

BV3V 5,000 PSI DIVERTER

Rated for 5000 PSI ~ Sizes from ¼" to 2" NPT/SAE/BSP
Designed as an inverse "T-Bore" Diverter for straight flow normal operation



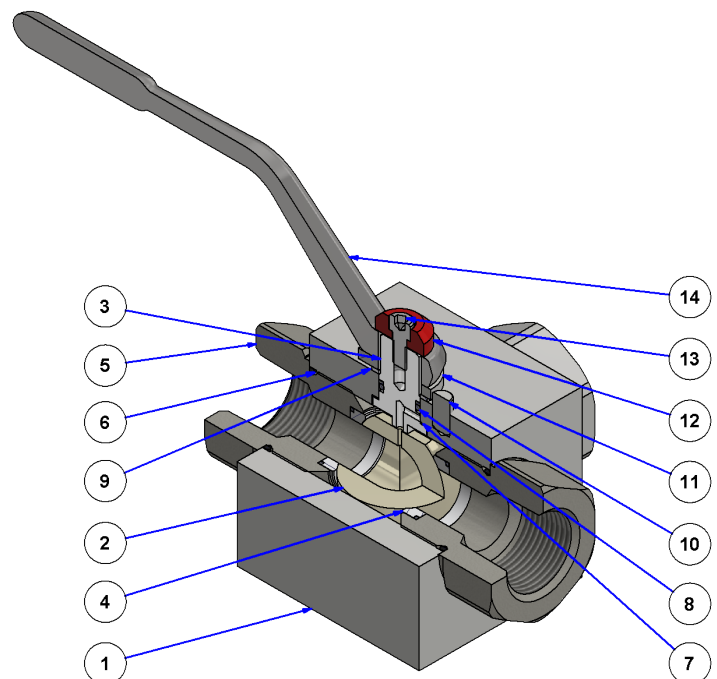
The DMIC **BV3V** is a 3-way, "inverse T-Bore" diverter derived from the DMIC **BV3D**. DMIC's newest high-end CNC equipment and advancements in manufacturing tolerance control allow the **BV3V** to satisfy many normal 2-way with 3 way divert option. Consult DMIC Engineering for more information.

- Similar to BV3D, but offers a straight flow path for normal operation
- Can be used as a compact 2-way ball valve with test point outlet
- Standard DMIC Blow-out proof stem design
- Ordering codes similar to BV3D line
- Standard reduced Bore design
- Zero leakage design is a standard

Service Parts BOM

BV3V	SERVICE PARTS BOM	
Index	Qty	Description
1	1	Valve Body
2	1	Ball
3	1	Spindle
4	3*	Ball Seal
5	3*	End Connection(s)
6	3*	End Connection O-Ring(s)
7	1	Internal Thrust Washer
8	1	Spindle O-Ring(s)
9	1	External Glide Washer
10	1	Stop Pin
11	1	Stop Washer
12	1	Color Code Cap
13	1	Handle Screw
14	1	Handle

*Quantity depends on size and configuration



BV3V 5,000 PSI DIVERTER

Ordering Codes Summary

Size Codes	
Code	Port Size
0250	1/4"
0375	3/8"
0500	1/2"
0750	3/4"
1000	1"
1250	1 1/4"
1500	1 1/2"
2000	2"

Call Factory for larger sizes 18"+



Connection Types		SAE Flange Conn	
Imperial Threads		SAE 4-Bolt Companion	
Code	Description	Code	Description
S	SAE ORB	FM	SAE C61 Comp UNC
N	NPT	FH	SAE C62 Comp UNC
J	JIC-Male	GM	SAE C61 Comp Metric
Metric Threads		GH	SAE C62 Comp Metric
B	BSPP-special	SAE Split Flanges	
T	BSPT (Tapered Pipe)	SM	SAE C61 Split Flg Head
		SH	SAE C62 Split Flg Head
ISO Threads		SAE 4 Bolt Standard	
IU	ISO6149	FL	SAE C61 Std UNC/Metric
-	-	FK	SAE C62 Std UNC/Metric

