



Section 4

Flanges

Specifications

SPECIFICATIONS: ANSI B16.5 – Pipe Flanges and Flanged Fittings (American)
 AS2129 – Flanges for Pipes, Valves and Fittings (Australian)
 BS4504 – Circular Flanges for Pipe, Valves and Fittings (PN designated) – (now BS EN1092) (European)
 AS4087 – Metallic Flanges for Waterworks Purposes (Australian)
 BS10 – Specification for Flanges and bolting for Pipes, Valves and Fittings (British)
***AS2129 is a replica of BS10 but is stated in mm rather than inches. In some sizes bolt holes are slightly larger to give better clearance*

APPLICATION: Water Supply, Oil, Gas, Petrochemical, Irrigation, Fire Services, General Industry, Construction.

MARKING: All Flanges when possible will display a heat number, size, table, grade and dimensional standard.

PLATE STEEL FLANGES: Plate flanges are mainly used for light duty, lower pressure or non-critical applications, commonly referring to AS2129, BS10 or AS4087 standards. The manufacturing method involves cutting and machining from plate steel.

FORGED STEEL FLANGES: Forged Steel flanges are commonly used and specified in the Oil, Gas, Petrochemical and mining sectors, where pressure, temperature and safety considerations often specify the ANSI B16.5, ASME B16.47 or BS4504 standards. The manufacturing method involves the hot forging of suitable steels prior to final machining.

MATERIALS: Mild Carbon Steel, ASTM A105, BS4504 (DIN) flanges from PN6 TO PN40.
 H J Asmuss & Co Ltd can also offer a wide range of products on request.

Dimension Tolerance for ANSI B16.5					
THREADED, SOCKET WELDING, SLIP-ON, LAP JOINT AND BLIND			WELD NECK		
OUTSIDE DIAMETER OF HUB	≤ 24	± 1/16	OUTSIDE DIAMETER	≤ 24	± 1/16
INSIDE DIAMETER	Threaded	Within limits of boring gauge	INSIDE DIAMETER	≤ 10	± 1/32
	Socket Weld, Slip on	≤ 10, + 1/32, -0 ≥ 12 + 1/16, -0		12 through 18	± 1/16
OUTSIDE DIAMETER OF HUB	≤ 12	+ 3/32 - 1/16		≥ 20	+1/8, - 1/16
	≥ 14	± 1/8	DIAMETER OF CONTACT FACE	1/16 Raised Face	± 1/32
DIAMETER OF CONTACT FACE	1/16 Raised Face	± 1/32		1/4 Raised face tongue & Groove male, female	± 1/64
	DRILLING	Bolt Circle	± 1/16	DIAMETER OF HUB AT BASE	≤ 24
Bolt Hole Spacing		± 1/32	> 24		± 1/8
Concentricity of bolt circle		NPS ≤ 2 1/2 1/32 max NPS ≥ 3 1/16 max	DIAMETER OF HUB AT POINT OF WELDING	NPS ≤ 5	+ 3/32 -1/32
THICKNESS	≤ 18	+ 1/8, -0		NPS ≥ 6	+ 5/32 -1/32
	≥ 20	+3/16, -0	DRILLING	Bolt Circle	± 1/16
LENGTH THROUGH THE HUB	≤ 18	+1/8, -1/32		Bolt Hole Spacing	± 1/32
	≥ 20	+3/16, -1/16		Concentricity of bolt circle	NPS ≤ 2 1/2 1/32 max NPS ≥ 3 1/16 max
THICKNESS	≤ 18	+1/8 -0	LENGTH THROUGH THE HUB	NPS ≤ 4	± 1/16
	≥ 20	+3/16 -0		5 ≤ NPS ≤ 10	+1/16 -1/8
				NPS ≥ 12	+ 1/8 -3/16

Temperature-Pressure Ratings

Temperature-Pressure Ratings						
ASTM A105						
TEMPERATURE/PRESSURE RATINGS						
CARBON STEEL PIPE FLANGES TO ANSI B16.5 (BS.1560)						
FORGINGS TO ASTM A105 – Not recommended for prolonged use above 427°C						
FORGINGS TO ASTM A350-LF2 – Not to be used above 343°C						
FORGINGS TO ASTM A105 – Not recommended for prolonged use above 427°C						
FORGINGS TO ASTM A350-LF2 – Not to be used above 423°C						
TEMPERATURE IN °C	MAXIMUM WORKING PRESSURE IN KPA BY PN (PRESSURE NUMBERS)					
	PN20 CLASS 150	PN50 CLASS 300	PN100 CLASS 600	PN150 CLASS 900	PN250 CLASS 1500	PN420 CLASS 2500
-29 to 38	1960	5110	10210	15320	25530	42550
50	1920	5010	10020	15020	25040	41730
100	1770	4640	9280	13910	23190	38650
150	1580	4520	9050	13570	22610	37690
200	1400	4380	8760	13150	21910	36520
250	1210	4170	8340	12520	20860	34770
300	1020	3870	7750	11620	19370	32280
350	840	3700	7390	11090	18480	30800
375	740	3650	7290	10940	18230	30390
400	650	3450	6900	10350	17250	28750
425	560	2880	5750	8630	14380	23960
450	470	2000	4010	6010	10020	16690
475	370	1350	2710	4060	6770	11290
500	280	880	1760	2640	4400	7330
525	190	520	1040	1550	2590	4320
540	130	330	650	980	1630	2720

Flanges above DN 600 are not included in ANSI B16.5 standard and the class designations in these large diameters do not imply specific temperature/pressure ratings.

Chemical Properties				
CARBON	MANGANESE	PHOSPHORUS	SULPHUR	SILICON
.35% max	.60 – 1.05%	.040% max	-050% max	0.35%

NOTE 1: For each reduction of 0.01% below the specified carbon maximum (0.35%), an increase of 0.06% manganese above the specified maximum (1.05%) will be permitted up to a maximum of 1.35%.

Mechanical Properties				
TENSILE STRENGTH MIN, MPA	YIELD STRENGTH MIN, MPA	ELONGATION IN 50MM, MIN%	REDUCTION OF AREA, MIN %	HARDNESS, HB MAX
485	250	22	30	187

** Determined by either the 0.2% off-set method or the 0.5% extension-under-load method.

FLANGES

Temperature-Pressure Ratings For Carbon Steel Plate Flanges

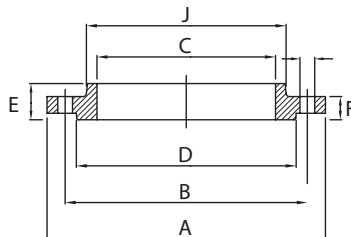
CODE	PRESSURE (KPA)												MAXIMUM HYDROSTATIC TEST PRESSURE KPA
	TEMPERATURE (°C)												
	-18	-50	250	275	300	325	350	375	400	425	450	475	
	TO 120	TO 232											
D		700	650	600	570	550	500	450	400	350			1050
C	1200												1800
E		1400	1300	1200	1100	1000	950	900	800	700			2100
F		2100	2000	1800	1700	1600	1400	1300	1200	1100			3150
H		3500	3300	3100	2900	2600	2400	2000	2000	1700	1300	900	5250
J		4800	4600	4300	4000	3700	3400	3100	2700	2400	1900	1300	7200
K		6200	5900	5500	5100	4700	4300	3900	3500	3100	2400	1600	9300
R		8300	7900	7400	6800	6300	5800	5200	4700	4200	3200	2200	12450
S		12400	11800	11100	10300	9500	8700	7900	7100	6300	4800	3300	18600
T		19300	18400	17200	16000	14700	13500	12200	11000	9800	7500	5100	28950

