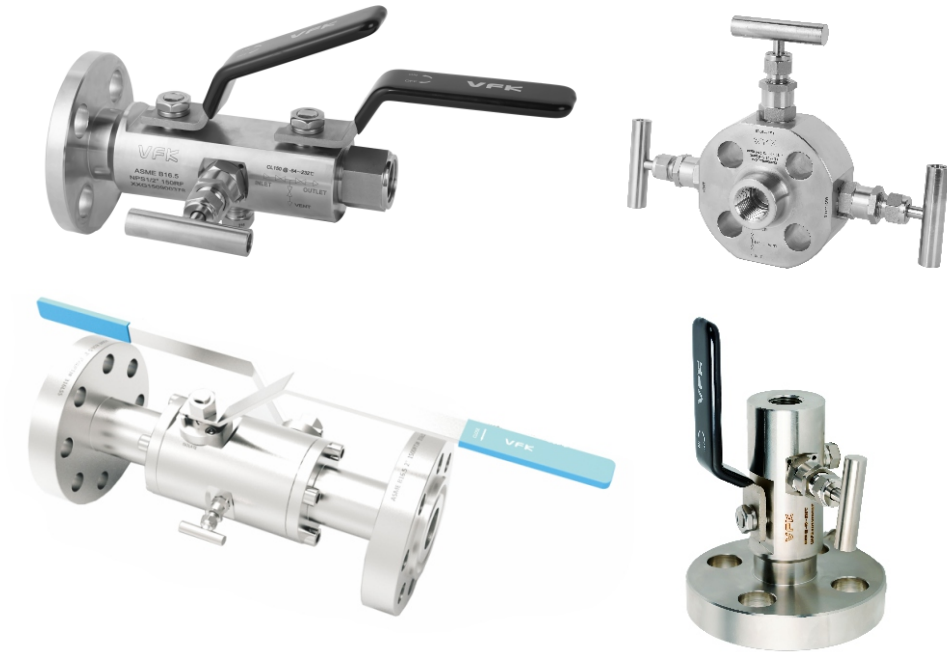
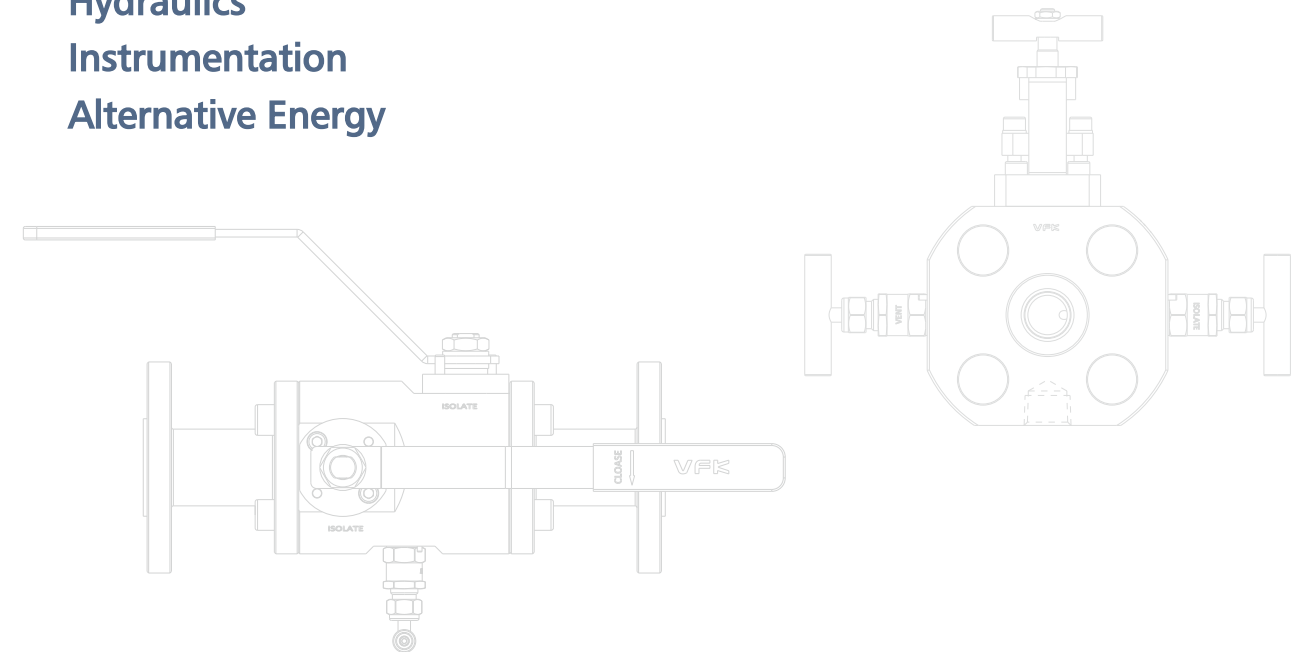


Block and Bleed Valve



Chemical & Petrochemical
Oil & Gas
Process Control
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Alternative Energy



VFK

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Block and Bleed Valves

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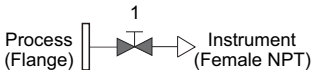
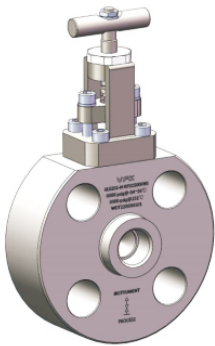
Monoflange Block and Bleed Valves
82 Series



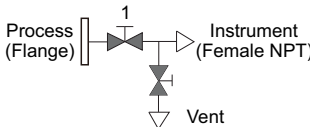
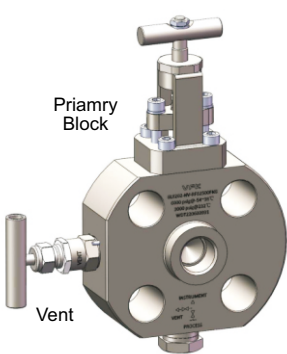
Features

- One-piece forged construction flange
- Flanged inlet connection size: 1/2" to 2"
Class rate: 150 to 2500
- 1/2" female NPT standard outlet
1/4" female NPT standard vent
- Variety of material available: Stainless Steel, Carbon Steel, Super Duplex, Monel and Hastelloy etc.
- Suitable for sour gas service; materials are selected in accordance with NACE MR0175/ISO 15156.
- Every valve is 100% factory tested with nitrogen for leak tight performance at 1.1 times maximum working pressure.