Please see page 11 for complete connection availability matrix

O-Ring Material	
Code	Description
1	Buna-N (Standard)
2	EPR
3	Viton™

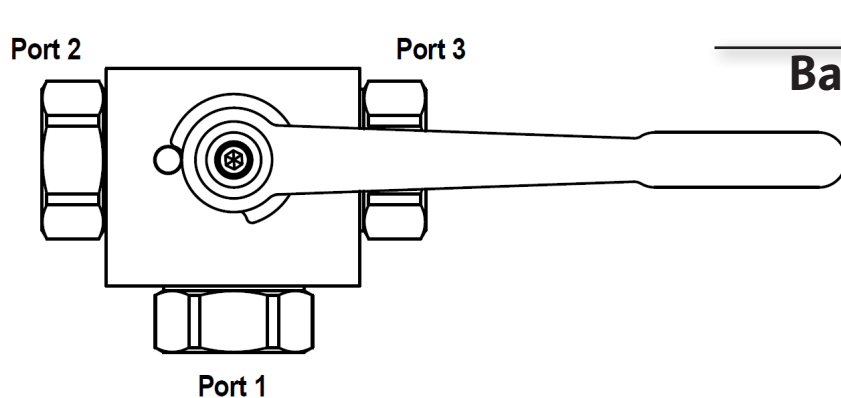
Ball Seal Material	
Code	Description
1	Delrin™
2	PTFE Teflon™ (1500 PSI MAX)
4	Peek
6	Delrin™ AF (low Friction)

Ball & Spindle Mat'l	
Code	Description
1	Carbon Steel
2	316 Stainless Steel
6	416 Stainless Spindle 316 Stainless Ball

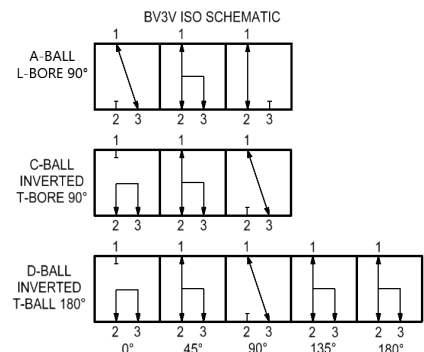
Ball Pattern	
Code	Description
A	L-Bore 90° Action
C	Inverted T-Bore 90° Action
D	T-Bore 180° Action

Body Material	
Code	Description
1	Carbon Steel
2	Stainless Steel

Note: Changes from Standard Materials may result in changes to temperature and/or pressure rating.



BV3V Ball Pattern Schematic



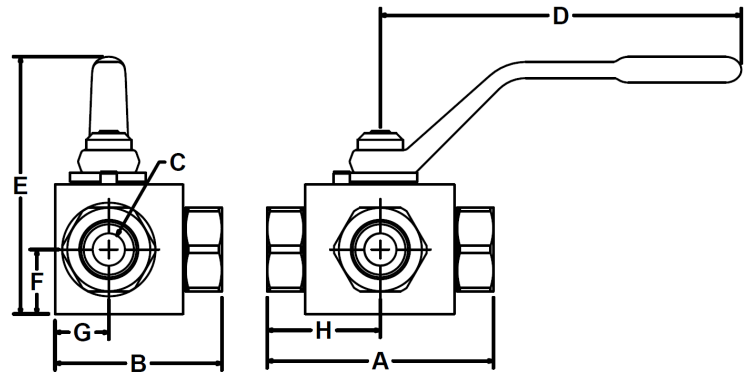
Due to our policy of continual product improvement, the specifications in this catalog may change without notice. When designing by spec, please request a certified print.



BV3V 5,000 PSI DIVERTER

Common Dimensions

Port Size	Rated Pressure PSI	Dimensions IN							
		Overall Length A	Width Port 1 B	Valve Bore C	Handle Length D	Overall Height E	Bot To Port Ctr F	Back of body to center G	Center to end H
¼"	5000	3.41	2.48	0.31	4.50	3.37	0.85	0.77	1.71
⅜"		3.41	2.48	0.31	4.50	3.37	0.85	0.77	1.71
½"		3.41	2.48	0.38	4.50	3.37	0.85	0.77	1.71
¾"		4.39	3.24	0.63	7.00	4.97	1.25	1.04	2.19
1"		5.20	3.91	0.81	7.00	5.47	1.64	1.31	2.60
1¼"		5.69	4.32	1.00	9.86	6.70	1.69	1.47	2.85
1½"		6.05	5.1	1.25	9.86	7.17	1.97	2.08	3.02
2"		8.00	6.28	1.63	9.86	7.70	2.21	2.28	4.00



