

Single block and bleed
Double block and bleed



FEATURES

- ANSI B16.5 flanged inlet connections 1/2" to 2" sizes
- Class 150 rated to Class 2500 rated
- 1/2" NPT thread female outlet to ANSI/ASME B1.20.1
- 1/2" NPT thread female vent connection to ANSI/ASME B1.20.1

STANDARD PARAMETERS

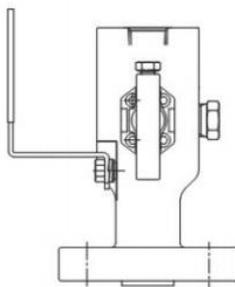
Block & vent configuration	Ball, OS&Y, Globe Needle
Flange size	1/2" (DN15), 3/4" (DN20), 1" (DN25), 1 1/2" (DN40), 2" (DN50)
Flange class	150, 300, 600, 900, 1500, 2500
Bore size	Full, Reduce, 9.5mm, 14mm, 19mm
Finish standard	Raised faced smooth, raised faced serrated, Raised faced stock, Ring type joint

MATERIALS

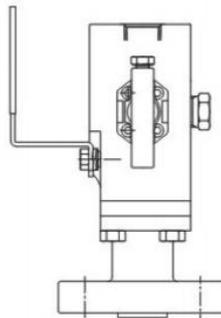
Ball valve seat material	Reinforced PTFE, PEEK
OS&Y packing	Graphite, PTFE
Needle valve packing	Graphite, Reinforced PTFE
Trim material	Standard SS 316, Duplex, Monel, Hastelloy
Body material	ASTM A182F316, ASTM A182F316L, ASTM A182F51, Monel, ASTM A350LF2

