

ORIFICE FLANGE ASSEMBLIES MODELS : F500 SERIES

WISE[®]

DESCRIPTION

Orifice Flange Assemblies are used in conjunction with Orifice Plate for flow measurement of smaller or medium size pipes at lower or medium pressure ranges. The flange connection is an RF type and the differential Pressure tapping system is the flange taps.



SPECIFICATION

ORIFICE BORE TYPE -

Welding neck
Slip-on
Socket-Weld
Ring-joint welding neck

NOMINAL DIAMETERS -

25mm(1 inch) to 500mm(20inches)

FLANGE RATINGS -

JIS 10, 20, 30, 40, 63
ANSI (or JPI) 150, 300, 600 lb RF

FLANGE MATERIAL -

A105, A182-F304, A182-F316, A182-F11,
A182-F22, A350-LF2

MATERIALS OF BOLTS AND NUTS -

Stud bolts : SNB7, A193-B7, A194-B8
Nuts : S45C, A194-2, A194-8
Jack bolts and nuts : S25C, A307

GASKET -

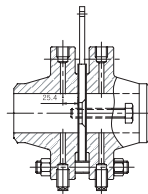
Thickness : 1.5mm, 4.5mm
Material : Asbestos sheet gaskets, spiral wound gaskets

PIPING CONNECTION METHOD -

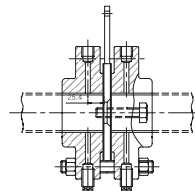
ANSI 150# : Insertion welding type(Slip-on-type)
ANSI 300#,600# : Butt welding type(Welding neck)
ANSI 600# : Butt welding neck(Ring-joint WN)

DIFFERENTIAL PRESSURE PIPING CONNECTION -

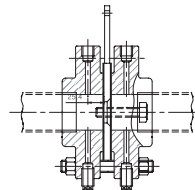
Select referring to the model number construction table



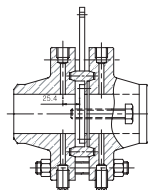
MODEL : F500-W



MODEL : F500-S



MODEL : F500-O



MODEL : F500-J

ORIFICE ORDERING INFORMATION

(Flange)

F500

TYPE

W : Welding Neck J : RTJ
O : Socket-Weld K : Other
S : Slip On

LINE SIZE

JIS (mm)	ANSI (inch)	DIN (mm)	JIS (mm)	ANSI (inch)	DIN (mm)
J015 : 15A	A001 : 1/2B	D015 : 15A	J250 : 250A	A012 : 10B	D250 : 250A
J020 : 20A	A002 : 3/4B	D020 : 20A	J300 : 300A	A013 : 12B	D300 : 300A
J025 : 25A	A003 : 1B	D025 : 25A	J350 : 350A	A014 : 14B	D350 : 350A
J040 : 40A	A004 : 1 1/2B	D040 : 40A	J400 : 400A	A015 : 16B	D400 : 400A
J050 : 50A	A005 : 2B	D050 : 50A	J450 : 450A	A016 : 18B	D450 : 450A
J065 : 65A	A006 : 2 1/2B	D065 : 65A	J500 : 500A	A017 : 20B	D500 : 500A
J080 : 80A	A007 : 3B	D080 : 80A	J600 : 600A	A018 : 24B	D600 : 600A
J100 : 100A	A008 : 5B	D100 : 100A	J700 : 700A	A019 : 28B	D700 : 700A
J125 : 125A	A009 : 5B	D125 : 125A	J800 : 800A	A020 : 32B	D800 : 800A
J150 : 150A	A010 : 6B	D150 : 150A	J000 : 1000A	A021 : 40B	D000 : 1000A
J200 : 200A	A011 : 8B	D200 : 200A	XXXX : OTHER		

TAP NIPPLE

A : 1/2" NPT/75L+150L N : None O : Other

FLANGE RATING

JIS	ANSI	DIN
J010 : JIS 10K	A010 : ANSI 150#	P010 : PN10
J016 : JIS 16K	A020 : ANSI 300#	P016 : PN16
J020 : JIS 20K	A030 : ANSI 600#	P025 : PN25
J030 : JIS 30K	A040 : ANSI 900#	P040 : PN40
J040 : JIS 40K	A050 : ANSI 1500#	
J063 : JIS 63K	A060 : ANSI 2500#	

MATERIAL

C : A105 4 : A182F304 Z : Other

BOLT/NUTS MATERIAL

1 : B7/2H 2 : B8/8 O : Other

GASKETS MATERIAL

N1 : None Asbestos 1.5t
OH : Other
T1 : Teflon 1.5t NO : None
SW : Spiral Wound 4.5t

