

Quick Open Needle Valves

Specifications

- MAWP up to 60,000 PSI (4136 bar)
- Temperature Ratings: -100°F to 600°F

Features & Benefits

- Valve is fully open in as little as 1 3/4 turns. A high pressure valve industry first!
- Stem is lifted off of the seat more than 2X faster than conventional valves, which reduces throttling and therefore increases seat life.
- Less than half the number of turns to fully open compared to competitor's valves. Less operator fatigue when opening/closing.
- Patent pending
- Solid stainless steel handle.
- Stainless steel captive fixing screw with stainless spring for easier handle removal. Eliminates dropped or misplaced fixing screw.
- 4-sided tapered stem for maximum handle contact. No chance of the handle slipping or loosening on stem.
- Two-piece, heavy-duty, non-rotating stem for a robust and reliable assembly.
- Bi-directional flow capability. Simplifies system designs.
- Packing gland/body thread interface consists of a preload locking internal thread form that is resistant to vibration. Eliminates the need for an external locking device.
- Double sided weep holes for easier leakage verification.
- Complete material traceability.

Options

- Can be manufactured to meet NACE MR-01-75
- Grafoil Packing for temperature up to 800°F
- Extended Stuffing Box for temperature up to 1200°F
- For Valve to be manufactured to NACE MR-01-75 add -NACE to end of part number. Pressure rating will change due to NACE, contact factory for revised pressure rating.

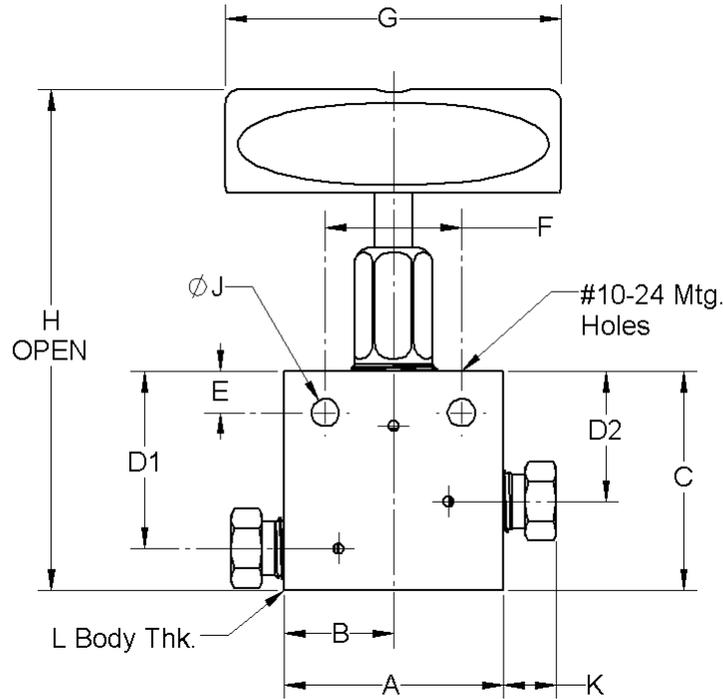
Example: 20NVQ6M1V-NACE

Materials

- Body - 316 cold worked stainless steel
- Packing - Glass filled Teflon
- Stem - 15-5 PH

