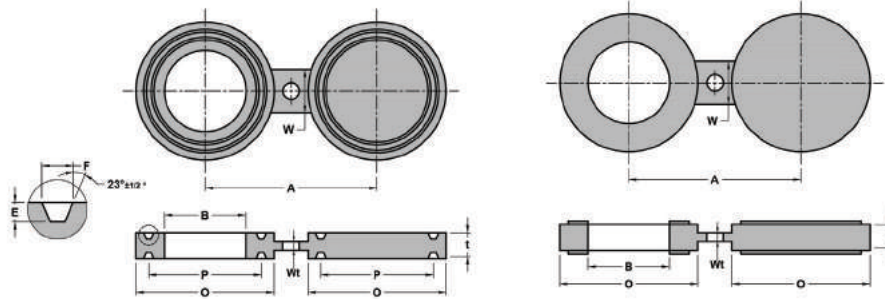


Spectacle Blind B16.48



Komplek Ruko Intercon Plaza Blok D No. 9, Jl. Meruya Ilir raya , Srengeseng , Jakarta Barat 11630
Phone : 6221 5890 1302 Email : unggulpp@upp.co.id Web : www.unggulpp.com

CLASS 150 / 300 FLANGES



Class 150 FIGURE 8 BLANK RAISED FACE & FEMALE RING-JOINT FACING

Unit : mm

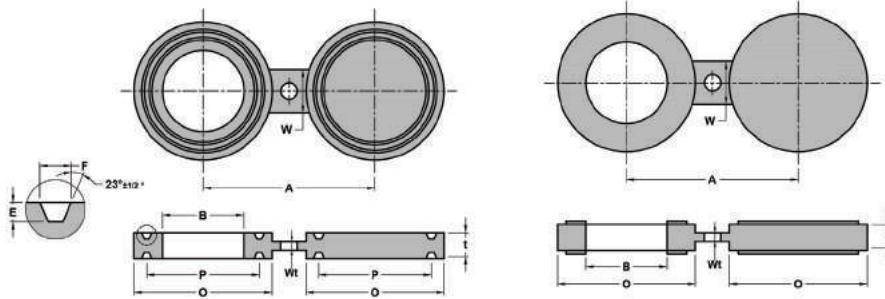
Nominal Pipe Size	SPECTACLE RAISED FACE						SPECTACLE RING JOINT FACING								
	Inside Diam	Outside Diam	Center-line Diam	Thick-ness	Web Width	Hole Diam.	Inside Diam	Outside Diam	Center-line Diam	Thick-ness	Web Width	Pitch Diam	Width of Groove	Depth of Groove	Hole Diam.
	B	O	A	t	W		B	O	A	t	W	P	F	E	
1/2	15.7	44.5	60.5	3.0	38.1	15.7	-	-	-	-	-	-	-	-	-
3/4	20.8	53.8	69.9	3.0	38.1	15.7	-	-	-	-	-	-	-	-	-
1	26.7	63.5	79.2	3.0	38.1	15.7	33.5	63.5	79.2	19.1	50.8	47.6	8.7	6.4	15.7
1 1/4	42.2	73.2	88.9	6.4	38.1	15.7	42.2	73.2	88.9	19.1	50.8	57.2	8.7	6.4	15.7
1 1/2	48.3	82.6	98.6	6.4	38.1	15.7	48.3	82.6	98.6	19.1	57.2	65.1	8.7	6.4	15.7
2	60.5	101.6	120.7	6.4	50.8	19.1	60.5	101.6	120.7	19.1	57.2	82.6	8.7	6.4	19.1
2 1/2	73.2	120.7	139.7	6.4	50.8	19.1	73.2	120.7	139.7	22.4	57.2	101.6	8.7	6.4	19.1
3	88.9	133.4	152.4	6.4	63.5	19.1	88.9	133.4	152.4	22.4	57.2	114.3	8.7	6.4	19.1
3 1/2	101.6	158.8	177.8	9.7	63.5	19.1	101.6	153.9	177.8	22.4	63.5	131.8	8.7	6.4	19.1
4	114.3	171.5	190.5	9.7	63.5	19.1	114.3	171.5	190.5	22.4	63.5	149.2	8.7	6.4	19.1
5	141.2	193.5	215.9	9.7	76.2	22.4	141.2	193.5	215.9	25.4	69.9	171.5	8.7	6.4	22.4
6	168.1	128.9	241.3	12.7	76.2	22.4	168.1	218.9	241.3	25.4	82.6	193.7	8.7	6.4	22.4
8	218.9	276.4	298.5	12.7	76.2	22.4	218.9	273.1	298.5	28.4	95.3	247.7	8.7	6.4	22.4
10	273.1	336.6	362.0	15.7	101.6	25.4	273.1	330.2	362.0	31.8	101.6	304.8	8.7	6.4	25.4
12	323.9	406.4	431.8	19.1	101.6	25.4	323.9	406.4	431.8	35.1	120.7	381.0	8.7	6.4	25.4
14	355.6	447.5	476.3	19.1	108.0	28.4	355.6	425.5	476.3	35.1	127.0	396.9	8.7	6.4	28.4
16	406.4	511.0	539.8	22.4	108.0	28.4	406.4	482.6	539.8	38.1	127.0	454.0	8.7	6.4	28.4
18	457.2	546.1	577.9	25.4	114.3	31.8	457.2	546.1	577.9	41.1	127.0	517.5	8.7	6.4	31.8
20	508.0	603.3	635.0	28.4	120.7	31.8	508.0	596.9	635.0	41.1	127.0	558.8	8.7	6.4	31.8
24	609.6	714.2	749.3	31.8	139.7	35.1	609.6	711.2	749.3	47.8	152.4	673.1	8.7	6.4	35.1

