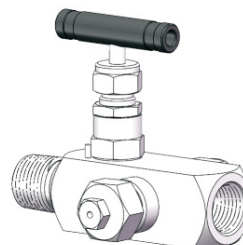


Contents

General-Purpose Gauge Valves (GV1 Series)

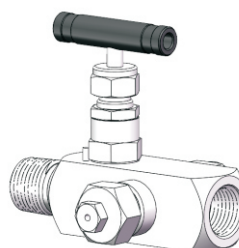
- ❖ Maximum working pressure up to 6000 psig (413 bar)
- ❖ Working temperature:
 - PTFE packing: from -65°F to 450°F (-53°C to 232°C)
 - Graphite packing: from -65°F to 1200°F (-53°C to 648°C)



10-3

High-Pressure Gauge Valves (GV2 Series)

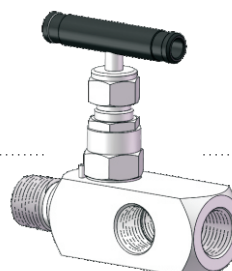
- ❖ Maximum working pressure up to 10000 psig (689 bar)
- ❖ Working temperature:
 - PTFE packing: from -65°F to 450°F (-53°C to 232°C)
 - Graphite packing: from -65°F to 1200°F (-53°C to 648°C)



10-6

Gauge Valves (GV3 Series)

- ❖ Maximum working pressure up to 6000 psig (413 bar)
- ❖ Working temperature:
 - PTFE packing: from -65°F to 450°F (-53°C to 232°C)



10-9

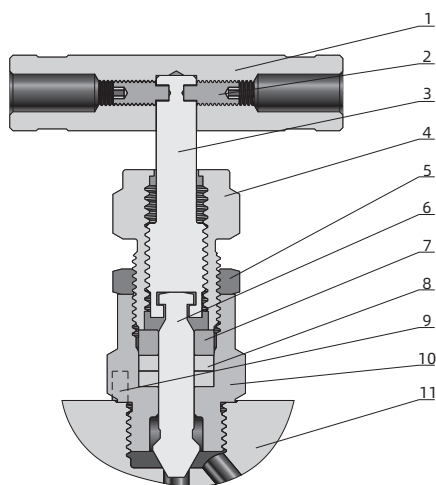
General-Purpose Gauge Valves

GV1 Series

Features

- ❖ Maximum working pressure up to 6000 psig (413 bar)
- ❖ Working temperature:
 - PTFE** packing: from -65°F to 450°F (-53°C to 232°C)
 - Graphite** packing: from -65°F to 1200°F (-53°C to 648°C)
- ❖ Orifice size: 0.16" (4.0 mm)
- ❖ Non-rotating lower stem
- ❖ Safety back seating seals in fully open position
- ❖ Rolled spindle operating threads
- ❖ Upper stem and lower stem design, stem threads above packing protected from system media
- ❖ Bonnet locking pin fitted as standard
- ❖ Low torque operating T bar handle
- ❖ Handle of different colors available for option

Standard Materials of Construction



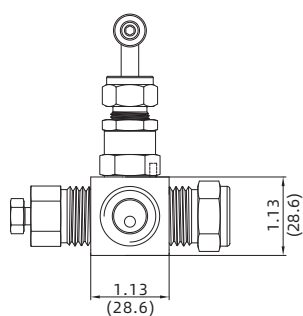
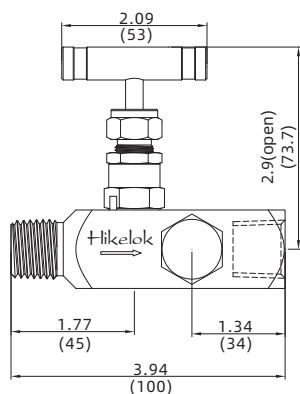
Component		Material Grade / ASTM Specification	
		316 S.S.	Alloy 400
1	Handle	Anodized aluminum or stainless steel	
2	Set Screw	Galvanized steel	
3	Upper Stem	316 S.S. / A276	
4	Packing Bolt	316 S.S. / A276	
5	Nut	630 S.S. / B783	
6	Lower Stem	Chrome-plated 316 S.S. / A276	Alloy R-405 / B164
7	Gland	316 S.S. / A276	
8	Packing	PTFE or graphite	
9	Pin	304 S.S.	
10	Bonnet	316 S.S. / A479	Alloy 400 / B164
11	Body	316 S.S. / A479 316 S.S. / A182	Alloy 400 / B164, B127, B564