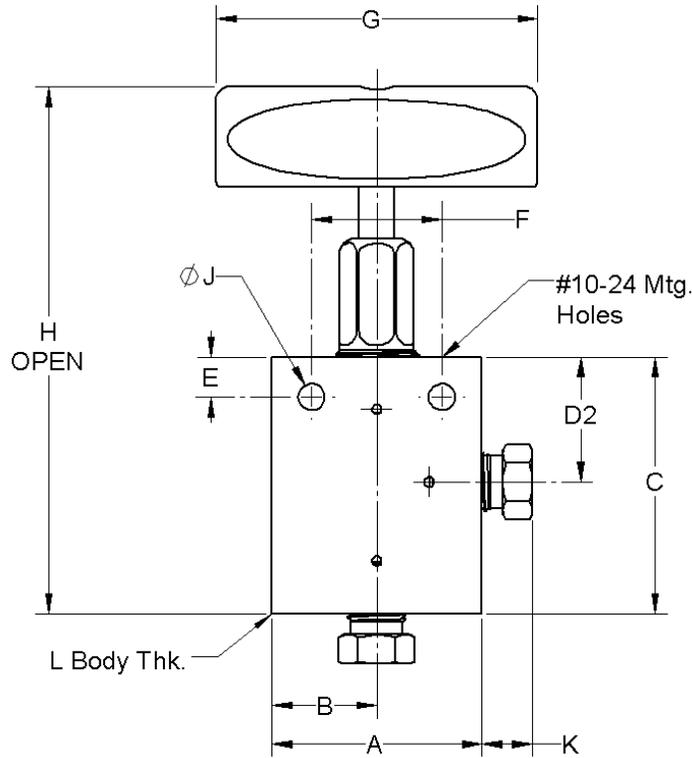
Quick Open Needle Valves 20,000 – 60,000 PSI

2-Way Straight



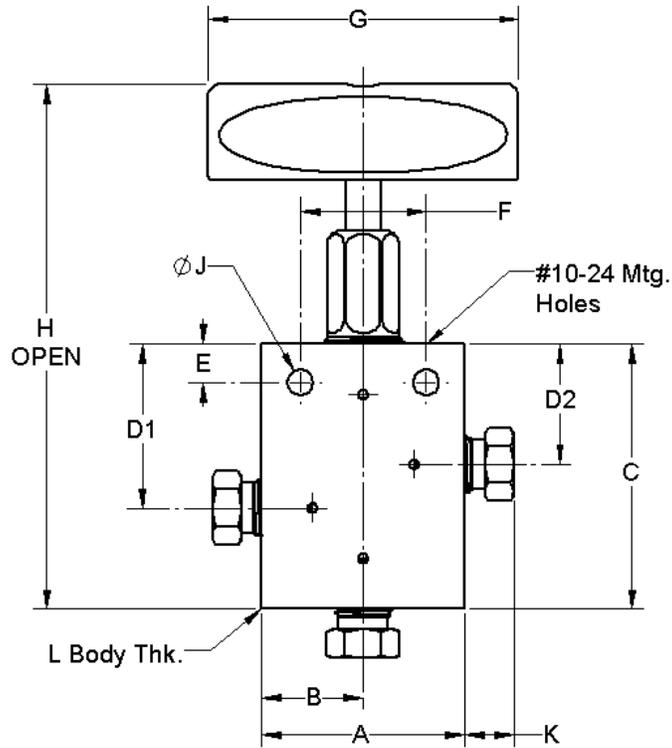
Pressure Rating	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)	Dimensions, in. (mm)											
					A	B	C	D1	D2	E	F	G	H	J	K	L
20,000 PSI	Medium Pressure Cone & Thread	1/4	20NVQ4M1	0.125 (3.2)	2.00 (50.8)	1.00 (25.4)	2.00 (50.8)	1.63 (41.3)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	2.54 (64.5)	0.25 (6.4)	0.38 (9.7)	1.00 (25.4)
		3/8	20NVQ6M1	0.20 (5.1)	2.00 (50.8)	1.00 (25.4)	2.00 (50.8)	1.63 (41.3)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	2.54 (64.5)	0.25 (6.4)	0.48 (12.2)	1.00 (25.4)
		9/16	20NVQ9M1	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	2.88 (73.2)	2.38 (60.5)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	2.32 (58.9)	0.34 (8.7)	0.68 (17.3)	1.00 (25.4)
30,000 PSI	High Pressure Cone & Thread	1/4	30NVQ4H1	0.093 (2.4)	2.00 (50.8)	1.00 (25.4)	2.00 (50.8)	1.50 (38.1)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.45 (62.2)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
		3/8	30NVQ6H1	0.125 (3.2)	2.00 (50.8)	1.00 (25.4)	2.00 (50.8)	1.50 (38.1)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.45 (62.2)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
		9/16	30NVQ9H1	0.125 (3.2)	2.62 (66.5)	1.31 (33.3)	2.44 (62.0)	1.56 (39.6)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.45 (62.2)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)
60,000 PSI	High Pressure Cone & Thread	1/4	60NVQ4H1	0.062 (1.6)	2.00 (50.8)	1.00 (25.4)	2.12 (53.8)	1.69 (42.9)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.49 (63.2)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
		3/8	60NVQ6H1	0.062 (1.6)	2.00 (50.8)	1.00 (25.4)	2.25 (57.2)	1.69 (42.9)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.49 (63.2)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
		9/16	60NVQ9H1	0.062 (1.6)	2.62 (66.5)	1.31 (33.3)	2.50 (63.5)	1.75 (44.5)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.49 (63.2)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