DIMENSIONAL DRAWING

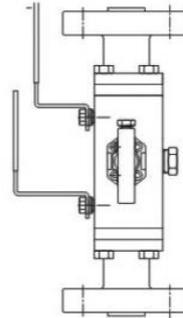
One Piece Forged
Design P1



Two Piece Bolted
Design P2

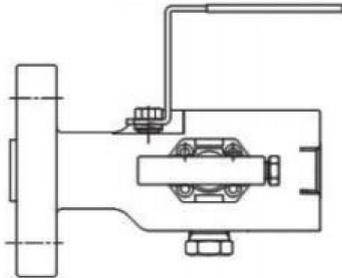


Two Piece Bolted
Design P3

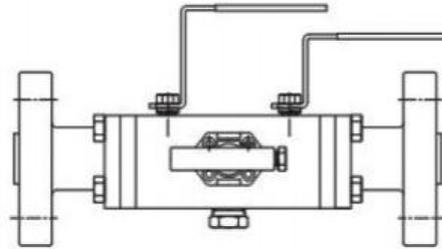


PROCESS AND OUTLET CONNECTION

Flange to 1/2" NPT(F)
F1

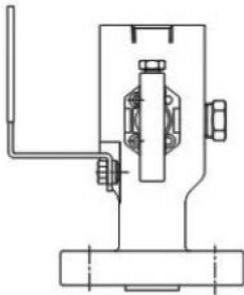


Flange to Flange
F2

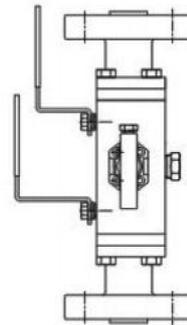


SINGLE AND DOUBLE BLOCK AND BLEED VALVE

Single block and bleed
SB

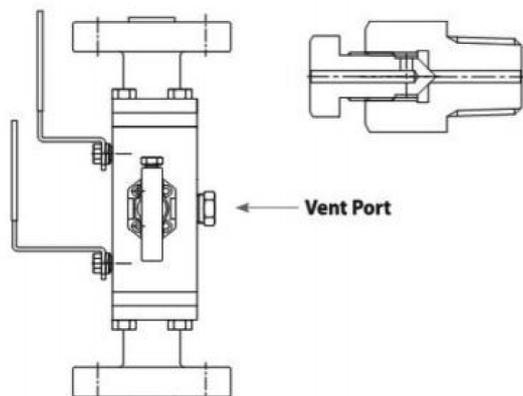


Double block and bleed
DB



VENT (BLEED) PORT

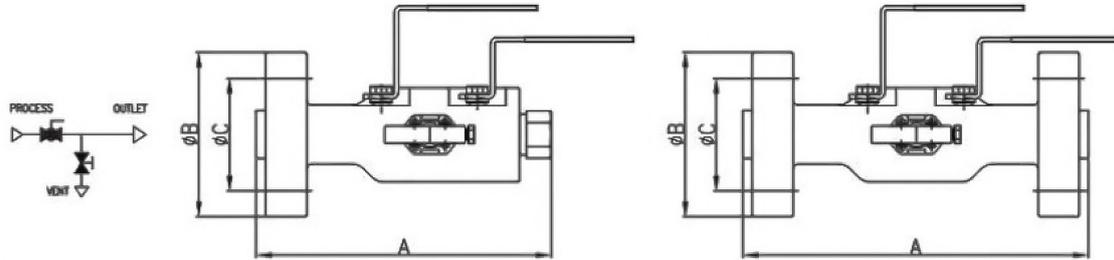
- Vent port 1/2" NPT(F) with Hex Plug is standard
- Vent port with «Vent Plug» is an option with «VP» designator



DIMENSIONAL DRAWING

P1F2 SERIES (9.5mm Bore)

One piece forged flange to 1/2" NPT (F) single block bleed valve with ball and OS&Y (or needle) on block and vent. 3/8" (9.5mm) and 1/2" (14mm), 3/4" (19mm) bore size.



Size(inch)	Class	Dimension(mm)					Weight(kg)	
		A(RF)	A(RTJ)	A(Flange/NPT)	B	C	Flange	Flange/NPT
1/2"	150	188	-	168	88.9	60.5	4.3	3.6
	300	188	193	168	95.2	60.5	5	3.9
	600	188	196	168	95.2	66.5	5.2	4
	900/1500	206	213	176	120.6	82.5	7.9	5
	2500	206	213	176	133.4	88.5	10.8	6
3/4"	150	188	-	168	98.6	69.9	4.9	3.9
	300	188	196	168	117.3	82.5	6.3	4
	600	188	196	168	117.3	82.5	6.5	4.2
	900/1500	206	213	176	130	88.9	9.5	5.6
	2500	206	213	176	139.7	95.3	11	7.1
1"	150	188	193	173	108	79.2	5	3.9
	300	190	195	173	124	88.9	6.3	4.3
	600	190	198	173	124	88.9	6.5	4.5
	900/1500	240	240	195	149.3	101.6	11.5	6.8
	2500	255	255	203	158.8	108	14.3	8.1
1 1/2"	150	198	203	178	127	98.6	7	4.6
	300	218	218	185	155.4	114.3	10.1	6
	600	235	235	204	155.4	114.3	11	6.5
	900/1500	280	280	215	177.8	123.9	16.5	9.4
	2500	316	316	220	203.2	146.1	25.8	14
2"	150	203	213	183	152.4	120.7	9.4	5.5
	300	223	228	190	165.1	127	12.8	6.8
	600	243	253	202	165.1	127	13.4	8.1
	900/1500	288	288	215	215.9	165.1	25.4	14
	2500	313	313	220	235	171.5	36.6	22

All dimension are in meillimeters unless otherwise specified and only for reference subject to change.

P1F2 SERIES (14mm Bore)

One piece forged flange to 1/2" NPT (F) single block bleed valve with ball and OS&Y (or needle) on block and vent. 3/8" (9.5mm) and 1/2" (14mm), 3/4" (19mm) bore size.