Class 300 FIGURE 8 BLANK RAISED FACE & FEMALE RING-JOINT FACING

Unit : mm

Nominal Pipe Size	SPECTACLE RAISED FACE						SPECTACLE RING JOINT FACING								
	Inside Diam	Outside Diam	Center-line Diam	Thick-ness	Web Width	Hole Diam.	Inside Diam	Outside Diam	Center-line Diam	Thick-ness	Web Width	Pitch Diam	Width of Groove	Depth of Groove	Hole Diam.
	B	O	A	t	W		B	O	A	t	W	P	F	E	
1/2	15.7	50.8	66.5	6.4	38.1	15.7	21.3	50.8	57.4	15.7	38.1	34.1	7.1	5.6	15.7
3/4	20.8	63.5	82.6	6.4	38.1	19.1	26.7	63.5	82.6	19.1	44.5	42.9	8.7	6.4	19.1
1	26.7	69.9	88.9	6.4	38.1	19.1	33.5	69.9	88.9	19.1	50.8	50.8	8.7	6.4	19.1
1 1/4	42.2	79.2	98.6	6.4	38.1	19.1	42.2	79.2	98.6	22.4	50.8	60.3	8.7	6.4	19.1
1 1/2	48.3	91.9	114.3	6.4	50.8	22.4	48.3	90.4	114.3	22.4	57.2	68.3	8.7	6.4	22.4
2	60.5	108.0	127.0	9.7	50.8	19.1	60.5	108.0	127.0	25.4	57.2	82.6	11.9	7.9	19.1
2 1/2	73.2	127.0	149.4	9.7	63.5	22.4	73.2	127.0	149.4	28.4	57.2	101.6	11.9	7.9	22.4
3	88.9	146.1	168.1	9.7	63.5	22.4	88.9	146.1	168.1	28.4	57.2	123.8	11.9	7.9	22.4
3 1/2	101.6	162.1	184.2	12.7	63.5	22.4	101.6	158.8	184.2	28.4	63.5	131.8	11.9	7.9	22.4
4	114.3	177.8	200.2	12.7	63.5	22.4	114.3	174.8	200.2	31.8	63.5	149.2	11.9	7.9	22.4
5	141.2	212.9	235.0	15.7	76.2	22.4	141.2	209.6	235.0	35.1	69.9	181.0	11.9	7.9	22.4
6	168.1	247.7	269.7	15.7	76.2	22.4	168.1	241.3	269.7	35.1	82.6	211.2	11.9	7.9	22.4
8	218.9	304.8	330.2	22.4	88.9	25.4	218.9	301.8	330.2	41.1	95.3	269.9	11.9	7.9	25.4
10	273.1	358.6	387.4	25.4	101.6	28.4	273.1	355.6	387.4	44.5	101.6	323.9	11.9	7.9	28.4
12	323.9	419.1	450.9	28.4	101.6	31.8	323.9	412.8	450.9	50.8	120.7	381.0	11.9	7.9	31.8
14	355.6	482.6	514.4	31.8	120.7	31.8	355.6	457.2	514.4	53.8	127.0	419.1	11.9	7.9	31.8
16	406.4	536.4	571.5	38.1	124.0	35.1	406.4	508.0	571.5	57.2	127.0	469.9	11.9	7.9	35.1
18	457.2	593.9	628.7	41.1	114.3	35.1	457.2	574.5	628.7	60.5	127.0	533.4	11.9	7.9	35.1
20	508.0	650.7	685.8	44.5	120.7	35.1	508.0	635.0	685.8	69.9	127.0	584.2	13.5	9.5	35.1
24	609.6	771.7	812.8	50.8	139.7	41.1	609.6	749.3	812.8	79.2	152.4	692.2	16.7	11.1	41.1