ANSI CL150 RF Slip On Flange (STD WT)

ANSI CL150 RF Slip On Flange B16.5 A105N

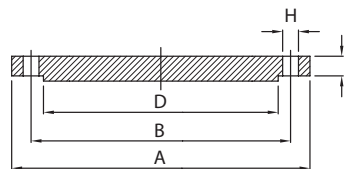
CODE	PIPE		FLANGE				HUB	RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	C	F	E	J	D	NUMBER HOLES	H	B	
FL150SO015	15	21.3	88.9	22.4	11.2	15.7	30.2	35.1	4	15.7	60.5	0.39
FL150SO020	20	26.7	98.6	27.7	12.7	15.7	38.1	42.9	4	15.7	69.6	0.56
FL150SO025	25	33.4	108.0	34.5	14.2	17.5	49.3	50.8	4	15.7	79.2	0.78
FL150SO032	32	42.2	117.3	43.2	15.7	20.6	58.7	63.5	4	15.7	88.9	1.03
FL150SO040	40	48.3	127.0	49.5	17.5	22.4	65.0	73.2	4	15.7	98.6	1.32
FL150SO050	50	60.3	152.4	62.0	19.1	25.4	77.7	91.9	4	19.1	120.7	2.06
FL150SO065	65	73.0	177.8	74.7	22.4	28.4	90.4	104.6	4	19.1	139.7	3.28
FL150SO080	80	88.9	190.5	90.7	23.9	30.2	108.0	127.0	4	19.1	152.4	3.85
FL150SO100	100	114.3	228.6	116.1	23.9	33.3	134.9	157.2	8	19.1	190.5	5.30
FL150SO125	125	141.3	254.0	143.8	23.9	36.6	163.6	185.7	8	22.4	215.9	6.07
FL150SO150	150	168.3	279.4	170.7	25.4	39.6	192.0	215.9	8	22.4	241.3	7.45
FL150SO200	200	219.1	342.9	221.5	28.4	44.5	246.1	269.7	8	22.4	295.8	12.10
FL150SO250	250	273.0	406.4	276.4	30.2	49.3	304.8	323.9	12	25.4	362	16.50
FL150SO300	300	323.8	482.6	327.2	31.8	55.6	365.3	381.0	12	25.4	431.8	26.20
FL150SO350	350	355.6	533.4	359.2	35.1	57.2	400.1	412.8	12	28.4	476.3	34.60
FL150SO400	400	406.4	596.9	410.5	36.6	63.5	457.2	469.9	16	28.4	539.8	44.80
FL150SO450	450	457.2	635.0	461.8	39.6	68.3	505.0	533.4	16	31.8	577.9	48.90
FL150SO500	500	508.0	698.5	513.1	42.9	73.2	558.8	584.2	20	31.8	635	61.90
FL150SO600	600	609.6	812.8	616.0	47.8	82.6	663.4	692.2	20	35.1	749.3	86.90

H = THREAD LENGTH



ANSI CL150 Blind Flange

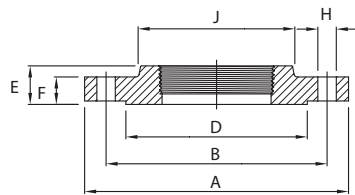
ANSI CL150 Blind Flange B16.5 A105N									
CODE	PIPE		FLANGE		RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	F	D	NUMBER HOLES	H	B	
FL150BL015	15	21.3	88.9	11.2	35.1	4	15.7	60.5	.42
FL150BL020	20	26.7	98.6	12.7	42.9	4	15.7	69.9	.61
FL150BL025	25	33.4	108.0	14.2	50.8	4	15.7	79.2	0.86
FL150BL032	32	42.2	117.3	15.7	63.5	4	15.7	88.9	1.17
FL150BL040	40	48.3	127.0	17.5	73.2	4	15.7	98.6	1.53
FL150BL050	50	60.3	152.4	19.1	91.9	4	19.1	120.7	2.42
FL150BL065	65	73.0	177.8	22.4	104.6	4	19.1	139.7	3.94
FL150BL080	80	88.9	190.5	23.9	127.0	4	19.1	152.4	4.93
FL150BL100	100	114.3	228.6	23.9	157.2	8	19.1	190.5	7.00
FL150BL125	125	141.3	254.0	23.9	185.7	8	22.4	215.9	8.63
FL150BL150	150	168.3	279.4	25.4	215.9	8	22.4	241.3	11.30
FL150BL200	200	219.1	342.9	28.4	269.7	8	22.4	298.5	19.60
FL150BL250	250	273.0	406.4	30.2	323.9	12	25.4	362.0	28.80
FL150BL300	300	323.8	482.6	31.8	381.0	12	25.4	431.8	43.20
FL150BL350	350	355.6	533.4	35.1	412.8	12	28.4	476.3	58.10
FL150BL400	400	406.4	596.9	36.6	469.9	16	28.4	539.8	76.00
FL150BL450	450	457.2	635.0	39.6	533.4	16	31.8	577.9	93.70
FL150BL500	500	508.0	698.5	42.9	584.2	20	31.8	635.0	122.00
FL150BL600	600	609.6	812.8	47.8	692.2	20	35.1	749.3	185.00



ANSI CL150 RF BSP Screwed Flange

ANSI CL150 RF BSP Screwed Flange B16.5 A105N

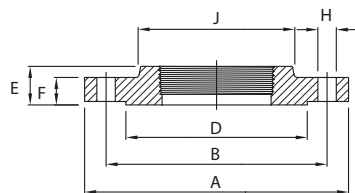
CODE	PIPE		FLANGE			HUB	RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	F	E	J	D	NUMBER HOLES	H	B	
FLSC150015	15	21.3	88.9	11.2	15.7	30.2	35.1	4	15.7	60.5	0.39
FLSC150020	20	26.7	98.6	12.7	15.7	38.1	42.9	4	15.7	69.9	0.56
FLSC150025	25	33.4	108.0	14.2	17.5	49.3	50.8	4	15.7	79.2	0.78
FLSC150032	32	42.2	117.3	15.7	20.6	58.7	63.5	4	15.7	88.9	1.03
FLSC150040	40	48.3	127.0	17.5	22.4	65.0	73.2	4	15.7	98.6	1.32
FLSC150050	50	60.3	152.4	19.1	25.4	77.7	91.9	4	19.1	120.7	2.06



ANSI CL150 RF BSP Screwed Flange Galvanized

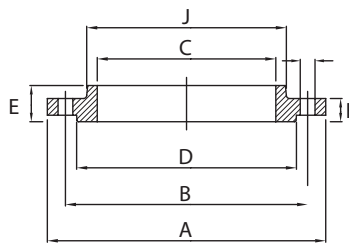
ANSI CL150 RF BSP Screwed Flange Galvanized B16.5 A105N

CODE	PIPE		FLANGE			HUB	RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	F	E	J	D	NUMBER HOLES	H	B	
FLSC150G015	15	21.3	88.9	11.2	15.7	30.2	35.1	4	15.7	60.5	0.39
FLSC150G020	20	26.7	98.6	12.7	15.7	38.1	42.9	4	15.7	69.9	0.56
FLSC150G025	25	33.4	108.0	14.2	17.5	49.3	50.8	4	15.7	79.2	0.78
FLSC150G032	32	42.2	117.3	15.7	20.6	58.7	63.5	4	15.7	88.9	1.03
FLSC150G040	40	48.3	127.0	17.5	22.4	65.0	73.2	4	15.7	98.6	1.32
FLSC150G050	50	60.3	152.4	19.1	25.4	77.7	91.9	4	19.1	120.7	2.06