Pressure vs. Temperature

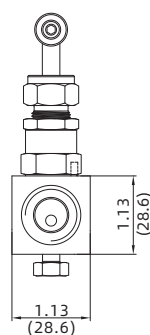
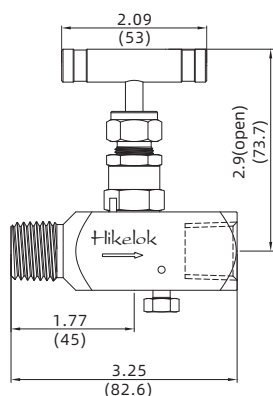
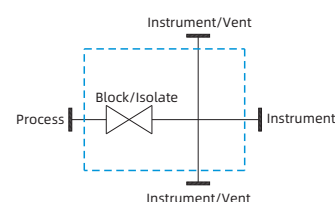
Material Name	316 S.S.	Alloy 400	Alloy 20	Alloy 600	Alloy C-276
Temperature, °F (°C)	Working Pressure, psig (bar)				
-65 (-53) to 100 (37)	6000 (413)	5000 (344)	5000 (344)	6000 (413)	6000 (413)
200 (93)	5160 (355)	4400 (303)	4640 (319)	5600 (385)	6000 (413)
250 (121)	4910 (338)	4260 (293)	4500 (310)	5460 (376)	6000 (413)
300 (148)	4660 (322)	4120 (283)	4360 (300)	5320 (366)	6000 (413)
350 (176)	4470 (307)	4050 (279)	4185 (288)	5220 (359)	5975 (411)
400 (204)	4280 (293)	3980 (274)	4010 (276)	5120 (352)	5880 (405)
450 (232)	4130 (284)	3970 (273)	3955 (272)	5030 (346)	5710 (393)
500 (260)	3980 (274)	3960 (272)	3900 (268)	4940 (340)	5540 (381)
600 (315)	3760 (259)	—	3790 (261)	4780 (329)	5040 (347)
650 (343)	3680 (253)	—	3750 (258)	4700 (323)	4905 (337)
700 (371)	3620 (250)	—	3710 (255)	4640 (319)	4730 (325)
750 (398)	3560 (245)	—	3665 (252)	4430 (305)	4430 (305)
800 (426)	3520 (243)	—	3600 (248)	4230 (291)	4230 (291)
850 (454)	3480 (240)	—	—	4060 (279)	4060 (279)
900 (482)	3460 (239)	—	—	3745 (258)	3745 (258)
950 (510)	3220 (221)	—	—	2725 (187)	3220 (221)
1000 (537)	3030 (209)	—	—	1800 (124)	3030 (208)
1050 (565)	3000 (206)	—	—	1155 (79.5)	3000 (206)
1100 (593)	2545 (175)	—	—	770 (53.0)	2685 (184)
1150 (621)	1970 (135)	—	—	565 (38.9)	2285 (157)
1200 (648)	1545 (107)	—	—	515 (35.4)	1545 (106)

❖ Based on graphite stem packing.