CLASS 600 / 900 FLANGES



Class 600 FIGURE 8 BLANK RAISED FACE & FEMALE RING-JOINT FACING

Unit : mm

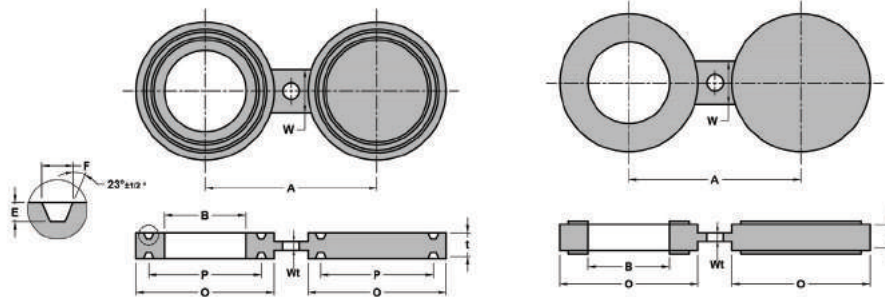
Nominal Pipe Size	SPECTACLE RAISED FACE						SPECTACLE RING JOINT FACING								
	Inside Diam	Outside Diam	Center-line Diam	Thick-ness	Web Width	Hole Diam.	Inside Diam	Outside Diam	Center-line Diam	Thick-ness	Web Width	Pitch Diam	Width of Groove	Depth of Groove	Hole Diam.
	B	O	A	t	W		B	O	A	t	W	P	F	E	
1/2	15.7	50.8	66.5	6.4	38.1	15.7	21.3	50.8	57.4	19.1	38.1	34.1	7.1	5.6	15.7
3/4	20.8	63.5	82.6	6.4	38.1	19.1	26.7	63.5	82.6	22.4	44.5	42.9	8.7	6.4	19.1
1	26.7	69.9	88.9	6.4	57.2	19.1	33.5	69.9	88.9	22.4	50.8	50.8	8.7	6.4	19.1
1 1/4	36.6	79.2	98.6	9.7	57.2	19.1	42.2	79.2	98.6	22.4	50.8	60.3	8.7	6.4	19.1
1 1/2	42.7	91.9	114.3	9.7	66.5	22.4	48.3	90.4	114.3	22.4	57.2	68.3	8.7	6.4	22.4
2	54.9	108.0	127.0	9.7	57.2	19.1	60.5	108.0	127.0	28.4	57.2	82.6	11.9	7.9	19.1
2 1/2	67.1	127.0	149.4	12.7	66.5	22.4	73.2	127.0	149.4	31.8	57.2	101.6	11.9	7.9	22.4
3	82.8	146.1	168.1	12.7	66.5	22.4	88.9	146.1	168.1	31.8	57.2	128.8	11.9	7.9	22.4
3 1/2	95.5	158.8	184.2	15.7	76.2	25.4	101.6	158.8	184.2	35.1	63.5	131.8	11.9	7.9	25.4
4	108.2	190.5	215.9	15.7	76.2	25.4	114.3	174.8	215.9	35.1	63.5	149.2	11.9	7.9	25.4
5	134.6	238.3	266.7	19.1	85.9	28.4	141.2	209.6	266.7	38.1	69.9	181.0	11.9	7.9	28.4
6	161.5	263.7	292.1	22.4	85.9	28.4	168.1	241.3	292.1	44.5	82.6	211.2	11.9	7.9	28.4
8	211.6	317.5	349.3	28.4	95.3	31.8	218.9	301.8	349.3	50.8	95.3	269.9	11.9	7.9	31.8
10	264.7	396.7	431.8	35.1	104.6	35.1	273.1	355.6	431.8	57.2	101.6	323.9	11.9	7.9	35.1
12	314.7	454.2	489.0	41.1	104.6	35.1	323.9	412.8	489.0	63.5	120.7	381.0	11.9	7.9	35.1
14	345.9	489.0	527.1	44.5	114.3	38.1	355.6	457.2	527.1	66.5	127.0	419.1	11.9	7.9	38.1
16	396.7	561.8	603.3	50.8	124.0	41.1	406.4	508.0	603.3	73.2	127.0	469.9	11.9	7.9	41.1
18	447.5	609.6	654.1	53.8	133.4	44.5	457.2	574.5	654.1	79.2	127.0	533.4	11.9	7.9	44.5
20	496.8	679.5	723.9	63.5	133.4	44.5	508.0	635.0	723.9	88.9	127.0	584.2	13.5	9.5	44.5
24	596.9	787.4	838.2	73.2	152.4	50.8	609.6	749.3	838.2	104.6	152.4	692.2	16.7	11.1	50.8