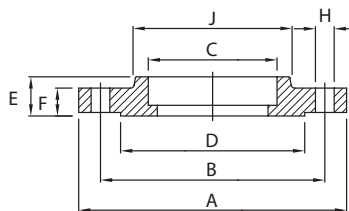
ANSI CL150 RF Socket Weld Flange (STD WT)

ANSI CL150 RF Socket Weld Flange B16.5 A105N														
CODE	PIPE		FLANGE						HUB	RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	C			F	E	J	D	NUMBER HOLES	H	B	
FL150SW015	15	21.3	88.9	22.4	15.7	9.6	11.2	15.7	30.2	35.1	4	15.7	60.5	0.42
FL150SW020	20	26.7	98.6	27.7	20.8	11.1	12.7	15.7	38.1	42.9	4	15.7	69.9	0.59
FL150SW025	25	33.4	108.0	34.5	26.7	12.7	14.2	17.5	49.3	50.8	4	15.7	79.2	0.81
FL150SW032	32	42.2	117.3	43.2	35.1	14.2	15.7	20.6	58.7	63.5	4	15.7	88.9	1.07
FL150SW040	40	48.3	127.0	49.5	40.9	15.7	17.5	22.4	65.0	73.1	4	15.7	98.6	1.36
FL150SW050	50	60.6	152.4	62.0	52.6	17.5	19.1	25.4	77.7	91.9	4	19.1	120.7	2.10



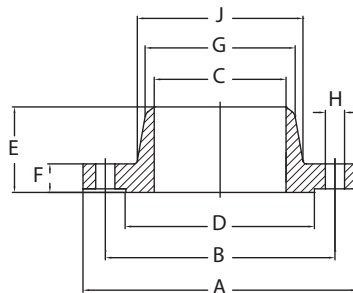
ANSI CL150 RF Socket Weld Flange (XS WT)

ANSI CL150 RF Socket Weld Flange B16.5 A105N														
CODE	PIPE		FLANGE						HUB	RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	C			F	E	J	D	NUMBER HOLES	H	B	
FL150SWX020	20	26.7	98.6	27.7	20.8	11.1	12.7	15.7	38.1	42.9	4	15.7	69.9	0.59
FL150SWX025	25	33.4	108.0	34.5	26.7	12.7	14.2	17.5	49.3	50.8	4	15.7	79.2	0.81
FL150SWX032	32	42.2	117.3	43.2	35.1	14.2	15.7	20.6	58.7	63.5	4	15.7	88.9	1.07
FL150SWX040	40	48.3	127.0	49.5	40.9	15.7	17.5	22.4	65.0	73.1	4	15.7	98.6	1.36
FL150SWX050	50	60.6	152.4	62.0	52.6	17.5	19.1	25.4	77.7	91.9	4	19.1	120.7	2.10



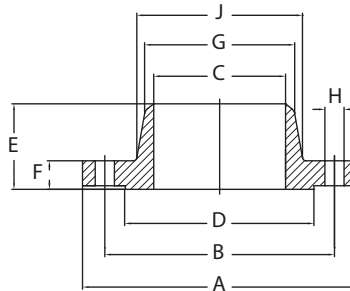
ANSI CL150 RF Weld Neck Flange (STD WT)

ANSI CL150 RF Weld Neck Flange B16.5 A105N													
CODE	PIPE		FLANGE			HUB		RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC	
	NB	OD	A	C	F	E	G	J	D	NUMBER HOLES	H		B
FL150WN015	15	21.3	88.9	To be specified by purchaser	11.2	47.8	21.3	30.2	35.1	4	15.7	60.5	0.48
FL150WN020	20	26.7	98.6		12.7	52.3	26.7	38.1	42.9	4	15.7	69.9	0.71
FL150WN025	25	33.4	108.0		14.2	55.6	33.5	49.3	50.8	4	15.7	79.2	1.01
FL150WN032	32	42.4	117.3		15.7	57.2	42.2	58.7	63.5	4	15.7	88.9	1.33
FL150WN040	40	48.3	127.0		17.5	62.0	48.3	65.0	73.2	4	15.7	98.6	1.72
FL150WN050	50	60.3	152.4		19.1	63.5	60.5	77.7	91.9	4	19.1	120.7	2.58
FL150WN065	65	73.0	177.8		22.4	69.9	73.2	90.4	104.6	4	19.1	139.7	4.11
FL150WN080	80	88.9	190.5		23.9	69.9	88.9	108.0	127.0	4	19.1	152.4	4.92
FL150WN100	100	114.3	228.6		23.9	76.2	114.3	134.9	157.2	8	19.1	190.5	6.84
FL150WN125	125	141.3	254.0		23.9	88.9	141.2	163.6	185.7	8	22.4	215.9	8.56
FL150WN150	150	168.3	279.4		25.4	88.9	168.4	192.0	215.9	8	22.4	241.3	10.6
FL150WN200	200	219.1	342.9		28.4	101.6	219.2	246.1	269.7	8	22.4	298.5	17.6
FL150WN250	250	273.0	406.4		30.2	101.6	273.1	304.8	323.9	12	25.4	362.0	24.00
FL150WN300	300	323.8	482.6		31.8	114.3	323.9	365.3	381.0	12	25.4	431.8	36.50
FL150WN350	350	355.6	533.4		35.1	127.0	355.6	400.1	412.8	12	28.4	476.3	48.40
FL150WN400	400	406.4	596.9		36.6	127.0	406.4	457.2	469.9	16	28.4	539.8	60.60
FL150WN450	450	457.2	635.0		39.6	139.7	457.2	505.0	533.4	16	31.8	577.9	68.30
FL150WN500	500	508.0	698.5		42.9	144.5	508.0	558.8	584.2	20	31.8	635.0	84.50
FL150WN600	600	609.6	812.8		47.8	152.4	609.6	663.4	692.2	20	35.1	749.3	115.00



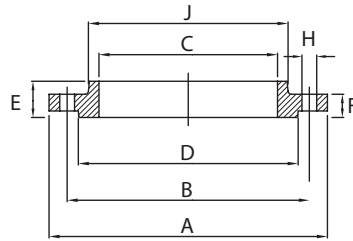
ANSI CL150 RF Weld Neck Flange (XS WT)

ANSI CL150 RF Weld Neck Flange B16.5 A105N													
CODE	PIPE		FLANGE				HUB		RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	C	F	E	G	J	D	NUMBER HOLES	H	B	
FL150WNX025	25	33.4	108.0	To be specified by purchaser	14.2	55.6	33.5	49.3	50.8	4	15.7	79.2	1.01
FL150WNX032	32	42.4	117.3		15.7	57.2	42.2	58.7	63.5	4	15.7	88.9	1.33
FL150WNX040	40	48.3	127.0		17.5	62.0	48.3	65.0	73.2	4	15.7	98.6	1.72
FL150WNX050	50	60.3	152.4		19.1	63.5	60.5	77.7	91.9	4	19.1	120.7	2.58
FL150WNX065	65	73.0	177.8		22.4	69.9	73.2	90.4	104.6	4	19.1	139.7	4.11
FL150WNX080	80	88.9	190.5		23.9	69.9	88.9	108.0	127.0	4	19.1	152.4	4.92
FL150WNX100	100	114.3	228.6		23.9	76.2	114.3	134.9	157.2	8	19.1	190.5	6.84
FL150WNX150	150	168.3	279.4		25.4	88.9	168.4	192.0	215.9	8	22.4	241.3	10.6
FL150WNX200	200	219.1	342.9		28.4	101.6	219.2	246.1	269.7	8	22.4	298.5	17.6
FL150WNX250	250	273.0	406.4		30.2	101.6	273.1	304.8	323.9	12	25.4	362.0	24.00
FL150WNX300	300	323.8	482.6		31.8	114.3	323.9	365.3	381.0	12	25.4	431.8	36.50



