

Plug Valves

PV1 Series



- ❖ Maximum working pressure up to 3000 psig (207 bar)
- ❖ Working temperature from -10°F to 400°F (-23°C to 204°C)
- ❖ Quarter turn operation
- ❖ O-ring seal
- ❖ 316 stainless steel and Brass material

Features

- ❖ Maximum working pressure up to 3000 psig (207 bar)
- ❖ Working temperature from -10°F to 400°F (-23°C to 204°C)
- ❖ Quarter turn operation
- ❖ O-ring seal
- ❖ Easy to maintain and clean
- ❖ Replaceable plug assembly
- ❖ 316 stainless steel and brass material
- ❖ Variety of end connections
- ❖ Color coded handles for option

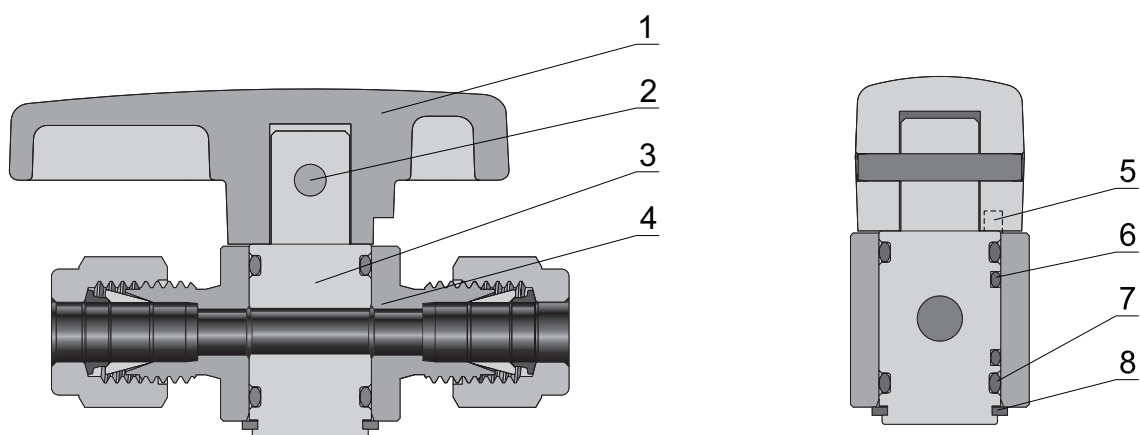
Pressure vs. Temperature

Body Material	316 S.S.	Brass	
Orifice in. (mm)	0.093 (2.4) 0.172 (4.4) 0.283 (7.2)	0.093 (2.4) 0.172 (4.4)	0.283 (7.2)
Temperature, °F (°C)	Working Pressure , psig (bar)		
-10 (-23) to 100 (37)	3000 (207)	3000 (207)	2000 (137)
150 (65)	3000 (207)	2500 (172)	2000 (137)
200 (93)	3000 (207)	2000 (137)	2000 (137)
250 (121)	2000 (137)	1500 (103)	1500 (103)
300 (148)	1000 (68.9)	1000 (68.9)	1000 (68.9)
350 (176)	1000 (68.9)	1000 (68.9)	1000 (68.9)
400 (204)	1000 (68.9)	400 (27.5)	400 (27.5)

Seal Materials

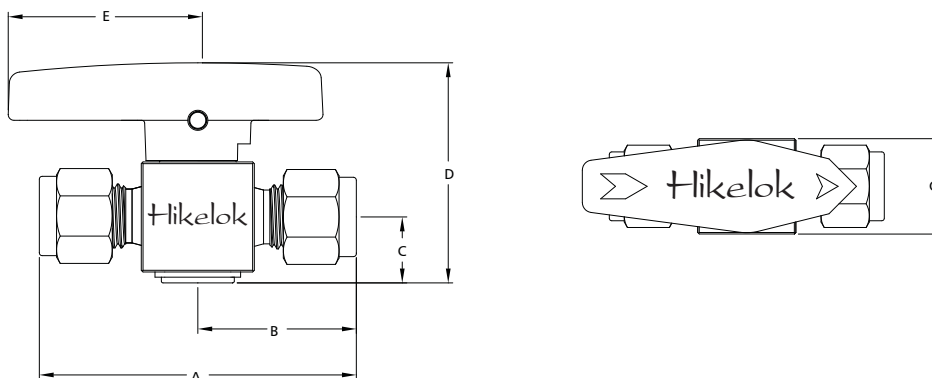
Seal Material	Temperature Range °F (°C)
Buna N	-30 to 225 (-34 to 107)
Ethylene propylene	-70 to 275 (-57 to 135)
Fluorocarbon FKM	-10 to 450 (-23 to 232)
Neoprene	-40 to 250 (-40 to 121)
Kalrez	-10 to 300 (-23 to 149)

Standard Materials of Construction



Item	Component	Material Grade/ASTM Specification	
		316 S.S.	Brass
1	Handle	Aluminium	
2	Pin	316 S.S.	
3	Plug	PTFE-coated 316 S.S./A479	PTFE-coated brass/B453
4	Body	316 S.S./A479	Brass/B453
5	Pin	316 S.S.	
6	O-ring	Fluorocarbon FKM or neoprene or ethylene propylene or buna N or kalrez	
7	O-ring	Fluorocarbon FKM or neoprene or ethylene propylene or buna N or kalrez	
8	Retaining Ring	316 S.S.	