2-Way Angle



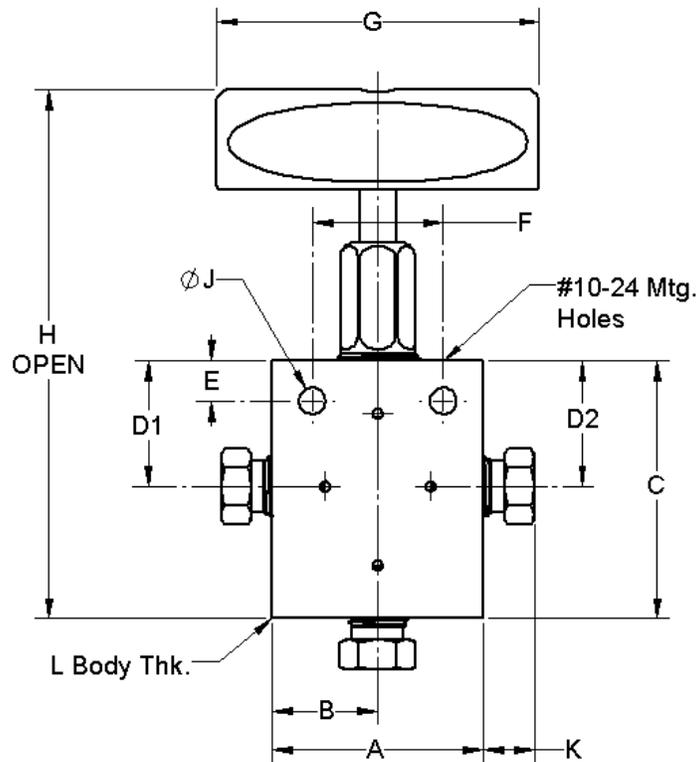
Pressure Rating	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)	Dimensions, in. (mm)										
					A	B	C	D1	E	F	G	H	J	K	L
20,000 PSI	Medium Pressure Cone & Thread	1/4	20NVQ4M2	0.125 (3.2)	2.00 (50.8)	1.00 (25.4)	2.44 (62.0)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	2.54 (64.5)	0.25 (6.4)	0.38 (9.7)	1.00 (25.4)
		3/8	20NVQ6M2	0.20 (5.1)	2.00 (50.8)	1.00 (25.4)	2.44 (62.0)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	2.54 (64.5)	0.25 (6.4)	0.48 (12.2)	1.00 (25.4)
		9/16	20NVQ9M2	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	3.38 (85.9)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	2.32 (58.9)	0.34 (8.7)	0.68 (17.3)	1.00 (25.4)
30,000 PSI	High Pressure Cone & Thread	1/4	30NVQ4H2	0.093 (2.4)	2.00 (50.8)	1.00 (25.4)	2.00 (50.8)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.45 (62.2)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
		3/8	30NVQ6H2	0.125 (3.2)	2.00 (50.8)	1.00 (25.4)	2.12 (53.8)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.45 (62.2)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
		9/16	30NVQ9H2	0.125 (3.2)	2.62 (66.5)	1.31 (33.3)	2.44 (62.0)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.45 (62.2)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)
60,000 PSI	High Pressure Cone & Thread	1/4	60NVQ4H2	0.062 (1.6)	2.00 (50.8)	1.00 (25.4)	2.38 (60.5)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.49 (63.2)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
		3/8	60NVQ6H2	0.062 (1.6)	2.00 (50.8)	1.00 (25.4)	2.62 (66.5)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.49 (63.2)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
		9/16	60NVQ9H2	0.062 (1.6)	2.62 (66.5)	1.31 (33.3)	2.81 (71.4)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.49 (63.2)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