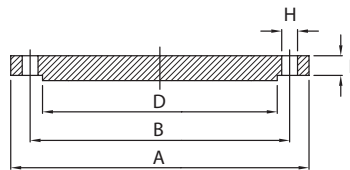
ANSI CL300 RF Slip On Flange (STD WT)

ANSI CL300 RF Slip On Flange B16.5 A105N												
CODE	PIPE		FLANGE				HUB	RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	C	F	E	J	D	NUMBER HOLES	H	B	
FL300SO015	15	21.3	95.2	22.3	14.2	22.3	38.1	35.0	4	15.7	66.5	0.64
FL300SO020	20	26.7	117.3	27.7	15.7	25.4	47.7	42.9	4	19.0	82.5	1.12
FL300SO025	25	33.4	123.9	34.5	17.5	26.9	53.8	50.8	4	19.0	88.9	1.36
FL300SO032	32	42.2	133.3	43.2	19.0	26.9	63.5	63.5	4	19.0	98.5	1.68
FL300SO040	40	48.3	155.4	49.5	20.6	30.2	69.8	73.1	4	22.3	114.3	2.49
FL300SO050	50	60.3	165.1	62.0	22.3	33.2	84.0	91.9	8	19.0	127.0	2.87
FL300SO065	65	73.0	190.5	74.7	25.4	38.1	100.0	104.6	8	22.3	149.3	4.32
FL300SO080	80	88.9	209.5	90.7	28.4	42.9	117.3	127.0	8	22.3	168.1	5.85
FL300SO100	100	114.3	254.0	116.1	31.7	47.7	146.0	157.2	8	22.3	200.1	9.61
FL300SO125	125	141.3	279.4	143.8	35.0	50.8	177.8	185.6	8	22.3	234.9	12.30
FL300SO150	150	168.3	317.5	170.7	36.5	52.3	206.2	215.9	12	22.3	269.7	15.60
FL300SO200	200	219.1	381.0	221.5	41.1	61.9	260.3	269.7	12	25.4	330.2	24.20
FL300SO250	250	273.0	444.5	276.3	47.7	66.5	320.5	323.8	16	28.4	387.3	34.10
FL300SO300	300	323.8	520.7	327.1	50.8	73.1	374.6	381.0	16	31.7	450.8	49.80



ANSI CL300 Blind Flange

ANSI CL300 Blind Flange B16.5 A105N									
CODE	PIPE		FLANGE		RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	F	D	NUMBER HOLES	H	B	
FL300BL015	15	21.3	95.2	14.2	35.0	4	15.7	66.5	64.0
FL300BL020	20	26.7	117.3	15.7	42.9	4	19.0	82.5	1.1
FL300BL025	25	33.4	123.9	17.5	50.8	4	19.0	88.9	1.4
FL300BL032	32	42.2	133.3	19.0	63.5	4	19.0	98.5	1.8
FL300BL040	40	48.3	155.4	20.6	73.1	4	22.3	114.3	2.7
FL300BL050	50	60.3	165.1	22.3	91.9	8	19.0	127.0	3.8
FL300BL065	65	73.0	190.5	25.4	104.6	8	22.3	149.3	4.9
FL300BL080	80	88.9	209.5	28.4	127.0	8	22.3	168.1	6.8
FL300BL100	100	114.3	254.0	31.7	157.2	8	22.3	200.1	11.5
FL300BL125	125	141.3	279.4	35.0	185.6	8	22.3	234.9	15.6
FL300BL150	150	168.3	317.5	36.5	215.9	12	22.3	269.7	20.9
FL300BL200	200	219.1	381.0	41.1	269.7	12	25.4	330.2	34.3
FL300BL250	250	273.0	444.5	47.7	323.8	16	28.4	387.3	53.3
FL300BL300	300	323.8	520.7	50.8	381.0	16	31.7	450.8	78.8
FL300BL350	350	355.6	584.2	53.8	412.7	20	31.7	514.3	105.0

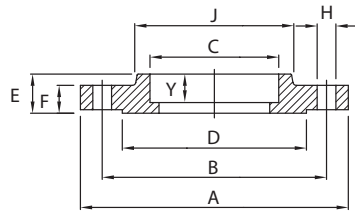


FLANGES

ANSI CL300 RF Socket Weld Flange (STD WT)

ANSI CL300 RF Socket Weld Flange B16.5 A105N

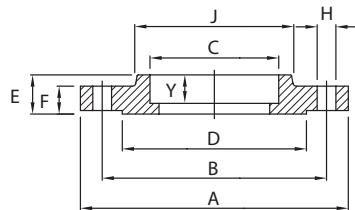
CODE	PIPE		FLANGE					HUB	RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	C	Y	F	E	J	D	NUMBER HOLES	H	K	
FL300SW025	25	33.4	124.0	34.5	12.7	17.5	26.9	53.8	50.8	4	19.1	88.9	1.44
FL300SW032	32	42.2	133.0	43.2	14.2	19.1	26.9	63.5	63.5	4	19.1	98.6	1.73
FL300SW040	40	48.3	155.0	49.5	15.7	20.6	30.2	69.9	73.1	4	22.4	114.3	2.62
FL300SW050	50	60.3	165.0	62.0	17.5	22.4	33.3	84.1	91.9	4	19.1	127.0	2.94



ANSI CL300 RF Socket Weld Flange (XS WT)

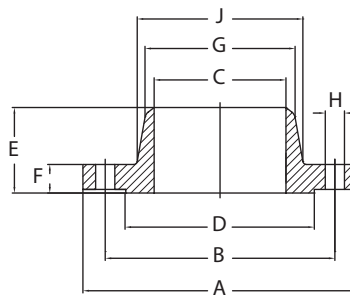
ANSI CL300 RF Socket Weld Flange B16.5 A105N

CODE	PIPE		FLANGE					HUB	RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	C	Y	F	E	J	D	NUMBER HOLES	H	K	
FL300SWX025	25	33.4	124.0	34.5	12.7	17.5	26.9	53.8	50.8	4	19.1	88.9	1.44
FL300SWX032	32	42.2	133.0	43.2	14.2	19.1	26.9	63.5	63.5	4	19.1	98.6	1.73
FL300SWX040	40	48.3	155.0	49.5	15.7	20.6	30.2	69.9	73.1	4	22.4	114.3	2.62
FL300SWX050	50	60.3	165.0	62.0	17.5	22.4	33.3	84.1	91.9	4	19.1	127.0	2.94



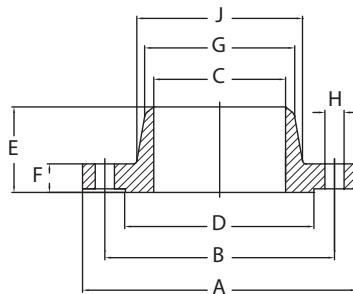
ANSI CL300 RF Weld Neck Flange (STD WT)