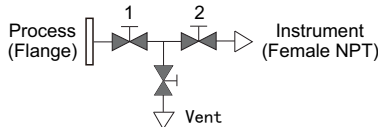
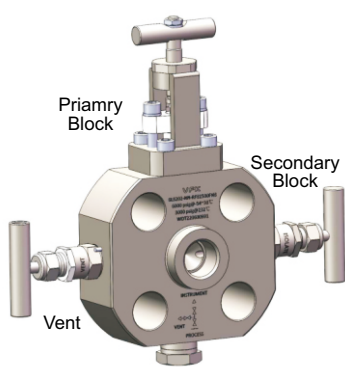
Single Block



Single Block & Bleed



Double Block & Bleed



Material of Construction

Item	Component	Valve Body Material		
		Stainless Steel	Duplex Stainless Steel	Carbon Steel
1	Body	316SS/A182	S31803/A182	A105, LF2/A350
2	Bonnet	316SS/A479	S31803/A479	316SS/A479
3	Packing Bolt	316SS/A479		
4	Packing	PTFE, Graphite		
5	Upper Stem	316SS/A276		
6	Lower Stem	Hardened 316SS		
7	Handle	Anodized Aluminum or StainlessSteel		
8	Other Components	316 SS/A276		

Alternative materials are available upon request.

Pressure vs Temperature

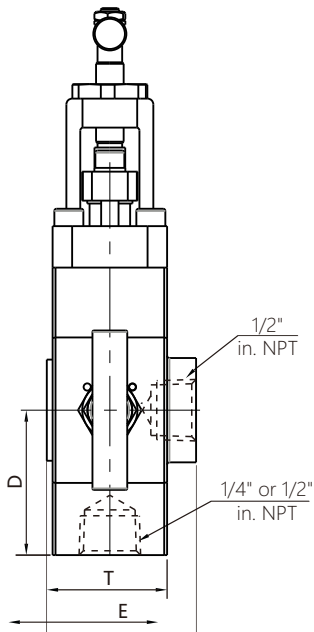
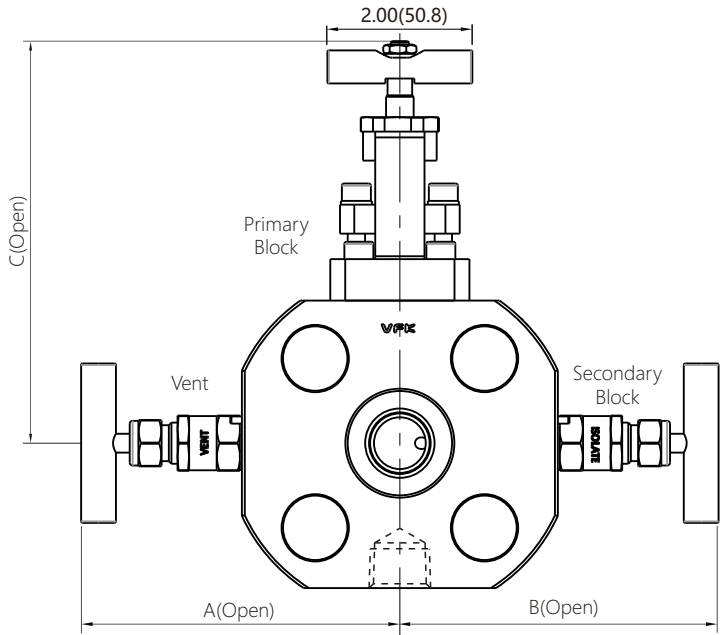
F316/A182

Temperature °C	ASME Class					
	150	300	600	900	1500	2500
	Working Pressure, bar					
-29 to38	19.0	49.6	99.3	148.9	248.2	413.7
50	18.4	48.1	96.2	144.3	240.6	400.9
100	16.2	42.2	84.4	126.6	211.0	351.6
150	14.8	38.5	77.0	115.5	192.5	320.8
200	13.7	35.7	71.3	107.0	178.3	297.2
250	12.1	33.4	66.8	100.1	166.9	278.1
300	10.2	31.6	63.2	94.9	158.1	263.5
325	9.3	30.9	61.8	92.7	154.4	257.4
350	8.4	30.3	60.7	91.0	151.6	252.7
375	7.4	29.9	59.8	89.6	149.4	249.0
400	6.5	29.4	58.9	88.3	147.2	245.3
425	5.5	29.1	58.3	87.4	145.7	242.9
450	4.6	28.8	57.7	86.5	144.2	240.4

- 54 to 204°C(-65 to 400°F) for PTFE packing material
- 54 to 538°C(-65 to 1000°F) for Graphite packing material

Dimensions

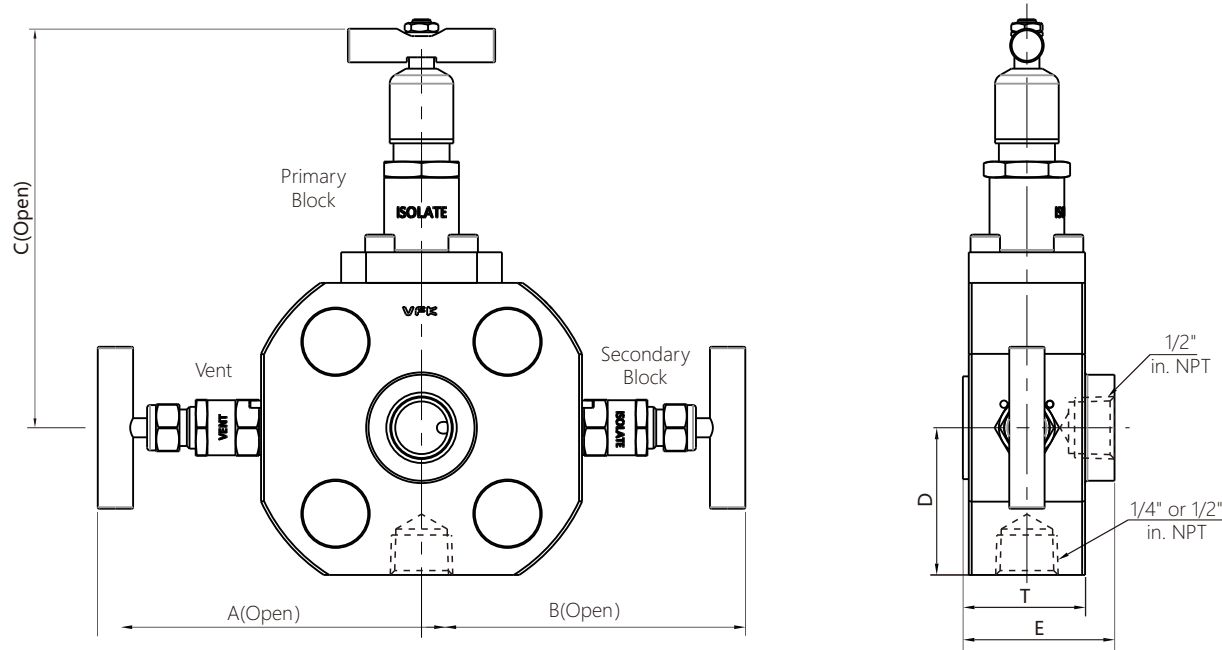
82A Series: OS&Y Bolted-Bonnet Assemblies



