

Flanges

These forged flanges are used to connect two pieces of pipe or valve onto a line. In order to meet our customer needs they come in different connection types and sizes. For proper flange gasket sealing, care must be taken when threading or welding to assure flanges are parallel to each other and perpendicular to the pipe. Gaskets should be lightly oiled and all bolts must be tightened evenly.

Standard Flange Specifications

Material: 13mm - 150mm (½" - 6") Forged Steel and conform to ASTM A105
 Temperature Range: 13mm - 100mm (½" - 4") -45°C - 105°C (-50°F - 220°F)
 125mm - 200mm (5" - 8") -50°C - 105°C (-60°F - 220°F)
 Maximum Rated Pressure (MRP) 28 barg (406 psig)
 Gasket Material: 13mm - 200mm (½" - 8") Garlock 2930

Stainless Steel Flange Specifications

Material: 13mm (½") 304SS ASTM A314
 Temperature Range: 13mm (½") -45°C - 105°C (-50°F - 220°F)
 Maximum Rated Pressure (MRP) 28 barg (406 psig)
 Gasket Material: 13mm (½") Garlock 2930

General Information

Port Size		Connections Available			
mm	inch	FPT	SW, WN	ODS	WN (DN)
5	3/16	1/4", 3/8", 1/2", 3/4"	1/4", 3/8", 1/2", 3/4"	1/2", 5/8"	13, 20
13	1/2	1/4", 3/8", 1/2", 3/4"	1/4", 3/8", 1/2", 3/4"	1/2", 5/8"	13, 20
20	3/4	3/4", 1", 1 1/4"	3/4", 1", 1 1/4"	7/8", 1 1/8", 1 3/8"	20, 25, 32
25	1	3/4", 1", 1 1/4"	3/4", 1", 1 1/4"	7/8", 1 1/8", 1 3/8"	20, 25, 32
32	1 1/4	1 1/4", 1 1/2"	1 1/4", 1 1/2"	1 5/8"	32
40	1 5/8	1 1/2", 2"	1 1/2", 2"	2 1/8", 2 5/8"	38, 50
50	2	1 1/2", 2"	1 1/2", 2"	2 1/8", 2 5/8"	38, 50
65	2 1/2	—	2 1/2", 3"	2 5/8", 3 1/8"	65, 75
75	3	—	3"	3 1/8", 3 5/8"	75
100	4	—	4"	4 1/8"	100
125	5	—	5" WN only	—	—
150	6	—	6" WN only	—	—
200	8	—	8" WN only	—	—

Flange and Pipe Dimensions

Nominal Inch	US Pipe Sizes		Equivalent Metric Steel Tubing		Socket Weld Flange I.D.		Weld Neck Flange O.D.		ANSI Slip-On Socket I.D.		ANSI WN Neck O.D.	
	Actual O.D.		NW	O.D. mm	mm	inch	mm	inch	mm	inch	mm	inch
	mm	inch										
1/4	13.72	0.540	8	13.5	14.22	0.560	13.72	0.540	—	—	—	—
3/8	17.14	0.675	10	17.2	17.65	0.695	17.14	0.675	—	—	—	—
1/2	21.34	0.840	15	21.3	21.84	0.860	21.34	0.840	—	—	—	—
3/4	26.67	1.050	20	26.9	27.81	1.090	26.67	1.050	—	—	—	—
1	33.40	1.315	25	33.7	34.67	1.365	33.40	1.315	—	—	—	—
1 1/4	42.16	1.660	32	42.4	43.31	1.705	42.16	1.660	—	—	—	—
1 5/8	48.26	1.900	40	48.3	59.02	1.930	48.25	1.900	—	—	—	—
2	60.32	2.375	50	60.3	62.1	2.445	60.30	2.375	—	—	—	—
2 1/2	73.02	2.875	65	76.1	74.8	2.945	73.03	2.875	—	—	—	—
3	88.90	3.500	75	88.9	90.81	3.575	88.90	3.500	—	—	—	—
4	114.30	4.500	100	114.3	116.2	4.575	114.30	4.500	—	—	—	—
5	141.30	5.563	125	139.7	144.0	5.670	141.30	5.563	144.14	5.675	141.3	5.563
6	168.28	6.625	150	165.1	170.9	6.730	168.28	6.625	171.07	6.735	168.28	6.625
8	—	—	—	—	—	—	—	—	221.87	8.735	219.08	8.625

Two Bolt Flanges

Valve Port Sizes:

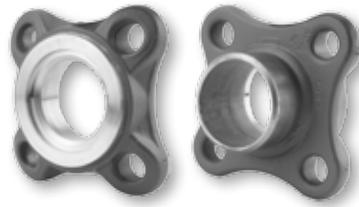
13mm - 100mm (1/2" - 1")



Four Bolt Flanges

Valve Port Sizes:

125mm - 200mm (1 1/4" - 4")



Flanges Unions

The flange union kits are used to combine a male and a female flange within the same flange size code. Union kits are available for flange sizes up to 100mm (4").

The kits consists of a flange gasket and the appropriate bolts for the flange size.

Two Bolt Flange Threaded (FPT)



Four Bolt Flange Socket Weld/Outside Diameter Sweat (SW/ODS)



Four Bolt Flange Weld Neck (WN)



For proper flange gasket sealing, care must be taken when threading or welding to assure flanges are parallel to each other and perpendicular to the pipe. Gasket should be lightly oiled and all bolts must be tightened evenly.

Adapter Rings

Adaptor rings are furnished with two matching flange gaskets.

Male Adapter Rings (MAR)

Are used to close couple CK4A or CK-1 check valves to the outlet of Refrigerating Specialties Control Valves.

Female Adapter Rings (FAR)

Are used in unions of two male flanges.

Male Adaptor Ring



Female Adaptor Ring

