

Features

- © Working pressure up to 10 000 psig (689 bar)
- © Fixed ball with double sealing
- © Any flow pattern at working pressure
- © Automatic compensation of seat sealing
- © Low operating torque
- © Blow-out proof stem
- © Handle indicates flow direction
- © Positive handle stop
- © Manual, electric or pneumatic actuation available
- © Panel mountable
- © Size from 1/8" to 1/2" & from 6 mm to 12 mm
- © Double Ferrule tube fitting or pipe thread end connections
- © Options for handle color
- © All designs are checked at 1.5 times work pressure with pure water to confirm the strength, every valve is factory tested with nitrogen at the smaller of working pressure and 1000 psig to detect leakage

Flow Data at 70° F (20° C)

CNG Series 2-Way

0.187 in. (4.75 mm) orifice, 1.6 Cv

Inlet Pressure psig (bar)	Pressure Drop (Δ p) psig (bar)	Air Flow std ft ³ /min (std L/min)	Water Flow U.S. gal/min (L/min)
1000 (68.9)	10 (0.69)	14 (334)	3.5 (13)
3000 (207)	50 (3.45)	30 (834)	7.5 (28)
6000 (414)	100 (6.89)	60 (1670)	11.0 (41)

CNG Series 3-Way

0.187 in. (4.75 mm) orifice, 0.8 Cv

Inlet Pressure psig (bar)	Pressure Drop (Δ p) psig (bar)	Air Flow std ft ³ /min (std L/min)	Water Flow U.S. gal/min (L/min)
1000 (68.9)	10 (0.69)	10 (275)	3.0 (11)
3000 (207)	50 (3.45)	23 (630)	7.0 (26)
6000 (414)	100 (6.89)	42 (1150)	9.5 (35)

HCNG Series 2-Way

0.187 in. (4.75 mm) orifice, 1.25 Cv

Inlet Pressure psig (bar)	Pressure Drop (Δ p) psig (bar)	Air Flow std ft ³ /min (std L/min)	Water Flow U.S. gal/min (L/min)
1000 (68.9)	150 (10.3)	90 (2550)	15 (55.5)
6000 (414)	600 (41.4)	345 (9660)	30 (111)
10000 (689)	1000 (68.9)	560 (15680)	40 (148)