Flange Size in.	ASME Rate	Dimensions in.(mm)									
		A	B	C	D	RF Flange		RTJ Flange			
						E	T	E	T		
1/2 (DN15)	150	4.05(103)	4.05(103)	4.88(124)	1.69(43.0)	2.03(51.5)	1.63(41.5)	-	-		
	300/600	4.21(107)	4.21(107)	4.88(124)	1.77(45.0)			2.03(51.5)	1.63(41.5)		
	900/1500	4.60(117)	4.60(117)	5.51(140)	1.97(50.0)						
	2500	4.76(121)	4.76(121)	5.75(146)	2.17(55.0)						
3/4 (DN20)	150	4.05(107)	4.05(107)	5.12(130)	1.77(45.0)	2.03(51.5)	1.63(41.5)	-	-		
	300/600	4.21(117)	4.21(117)	5.12(130)	2.05(52.0)			2.03(51.5)	1.63(41.5)		
	900/1500	4.60(121)	4.60(121)	5.51(140)	2.17(55.0)						
	2500	4.76(127)	4.76(127)	5.75(146)	2.36(60.0)			2.11(53.5)		2.11(53.5)	
1 (DN25)	150	4.37(111)	4.37(111)	5.12(130)	1.97(50.0)	2.03(51.5)	1.63(41.5)	2.03(51.5)	1.63(41.5)		
	300/600	4.60(121)	4.60(121)	5.51(140)	2.17(55.0)						
	900/1500	5.16(131)	5.16(131)	6.06(154)	2.76(70.0)	2.11(53.5)		1.87(47.5)			
	2500	5.16(131)	5.16(131)	6.06(154)	2.95(75.0)						
1-1/2 (DN40)	150	4.60(121)	4.60(121)	5.51(140)	2.36(60.0)	2.03(51.5)	1.63(41.5)	2.03(51.5)	1.63(41.5)		
	300/600	5.16(131)	5.16(131)	6.06(154)	2.95(75.0)	2.11(53.5)		2.11(53.5)			
	900/1500	5.39(137)	5.39(137)	6.06(154)	3.35(85.0)	2.19(55.5)		2.19(55.5)			
	2500	6.34(161)	6.34(161)	7.24(184)	3.74(95.0)	2.67(67.9)		2.20(55.9)		2.67(67.9)	2.20(55.9)
2 (DN50)	150	4.60(121)	4.60(121)	5.51(140)	2.36(60.0)	2.11(53.5)	1.63(41.5)	2.11(53.5)	1.63(41.5)		
	300/600	5.16(131)	5.16(131)	6.06(154)	2.95(75.0)	2.19(55.5)		2.19(55.5)			
	900/1500	5.39(137)	5.39(137)	6.06(154)	3.35(85.0)	2.42(61.5)		1.95(49.5)		2.42(61.5)	1.95(49.5)
	2500	6.34(161)	6.34(161)	7.24(184)	3.74(95.0)	2.88(73.4)		2.44(61.9)		2.88(73.4)	2.44(61.9)

Dimensions are for reference only and are subject to change.