3-Way 2 Inlet



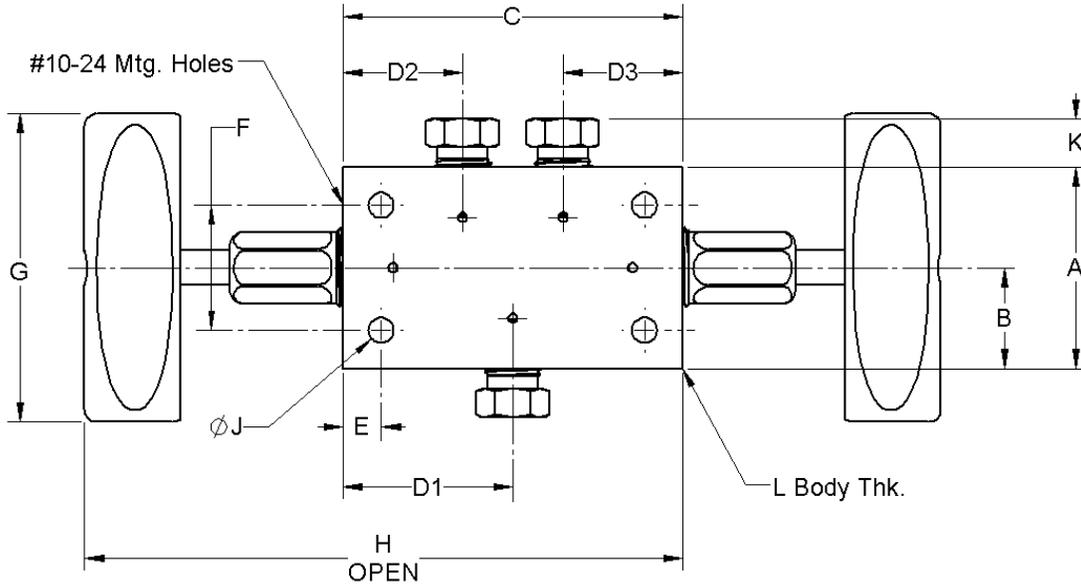
Pressure Rating	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)	Dimensions, in. (mm)											
					A	B	C	D1	D2	E	F	G	H	J	K	L
20,000 PSI	Medium Pressure Cone & Thread	1/4	20NVQ4M3	0.125 (3.2)	2.00 (50.8)	1.00 (25.4)	2.62 (66.5)	1.63 (41.3)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	2.54 (64.5)	0.25 (6.4)	0.38 (9.7)	1.00 (25.4)
		3/8	20NVQ6M3	0.20 (5.1)	2.00 (50.8)	1.00 (25.4)	2.62 (66.5)	1.63 (41.3)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	2.54 (64.5)	0.25 (6.4)	0.48 (12.2)	1.00 (25.4)
		9/16	20NVQ9M3	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	3.63 (92.2)	1.75 (44.5)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	2.32 (58.9)	0.34 (8.7)	0.68 (17.3)	1.00 (25.4)
30,000 PSI	High Pressure Cone & Thread	1/4	30NVQ4H3	0.093 (2.4)	2.00 (50.8)	1.00 (25.4)	2.12 (53.8)	1.50 (38.1)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.45 (62.2)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
		3/8	30NVQ6H3	0.125 (3.2)	2.00 (50.8)	1.00 (25.4)	2.50 (63.5)	1.50 (38.1)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.45 (62.2)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
		9/16	30NVQ9H3	0.125 (3.2)	2.62 (66.5)	1.31 (33.3)	2.88 (73.2)	1.56 (39.6)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.45 (62.2)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)
60,000 PSI	High Pressure Cone & Thread	1/4	60NVQ4H3	0.062 (1.6)	2.00 (50.8)	1.00 (25.4)	2.38 (60.5)	1.69 (42.9)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.49 (63.2)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
		3/8	60NVQ6H3	0.062 (1.6)	2.00 (50.8)	1.00 (25.4)	2.75 (69.9)	1.69 (42.9)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.49 (63.2)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
		9/16	60NVQ9H3	0.062 (1.6)	2.62 (66.5)	1.31 (33.3)	3.03 (77.0)	1.75 (44.5)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.49 (63.2)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