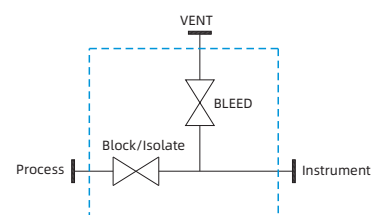
Dimensions



Multi-port



Single-port



How to Order

GV1 — NPT8 — FNPT8 — SR1 — G — 316

Series	Inlet Type		Inlet Size	Outlet Type	Outlet Size	Body Type	Handle	Packing Material	Body Material
GV1	FNPT	Female NPT	4 1/4 in.	Same as inlet type and inlet size		M Multi-port	Black Aluminum	PTFE	316 316 S.S.
	NPT	Male NPT	6 3/8 in. or 6 mm			S Single-port	R1 Red Aluminum	G Graphite	316L 316L S.S.
	FBT	Female BSPT	8 1/2 in. or 8 mm	If outlet and inlet are the same, eliminate the outlet designator			S1 Stainless Steel		304 304 S.S.
	MBT	Male BSPT	12 3/4 in. or 12 mm						304L 304L S.S.
	FMS	Female Metric	20 M20 x 1.5						A20 Alloy 20
	MS	Male Metric (for BG)							A400 Alloy 400
	FBP	Female BSPP							A600 Alloy 600
	MBP	Male BSPP (for BG)							A825 Alloy 825
									A276 Alloy C276
									DU7 Duplex 2507

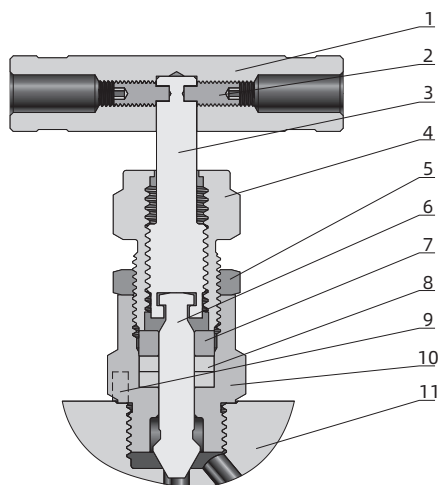
High-Pressure Gauge Valves

GV2 Series

Features

- ❖ Maximum working pressure up to 10000 psig (689 bar)
- ❖ Working temperature:
 - PTFE** packing: from -65°F to 450°F (-53°C to 232°C)
 - Graphite** packing: from -65°F to 1200°F (-53°C to 648°C)
- ❖ Orifice size: 0.16" (4.0 mm)
- ❖ Non-rotating lower stem
- ❖ Safety back seating seals in fully open position
- ❖ Rolled spindle operating threads
- ❖ Upper stem and lower stem design, Stem threads above packing protected from system media
- ❖ Bonnet locking pin fitted as standard
- ❖ Low torque operating T bar handle
- ❖ Handle of different colors available for option

Standard Materials of Construction



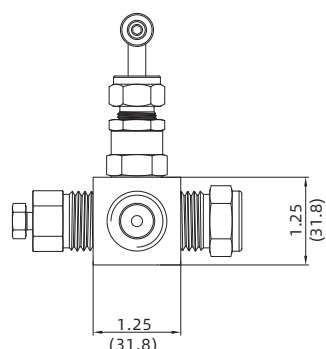
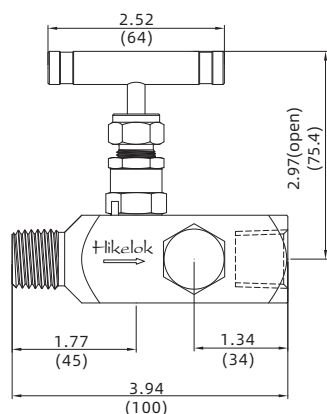
Component		Material Grade / ASTM Specification	
		316 S.S.	Alloy 400
1	Handle	Anodized aluminum or stainless steel	
2	Set Screw	Galvanized steel	
3	Upper Stem	316 S.S. / A276	
4	Packing Bolt	316 S.S. / A276	
5	Nut	630 S.S. / B783	
6	Lower Stem	Chrome-plated 316 S.S. / A276	Alloy R-405 / B164
7	Gland	316 S.S. / A276	
8	Packing	PTFE or graphite	
9	Pin	304 S.S.	
10	Bonnet	316 S.S. / A479	Alloy 400 / B164
11	Body	316 S.S. / A479 316 S.S. / A182	Alloy 400 / B164, B127, B564