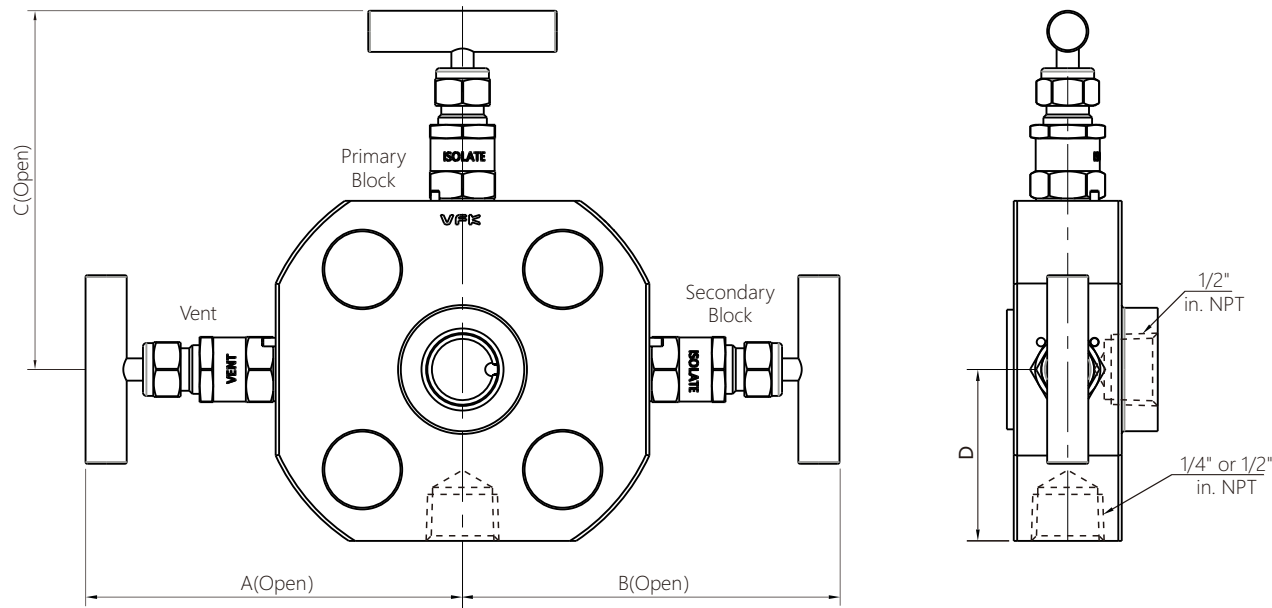
82B Series: Bolted-Bonnet Assemblies



Flange Size in.	ASME Rate	Dimension in.(mm)								
		A	B	C	D	RF Flange		RTJ Flange		
						E	T	E	T	
1/2 (DN15)	150	4.05(103)	4.05(103)	4.72(120)	1.69(43.0)	2.03(51.5)	1.63(41.5)	—	—	
	300/600	4.21(107)	4.21(107)	4.72(120)	1.77(45.0)			2.03(51.5)	1.63(41.5)	
	900/1500	4.60(117)	4.60(117)	5.35(136)	1.97(50.0)					
	2500	4.76(121)	4.76(121)	5.59(142)	2.17(55.0)					
3/4 (DN20)	150	4.05(107)	4.05(107)	4.96(126)	1.77(45.0)	2.03(51.5)	1.63(41.5)	—	—	
	300/600	4.21(117)	4.21(117)	4.96(126)	2.05(52.0)			2.03(51.5)	1.63(41.5)	
	900/1500	4.60(121)	4.60(121)	5.35(136)	2.17(55.0)					
	2500	4.76(127)	4.76(127)	5.59(142)	2.36(60.0)					2.11(53.5)
1 (DN25)	150	4.37(111)	4.37(111)	4.96(126)	1.97(50.0)	2.03(51.5)	1.63(41.5)	2.03(51.5)	1.63(41.5)	
	300/600	4.60(121)	4.60(121)	5.35(136)	2.17(55.0)			2.11(53.5)		1.87(47.5)
	900/1500	5.16(131)	5.16(131)	5.91(150)	2.76(70.0)					
	2500	5.16(131)	5.16(131)	5.91(150)	2.95(75.0)					
1-1/2 (DN40)	150	4.60(121)	4.60(121)	5.35(136)	2.36(60.0)	2.03(51.5)	1.63(41.5)	2.03(51.5)	1.63(41.5)	
	300/600	5.16(131)	5.16(131)	5.91(150)	2.95(75.0)	2.11(53.5)		2.11(53.5)		
	900/1500	5.39(137)	5.39(137)	5.91(150)	3.35(85.0)	2.19(55.5)		2.19(55.5)		
	2500	6.34(161)	6.34(161)	7.09(180)	3.74(95.0)	2.67(67.9)		2.20(55.9)		2.20(55.9)
2 (DN50)	150	4.60(121)	4.60(121)	5.91(150)	2.95(75.0)	2.11(53.5)	1.63(41.5)	2.11(53.5)	1.63(41.5)	
	300/600	5.16(131)	5.16(131)	6.22(158)	3.12(80.0)	2.19(55.5)		2.19(55.5)		
	900/1500	5.39(137)	5.39(137)	7.09(180)	4.13(105)	2.42(61.5)		1.95(49.5)		1.95(49.5)
	2500	6.34(161)	6.34(161)	7.56(192)	4.33(110)	2.88(73.4)		2.44(61.9)		2.88(73.4)

Dimensions are for reference only and are subject to change.

82C Series: Integral Screwed-Bonnet Assemblies



Flange Size in.	ASME Rate	Dimensions in.(mm)							
		A	B	C	D	RF Flange		RTJ Flange	
						E	T	E	T
1/2 (DN15)	150	4.05(103)	4.05(103)	4.05(103)	1.57(40.0)	1.73(44.0)	1.24(31.5)	—	—
	300/600	4.21(107)	4.21(107)	4.21(107)	1.57(40.0)			1.79(45.5)	1.30(33.0)
	900/1500	4.60(117)	4.60(117)	4.60(117)	2.17(55.0)	1.73(44.0)	1.32(33.5)	1.79(45.5)	1.38(35.0)
	2500	4.76(121)	4.76(121)	4.76(121)	2.36(60.0)	1.93(48.9)	1.51(38.4)	1.93(48.9)	1.51(38.4)
3/4 (DN20)	150	4.05(107)	4.05(107)	4.05(107)	1.77(45.0)	1.73(44.0)	1.24(31.5)	—	—
	300/600	4.21(117)	4.21(117)	4.21(117)	2.17(55.0)			1.79(45.5)	1.30(33.0)
	900/1500	4.60(121)	4.60(121)	4.60(121)	2.36(60.0)	1.73(44.0)	1.32(33.5)	1.79(45.5)	1.38(35.0)
	2500	4.76(127)	4.76(127)	4.76(127)	2.56(65.0)	2.00(50.8)	1.59(40.4)	2.00(50.8)	1.59(40.4)
1 (DN25)	150	4.37(111)	4.37(111)	4.37(111)	1.97(50.0)	1.73(44.0)	1.24(31.5)	1.79(45.5)	1.30(33.0)
	300/600	4.60(121)	4.60(121)	4.60(121)	2.36(60.0)				
	900/1500	5.16(131)	5.16(131)	5.16(131)	2.76(70.0)	2.00(50.8)	1.51(38.4)	2.00(50.8)	1.51(38.4)
	2500	5.16(131)	5.16(131)	5.16(131)	2.95(75.0)		1.71(43.4)	2.00(50.8)	1.71(43.4)
1 1/2 (DN40)	150	4.60(121)	4.60(121)	4.60(121)	2.36(60.0)	1.73(44.0)	1.24(31.5)	1.79(45.5)	1.30(33.0)
	300/600	5.16(131)	5.16(131)	5.16(131)	2.95(75.0)				
	900/1500	5.39(137)	5.39(137)	5.39(137)	3.35(85.0)	2.08(52.9)	1.59(40.4)	2.08(52.9)	1.59(40.4)
	2500	6.34(161)	6.34(161)	6.34(161)	3.94(100)	2.38(60.4)	2.16(54.9)	2.38(60.4)	2.16(54.9)
2 (DN50)	150	4.60(121)	4.60(121)	4.60(121)	2.95(75.0)	1.81(46.0)	1.24(31.5)	2.03(51.5)	1.30(33.0)
	300/600	5.16(131)	5.16(131)	5.16(131)	3.12(80.0)				
	900/1500	5.39(137)	5.39(137)	5.39(137)	4.13(105)	2.38(60.4)	1.89(47.9)	2.19(55.5)	1.89(47.9)
	2500	6.34(161)	6.34(161)	6.34(161)	4.53(115)	2.59(65.9)	2.44(61.9)	2.67(67.9)	2.44(61.9)

Dimensions are for reference only and are subject to change.

Monoflange Block and Bleed Valve How to Order

A	B	C	D	E	F	G	H
Body Material	Valve Series	Flow Patten	Process Type	Process Rate	Outlet Type	Outlet Size	Orifice Size
SS	82C	0	RF	150	FN	8	6
I	J	K					
Packing Material	Plug Option	Special Application					
4	P	SG					

A	Body Material
SS	316 SS
S4	304 SS
D5	Duplex 2205
D7	Duplex 2207
M	Monel 400
HC	Hasterlloy C-276
CLF2	A350 LF2
CS	A105 Carbon Steel
B	Valve Series
82A	82A Series OS&Y Bolted-Bonnet
82B	82B Series Bolted-Bonnet
82C	82C Series Integral Screwed-Bonnet

C	Flow Pattern
0	1-Block
1	1-Block & 1-Vent
2	2-Block & 1-Vent
D	Process Type
RF	RF Flange
RTJ	RTJ Flange
GRF	GOST 33259 Type B
E	Process Rate
150	Class 150
300	Class 300
600	Class 600
900	Class 900
1500	Class 1500
2500	Class 2500

F	Outlet Type
FN	Female NPT
FR	Female BSPT
G	Outlet Size
	1/2"
4	1/4"
H	Orifice Size
	4mm
6	6mm

I	Packing Material
	PTFE
G	Graphite
J	Plug Option
	No Plug
P	With Plug
K	Special Application
SG	NACE MR0175