3-Way 2 Outlet



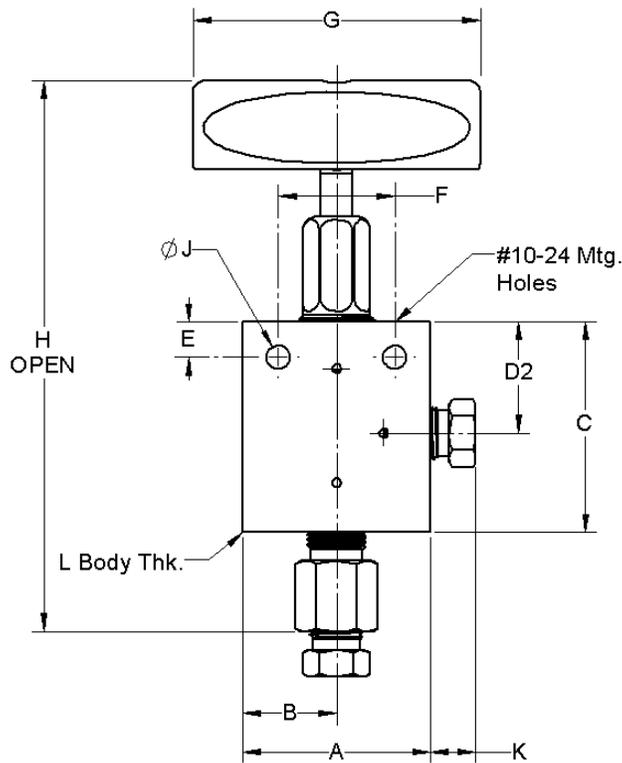
Pressure Rating	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)	Dimensions, in. (mm)											
					A	B	C	D1	D2	E	F	G	H	J	K	L
20,000 PSI	Medium Pressure Cone & Thread	1/4	20NVQ4M4	0.125 (3.2)	2.00 (50.8)	1.00 (25.4)	2.44 (62.0)	1.19 (30.2)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	2.54 (64.5)	0.25 (6.4)	0.38 (9.7)	1.00 (25.4)
		3/8	20NVQ6M4	0.20 (5.1)	2.00 (50.8)	1.00 (25.4)	2.44 (62.0)	1.19 (30.2)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	2.54 (64.5)	0.25 (6.4)	0.48 (12.2)	1.00 (25.4)
		9/16	20NVQ9M4	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	3.38 (85.9)	1.75 (44.5)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	2.32 (58.9)	0.34 (8.7)	0.68 (17.3)	1.00 (25.4)
30,000 PSI	High Pressure Cone & Thread	1/4	30NVQ4H4	0.093 (2.4)	2.00 (50.8)	1.00 (25.4)	2.00 (50.8)	1.12 (28.5)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.45 (62.2)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
		3/8	30NVQ6H4	0.125 (3.2)	2.00 (50.8)	1.00 (25.4)	2.12 (53.8)	1.12 (28.5)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.45 (62.2)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
		9/16	30NVQ9H4	0.125 (3.2)	2.62 (66.5)	1.31 (33.3)	2.44 (62.0)	1.12 (28.5)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.45 (62.2)	0.28 (7.1)	1.00 (25.4)	1.00 (25.4)
60,000 PSI	High Pressure Cone & Thread	1/4	60NVQ4H4	0.062 (1.6)	2.00 (50.8)	1.00 (25.4)	2.38 (60.5)	1.31 (33.3)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.49 (63.2)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
		3/8	60NVQ6H4	0.062 (1.6)	2.00 (50.8)	1.00 (25.4)	2.62 (66.5)	1.31 (33.3)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	2.49 (63.2)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
		9/16	60NVQ9H4	0.062 (1.6)	2.62 (66.5)	1.31 (33.3)	2.81 (71.4)	1.31 (33.3)	1.31 (33.3)	0.38 (9.7)	1.50 (38.1)	3.00 (76.2)	2.49 (63.2)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