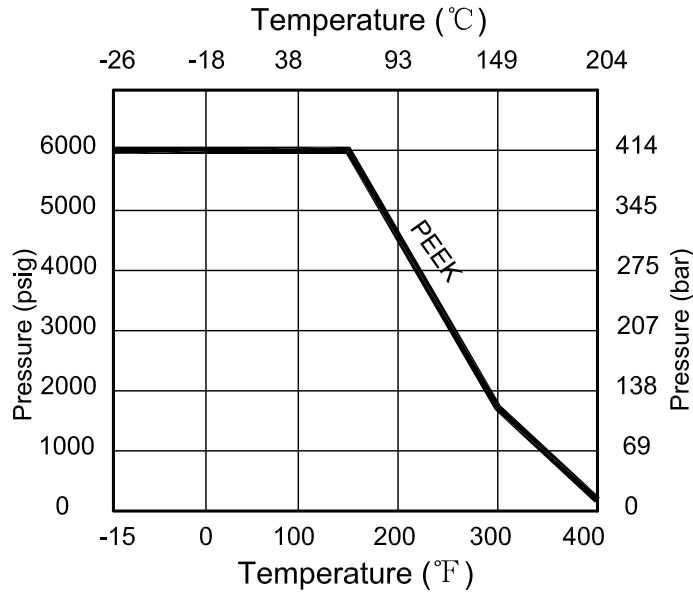
HCNG Series 3-Way

0.187 in. (4.75 mm) orifice, 0.8 Cv

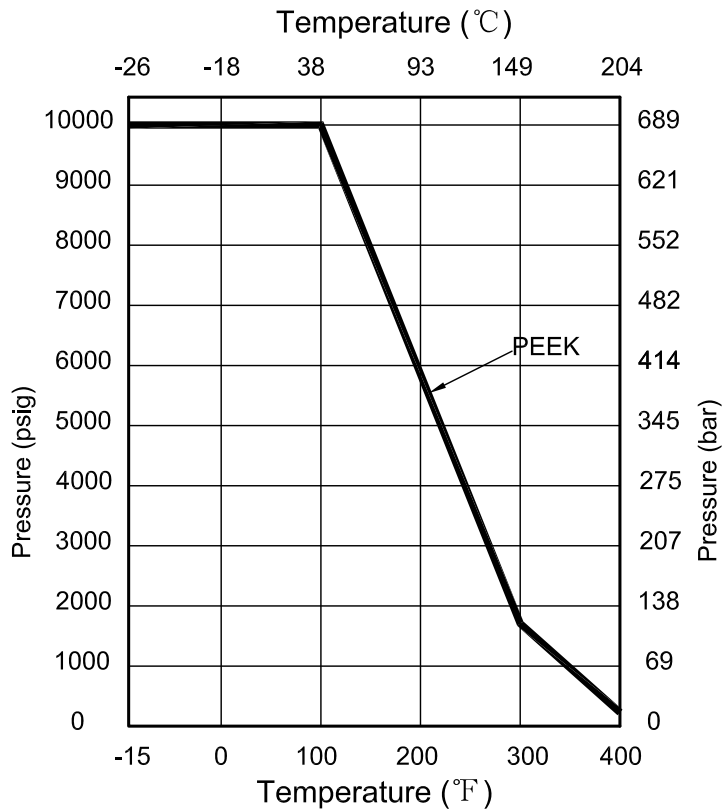
Inlet Pressure psig (bar)	Pressure Drop (Δp) psig (bar)	Air Flow std ft ³ /min (std L/min)	Water Flow U.S. gal/min (L/min)
1000 (68.9)	150 (10.3)	55 (1540)	10 (37.0)
6000 (414)	600 (41.4)	200 (5600)	20 (74.0)
10000 (689)	1000 (68.9)	330 (9240)	25 (92.5)

Pressure vs. Temperature

CNG Series

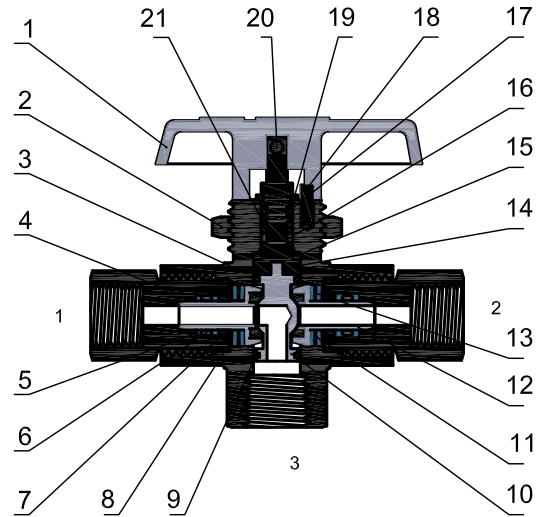
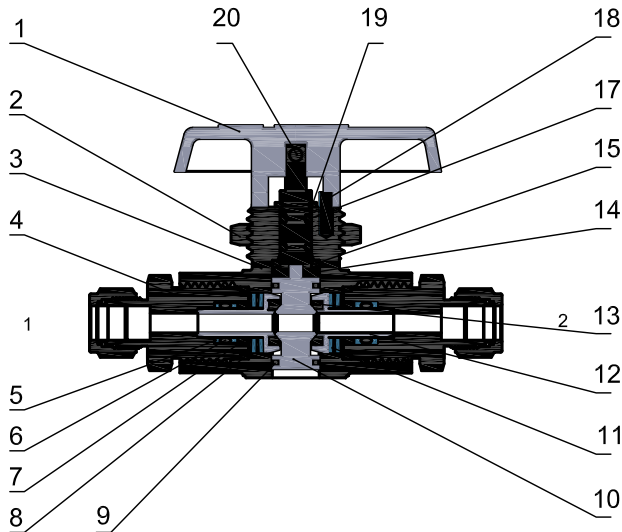