Class 900 FIGURE 8 BLANK RAISED FACE & FEMALE RING-JOINT FACING

Unit : mm

Nominal Pipe Size	SPECTACLE RAISED FACE						SPECTACLE RING JOINT FACING								
	Inside Diam	Outside Diam	Center-line Diam	Thick-ness	Web Width	Hole Diam.	Inside Diam	Outside Diam	Center-line Diam	Thick-ness	Web Width	Pitch Diam	Width of Groove	Depth of Groove	Hole Diam.
	B	O	A	t	W		B	O	A	t	W	P	F	E	
1/2	15.7	60.5	82.6	6.4	38.1	22.4	21.3	60.5	82.6	22.4	38.1	39.4	8.7	6.4	22.4
3/4	20.8	66.5	88.9	6.4	41.1	22.4	26.7	66.5	88.9	22.4	44.5	44.5	8.7	6.4	22.4
1	26.7	76.2	101.6	6.4	57.2	25.4	33.5	71.4	101.6	22.4	50.8	50.8	8.7	6.4	25.4
1 1/4	36.6	85.9	111.3	9.7	57.2	25.4	42.2	81.0	111.3	25.4	50.8	60.3	8.7	6.4	25.4
1 1/2	42.7	95.3	124.0	9.7	66.5	28.4	48.3	91.9	124.0	25.4	63.5	68.3	8.7	6.4	28.4
2	54.9	139.7	165.1	12.7	57.2	25.4	60.5	124.0	165.1	31.8	50.8	95.3	11.9	7.9	25.4
2 1/2	67.1	162.1	190.5	12.7	66.5	28.4	73.2	136.7	190.5	35.1	66.5	108.0	11.9	7.9	28.4
3	82.8	165.1	190.5	15.7	66.5	25.4	88.9	155.4	190.5	35.1	66.5	123.8	11.9	7.9	25.4
4	108.2	203.2	235.0	19.1	76.2	31.8	114.3	180.8	235.0	41.1	73.2	149.2	11.9	7.9	31.8
5	134.6	244.3	279.4	22.4	85.9	35.1	141.2	215.9	279.4	44.5	73.2	181.0	11.9	7.9	35.1
6	161.5	285.8	317.5	25.4	85.9	31.8	168.1	241.3	317.5	47.8	73.2	211.2	11.9	7.9	31.8
8	211.6	355.6	393.7	35.1	95.3	38.1	218.9	307.8	393.7	57.2	79.2	269.9	11.9	7.9	38.1
10	264.7	431.8	469.9	41.1	104.6	38.1	273.1	362.0	469.9	63.5	120.7	323.9	11.9	7.9	38.1
12	314.7	495.3	533.4	47.8	104.6	38.1	323.9	419.1	533.4	73.2	120.7	381.0	11.9	7.9	38.1
14	345.9	517.7	558.8	53.8	114.3	41.1	355.6	466.9	558.8	82.6	120.7	419.1	16.7	11.1	41.1
16	396.7	571.5	616.6	60.5	124.0	44.5	406.4	523.7	616.0	91.9	127.0	469.9	16.7	11.1	44.5
18	447.5	635.0	685.8	66.5	133.4	50.8	457.2	593.9	685.8	101.6	133.4	533.4	19.8	12.7	50.8
20	496.8	695.5	749.3	73.2	133.4	53.8	508.0	647.7	749.3	111.3	127.0	584.2	19.8	12.7	53.8
24	596.9	835.2	901.7	88.9	152.4	66.5	609.6	771.7	901.7	133.4	139.7	692.2	27.0	15.9	66.5