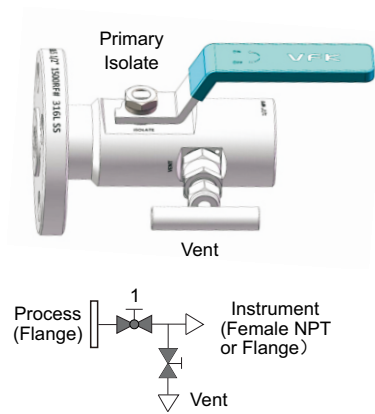
Double Block and Bleed Valve 84 Series



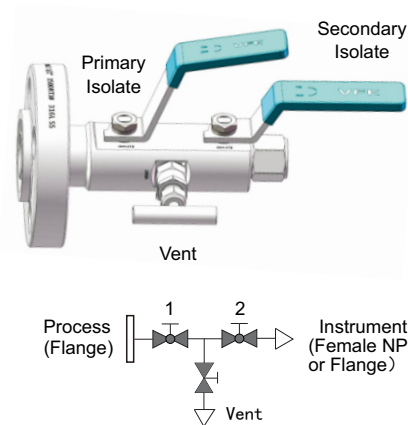
Features

- One-piece forged valve body
- Flanged inlet connection size: 1/2" to 2"
Class rate: 150 to 2500
- Temperature rating: -57°C (-70°F) to 250°C(482°F)
- Bolted body construction is option
- Fire safe and anti-static design
- Variety of material available: Stainless Steel, Carbon Steel, Super Duplex, Monel etc.
- Suitable for sour gas service; materials are selected inaccordance with NACE MR0175/ISO 15156.
- Every valve is 100% factory tested with nitrogen for leak tight performance at 1.1 times maximum working pressure.

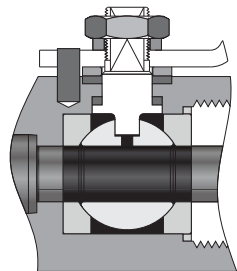
Single Block and Bleed



Double Block and Bleed



Material of Construction



Item	Component	Valve Body Material		
		Stainless Steel	Duplex Stainless Steel	Carbon Steel
1	Body	316SS/A182	S31803/A182	A105, LF2/A350
2	Outlet Connector	316SS/A276	S31803/A276	A105, LF2/A350
3	Ball	316SS/A276	S31803	316SS/A276
4	Seat	PTFE, PEEK		
5	Stem	316SS/A276	S31803	316SS/A276
6	Stem Bearing	PTFE		
7	Stem Packing	Graphite		
8	Other Components	316SS		

Alternative materials are available upon request.

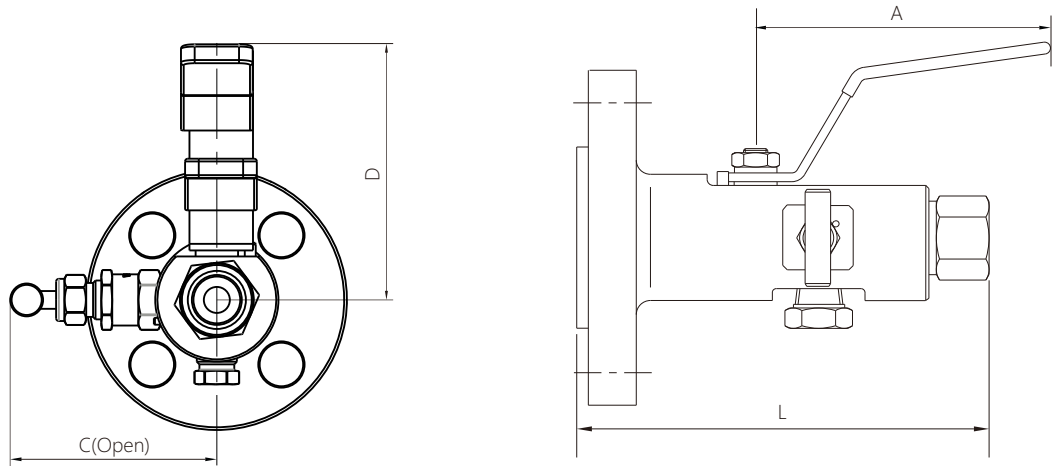
Pressure vs Temperature

F316/A182

Temperature °C	ASME Class					
	150	300	600	900	1500	2500
	Working Pressure, bar					
-29 to38	19.0	49.6	99.3	148.9	248.2	413.7
50	18.4	48.1	96.2	144.3	240.6	400.9
100	16.2	42.2	84.4	126.6	211.0	351.6
150	14.8	38.5	77.0	115.5	192.5	320.8
200	13.7	35.7	71.3	107.0	178.3	297.2
250	12.1	33.4	66.8	100.1	166.9	278.1
300	10.2	31.6	63.2	94.9	158.1	263.5
325	9.3	30.9	61.8	92.7	154.4	257.4
350	8.4	30.3	60.7	91.0	151.6	252.7
375	7.4	29.9	59.8	89.6	149.4	249.0
400	6.5	29.4	58.9	88.3	147.2	245.3
425	5.5	29.1	58.3	87.4	145.7	242.9
450	4.6	28.8	57.7	86.5	144.2	240.4

Dimensions

8401 Series



Bore Size: 3/8 in. (9.5 mm)

Flange Size in.	ASME Class	Dimensions in.(mm)							
		A	C	D	RF Flange		RTJ Flange		Flange/NPT
					L	T	L	T	L
1/2 (Dn15)	150	4.13 (105)	4.64 (118)	3.27 (83)	6.30(160)	0.46(11.6)	11.2(285)	–	5.12(130)
	300				6.50(165)	0.58(14.7)	–	0.72(18.2)	5.31(135)
	600				7.09(180)	0.84(21.3)	11.5(292)	0.78(19.8)	5.51(140)
	900/1500				8.07(205)	1.15(29.3)	14.3(364)	1.13(28.7)	6.10(155)
	2500				8.86(225)	1.46(37.2)	14.8(377)	1.44(36.6)	6.50(165)
3/4 (DN25)	150				6.30(160)	0.52(13.2)		–	5.31(135)
	300				6.89(175)	0.64(16.3)		0.81(20.7)	5.31(135)
	600				7.48(190)	0.9(22.9)		0.88(22.3)	5.71(145)
	900/1500				8.46(215)	1.28(32.4)		0.94(23.9)	6.30(160)
	2500				8.86(225)	1.53(38.8)		1.5(38.2)	6.50(165)
1 (DN25)	150				6.50(165)	0.58(14.7)	14.7(374)	0.75(19.1)	5.31(135)
	300				7.09(180)	0.7(17.9)	–	0.88(22.3)	5.51(140)
	600				7.68(195)	0.96(24.5)	15.1(384)	0.94(23.9)	5.91(150)
	900/1500				8.86(225)	1.4(35.6)	15.8(402)	1.38(35.0)	6.50(165)
	2500				9.45(240)	1.65(42.0)	18.3(466)	1.63(41.4)	6.89(175)
1-1/2 (DN40)	150				6.69(170)	0.7(17.9)	15.8(403)	0.88(22.3)	5.51(140)
	300				7.28(185)	0.83(21.1)	–	1.00(25.5)	5.91(150)
	600				8.07(205)	1.15(29.3)	16.5(419)	1.13(28.7)	6.10(155)
	900/1500				9.65(245)	1.53(38.8)	19.1(484)	1.50(38.2)	6.89(175)
	2500				11.22(285)	2.03(51.5)		2.06(52.4)	7.48(190)
2 (DN50)	150				7.09(180)	0.77(19.5)		0.94(23.9)	5.71(145)
	300				7.28(185)	0.89(22.7)		1.13(28.6)	5.91(150)
	600				8.07(205)	1.28(32.4)		1.31(33.3)	6.10(155)
	900/1500				9.65(245)	1.78(45.1)		1.81(46.0)	6.89(175)
	2500				11.61(295)	2.28(57.9)		2.32(58.2)	7.68(195)

Dimensions are for reference only and are subject to change.