ANSI CL300 RF Weld Neck Flange B16.5 A105N													
CODE	PIPE		FLANGE				HUB		RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A		F	E	G	J	D	NUMBER HOLES	H	B	
FL300WN025	25	33.4	123.9	To be specified by purchaser	17.5	62.0	33.5	53.8	50.8	4	19.0	88.9	1.52
FL300WN032	32	42.2	133.3		19.0	65.0	42.2	63.5	63.5	4	19	98.5	2.03
FL300WN040	40	48.3	155.4		20.6	68.3	48.3	98.8	73.1	4	22.3	114.3	2.89
FL300WN050	50	60.3	165.1		22.3	69.8	60.4	84.0	91.9	8	19	127	3.40
FL300WN080	80	88.9	209.5		28.4	79.2	88.9	117.3	127.0	8	22.3	168.1	6.93
FL300WN100	100	114.3	254.0		31.7	85.8	114.3	146.0	157.2	8	22.3	200.1	11.20
FL300WN150	150	168.3	317.5		36.5	98.5	168.4	206.2	215.9	12	22.3	269.7	19.10
FL300WN200	200	219.1	381.0		41.1	111.2	219.2	260.3	269.7	12	25.4	330.2	29.90
FL300WN250	250	273.0	444.5		47.7	117.3	273.0	320.5	323.8	16	28.4	387.3	42.70
FL300WN300	300	323.8	520.7		50.8	130.0	323.8	374.6	381.0	16	31.7	450.8	61.80
FL300WN350	350	355.6	584.2		53.8	142.7	355.6	425.4	412.7	20	31.7	514.3	85.80



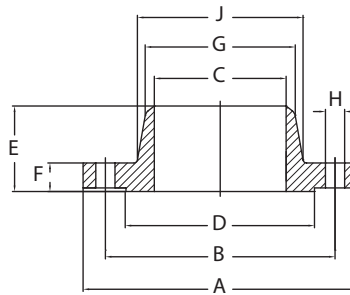
ANSI CL300 RF Weld Neck Flange (XS WT)

ANSI CL300 RF WELD Neck Flange B16.5 A105N													
CODE	PIPE		FLANGE			HUB		RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC	
	NB	OD	A	C	F	E	G	J	D	NUMBER HOLES	H		B
FL300WNX015	15	21.3	95.2	To be specified by purchaser	14.2	52.3	21.3	38.1	35.0	4	15.7	66.5	0.75
FL300WNX020	20	26.7	117.3		15.7	57.1	26.7	47.7	42.9	4	19.0	82.5	1.26
FL300WNX025	25	33.4	123.9		17.5	62.0	33.5	53.8	50.8	4	19.0	88.9	1.52
FL300WNX032	32	42.2	133.3		19.0	65.0	42.2	63.5	63.5	4	19.0	98.5	2.03
FL300WNX040	40	48.3	155.4		20.6	68.3	48.3	98.8	73.1	4	22.3	114.3	2.89
FL300WNX050	50	60.3	165.1		22.3	69.8	60.4	84.0	91.9	8	19.0	127.0	3.40
FL300WNX065	65	73.0	190.5		25.4	76.2	73.1	100.0	104.6	8	22.3	149.3	5.17
FL300WNX080	80	88.9	209.5		22.3	69.8	60.4	84.0	91.9	8	19.0	127.0	3.40
FL300WNX100	100	114.3	254.0		28.4	79.2	88.9	117.3	127.0	8	22.3	168.1	6.93
FL300WNX125	125	141.3	279.4		35.0	98.5	141.2	177.8	185.6	8	22.3	234.9	15.10
FL300WNX150	150	168.3	317.5		36.5	98.5	168.4	206.2	215.9	12	22.3	269.7	19.10
FL300WNX200	200	219.1	381.0		41.1	111.2	219.2	260.3	269.7	12	25.4	330.2	29.90
FL300WNX250	250	273.0	444.5		47.7	117.3	273.0	320.5	323.8	16	28.4	387.3	42.70
FL300WNX300	300	323.8	520.7		50.8	130.0	323.8	374.6	381.0	16	31.7	450.8	61.80



ANSI CL600 RF Weld Neck Flange (XS WT)

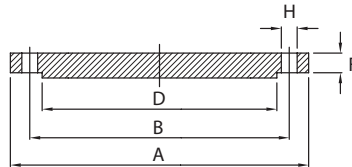
ANSI CL600 RF Weld Neck Flange B16.5 A105N													
CODE	PIPE		FLANGE			HUB		RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC	
	NB	OD	A	C	F	E	G	J	D	NUMBER HOLES	H		B
FL600WNX025	25	33.4	124.0	To be specified by purchaser	17.5	62.0	33.5	53.8	50.8	4	19.1	88.9	1.76
FL600WNX040	40	48.3	155.4		22.4	69.9	48.3	69.9	73.2	4	22.4	114.3	3.49
FL600WNX050	50	60.3	165.1		25.4	73.2	60.5	84.1	91.9	8	19.1	127.0	4.36
FL600WNX065	65	73.0	190.5		28.4	79.2	73.2	100.1	104.6	8	22.4	149.4	6.43
FL600WNX080	80	88.9	209.6		31.8	82.6	88.9	117.3	127.0	8	22.4	168.1	8.53
FL600WNX100	100	114.3	273.1		38.1	101.6	114.3	152.4	157.2	8	25.4	215.9	17.4
FL600WNX150	150	168.3	355.6		47.8	117.3	168.4	222.3	215.9	12	28.4	292.1	34.9
FL600WNX200	200	219.1	419.1		55.6	133.4	219.2	273.1	269.7	12	31.8	349.3	53.9
FL600WNX250	250	273.0	508.0		63.5	152.4	273.1	342.9	323.9	16	35.1	431.8	86.5
FL600WNX300	300	323.8	558.8		66.5	155.4	323.9	400.1	381.0	20	35.1	489.0	103



ANSI CL600 Blind Flange

ANSI CL600 Blind Flange B16.5 A105N

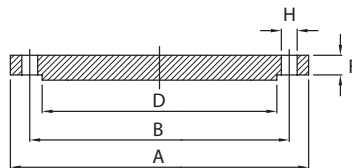
CODE	PIPE		FLANGE		RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	F	D	NUMBER HOLES	H	B	
FL600BL025	25	33.4	124.0	17.5	50.8	4	19.1	88.9	1.60
FL600BL040	40	48.3	155.4	22.4	73.2	4	22.4	114.3	3.25
FL600BL050	50	60.3	165.1	25.4	91.9	8	19.1	127.0	4.15
FL600BL065	65	73.0	190.5	28.4	104.6	8	22.4	149.4	6.13
FL600BL080	80	88.9	209.6	31.8	127.0	8	22.4	168.1	8.44
FL600BL100	100	114.3	273.1	38.1	157.2	8	25.4	215.9	17.30
FL600BL150	150	168.3	355.6	47.8	215.9	12	28.4	292.1	36.10
FL600BL200	200	219.1	419.1	55.6	269.7	12	31.8	349.3	58.90