HCNG Series (Heavy Wall)



Materials of Construction

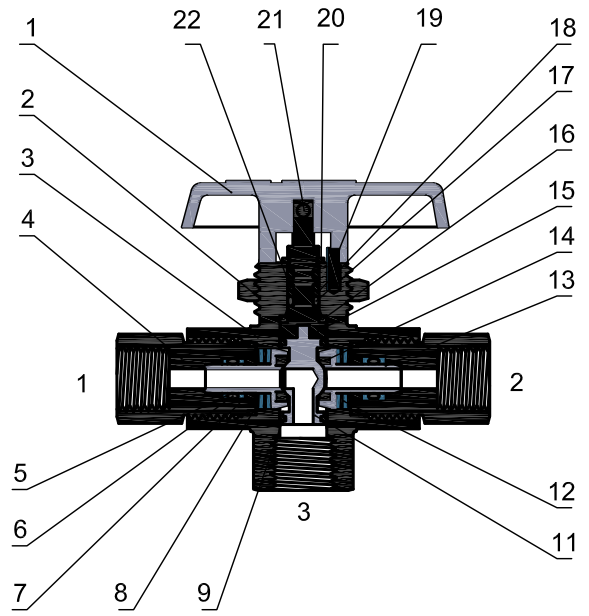
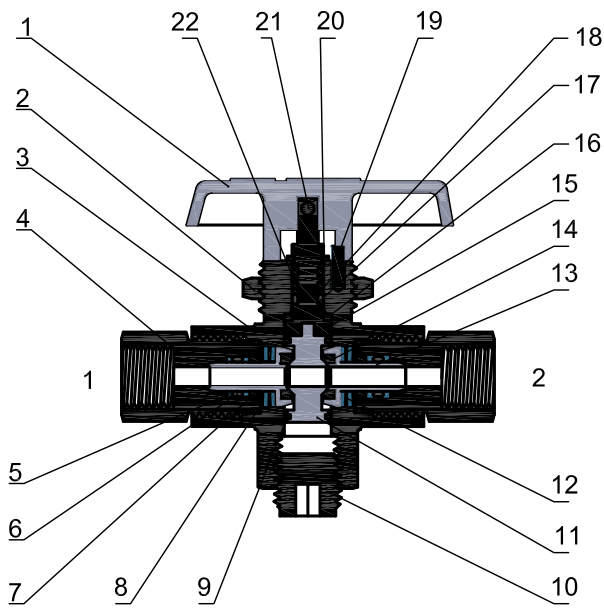
CNG Series



Item	Component	Valve Body Material			
		Stainless Steel		Alloy 400	
		2-Way	3-Way	2-Way	3-Way
		Material Grade/ASTM Specification			
1	Handle	Aluminum alloy/Nylon			
2	Panel nut	17-4PH power metallurgy/B783			
3	Body	316 SS/A182		Alloy 400/B164	
4	End connectors	316 SSA479		Alloy R-405/B164	
5	Seat retainer guides	Reinforced PTFE			
6	Seat retainer O-ring2	Fluorocarbon FKM*			
7	Seat retainer O-ring back-up	Reinforced PTFE			
8	End connector seals	PTFE/D1710			
9	Trunnion bearings	Fluorocarbon FKM*	PEEK	Fluorocarbon FKM*	PEEK
10	Ball	316 SS/A276		Alloy R-405/B164	
11	Seat springs	60Si2Mn			
12	Seat retainers	316 SS/A276		Alloy R-405/B164	
13	Seats	PTFE/PEEK/PCTFE			
14	Stem	316 SS/A276		Alloy R-405/B164	
15	Stem washer	Reinforced PTFE	PEEK	Reinforced PTFE	PEEK
16	Stem O-ring	—	Fluorocarbon FKM*	—	Fluorocarbon FKM*
17	Stem back-up rings	PTFE/D1710			
18	Pin	Stainless Steel			
19	Snap ring	PEEK			
20	Set screw	302 SS			
21	Stem backup ring	—	PEEK	—	PEEK
	Lubricants	Molybdenum and tungstendisulfide and fluorinated-based			