Dimensions



Basic Ordering Number	Connection Type and Size	Orifice in. (mm)	Cv	Dimension, in. (mm)						
				A	B	C	D	E	F	G
PV1-F2-02-	1/8" Hikelok	0.093 (2.4)	0.10	1.99 (50.5)	0.98 (24.9)					
PV1-F4-04-	1/4" Hikelok	0.172 (4.4)	1.6	2.17 (55.1)	1.08 (27.4)	0.46 (11.7)	1.54 (39.1)	1.14 (29.0)	1.89 (48.0)	0.75 (19.0)
PV1-F6-04-	3/8" Hikelok		1.1	2.29 (58.2)	1.14 (29.0)					
PV1-F6-07-	3/8" Hikelok	0.283 (7.2)	6.4	2.66 (67.6)	1.33 (33.8)	0.66 (16.8)	2.14 (54.4)	1.50 (38.1)	2.47 (62.7)	1.12 (28.5)
PV1-F8-07-	1/2" Hikelok		4.4	2.88 (73.2)	1.44 (36.6)					
PV1-M3-02-	3 mm Hikelok	0.093 (2.4)	0.10	1.99 (50.5)	0.98 (24.9)	0.46 (11.7)	1.54 (39.1)	1.14 (29.0)	1.89 (48.0)	0.75 (19.0)
PV1-M6-04-	6 mm Hikelok	0.172 (4.4)	1.6	2.17 (55.1)	1.08 (27.4)					
PV1-M8-07-	8 mm Hikelok	0.283 (7.2)	6.4	2.66 (67.6)	1.30 (33.0)	0.66 (16.8)	2.14 (54.4)	1.50 (38.1)	2.47 (62.7)	1.12 (28.5)
PV1-M10-07-	10 mm Hikelok		6.4	2.68 (68.1)	1.34 (34.0)					
PV1-M12-07-	12 mm Hikelok		4.8	2.96 (75.2)	1.44 (36.6)					
PV1-FNPT2-04-	1/8 Female NPT	0.172 (4.4)	1.2	1.78 (45.2)	0.89 (22.6)	0.46 (11.7)	1.54 (39.1)	1.14 (29.0)	1.89 (48.0)	0.75 (19.0)
PV1-FNPT4-04-	1/4 Female NPT		0.9	2.09 (53.1)	1.05 (26.7)					
PV1-FNPT4-07-	1/4 Female NPT	0.283 (7.2)	4.3	2.38 (60.5)	1.19 (30.2)	0.66 (16.8)	2.14 (54.4)	1.50 (38.1)	2.47 (62.7)	1.12 (28.5)
PV1-FNPT8-07-	1/2 Female NPT		2.7	2.88 (73.2)	1.44 (36.6)					
PV1-NPT2-04-	1/8 Male NPT	0.172 (4.4)	1.0	1.53 (38.9)	0.76 (19.3)	0.46 (11.7)	1.54 (39.1)	1.14 (29.0)	1.89 (48.0)	0.75 (19.0)
PV1-NPT4-04-	1/4 Male NPT		1.0	1.90 (48.3)	0.95 (24.1)					

How to Order

PV1 — M10 — FNPT4 — V07 — R — 316

Series	Port 1 Type	Port 1 Size	Port 2 Type	Port 2 Size	Seat Material	Orifice Size	Handle	Body Material
PV1	FNPT Female NPT	2 1/8 in.	Same as port 1 type and port 2 size If port2 as port 1 are the same, eliminate the port 2 designator		V Fluorocarbon FKM	02 0.093 in. (2.4 mm)	Black	316 316 S.S.
	NPT Male NPT	3 3 mm			B BunaN	04 0.172 in. (4.4 mm)	L Blue	316L 316L
	FBT Female BSPT	4 1/4 in.			E Ethylene propylene	07 0.283 in. (7.2 mm)	R Red	304 304
	MBT Male BSPT	5 5/16 in.			N Neoprene		G Green	304L 304L
	FMS Female ISO 261	6 3/8 in. or 6 mm			Z Kalrez		Y Yellow	BR Brass
	MS Male ISO 261	8 1/2 in. or 8 mm						
	FBP Female BSPP	10 10 mm						
	MBP Male BSPP	12 12 mm						
	F Fractional Tube Fitting							
	M Metric Tube Fitting							