CLASS 1500 / 2500 FLANGES



Class 1500 FIGURE 8 BLANK RAISED FACE & FEMALE RING-JOINT FACING

Unit : mm

Nominal Pipe Size	SPECTACLE RAISED FACE						SPECTACLE RING JOINT FACING								
	Inside Diam	Outside Diam	Center-line Diam	Thick-ness	Web Width	Hole Diam.	Inside Diam	Outside Diam	Center-line Diam	Thick-ness	Web Width	Pitch Diam	Width of Groove	Depth of Groove	Hole Diam.
	B	O	A	t	W		B	O	A	t	W	P	F	E	
1/2	15.7	60.5	82.6	6.4	38.1	22.4	21.3	60.5	82.6	22.4	38.1	39.4	8.7	6.4	22.4
3/4	20.8	66.5	88.9	9.7	41.1	22.4	26.7	66.5	88.9	25.4	44.5	44.5	8.7	6.4	22.4
1	26.7	76.2	101.6	9.7	63.5	25.4	33.5	71.4	101.6	25.4	53.8	50.8	8.7	6.4	25.4
1 1/4	35.1	85.9	111.3	9.7	63.5	25.4	42.2	81.0	111.3	25.4	53.8	60.3	8.7	6.4	25.4
1 1/2	40.9	95.3	124.0	12.7	69.9	28.4	48.3	91.9	124.0	28.4	57.2	68.3	8.7	6.4	28.4
2	52.6	139.7	165.1	12.7	69.9	25.4	60.5	124.0	165.1	35.1	53.8	95.3	11.9	7.9	25.4
2 1/2	62.7	162.1	190.5	15.7	76.2	28.4	73.2	136.7	190.5	38.1	57.2	108.0	11.9	7.9	28.4
3	78.0	171.5	203.2	19.1	76.2	31.8	88.9	168.1	203.2	44.5	73.2	136.5	11.9	7.9	31.8
4	102.4	206.2	241.3	22.4	88.9	35.1	114.3	193.5	241.3	47.8	76.2	161.9	11.9	7.9	35.1
5	128.3	251.0	292.1	28.4	88.9	41.1	141.2	228.6	292.1	53.8	76.2	193.7	11.9	7.9	41.1
6	153.9	279.4	317.5	35.1	88.9	38.1	168.1	247.7	317.5	60.5	79.2	211.2	13.5	9.5	38.1
8	202.7	349.3	393.7	41.1	101.6	44.5	218.9	317.5	482.6	73.2	85.9	269.9	16.7	11.1	44.5
10	254.5	431.8	482.6	50.8	114.3	50.8	273.1	371.3	571.5	82.6	133.4	323.9	16.7	11.1	50.8
12	303.3	517.7	571.5	60.5	114.3	53.8	323.9	438.2	635.0	101.6	133.4	381.0	23.0	14.3	53.8
14	333.2	574.5	635.0	66.5	127.0	60.5	355.6	489.0	704.9	111.3	139.7	419.1	27.0	15.9	60.5
16	381.0	638.0	704.9	76.2	133.4	66.5	406.4	546.1	774.7	124.0	146.1	469.9	30.2	17.5	66.5
18	428.8	701.5	774.7	85.9	146.1	73.2	457.2	612.6	831.9	133.4	152.4	533.4	30.2	17.5	73.2
20	477.8	752.3	831.9	95.3	152.4	79.2	508.0	673.1	749.3	142.7	165.1	584.2	33.4	17.5	79.2
24	574.5	898.7	990.6	111.3	177.8	91.9	609.6	793.8	990.6	168.1	177.8	692.2	36.5	20.6	91.9