SAE C.61 Split Flange Head Dimension

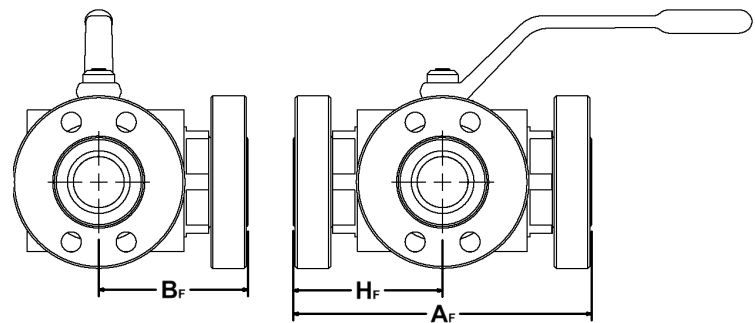
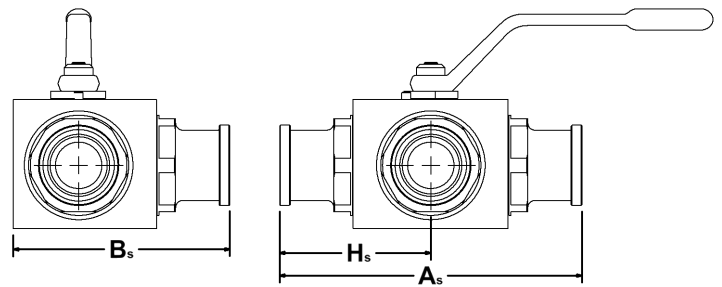
Dimension (inches)	Rated Pressure PSI	Overall Length A _s	Width Port 1 B _s	Center to end H _s
½"	5000	6.00	3.77	3.00
¾"		6.86	4.47	3.43
1"		7.69	5.15	3.85
1¼"	4000	8.34	5.64	4.17
1½"	3000	10.29	7.22	5.14
2"		10.56	7.56	5.28

SAE C.62 Split Flange Head Dimension

Dimension (inches)	Rated Pressure PSI	Overall Length A _s	Width Port 1 B _s	Center to end H _s
½"	5000	6.00	3.77	3.00
¾"		7.34	4.71	3.67
1"		8.50	5.56	4.25
1¼"		9.62	6.28	4.81
1½"		12.27	8.21	6.13
2"		13.86	9.21	6.93