ANSI CL600 RTJ Blind Flange

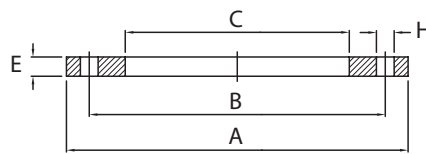
ANSI CL600 RTJ Blind Flange B16.5 A105N

CODE	PIPE		FLANGE		RAISED FACE	DRILLING TEMPLATE			APPROX KG/PC
	NB	OD	A	F	D	NUMBER HOLES	H	B	
FL600BLRTJ050	50	60.3	165.1	25.4	91.9	8	19.1	127.0	4.15
FL600BLRTJ080	80	88.9	209.6	31.8	127.0	8	22.4	168.1	8.44
FL600BLRTJ100	100	114.3	273.1	38.1	157.2	8	25.4	215.9	17.30
FL600BLRTJ150	150	168.3	355.6	47.8	215.9	12	28.4	292.1	36.10
FL600BLRTJ200	200	219.1	419.1	55.6	269.7	12	31.8	349.3	58.90
FL600BLRTJ250	250	273.0	508.0	63.5	323.9	16	35.1	431.8	97.5
FL600BLRTJ300	300	323.8	558.8	66.5	381.0	20	35.1	489.0	124.0



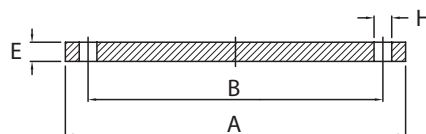
Slip On Plate Flange (Table D)

Slip On Plate Flange AS2129 (Table D)									
CODE	PIPE		FLANGE				BOLT		APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	SIZE	E	
FLTDSO100	100	114.3	215.9	177.8	4	15.9	M16	9.5	3.63
FLTDSO125	125	139.7	254.0	209.5	8	15.9	M16	12.7	5.10
FLTDSO150	150	168.3	279.0	234.9	8	15.9	M16	12.7	6.80
FLTDSO200	200	219.1	336.6	292.1	8	15.9	M16	12.7	11.79
FLTDSO250	250	273.0	406.4	355.6	8	19.0	M20	15.9	22.23
FLTDSO300	300	323.9	457.2	406.4	12	19.0	M20	19.0	33.11



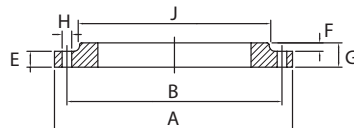
Blind Flange (Table D)

Blind Flange AS2129 (Table D)									
CODE	PIPE		FLANGE				BOLT		APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	SIZE	E	
FLTDBL100	100	114.3	215.9	177.8	4	15.9	M16	12	3.18
FLTDBL125	125	139.7	254.0	209.5	8	15.9	M16	13	5.10
FLTDBL150	150	165.1	279.0	234.9	8	15.9	M16	13	6.80
FLTDBL200	200	219.1	336.6	292.1	8	15.9	M16	13	9.98
FLTDBL250	250	273.0	406.4	355.6	8	19.0	M20	16	19.50
FLTDBL300	300	323.9	457.2	406.4	12	19.0	M20	19	28.58



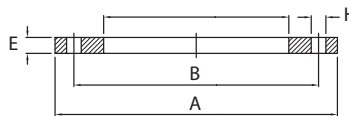
Slip On Forged Flat Face Flange (Table E)

Slip On Flat Face Flange AS2129 (Table E)											
CODE	PIPE		FLANGE				DIMENSIONS OF BOSS		BOLT	G	APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	E	J	SIZE		
FLTESO015	15	21.3	95.3	66.7	4	12.7	9.5	33.3	M12	6.3	0.34
FLTESO020	20	26.9	101.6	73.0	4	12.7	11.1	38.1	M12	6.3	0.45
FLTESO025	25	33.7	114.3	82.6	4	12.7	11.1	47.6	M12	7.1	0.57
FLTESO032	32	42.4	120.7	87.3	4	12.7	11.1	55.6	M12	7.9	0.79
FLTESO040	40	48.3	133.3	98.4	4	12.7	12.7	61.9	M12	8.7	1.02
FLTESO050	50	60.3	152.4	114.3	4	15.9	12.7	74.6	M16	9.5	1.36
FLTESO065	65	76.1	165.1	127.0	4	15.9	15.9	90.5	M16	10.3	1.70
FLTESO080	80	88.9	184.1	146.0	4	15.9	15.9	106.4	M16	11.1	2.27
FLTESO100	100	114.3	215.9	177.8	8	15.9	19.0	133.3	M16	13.7	3.18
FLTESO125	125	139.7	254.0	209.6	8	15.9	19.0	160.3	M16	14.3	4.76
FLTESO150	150	168.3	279.4	235.0	8	19.0	19.0	185.7	M20	17.5	7.48
FLTESO200	200	219.1	336.6	292.1	8	19.0	22.2	241.3	M20	19.0	9.98
FLTESO250	250	273.0	406.4	355.6	12	19.0	27.0	298.5	M20	22.2	15.42
FLTESO300	300	323.9	457.2	406.4	12	22.2	28.6	349.3	M24	25.4	20.41
FLTESO350	350	381.0	527.1	469.9	12	22.2			M24	28.6	
FLTESO400	400	406.4	552.5	495.3	12	22.2			M24	31.8	
FLTESO450	450	450.0	641.4	584.2	16	22.2			M24	34.9	
FLTESO500	500	500.0	704.9	641.4	16	22.2			M24	38.1	
FLTESO600	600	600.0	825.5	755.7	16	28.6			M30	47.6	



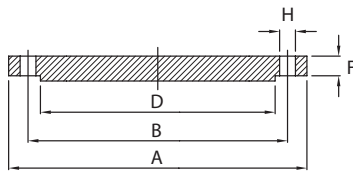
Slip on Plate Flat Face Flange (Table E)

Slip On Flat Face Flange AS 2129 (Table E)									
CODE	PIPE		FLANGE				BOLT		APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	SIZE	E	
FLTESO050P	50	60.3	152.4	114.3	4	15.9	M16	12	1.3
FLTESO065P	65	76.1	165.1	127.0	4	15.9	M16	12	1.5
FLTESO080P	80	88.9	184.1	146.0	4	15.9	M16	12	1.8
FLTESO100P	100	114.3	215.9	177.8	8	15.9	M16	13	2.4
FLTESO125P	125	139.7	254.0	209.6	8	15.9	M16	14	3.6
FLTESO150P	150	168.3	279.4	235.0	8	19.0	M20	17	4.8
FLTESO200P	200	219.1	336.6	292.1	8	19.0	M20	19	7.0
FLTESO250P	250	273.0	406.4	355.6	12	19.0	M20	22	11.1
FLTESO300P	300	323.9	457.2	406.4	12	22.2	M24	25	14.2
FLTESO350P	350	381.0	527.1	469.9	12	22.2	M24	29	24.8
FLTESO400P	400	406.4	552.5	495.3	12	22.2	M24	32	31.5
FLTESO450P	450	450.0	641.4	584.2	16	22.2	M24	35	40.1
FLTESO500P	500	500.0	704.9	641.4	16	22.2	M24	38	52.3
FLTESO600P	600	600.0	825.5	755.7	16	28.6	M30	48	85.4



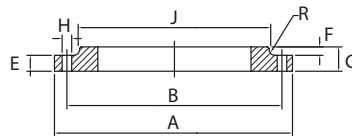
Blind Flange (Table E)