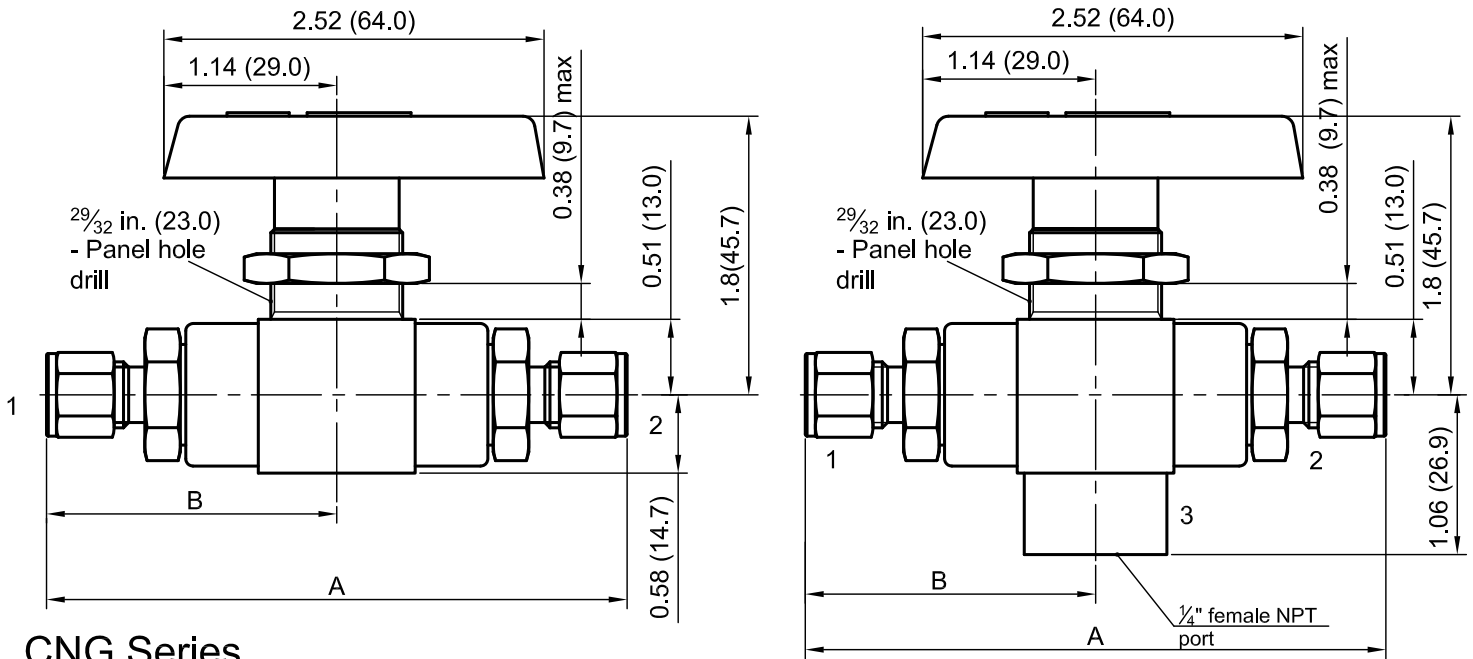
*Optional seal materials: Fluorocarbon FKM/Neoprene/Ethylene Propylene/Buna N