OPTION(Same as Flange Mat'l)

1 : Meter Run(Flanged)
2 : Meter Run(Weld On)
3 : Tap Valve
NO : None

F500

W

A011

N

A020

C

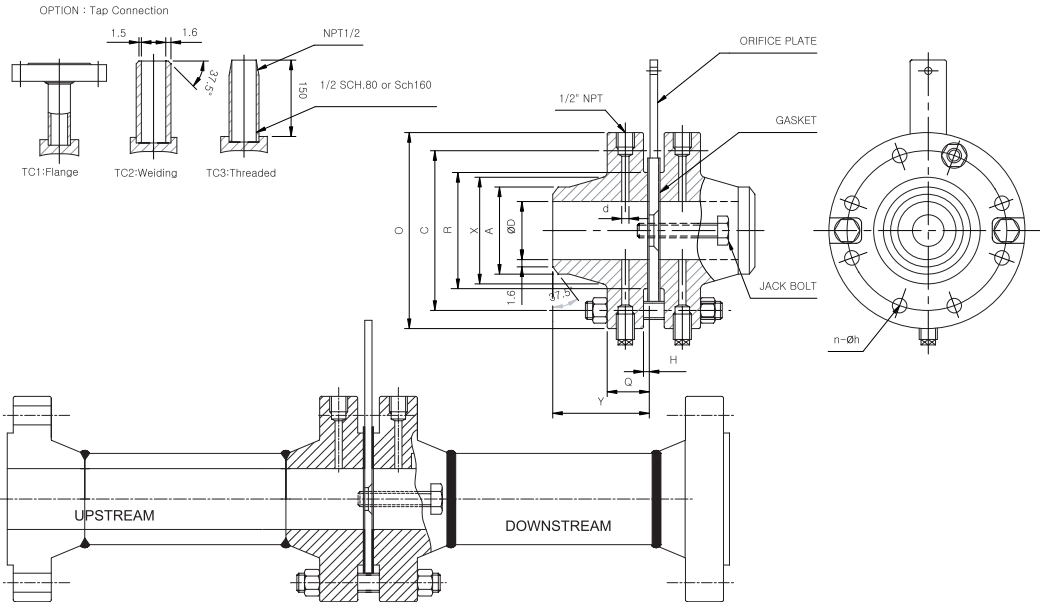
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SW

N

DIMENSION

WISE®



FOR ANSI 300 FLANGES

Nominal Pipe Size	Diam of Flange O	Thickness of Flange Q	Dof Hub of Wedge A	Diam of Hub X	Length Through Hub	Pitch Diam of Groove	Depth of Groove E	Diam of Tab Holes d	Diam of Bolts Circle c	Number of bolt	Bolt Size
11/2	155.6	38.1	48.6	69.9	85.8	68.26	6.4	4	114.3	4	3/4
2	165.1	39.7	60.5	84.1	87.3	82.55	7.9	4	127.0	8	5/8
2 1/2	190.5	39.7	76.3	100.0	90.5	101.60	7.9	4	149.2	8	3/4
3	209.6	39.7	89.1	117.5	90.5	123.83	7.9	6	168.3	8	3/4
3 1/2	228.6	39.7	101.6	133.4	90.5	131.76	7.9	6	184.2	8	3/4
4	254.0	39.7	114.3	146.1	93.6	149.23	7.9	6	200.0	8	3/4
5	279.4	42.9	139.8	177.8	106.3	180.98	7.9	8	235.0	8	3/4
6	317.5	44.5	165.2	206.4	106.3	211.14	7.9	8	269.9	12	3/4
8	381.0	49.3	216.3	260.4	119.1	269.88	7.9	12	330.2	12	7/8
10	444.5	55.6	267.4	320.7	125.4	323.85	7.9	12	387.4	16	1
12	520.7	58.8	318.5	374.7	138.2	381.00	7.9	12	450.9	16	1 1/8
14	584.2	62.0	365.5	425.5	150.9	419.10	7.9	12	514.4	20	1 1/8