Blind Flange AS2129 (Table E)									
CODE	PIPE		FLANGE				BOLT	E	APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	SIZE		
FLTEBL015	15	21.3	95.3	66.7	4	12.7	M12	14	0.23
FLTEBL020	20	26.9	101.6	73.0	4	12.7	M12	14	0.34
FLTEBL025	25	33.7	114.3	82.6	4	12.7	M12	14	0.57
FLTEBL032	32	42.4	120.7	87.3	4	12.7	M12	14	0.91
FLTEBL040	40	48.3	133.3	98.4	4	12.7	M12	14	1.13
FLTEBL050	50	60.3	152.4	114.3	4	15.9	M16	18	1.36
FLTEBL065	65	76.1	165.1	127.0	4	15.9	M16	18	1.59
FLTEBL080	80	88.9	184.1	146.0	4	15.9	M16	18	2.72
FLTEBL100	100	114.3	215.9	177.8	8	15.9	M16	18	3.63
FLTEBL125	125	139.7	254.0	209.6	8	15.9	M16	18	5.90
FLTEBL150	150	168.3	279.4	235.0	8	19.0	M20	22	8.62
FLTEBL200	200	219.1	336.6	292.1	8	19.0	M20	22	11.79
FLTEBL250	250	273.0	406.4	355.6	12	19.0	M20	22	22.23
FLTEBL300	300	323.9	457.2	406.4	12	22.2	M24	26	33.11
FLTEBL350	350	381.0	527.1	469.9	12	22.2	M24	26	48.54
FLTEBL400	400	406.4	552.5	495.3	12	22.2	M24	26	65.50
FLTEBL450	450	450.0	641.4	584.2	16	22.2	M24	26	87.00
FLTEBL500	500	500.0	704.9	641.4	16	22.2	M24	26	114.75



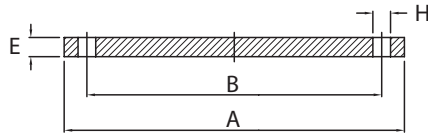
Slip on Forged Flat Face Flange (Table H)

Slip On Flat Face Flange AS2129 (Table H)												
CODE	PIPE		FLANGE				DIMENSIONS OF BOSS			BOLT		APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	F	J		SIZE	E	
FLTHSO015	15	21.3	114.3	82.6	4	15.9	9.5	33.3	47.6	M16	12.7	1.13
FLTHSO020	20	26.9	114.0	82.6	4	15.9	11.1	38.1	47.6	M16	12.7	1.13
FLTHSO025	25	33.7	120.7	87.3	4	15.9	11.1	47.6	52.4	M16	14.3	1.36
FLTHSO032	32	42.4	133.4	98.4	4	15.9	11.1	55.6	63.5	M16	17.5	1.93
FLTHSO040	40	48.3	139.7	104.8	4	15.9	12.7	61.9	69.9	M16	17.5	2.04
FLTHSO050	50	60.3	165.1	127.0	4	15.9	12.7	74.6	92.9	M16	19.0	2.83
FLTHSO065	65	76.1	184.1	146.0	8	15.9	15.9	90.6	111.9	M16	19.0	3.74
FLTHSO080	80	88.9	203.2	165.1	8	15.9	15.9	106.4	130.2	M16	22.2	5.22
FLTHSO100	100	114.3	228.6	190.5	8	15.9	19.0	133.3	152.4	M16	25.4	7.26
FLTHSO125	125	139.7	279.4	235.0	8	19.0	19.0	160.3	190.5	M20	28.6	11.79
FLTHSO150	150	168.3	304.8	260.3	12	19.0	19.0	185.7	215.9	M20	28.6	13.15
FLTHSO200	200	219.1	368.3	323.9	12	19.0	22.2	241.3	279.4	M24	31.8	19.50
FLTHSO250	250	273.0	431.8	381.0	12	22.2	25.4	298.5	328.6	M30	34.9	27.22



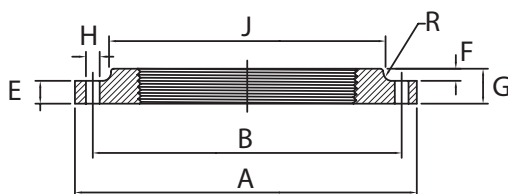
Blind Flange (Table H)

Blind Flange AS2129 (Table H)									
CODE	PIPE		FLANGE				BOLT	E	APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	SIZE		
FLTHBL015	15	21.3	114.3	82.6	4	15.9	M16	13	0.91
FLTHBL020	20	26.9	114.0	82.6	4	15.9	M16	13	1.36
FLTHBL025	25	33.7	120.7	87.3	4	15.9	M16	14	1.59
FLTHBL032	32	42.4	133.4	98.4	4	15.9	M16	17	1.81
FLTHBL040	40	48.3	139.7	104.8	4	15.9	M16	17	1.93
FLTHBL050	50	60.3	165.1	127.0	4	15.9	M16	19	4.08
FLTHBL065	65	76.1	184.1	146.0	8	15.9	M16	19	6.35
FLTHBL080	80	88.9	203.2	165.1	8	15.9	M16	22	8.62
FLTHBL100	100	114.3	228.6	190.5	8	15.9	M16	25	18.14
FLTHBL125	125	139.7	279.4	235.0	8	19.0	M20	29	30.39
FLTHBL150	150	168.3	304.8	260.3	12	19.0	M20	29	32.66
FLTHBL200	200	219.1	368.3	323.9	12	19.0	M24	32	39.46
FLTHBL250	250	273.0	431.8	381.0	12	22.2	M30	35	54.43



Screwed Flat Face Flange (Table E)

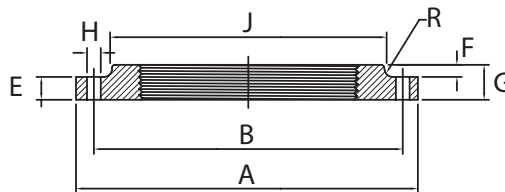
Screwed Flat Face Flange (Table E)											
CODE	PIPE		FLANGE				DIMENSIONS OF BOSS		BOLT	G	APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	J	SIZE			
FLSCTE015	15	21.3	95.3	66.7	4	12.7	9.5	33.3	M12	6.3	0.34
FLSCTE020	20	26.9	101.6	73.0	4	12.7	11.1	38.1	M12	6.3	0.45
FLSCTE025	25	33.7	114.3	82.6	4	12.7	11.1	47.6	M12	7.1	0.57
FLSCTE032	32	42.4	120.7	87.3	4	12.7	11.1	55.6	M12	7.9	0.79
FLSCTE040	40	48.3	133.3	98.4	4	12.7	12.7	61.9	M12	8.7	1.02
FLSCTE050	50	60.3	152.4	114.3	4	15.9	12.7	74.6	M16	9.5	1.36
FLSCTE065	65	76.1	165.1	127.0	4	15.9	15.9	90.5	M16	10.3	1.70
FLSCTE080	80	88.9	184.1	146.0	4	15.9	15.9	106.4	M16	11.1	2.27
FLSCTE100	100	114.3	215.9	177.8	8	15.9	19.0	133.3	M16	13.7	3.18
FLSCTE125	125	139.7	254.0	209.6	8	15.9	19.0	160.3	M16	14.3	4.76
FLSCTE150	150	168.3	279.4	235.0	8	19.0	19.0	185.7	M20	17.5	7.48



Galvanized Screwed Flat Face Flange (Table E)

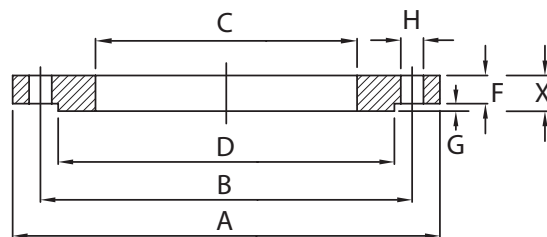
Galvanized Screwed BSP Flat Face Flange AS2129/BS10 Table E