HCNG Series



Item	Component	2-Way	3-Way
		Material Grade/ASTM Specification	
1	Handle	Aluminum alloy	
2	Panel nut	17-4PH power metallurgy/B783	
3	Body	316 SS/A182	
4	End connectors	316 SSA182	
5	Seat retainer guides	Reinforced PTFE	
6	Seat retainer O-rings	Fluorocarbon FKM *	
7	Seat retainer O-ring back-up	Reinforced PTFE	
8	End connector seals	PTFE/D1710	
9	Trunnion bearings	Fluorocarbon FKM *	
10	Plug	316 SS/A276	
11	Ball	316 SS/A479	
12	Seat springs	60SI2MN	
13	Seat retainers	316 SS/A276	
14	Seats	PTFE/PEEK/PCTFE	
15	Stem	316 SS/A276	
16	Stem washer	PEEK	
17	Stem O-ring	Fluorocarbon FKM *	
18	Stem back-up rings	PTFE/D1710	
19	Pin	Stainless Steel	
20	Snap ring	PEEK	
21	Set screw	Stainless Steel	
22	Stem backup ring	PEEK	
	Lubricants	Molybdenum and tungstendisulfide and fluorinated-based	

Dimensions



CNG Series

End Connections		Flow Coefficient (Cv)		Ordering Number		Dimensions, in. (mm)	
Type	Size	2-Way	3-Way	2-Way Valve	3-Way Valve	A	B
Female NPT	1/8 in.	1.6	0.8	CNG-FNS2-□□	CNG-FNS2-X-□□	2.94 (74.7)	1.47 (37.3)
	1/4 in.			CNG-FNS4-□□	CNG-FNS4-X-□□		
	1/2 in.			CNG-FNS8-□□	CNG-FNS8-X-□□		
Double Ferrule Tube Fitting	1/4 in.			CNG-OD4-□□	CNG-OD4-X-□□	4.14 (105.2)	2.07 (52.6)
	3/8 in.			CNG-OD6-□□	CNG-OD6-X-□□	4.39 (111.5)	2.19 (55.6)
	1/2 in.			CNG-OD8-□□	CNG-OD8-X-□□	4.60 (116.8)	2.30 (58.4)
	6 mm			CNG-6MM-□□	CNG-6MM-X-□□	4.14 (105.2)	2.07 (52.6)
	8 mm			CNG-8MM-□□	CNG-8MM-X-□□	4.15 (105.4)	
	10 mm			CNG-10MM-□□	CNG-10MM-X-□□	4.41 (112.0)	2.20 (55.9)
	12 mm			CNG-12MM-□□	CNG-12MM-X-□□	4.60 (116.8)	2.30 (58.4)

HCNG Series

End Connections		Flow Coefficient (Cv)		Ordering Number		Dimensions, in. (mm)	
Type	Size	2-Way	3-Way	2-Way Valve	3-Way Valve	A	B
Female NPT	1/8 in.	1.25	0.8	HCNG-FNS2-□□	HCNG-FNS2-X-□□	2.94 (74.7)	1.47 (37.3)
	1/4 in.			HCNG-FNS4-□□	HCNG-FNS4-X-□□		
Double Ferrule Tube Fitting	1/4 in.			HCNG-OD4-□□	HCNG-OD4-X-□□	4.14 (105.2)	2.07 (52.6)
	3/8 in.			HCNG-OD6-□□	HCNG-OD6-X-□□	4.39 (111.5)	2.19 (55.6)
	1/2 in.			HCNG-OD8-□□	HCNG-OD8-X-□□	4.60 (116.8)	2.30 (58.4)
	6 mm			HCNG-6MM-□□	HCNG-6MM-X-□□	4.14 (105.2)	2.07 (52.6)
	8 mm			HCNG-8MM-□□	HCNG-8MM-X-□□	4.15 (105.4)	
	10 mm			HCNG-10MM-□□	HCNG-10MM-X-□□	4.41 (112.0)	2.20 (55.9)
	12 mm			HCNG-12MM-□□	HCNG-12MM-X-□□	4.60 (116.8)	2.30 (58.4)