FOR ANSI 600 FLANGES

Nominal Pipe Size	Diam of Flange O	Thickness of Flange Q	Dof Hub of Wedge A	Diam of Hub X	Length Through Hub	Pitch Diam of Groove	Depth of Groove E	Diam of Tab Holes d	Diam of Bolts Circle c	Number of bolt	Bolt Size
11/2	155.6	38.1	48.6	69.9	85.8	68.26	6.4	4	114.3	4	3/4
2	165.1	39.7	60.5	84.1	87.3	82.55	7.9	4	127.0	8	5/8
2 1/2	190.5	39.7	76.3	100.0	90.5	101.60	7.9	4	149.2	8	3/4
3	209.6	39.7	89.1	117.5	90.5	123.83	7.9	6	168.3	8	3/4
3 1/2	228.6	42.9	101.6	133.4	93.6	131.76	7.9	6	184.2	8	7/8
4	273.1	46.1	114.3	152.4	109.6	149.23	7.9	6	215.9	8	7/8
5	330.2	52.4	139.8	188.9	122.2	180.98	7.9	8	266.7	8	1
6	355.6	55.6	165.2	222.3	125.4	211.14	7.9	8	292.1	12	1
8	419.1	63.5	216.3	273.1	141.3	269.88	7.9	12	349.3	12	1 1/8
10	508.0	71.5	267.4	342.9	160.4	323.85	7.9	12	431.8	16	1 1/4
12	558.8	74.5	318.5	400.1	163.6	381.00	7.9	12	489.0	16	1 1/4
14	603.3	77.8	365.5	431.8	173.0	419.10	7.9	12	527.1	20	1 3/8

FOR ANSI 900 FLANGES

Nominal Pipe Size	Diam of Flange O	Thickness of Flange Q	Dof Hub of Wedge A	Diam of Hub X	Length Through Hub	Pitch Diam of Groove R	Depth of Groove E	Diam of Tab Holes d	Diam of Bolts Circle c	Number of bolt	Bolt Size
11/2	177.8	38.1	48.6	69.9	89.0	68.26	6.4	4	123.8	4	1
2	215.9	46.1	60.5	104.8	109.6	95.25	7.9	4	163.1	8	7/8
2 1/2	244.5	49.7	116.9	123.8	112.8	107.95	7.9	4	190.6	8	1
3	241.3	46.1	89.1	127.0	109.6	123.83	7.9	6	190.5	8	7/8
4	292.1	52.4	114.3	158.8	122.2	149.23	7.9	6	235.0	8	1 1/8
5	349.3	58.8	139.8	190.5	135.0	180.98	7.9	8	279.4	8	1 1/4
6	381.0	63.5	165.2	235.0	147.6	211.14	7.9	8	317.5	12	1 1/8
8	469.9	71.5	216.3	298.5	169.9	269.88	7.9	12	393.7	12	1 3/8
10	546.1	77.8	267.4	368.3	192.1	323.85	7.9	12	469.9	16	1 3/8
12	609.1	87.4	318.5	419.1	208.0	381.00	7.9	12	533.4	16	1 3/8
14	641.4	96.9	355.6	450.9	223.8	419.10	11.1	12	558.8	20	1 1/2

FOR ANSI 1500 FLANGES

Nominal Pipe Size	Diam of Flange O	Thickness of Flange Q	Dof Hub of Wedge A	Diam of Hub X	Length Through Hub	Pitch Diam of Groove R	Depth of Groove E	Diam of Tab Holes d	Diam of Bolts Circle c	Number of bolt	Bolt Size
11/2	100.8	38.1	118.6	69.9	89.0	68.26	6.11	11	112.8	11	1
2	215.9	46.1	60.5	104.8	109.6	95.25	7.9	4	165.1	8	7/8
2 1/2	244.5	49.3	76.3	123.8	112.8	107.95	7.9	4	190.5	8	1
3	266.7	55.6	89.1	133.4	125.4	136.3	7.9	6	203.2	8	1 1/8
4	311.2	62.0	114.3	161.9	131.8	161.93	7.9	6	241.3	8	1 1/4
5	374.7	81.0	139.8	196.9	163.5	193.68	7.9	8	292.1	8	1 1/2
6	393.7	92.1	165.2	228.6	181.0	211.14	9.55	8	317.5	12	1 3/8
8	482.6	103.2	216.3	292.1	223.8	269.88	11.1	12	393.7	12	1 5/8
10	584.2	119.1	267.4	368.3	265.1	323.85	11.1	12	482.6	12	1 7/8
12	673.1	138.2	318.5	450.9	296.9	381.00	14.3	12	571.5	16	2
14	749.3	149.3	355.6	495.3	314.4	419.10	15.9	12	635.0	16	2 1/4

WISE®



FOR JIS 30K FLANGES

FOR JIS 16/20K FLANGES

FOR JIS 40K FLANGES

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