Bore Size: 1/2 in. (14 mm)

Flange Size in.	ASME Class	Dimension in.(mm)										
		A	C	D	RF Flange		RTJ Flange		Flange/NPT			
					L	T	L	T	L			
1 (DN25)	150	4.80 (122)	3.98 (101)	3.88 (98.5)	6.89(175)	0.58(14.7)	6.89(175)	0.75(19.1)	6.10(155)			
	300				7.48(190)	0.70(17.9)	7.48(190)	0.88(22.3)				
	600					0.96(24.5)		0.94(22.9)	6.30(160)			
	900/1500				8.66(220)	1.40(35.6)	8.66(220)	1.38(35.0)	7.09(180)			
	2500				9.84(250)	1.65(42.0)	9.84(250)	1.63(41.4)	7.28(185)			
1-1/2 (DN40)	150				4.80 (122)	3.98 (101)	3.88 (98.5)	7.09(180)	0.70(17.9)	7.09(180)	0.75(19.0)	6.30(160)
	300							8.66(220)	1.15(29.3)	8.66(220)	0.88(22.3)	
	600								1.53(38.8)		0.94(23.9)	6.69(170)
	900/1500							10.0(255)	1.58(40.2)	10.0(255)	1.50(38.2)	7.48(190)
	2500							11.4(290)	2.03(51.5)	11.4(290)	2.06(52.4)	8.35(212)
2 (DN50)	150	4.80 (122)	3.98 (101)	3.88 (98.5)				7.48(190)	0.77(19.5)	7.48(190)	0.94(23.9)	6.30(160)
	300							7.87(200)	0.89(22.7)	7.87(200)	1.13(28.6)	
	600								1.28(32.4)		1.31(33.3)	6.69(170)
	900/1500							10.4(265)	1.78(45.1)	10.4(265)	1.81(46.0)	7.48(190)
	2500							11.8(300)	2.28(57.9)	11.8(300)	2.32(58.8)	8.35(212)

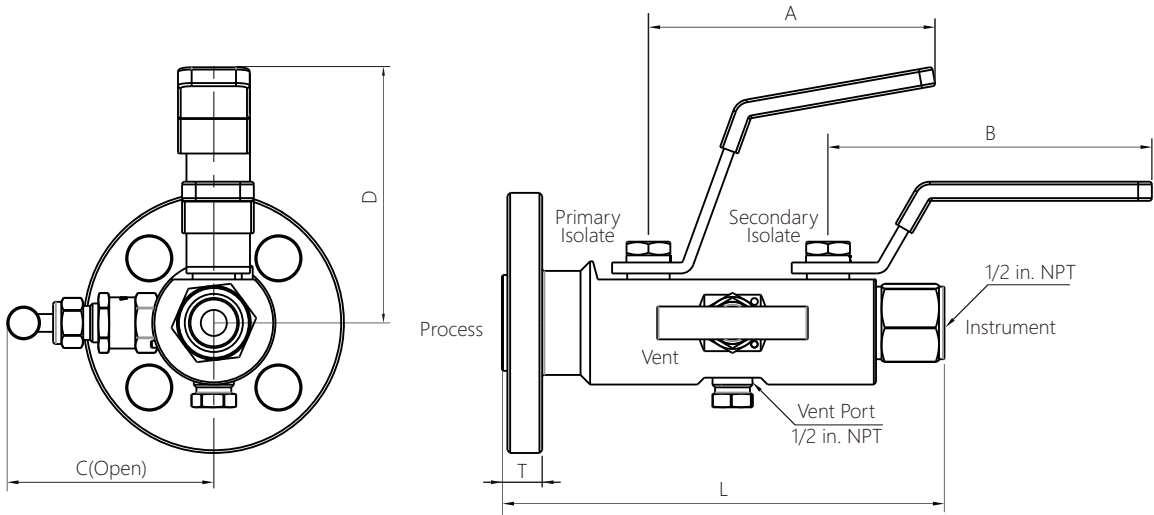
Dimensions are for reference only and are subject to change.

Bore Size: 3/4 in. (20 mm)

Flange Size in.	ASME Class	Dimensions in.(mm)				
		A	C	D	Flange/NPT	
					L	T
1-1/2 (DN40)	150	7.12 (181)	4.25 (108)	5.55 (141)	9.45(240)	0.77(19.5)
	300					0.83(21.1)
	600				9.65(245)	1.15(29.3)
	900/1500				10.6(270)	1.53(38.8)
	2500				12.2(310)	2.03(51.5)
2 (DN50)	150				9.45(240)	0.77(19.5)
	300					0.89(22.7)
	600				9.65(245)	1.28(32.4)
	900/1500				10.6(270)	1.78(45.1)
	2500				12.2(310)	2.28(57.9)

Dimensions are for reference only and are subject to change.

8402 Series



Bore Size: 3/8 in. (9.5 mm)

Flange Size in.	ASME Class	Dimensions in.(mm)												
		A	B	C	D	RF Flange		RTJ Flange		Flange/NPT				
						L	T	L	T	L				
1/2 (DN15)	150	4.13 (105)	4.64 (118)	3.27 (83)	3.70 (94)	9.25(235)	0.46(11.6)	—	—	5.91(150)				
	300						0.58(14.7)	9.45(240)	0.72(18.2)					
	600						0.84(21.3)	9.25(235)	0.78(19.8)					
	900/1500					10.51(267)	1.15(29.3)	10.51(267)	1.13(28.7)	6.69(170)				
	2500						1.46(37.2)		1.44(36.6)					
3/4 (DN20)	150					4.13 (105)	4.64 (118)	3.27 (83)	3.70 (94)	9.25(235)	0.52(13.2)	—	—	5.91(150)
	300										0.64(16.3)	9.25(235)	0.81(20.7)	
	600									9.84(250)	1.28(32.4)	9.84(250)	0.88(22.3)	6.69(170)
	900/1500												0.94(23.9)	
	2500										1.53(38.8)		1.5(38.2)	
1 (DN25)	150	4.13 (105)	4.64 (118)	3.27 (83)	3.70 (94)					9.25(235)	0.58(14.7)	9.25(235)	0.75(19.1)	5.91(150)
	300									10.0(254)	0.7(17.9)	10.0(254)	0.88(22.3)	
	600										0.96(24.5)		0.94(23.9)	7.00(178)
	900/1500									10.5(267)	1.4(35.6)	10.5(267)	1.38(35.0)	
	2500										1.65(42.0)		1.63(41.4)	
1-1/2 (DN40)	150					4.13 (105)	4.64 (118)	3.27 (83)	3.70 (94)	9.25(235)	0.7(17.9)	9.25(235)	0.88(22.3)	7.00(178)
	300										0.83(21.1)		1.00(25.5)	
	600									10.0(255)	1.15(29.3)	10.0(255)	1.13(28.7)	7.64(194)
	900/1500										1.53(38.8)		1.50(38.2)	
	2500										2.03(51.5)		2.06(52.4)	
2 (DN50)	150	4.13 (105)	4.64 (118)	3.27 (83)	3.70 (94)					10.0(255)	0.77(19.5)	10.0(255)	0.94(23.9)	7.00(178)
	300										0.89(22.7)		1.13(28.6)	
	600									10.5(267)	1.28(32.4)	10.5(267)	1.31(33.3)	7.64(194)
	900/1500										1.78(45.1)		1.81(46.0)	
	2500									14.7(374)	2.28(57.9)	14.7(374)	2.32(58.2)	8.03(204)