Pressure vs. Temperature

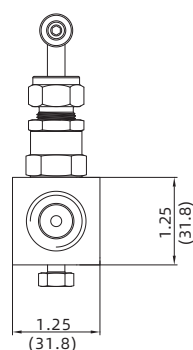
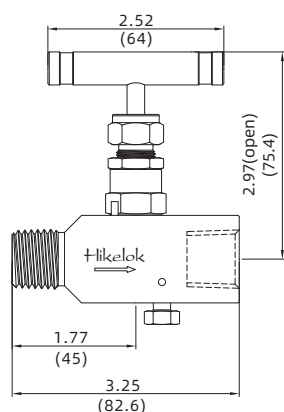
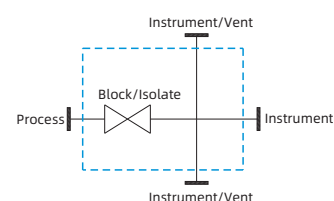
Material Name	316 S.S.	Alloy 400	Alloy 20	Alloy 600	Alloy C-276
Temperature, °F (°C)	Working Pressure, psig (bar)				
-65 (-53) to 100 (37)	10000 (689)	10000 (689)	10000 (689)	10000 (689)	10000 (689)
200 (93)	9290 (640)	7920 (546)	10000 (689)	10000 (689)	10000 (689)
250 (121)	8840 (609)	7667 (528)	9711 (669)	9711 (669)	9711 (669)
300 (148)	8390 (578)	7415 (511)	9408 (648)	9408 (648)	9408 (648)
350 (176)	8045 (554)	7290 (502)	9323 (642)	9323 (642)	9323 (642)
400 (204)	7705 (530)	7165 (494)	9239 (637)	9239 (637)	9239 (637)
450 (232)	7435 (512)	7147 (492)	9144 (630)	9144 (630)	9144 (630)
500 (260)	7165 (493)	7130 (491)	9060 (624)	9060 (624)	9060 (624)
600 (315)	6770 (466)	7130 (491)	9070 (625)	9070 (625)	9070 (625)
650 (343)	6660 (458)	—	8825 (608)	8825 (608)	8825 (608)
700 (371)	6480 (446)	—	8515 (587)	8515 (587)	8515 (587)
750 (398)	6335 (436)	—	7970 (549)	7970 (549)	7970 (549)
800 (426)	6230 (429)	—	7610 (524)	7610 (524)	7610 (524)
850 (454)	6085 (419)	—	—	7305 (503)	7305 (503)
900 (482)	5905 (406)	—	—	6740 (464)	6740 (464)
950 (510)	5795 (399)	—	—	4905 (338)	5795 (399)
1000 (537)	5450 (375)	—	—	3240 (223)	5450 (375)
1050 (565)	5400 (372)	—	—	2085 (143)	4835 (333)
1100 (593)	4835 (333)	—	—	1390 (95)	4115 (283)
1150 (621)	4115 (283)	—	—	1020 (70)	2775 (191)
1200 (648)	3085 (212)	—	—	925 (63)	1620 (111)

❖ Based on graphite stem packing.