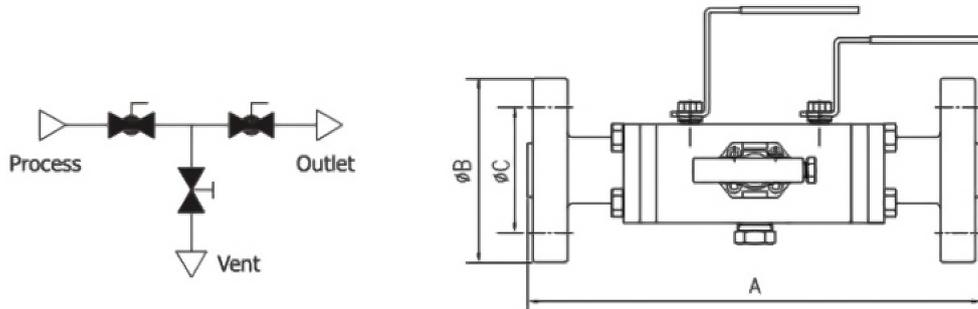
Size(inch)	Class	Dimension(mm)					Weight(kg)	
		A(RF)	A(RTJ)	A(Flange/ NPT)	B	C	Flange	Flange/NPT
1"	150	231	231	197	108	79.2	7.7	3.9
	300	241	241	197	124	88.9	8.8	4.3
	600	241	241	203	124	88.9	8.8	4.5
	900/1500	261	261	203	149.3	101.6	12.7	6.8
	2500	273	273	203	158.8	108	16.5	8.1
1½"	150	241	241	207	127	98.6	9.1	4.9
	300	251	251	207	155.4	114.3	12.3	6.4
	600	251	251	215	155.4	114.3	12.3	6.9
	900/1500	291	291	215	177.8	123.9	17.7	9.8
	2500	316	316	220	203.2	146.1	27	14
2"	150	241	213	210	152.4	120.7	10.9	5.9
	300	261	241	210	165.1	127	14.1	7.5
	600	261	261	220	165.1	127	14.1	8.4
	900/1500	306	306	220	215.9	165.1	26.6	14
	2500	346	346	230	235	171.5	37.8	22.1

P1F2 SERIES 19mm Bore

Size(inch)	Class	Dimension(mm)				Weight(kg)
		A(RF)	A(RTJ)	B	C	
1½"	150	253	253	127	98.6	9.8
	300	263	263	155.4	114.3	13.0
	600	263	263	155.4	114.3	13.0
	900/1500	303	303	177.8	123.9	18.4
	2500	328	328	203.2	146.1	27.7
2"	150	253	253	152.4	127	11.7
	300	273	273	165.1	127	14.9
	600	273	273	165.1	127	14.9
	900/1500	318	318	215.9	165.1	27.4
	2500	358	358	235	171.5	38.6

P3F2 SERIES (Full Bore)

Three piece bolted design flange to flange double block and bleed valve with ball and OS&Y (or needle) on block and vent.



Size(inch)	Bore(mm)	Class	Dimension(mm)				Weight(kg)
			A(RF)	A(RTJ)	B	C	
1/2"	14	150	235	248	88.9	60.5	8.5
		300	241	254	95.2	66.5	9.5
		600	254	254	95.2	66.5	10.0
		900/1500	287	287	120.6	82.5	13.0
		2500	303	303	133.4	88.5	16.0
3/4"	19	150	264	277	98.6	69.9	9.5
		300	277	290	117.3	82.5	10.5
		600	290	290	117.3	82.5	11.0
		900/1500	320	320	130	88.9	16.0
		2500	333	333	139.7	95.3	19.0
1"	25	150	272	285	108	79.2	15.0
		300	279	292	124	88.9	16.7
		600	292	292	124	88.9	17.5
		900/1500	364	364	149.3	101.6	21.2
		2500	377	377	158.8	108	24.2
1 1/2"	38	150	361	374	127	98.6	24.7
		300	367	384	155.4	114.3	27.1
		600	384	384	155.4	114.3	27.9
		900/1500	402	402	177.8	123.9	35.1
		2500	463	466	203.2	146.1	45.5
2"	50	150	390	403	152.4	120.7	48.2
		300	398	411	165.1	127	50.3
		600	416	419	165.1	127	51.1
		900/1500	481	484	215.9	165.1	66.8
	42	2500	652	655	235	171.5	150.0