Dimensions are for reference only and are subject to change.

Bore Size: 1/2 in. (14 mm)

Flange Size in.	ASME Class	Dimension in.(mm)								
		A	B	C	D	RF Flange		RTJ Flange		Flange/NPT
						L	T	L	T	
1 (DN25)	150	4.80 (122)	5.00 (127)	3.98 (101)	3.88 (98.5)	9.10(231)	0.58(14.7)	9.10(231)	0.75(19.1)	7.76(197)
	300					9.49(241)	0.70(17.9)	9.49(241)	0.88(22.3)	
	600						0.96(24.5)		0.94(22.9)	
	900/1500					10.3(261)	1.40(35.6)	10.3(261)	1.38(35.0)	
	2500					10.7(273)	1.65(42.0)	10.7(273)	1.63(41.4)	
1-1/2 (DN40)	150					9.49(241)	0.70(17.9)	9.49(241)	0.75(19.0)	8.15(207)
	300					9.88(251)	1.15(29.3)	9.88(251)	0.88(22.3)	
	600						1.53(38.8)		0.94(23.9)	8.35(212)
	900/1500					11.5(291)	1.58(40.2)	11.5(291)	1.50(38.2)	
	2500					12.4(316)	2.03(51.5)	12.4(316)	2.06(52.4)	
2 (DN50)	150					9.49(241)	0.77(19.5)	9.49(241)	0.94(23.9)	8.15(207)
	300					10.3(261)	0.89(22.7)	10.3(261)	1.13(28.6)	
	600						1.28(32.4)		1.31(33.3)	
	900/1500					12.0(306)	1.78(45.1)	12.0(306)	1.81(46.0)	8.35(212)
	2500					13.6(346)	2.28(57.9)	13.6(346)	2.32(58.8)	8.74(222)

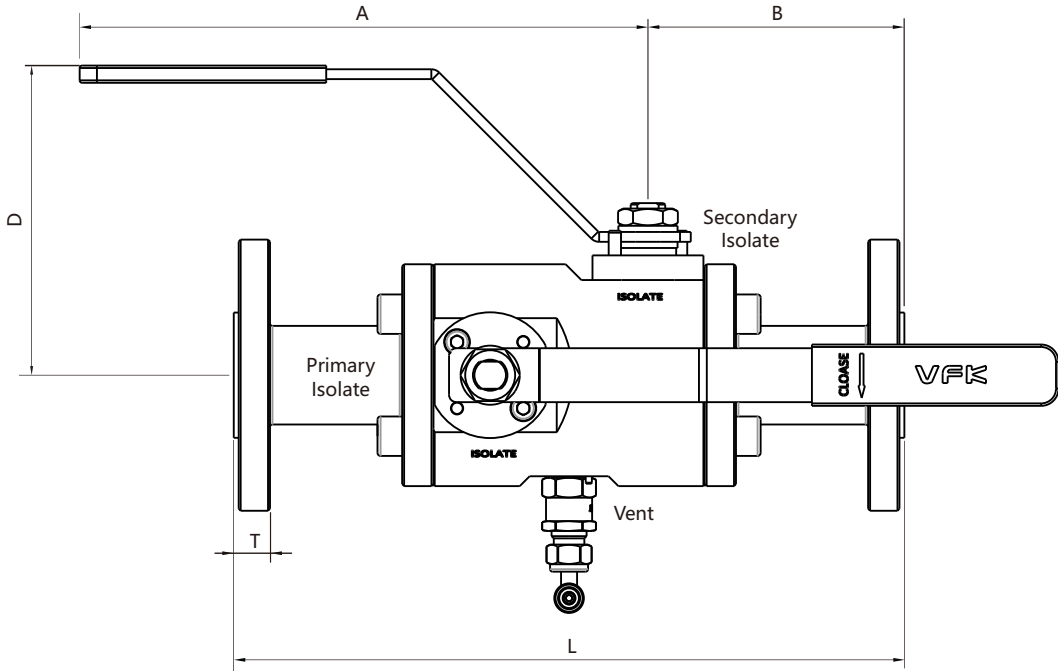
Dimensions are for reference only and are subject to change.

Bore Size: 3/4 in. (20 mm)

Flange Size in.	ASME Class	Dimensions in.(mm)							
		A	B	C	D	RF Flange		RTJ Flange	
						L	T	L	T
1-1/2 (DN40)	150	7.12 (181)	7.50 (191)	4.25 (108)	5.55 (141)	9.1(230)	0.77(19.5)	9.1(230)	0.88(22.3)
	300					9.8(250)	0.83(21.1)	9.8(250)	1.00(25.5)
	600					10.7(270)	1.15(29.3)	10.7(270)	1.13(28.7)
	900/1500					11.6(315)	1.53(38.8)	11.6(315)	1.50(38.2)
	2500					14.6(370)	2.03(51.5)	14.6(370)	2.06(52.4)
2 (DN50)	150					9.7(245)	0.77(19.5)	9.7(245)	0.94(23.9)
	300					9.8(250)	0.89(22.7)	9.8(250)	1.13(28.6)
	600					10.8(273)	1.28(32.4)	10.8(273)	1.31(33.3)
	900/1500					12.5(318)	1.78(45.1)	12.5(318)	1.81(46.0)
	2500					14.7(373)	2.28(57.9)	14.7(373)	2.32(58.2)

Dimensions are for reference only and are subject to change.