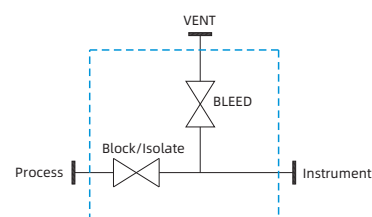
Dimensions



Multi-port



Single-port



How to Order

GV2 — NPT8 — FNPT8 — SR1 — G — 316

Series	Inlet Type	Inlet Size	Outlet Type	Outlet Size	Body Type	Handle	Packing Material	Body Material
GV2	FNPT Female NPT	4 1/4 in.	Same as inlet type and inlet size		M Multi-port	Black Aluminum	PTFE	316 316 S.S.
	NPT Male NPT	6 3/8 in. or 6 mm			S Single-port	R1 Red Aluminum	G Graphite	316L 316L S.S.
	FBT Female BSPT	8 1/2 in. or 8 mm	If outlet and inlet are the same, eliminate the outlet designator			S1 Stainless Steel		304 304 S.S.
	MBT Male BSPT	12 3/4 in. or 12 mm				304L 304L S.S.		
	FMS Female Metric	20 M20 x 1.5				A20 Alloy 20		
	MS Male Metric (for BG)					A400 Alloy 400		
	FBP Female BSPP					A600 Alloy 600		
	MBP Male BSPP (for BG)					A825 Alloy 825		
						A276 Alloy C276		
						DU7 Duplex 2507		

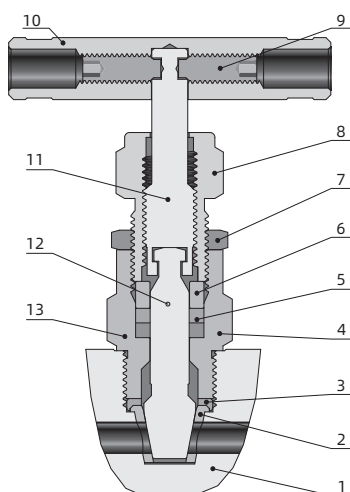
Gauge Valves

GV3 Series

Features

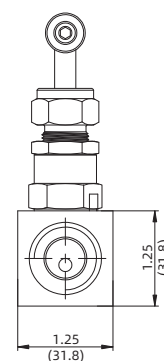
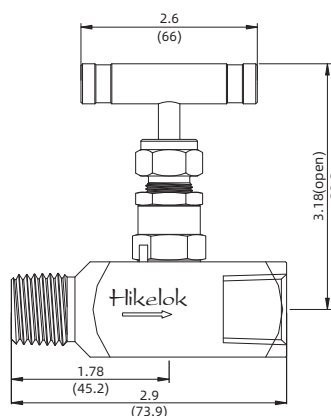
- ❖ The maximum working pressure is up to 6000psi (413bar)
- ❖ Working temperature:
PTFE packing: from -65°F to 450°F (-53°C to 232°C)
- ❖ Orifice size: 0.19"(4.8mm), 0.25"(6.4mm)
- ❖ The lower valve stem does not rotate
- ❖ Fully open position back seal design
- ❖ The upper valve stem thread has rolling teeth and high strength
- ❖ Two section valve stem structure, with the valve stem thread located above the packing, unaffected by the system medium
- ❖ Bar shaped handle for easy operation