CODE	PIPE		FLANGE				DIMENSIONS OF BOSS			BOLT	E	APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	F	J	R	SIZE		
FLSCTEG015	15	21.3	95.3	66.7	4	12.7	9.5	33.3	38.1	M12	6.3	0.34
FLSCTEG020	20	26.9	101.6	73.0	4	12.7	11.1	38.1	44.5	M12	6.3	0.45
FLSCTEG025	25	33.7	114.3	82.6	4	12.7	11.1	47.6	52.4	M12	7.1	0.57
FLSCTEG032	32	42.4	120.7	87.3	4	12.7	11.1	55.6	57.0	M12	7.9	0.79
FLSCTEG040	40	48.3	133.3	98.4	4	12.7	12.7	61.9	69.9	M12	8.7	1.02
FLSCTEG050	50	60.3	152.4	114.3	4	15.9	12.7	74.6	79.4	M16	9.5	1.36
FLSCTEG065	65	76.1	165.1	127.0	4	15.9	15.9	90.5	92.9	M16	10.3	1.70
FLSCTEG080	80	88.9	184.1	146.0	4	15.9	15.9	106.4	111.9	M16	11.1	2.27
FLSCTEG100	100	114.3	215.9	177.8	8	15.9	19.0	133.3	139.7	M16	13.7	3.18
FLSCTEG125	125	139.7	254.0	209.6	8	15.9	19.0	160.3	171.4	M16	14.3	4.76
FLSCTEG150	150	168.3	279.4	235.0	8	19.0	19.0	185.7	190.5	M20	17.5	7.48



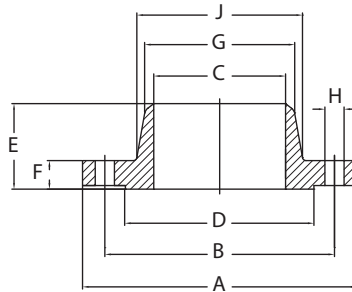
DIN PN16 Forged Slip On RF Flanges

PN16 Slip On RF Flange BS4504 A105N												
CODE	PIPE		FLANGE				RAISED FACE		BOSS	BOLT SIZE	X	APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	D	G				
FL16SO015	15	21.3	95	65	4	14	45	2	35	M12	20	0.65
FL16SO020	20	26.9	105	75	4	14	58	2	45	M12	24	0.95
FL16SO025	25	33.7	115	85	4	14	68	2	52	M12	24	1.14
FL16SO032	32	42.4	140	100	4	18	78	2	60	M16	26	1.69
FL16SO040	40	48.3	150	110	4	18	88	3	70	M16	26	1.86
FL16SO050	50	60.3	165	125	4	18	102	3	85	M16	28	2.53
FL16SO065	65	76.1	185	145	4	18	122	3	105	M16	32	3.06
FL16SO080	80	88.9	200	160	8	18	138	3	118	M16	34	3.70
FL16SO100	100	114.3	220	180	8	18	158	3	140	M16	40	4.62
FL16SO125	125	139.7	250	210	8	18	188	3	168	M16	44	6.30
FL16SO150	150	168.3	285	240	8	22	212	3	195	M20	44	7.75
FL16SO200	200	219.1	340	295	12	22	268	3	247	M20	44	11.30
FL16SO250	250	273.0	405	355	12	26	320	3	300	M27	46	15.60
FL16SO300	300	323.9	460	410	12	26	378	3	355	M27	46	22.00
FL16SO350	350	381.0	520	470	16	26	438	4	400	M27	57	31.20



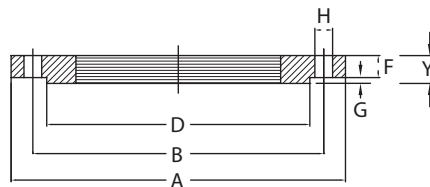
DIN PN16 RF Weld Neck Flange

PN16 RF Weld Neck Flange BS4504 A105N											
CODE	PIPE		FLANGE				NECK	RAISED FACE	BOLT	E	APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	J	D	SIZE		
FL16WN025	25	33.7	115	85	4	14	46	68	M12	38	1.14
FL16WN032	32	42.4	140	100	4	18	56	78	M16	40	1.69
FL16WN040	40	48.3	150	110	4	18	64	88	M16	42	1.86
FL16WN050	50	60.3	165	125	4	18	75	102	M16	45	2.53
FL16WN065	65	76.1	185	145	4	18	90	122	M16	45	3.06
FL16WN080	80	88.9	200	160	8	18	105	138	M16	50	3.70
FL16WN100	100	114.3	220	180	8	18	131	158	M16	52	4.62
FL16WN125	125	139.7	250	210	8	18	156	188	M16	55	6.30
FL16WN150	150	168.3	285	240	8	22	184	212	M20	55	7.75
FL16WN200	200	219.1	340	295	12	22	235	268	M20	62	11.30



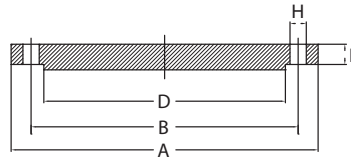
DIN PN16 RF Flange Screwed BSP Thread Galvanized

Galvanized Screwed BSP Flange BS4504 A105N PN16											
CODE	PIPE		FLANGE				RAISED FACE		BOLT	Y	APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	D	G	SIZE		
FLSC16G040	40	48.3	150	110	4	18	88	3	M16	26	1.86
FLSC16G050	50	60.3	165	125	4	18	102	3	M16	28	2.53
FLSC16G065	65	76.1	185	145	4	18	122	3	M16	32	3.06
FLSC16G080	80	88.9	200	160	8	18	138	3	M16	34	3.70



DIN PN16 Blind Flange

PN16 Blank Flange BS4504 A105N										
CODE	PIPE		FLANGE				SPIGOT	BOLT	E	APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	D	SIZE			
FL16BL025	25	33.7	115	85	4	14	-	M12	14	1.2
FL16BL032	32	42.4	140	100	4	18	-	M16	14	1.8
FL16BL040	40	48.3	150	110	4	18	-	M16	14	2.1
FL16BL050	50	60.3	165	125	4	18	-	M16	14	2.9
FL16BL065	65	76.1	185	145	4	18	55	M16	14	3.6
FL16BL080	80	88.9	200	160	8	18	70	M16	16	4.6
FL16BL100	100	114.3	220	180	8	18	90	M16	16	5.6
FL16BL150	150	168.3	285	240	8	22	140	M20	18	10.5
FL16BL200	200	219.1	340	295	12	22	190	M20	20	16
FL16BL250	250	273.0	405	355	12	26	237	M24	22	25



DIN PN40 RF Forged Slip On Flange

PN40 RF Slip On Flange BS4504 A105N												
CODE	PIPE		FLANGE				RAISED FACE		BOSS	BOLT	G	APPROX KG/PC
	NB	OD	A	B	NUMBER HOLES	H	J	Y	R	SIZE		
FL40SO025	25	33.7	115	85	4	14	68	2	52	M12	28	1.29
FL40SO032	32	42.4	140	100	4	18	78	2	60	M16	78	1.88
FL40SO040	40	48.3	150	110	4	18	88	3	70	M16	88	2.33
FL40SO050	50	60.3	165	125	4	18	102	3	85	M16	102	2.82
FL40SO065	65	76.1	185	145	8	18	122	3	105	M16	122	3.74
FL40SO080	80	88.9	200	160	8	18	138	3	118	M16	138	4.75
FL40SO100	100	114.3	235	190	8	22	162	3	145	M20	162	6.52
FL40SO150	150	168.3	300	250	8	26	218	3	200	M24	218	11.80
FL40SO200	200	219.1	375	320	12	30	285	3	260	M27	285	21.50