2-Stem Manifold



Pressure Rating	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)	Dimensions, in. (mm)												
					A	B	C	D1	D2	D3	E	F	G	H	J	K	L
20,000 PSI	Medium Pressure Cone & Thread	1/4	20NVQ4M5	0.125 (3.2)	2.00 (50.8)	1.00 (25.4)	3.38 (85.9)	1.69 (42.9)	1.19 (30.2)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	9.06 (230.1)	0.25 (6.4)	0.38 (9.7)	1.00 (25.4)
		3/8	20NVQ6M5	0.20 (5.1)	2.00 (50.8)	1.00 (25.4)	3.38 (85.9)	2.56 (65.0)	1.75 (44.5)	1.75 (44.5)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	9.06 (230.1)	0.25 (6.4)	0.48 (12.2)	1.00 (25.4)
		9/16	20NVQ9M5	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	5.12 (130.0)	2.56 (65.0)	1.75 (44.5)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	10.28 (261.1)	0.34 (8.7)	0.68 (17.3)	1.00 (25.4)
30,000 PSI	High Pressure Cone & Thread	1/4	30NVQ4H5	0.093 (2.4)	2.00 (50.8)	1.00 (25.4)	3.06 (77.7)	1.53 (38.9)	1.12 (28.4)	1.12 (28.4)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	8.54 (216.9)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
		3/8	30NVQ6H5	0.125 (3.2)	2.00 (50.8)	1.00 (25.4)	3.25 (82.6)	1.62 (41.2)	1.12 (28.4)	1.12 (28.4)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	8.73 (221.7)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
		9/16	30NVQ9H5	0.125 (3.2)	2.62 (66.5)	1.31 (33.3)	3.75 (95.3)	1.88 (47.8)	1.12 (28.4)	1.12 (28.4)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	9.23 (234.4)	0.28 (7.1)	1.00 (25.4)	1.00 (25.4)
60,000 PSI	High Pressure Cone & Thread	1/4	60NVQ4H5	0.062 (1.6)	2.00 (50.8)	1.00 (25.4)	3.44 (87.4)	1.72 (43.7)	1.31 (33.3)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	8.98 (228.1)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
		3/8	60NVQ6H5	0.062 (1.6)	2.00 (50.8)	1.00 (25.4)	3.75 (95.3)	1.88 (47.8)	1.31 (33.3)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	9.29 (236.0)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
		9/16	60NVQ9H5	0.062 (1.6)	2.62 (66.5)	1.31 (33.3)	4.12 (104.7)	2.06 (52.3)	1.31 (33.3)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	9.66 (245.4)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