ORDERING CODES

1. BODY CONSTRUCTION		P1
P1	One Piece Forged Design	
P2	Two Piece Bolted Design	
P3	Three Piece Bolted Design	

2. PROCESS & OUTLET CONNECTION		F1
F1	Flange to 1/2" NPT(F)	
F2	Flange to flange	

3. SINGLE AND DOUBLE BLOCK AND BLEED VALVE		SB
SB	Single block and bleed	
DB	Double block and bleed	

4. CONFIGURATION			BL2
Single Block And Bleed Valve			
Code	Block	Vent	
BL2	Ball	Ball	
OS2	OS&Y	OS&Y	
GN2	Globe Needle	Globe Needle	
BO	Ball	OS&Y	
BN	Ball	Globe Needle	
ON	OS&Y	Globe Needle	

Double Block And Bleed Valve			
Code	Block	Block	Vent
BL3	Ball	Ball	Ball
OS3	OS&Y	OS&Y	OS&Y
BBO	Ball	Ball	OS&Y
BBN	Ball	Ball	Globe Needle
ONN	OS&Y	Globe Needle	Globe Needle
OON	OS&Y	OS&Y	Globe Needle

5. PROCESS CONNECTION		XXX
XXX	Refer Flange Table for the codes	

6. BORE SIZE		FU
FU	Full	
RU	Reduce	
BS95	9.5mm	
BS14	14mm	
BS19	19mm	

7. TRIM MATERIAL		MF
MF	SS 316	
MD	Super Duplex	
MM	Monel	
MO	Hastelloy	

8. BODY MATERIAL		FM
FM	ASTM A182F316	
FG	ASTM A182F316L	
FS	ASTM A182F51	
MM	Monel	
FT	ASTM A350LF2	

9. VENT PORT OPTION		HP
HP	Hex plug	
VP	Vent plug	

10. FLANGE FACING		RJ
RFS	Raised faced smooth	
RFE	Raised faced serrated	
RFT	Raised faced stock	
RJ	Ring type joint	

11. BALL VALVE SEAT MATERIAL		RP
NP	Not applicable	
RP	Reinforced PTFE	
PK	PEEK	

12. OS&Y PACKING		NP
NP	Not applicable	
GR	Graphite	
ME	PTFE	

13. NEEDLE VALVE PACKING		GR
NP	Not applicable	
GR	Graphite	
RP	Reinforced PTFE	

Ordering Example:

MT-M100BV-P1-F1-SB-BL2-XXX-FU-MF-FM-HP-RJ-RP-NP-GR

STANDARD RANGES

ANSI B 16.5								
Code	Size	Rating	Code	Size	Rating	Code	Size	Rating
A01	½"	150#	A02	½"	300#	A03	½"	600#
A04	½"	900#	A05	½"	1500#	A06	½"	2500#
A07	¾"	150#	A08	¾"	300#	A09	¾"	600#
A10	¾"	900#	A11	¾"	1500#	A12	¾"	2500#
A13	1"	150#	A14	1"	300#	A15	1"	600#
A16	1"	900#	A17	1"	1500#	A18	1"	2500#
A19	1¼"	150#	A20	1¼"	300#	A21	1¼"	600#
A22	1¼"	900#	A23	1¼"	1500#	A24	1¼"	2500#
A25	1½"	150#	A26	1½"	300#	A27	1½"	600#
A28	1½"	900#	A29	1½"	1500#	A30	1½"	2500#
A31	2"	150#	A32	2"	300#	A33	2"	600#
A34	2"	900#	A35	2"	1500#	A36	2"	2500#