127.0	152.4	203.2	254.0	304.8
LONG STUB ENDS	Outside Dia at Bevel	mm	21.3	26.7	33.4	42.2	48.3	60.3	73.0	88.9	101.6	114.3	141.3	168.3	219.1	273.0	324
	Centre to End	A mm	11.1	11.1	22.2	25.4	28.6	34.9	44.4	50.8	57.1	63.5	79.5	95.2	127	158.7	190.5
	Centre to Centre	B mm	19.0	28.6	38.1	47.6	57.1	76.2	95.2	114.3	133.3	152.4	190.5	226.6	304.8	381.0	457.2
	Back to Face	C mm	30.2	42.8	55.5	69.8	82.5	106.3	131.7	158.7	184.1	209.5	261.9	312.7	414.2	517.5	619.1
	Cap Length	D mm	25.4	31.7	38.1	38.1	38.1	38.1	50.8	63.5	63.5	76.2	88.9	101.6	127.0	152.4	
	DIN Std	E mm	45	58	68	78	88	102	122	138	-	158	188	212	268	320	378
	ANSI Std	F mm	20	25	30	38	44.5	57	76	88.9	-	108	133	159	216	267	318
THICKNESS	O.D.Std	E mm	40	45	54	64	78	88	102	122	-	158	188	212	268	320	370
	I.D.Std	F mm	12.7	19	25.4	32	38	51	64	76.2	-	102	127	152.5	203.2	254	304.8
	Height	J mm	8	8	10	12	12	16	16	18	-	20	25	25	30	35	40
	SCH 5s	t mm	1.65	1.65	1.65	1.65	1.65	1.65	2.11	2.11	2.11	2.11	2.77	2.77	2.77	3.40	3.96
	SCH 10s	t mm	2.11	2.11	2.77	2.77	2.77	2.77	3.05	3.05	3.05	3.05	3.40	3.40	3.76	4.19	4.57
	SCH 40s	t mm	2.7	2.8	3.3	3.5	3.6	3.9	5.1	5.4	5.7	6.0	6.5	7.1	8.1	9.2	9.5
	SCH 80s	t mm	3.7	3.9	4.5	4.8	5.0	5.5	7.0	7.6	8.0	8.5	9.5	10.9	12.7	12.7	12.7

Brand pipe fittings and flanges are manufactured as per the trends in the international market, and are made to ANSI, BS & MSS standards. The traceability of the heat of steel is ensured by proper documentation. Strict quality control ensures a product that will live upto your highest expectations.



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