Class 2500 FIGURE 8 BLANK RAISED FACE & FEMALE RING-JOINT FACING

Unit : mm

Nominal Pipe Size	SPECTACLE RAISED FACE						SPECTACLE RING JOINT FACING								
	Inside Diam	Outside Diam	Center-line Diam	Thick-ness	Web Width	Hole Diam.	Inside Diam	Outside Diam	Center-line Diam	Thick-ness	Web Width	Pitch Diam	Width of Groove	Depth of Groove	Hole Diam.
	B	O	A	t	W		B	O	A	t	W	P	F	E	
1/2	15.7	66.5	88.9	9.7	38.1	22.4	21.3	65.0	88.9	25.4	38.1	42.9	8.7	6.4	22.4
3/4	20.8	73.2	95.3	9.7	41.1	22.4	26.7	73.2	95.3	28.4	44.5	50.8	8.7	6.4	22.4
1	26.7	82.6	108.0	9.7	63.5	25.4	33.5	82.6	108.0	28.4	53.8	60.3	8.7	6.4	25.4
1 1/4	35.1	101.6	130.0	12.7	63.5	28.4	42.2	101.6	130.0	35.1	53.8	72.2	11.9	7.9	28.4
1 1/2	40.9	114.3	146.1	15.7	69.9	31.8	48.3	114.3	146.1	38.1	60.5	82.6	11.9	7.9	31.8
2	52.6	142.7	171.5	15.7	69.9	28.4	60.5	133.4	171.5	41.1	57.2	101.6	11.9	7.9	28.4
2 1/2	62.7	165.1	196.9	19.1	76.2	31.8	73.2	149.4	196.9	47.8	60.5	111.1	13.5	9.5	31.8
3	78.0	193.5	228.6	22.4	76.2	35.1	88.9	168.1	228.6	50.8	76.2	127.0	13.5	9.5	35.1
4	102.4	231.6	273.1	28.4	88.9	41.1	114.3	203.2	273.1	63.5	82.6	157.2	16.7	11.1	41.1
5	128.3	276.4	323.9	35.1	88.9	47.8	141.2	241.3	323.9	73.2	88.9	190.5	19.8	12.7	47.8
6	153.9	314.5	368.3	41.1	88.9	53.8	168.1	279.4	368.3	82.6	95.3	228.6	19.8	12.7	53.8
8	198.4	384.0	438.2	53.8	101.6	53.8	218.9	339.9	438.2	98.6	95.3	279.4	23.0	14.3	53.8
10	247.7	472.9	539.8	66.5	114.3	66.5	273.1	425.5	539.8	117.3	90.9	342.9	30.2	17.5	66.5
12	288.8	546.1	619.3	79.2	114.3	73.2	323.9	495.3	619.3	133.4	152.4	406.4	33.4	17.5	73.2

Notes :

- (1) Holes size(where required due to bolt spacing) shall be the same as the flange bolt hole, and located such that is will not interfere with bolting between two flanges
- (2) The thickness of the web(or tie bar) dimension Wt shall be 0.25 in. minimum, except when t is less than 0.25 in., Wt shall equal t