Standard Materials of Construction

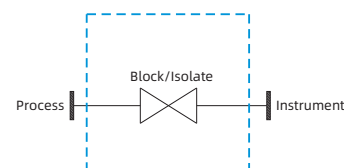


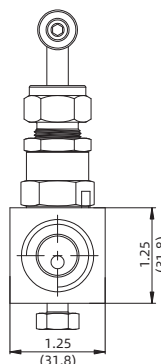
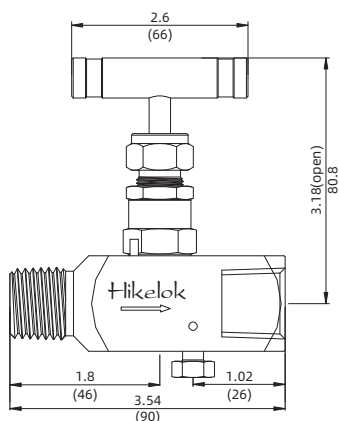
Component		Material Grade / ASTM Specification
1	Body	316 S.S./A479
2	Seat	PEEK
3	Seat Retainer	316 S.S./A479
4	Bonnet	316 S.S./A479
5	Stem Packing	PTFE/D1710
6	Gland	316.S.S/A479
7	Nut	630.S.S/B783
8	Packing Nut	316.S.S/A479
9	Set Screw	Galvanized Steel
10	Handle	Anodized aluminum or stainless steel
11	Upper Stem	316 S.S./A479
12	Lower stem	316 S.S./A479
13	Pin	304 S.S.

Dimensions

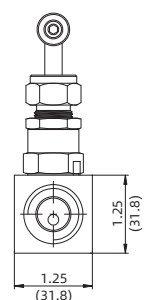
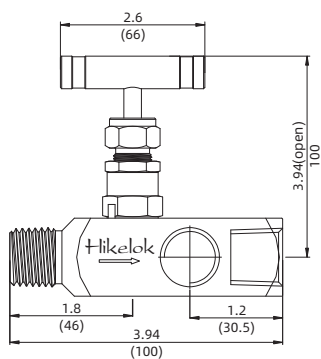
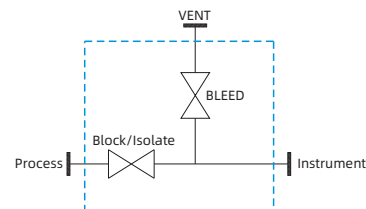


standardform

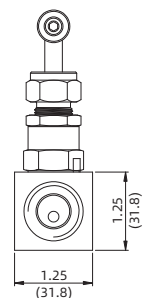
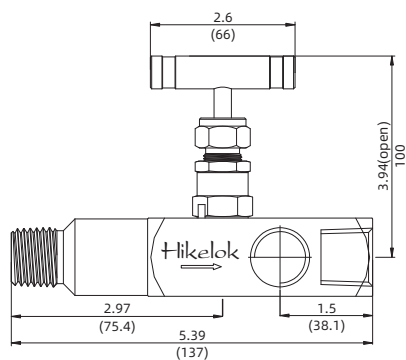
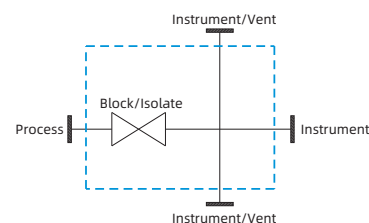




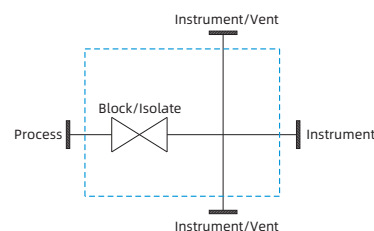
single-port



Multi-port



Lengthening



How to Order

GV3 — NPT8 — FNPT8 — SR1 — P — 316

Series	Inlet Type	Inlet Size	Outlet Type	Outlet Size	Body Type	Handle	Plug	Body Material	
GV3	FNPT Female NPT	4 1/4 in.	Same as inlet type and inlet size		Standard form	Black Aluminum	Without plug	316 316 S.S.	
	NPT Male NPT	6 3/8 in. or 6 mm			S Single-port	R1 Red Aluminum	P With plug	316L 316L S.S.	
	FBT Female BSPT	8 1/2 in. or 8 mm	If outlet and inlet are the same, eliminate the outlet designator		M Multi-port	S1 Stainless Steel		304 304 S.S.	
	MBT Male BSPT	12 3/4 in. or 12 mm			L Lengthening			304L 304L S.S.	
	FMS Female Metric	20 M20 x 1.5							
	MS Male Metric (for BG)								
	FBP Female BSPP								
	MBP Male BSPP (for BG)								