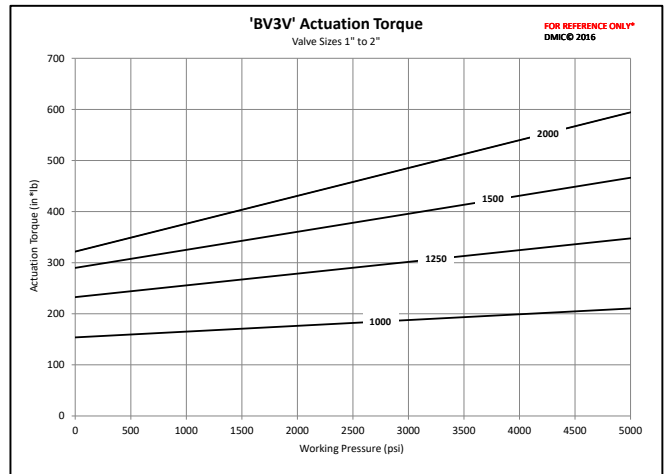
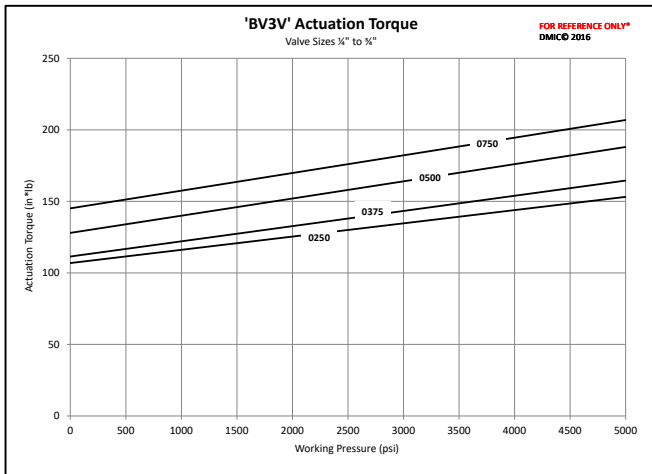
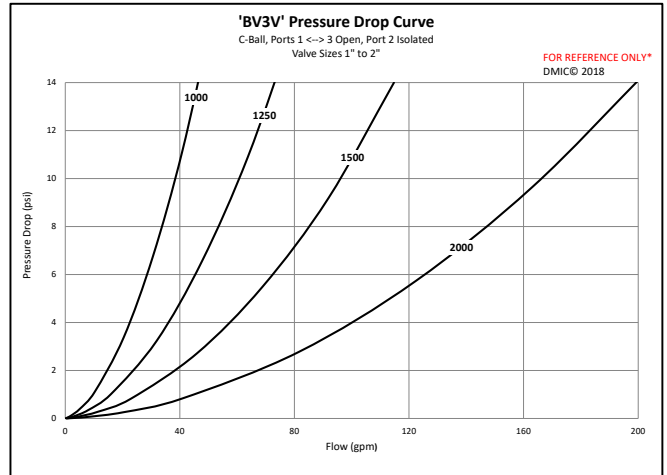
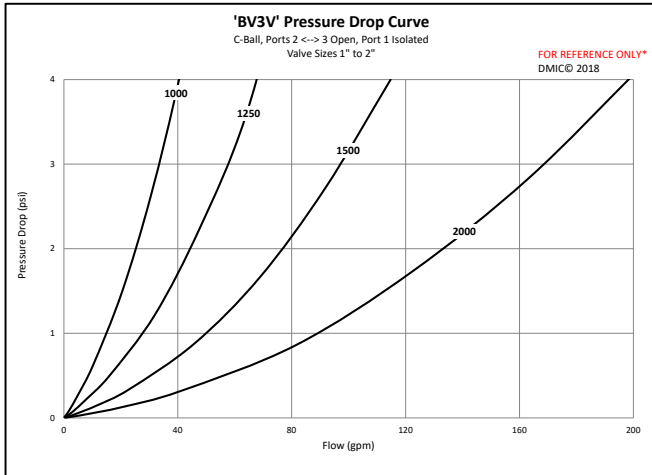
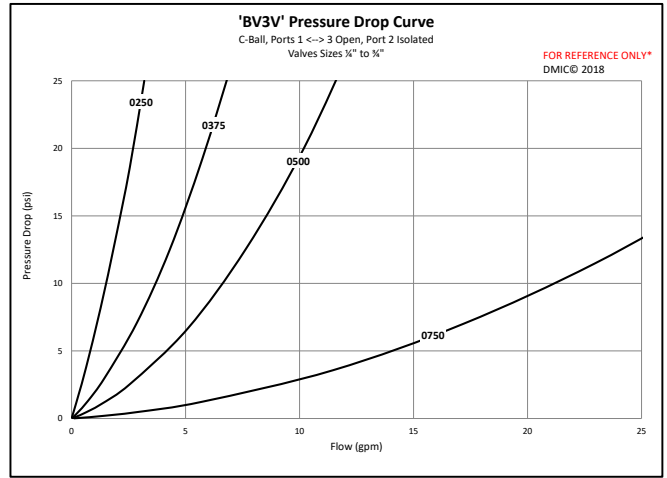
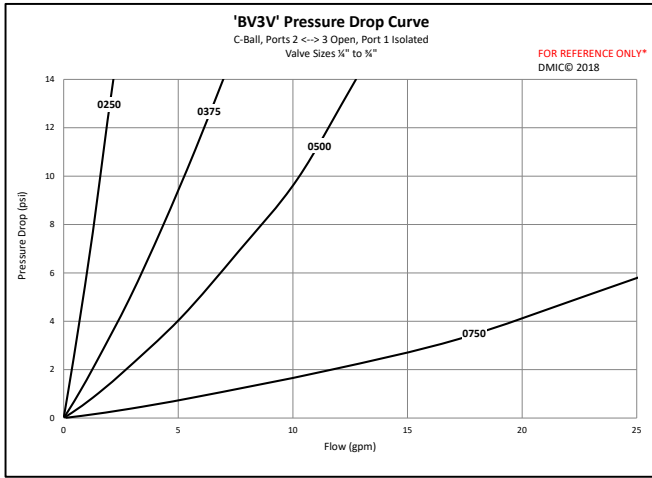
SAE C.61 & C.62 Bolt Flange Dimension

Dimension (inches)	Rated Pressure PSI C.61	Rated Pressure PSI C.62	Overall Length A _f	Width Port 1 B _f	Center to end H _f
½"	5000	5000	4.31	2.16	2.16
¾"			5.25	2.62	2.62
1"			5.98	2.99	2.99
1¼"	4000	3000	7.75	3.88	3.88
1½"	8.29		4.14	4.14	
2"	9.52		4.76	4.76	



BV3V 5,000 PSI DIVERTER

Flow Characteristic and Actuation Torque Curves



Due to our policy of continual product improvement, the specifications in this catalog may change without notice. When designing by spec, please request a certified print.