84C2 Series



Full Bore

Flange Size in.	ASME Class	Dimensions in.(mm)							
		A	B	D	Bore Size	RF Flange		RTJ Flange	
						L	T	L	T
1 (DN25)	150	9.0(229)	4.09(104)	5.20(132)	1 (25.4)	10.7(273)	0.63(16.2)	11.2(285)	0.89(22.6)
	300		4.21(107)			11.0(279)	0.77(19.5)	–	–
	600		4.49(114)			11.5(292)	1.02(25.9)	11.5(292)	1.02(25.9)
	900/1500		5.87(149)			14.3(364)	1.45(36.8)	14.3(364)	1.45(36.8)
	2500		6.14(156)			14.8(377)	1.71(43.5)	14.8(377)	1.71(43.5)
1-1/2 (DN40)	150	12.8 (325)	5.55(141)	5.79(147)	1 1/2 (38.1)	14.2(361)	0.77(19.5)	14.7(374)	1.02(25.9)
	300		5.67(107)			14.4(367)	0.89(22.6)	–	–
	600		5.98(152)			15.1(384)	1.21(30.8)	15.1(384)	1.21(30.8)
	900/1500		6.38(162)			15.8(402)	1.58(40.2)	15.8(402)	1.58(40.2)
	2500		7.56(192)			18.2(463)	2.08(52.9)	18.3(466)	2.14(54.4)
2 (DN50)	150	17.8 (452)	5.87(149)	6.69 (170)	2 (50.8)	15.4(390)	0.83(21.1)	15.8(403)	1.08(27.5)
	300		6.02(153)			15.7(398)	0.98(24.9)	–	–
	600		6.38(162)			16.4(416)	1.33(33.8)	16.5(419)	1.39(35.3)
	900/1500		7.64(194)			18.9(481)	1.83(46.5)	19.1(484)	1.89(48.0)

Dimensions are for reference only and are subject to change.

Double Block and Bleed Valve How to Order

A	B	C	D	E	F	G	H	I	
Body Material	Valve Series	Flow Patten	Process Type	Process Size	Pressure Rating	Outlet Type	Outlet Size	Ball Orifice	
SS	84	01	RF	16	150	FN	8	6	
J	K	L	M						
Packing Material	Bleed Option	Special Option	Special Application						
PG	P8	FE	SG						

A	Body Material
SS	316 SS
S4	304 SS
D5	Duplex 2205
D7	Duplex 2207
M	Monel 400
HC	Hasterlloy C-276
CLF2	A350 LF2
CS	A105 Carbon Steel
B	Valve Series
84	84 Series
84C	84C 3-Piece Bolted-Flange

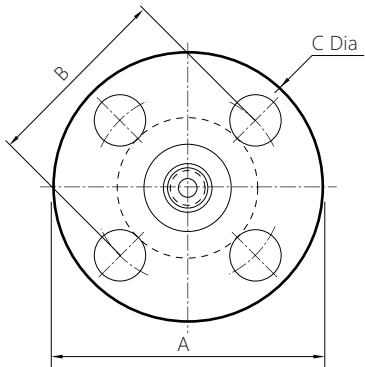
C	Flow Pattern
01	1-Block & 1-Vent
02	2-Block & 1-Vent
DG	Process/Outlet Type
RF	RF Flange
RTJ	RTJ Flange
GRF	GOST 33259 Type B
GRTJ	GOST 33259 Type J
FN	Female NPT
N	Male NPT
FR	Female BSPT
R	Male NPT
FX	Fractional Tube Fitting
MX	Metric Tube Fitting
10KN	10000 Psig NPT
10KFN	10000 Psig Female NPT

I	Ball Orifice
	3/8"(9.5mm)
2	1/2"(14mm)
4	3/4"(20mm)
6	1"(25mm)
8	1-1/2"(38mm)
10	2"(50mm)

EH	Inlet/Outlet Size
4	1/4"
6	3/8" or 6mm
8	1/2 or 8mm
10	10mm
12	3/4" or 12mm
14	14mm
16	1" or 16mm
20	1-1/4" or M20 x 1.5
24	1-1/2"
32	2"
F	Pressure Rating
150	Class 150
300	Class 300
600	Class 600
900	Class 900
1500	Class 1500
2500	Class 2500
6	PN 6
10	PN 10
16	PN 16
25	PN 25
40	PN 40
63	PN 63
100	PN 100
160	PN 160

J	Packing Material
	PEEK Seat and PTFE Stem Packing
PG	PEEK Seat and Graphite Stem Packing
K	Bleed Option
	1/2" Female NPT
4	1/4" Female NPT
P4	1/4" Female NPT With Plug
P8	1/2" Female NPT With Plug
L	Special Option
	Female NPT
F	Fire Safe
E	Anti-Static
M	Special Application
SG	NACE MR0175

Flange Dimensions



Flanges meet ASME B16.5 dimensional specifications and pressure ratings.

Class150

Nominal Flange Size in.	Dimensions, in.(mm)			Mounting Holes
	A	B	C	
1/2	3.50 (88.9)	2.38 (60.5)	0.62 (15.7)	4
3/4	3.88 (98.6)	2.75 (69.8)	0.62 (15.7)	
1	4.25 (108)	3.12 (79.2)	0.62 (15.7)	
1-1/2	5.00 (127)	3.88 (98.6)	0.62 (15.7)	
2	6.00 (152)	4.75 (121)	0.75 (19.0)	
3	7.50 (190)	6.00 (152)	0.75 (19.0)	

Class900/1500

Nominal Flange Size in.	Dimensions, in.(mm)			Mounting Holes
	A	B	C	
1/2	4.75 (121)	3.25 (82.6)	0.88 (22.4)	4
3/4	5.13 (130)	3.50 (88.9)	0.88 (22.4)	
1	5.88 (149)	4.00 (102)	1.00 (25.4)	
1-1/2	7.00 (178)	4.88 (124)	1.13 (28.7)	
2	8.50 (152)	6.50 (165)	1.00 (25.4)	
3 (CL 900)	9.50 (241)	7.50 (190)	1.00 (25.4)	8
3 (CL 1500)	10.5 (267)	8.00 (203)	1.25 (31.8)	

Dimensions are for reference only and are subject to change.

Class300/600

Nominal Flange Size in.	Dimensions, in.(mm)			Mounting Holes
	A	B	C	
1/2	3.75 (95.2)	2.62 (66.5)	0.62 (15.7)	4
3/4	4.62 (117)	3.25 (82.6)	0.75 (19.0)	
1	4.88 (124)	3.50 (88.9)	0.75 (19.0)	
1-1/2	6.12 (155)	4.50 (114)	0.88 (22.4)	
2	8.25 (210)	4.75 (121)	0.75 (19.0)	
3	7.50 (190)	6.62 (168)	0.88 (22.4)	8

Class 2500

Nominal Flange Size in.	Dimensions, in.(mm)			Mounting Holes
	A	B	C	
1/2	5.25 (134)	3.50 (88.9)	0.88 (22.4)	4
3/4	5.50 (140)	3.75 (95.2)	0.88 (22.4)	
1	6.25 (159)	4.25 (108)	1.00 (25.4)	
1-1/2	8.00 (203)	5.75 (156)	1.25 (31.8)	
2	9.25 (235)	6.75 (171)	1.13 (28.7)	8