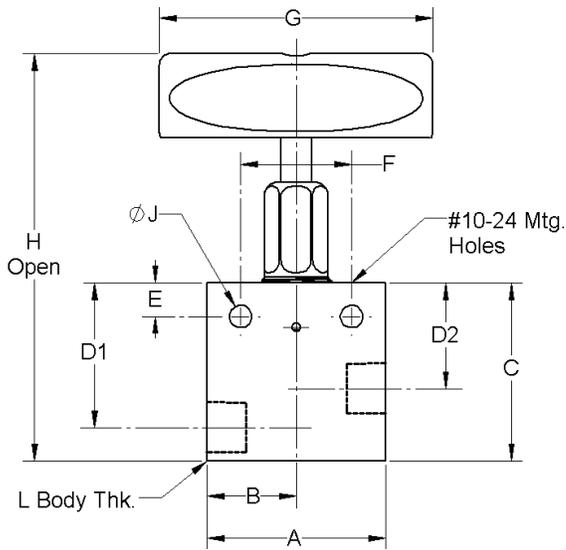
Replaceable Seat



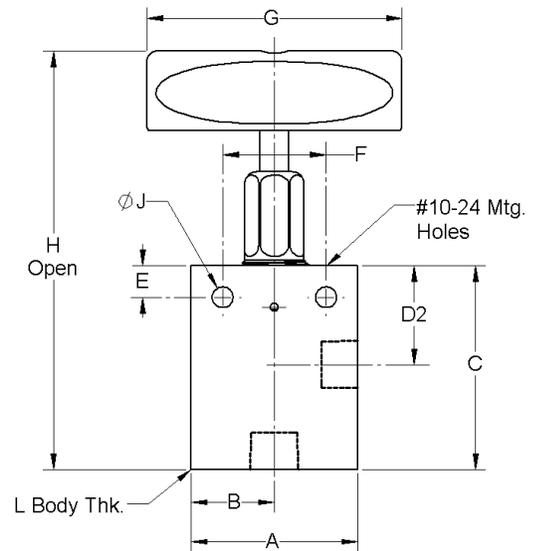
Pressure Rating	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)	Dimensions, in. (mm)										
					A	B	C	D1	E	F	G	H	J	K	L
20,000 PSI	Medium Pressure Cone & Thread	1/4	20NVQ4M6	0.125 (3.2)	2.00 (50.8)	1.00 (25.4)	3.30 (83.8)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	5.09 (129.3)	0.25 (6.4)	0.38 (9.7)	1.00 (25.4)
		3/8	20NVQ6M6	0.20 (5.1)	2.00 (50.8)	1.00 (25.4)	3.30 (83.8)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	5.09 (129.3)	0.25 (6.4)	0.48 (12.2)	1.00 (25.4)
		9/16	20NVQ9M6	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	4.63 (117.6)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	5.83 (148.1)	0.34 (8.7)	0.68 (17.3)	1.00 (25.4)
30,000 PSI	High Pressure Cone & Thread	1/4	30NVQ4H6	0.093 (2.4)	2.00 (50.8)	1.00 (25.4)	3.46 (87.9)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	5.12 (130.0)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
		3/8	30NVQ6H6	0.125 (3.2)	2.00 (50.8)	1.00 (25.4)	3.37 (85.6)	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	5.12 (130.0)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
		9/16	30NVQ9H6	0.125 (3.2)	2.62 (66.5)	1.31 (33.3)	3.64 (92.5)	1.19 (30.2)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	5.18 (131.6)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)
60,000 PSI	High Pressure Cone & Thread	1/4	60NVQ4H6	0.062 (1.6)	2.00 (50.8)	1.00 (25.4)	3.62 (91.9)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	5.39 (136.9)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
		3/8	60NVQ6H6	0.062 (1.6)	2.00 (50.8)	1.00 (25.4)	3.82 (97.0)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	5.39 (136.9)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
		9/16	60NVQ9H6	0.062 (1.6)	2.62 (66.5)	1.31 (33.3)	4.01 (101.9)	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	5.39 (136.9)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

Quick Open Pipe Needle Valves 15,000 PSI

2-Way Straight



2-Way Angle



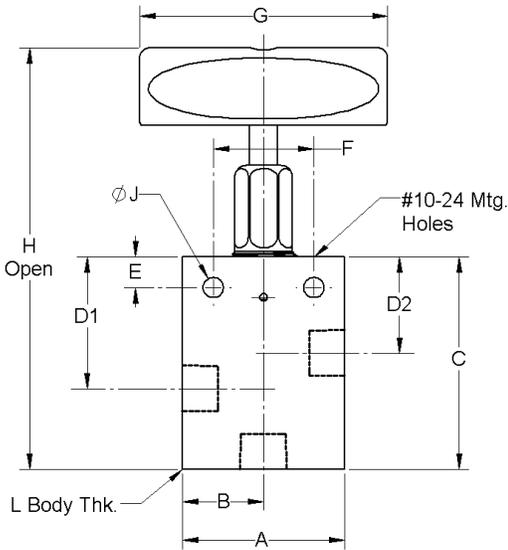
2-Way Straight

Pressure Rating	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)	Dimensions, in. (mm)										
					A	B	C	D1	D2	E	F	G	H	J	L
15,000 PSI	Female NPT	1/4	15NVQ4N1	0.25 (6.4)	2.00 (50.8)	1.00 (25.4)	2.00 (50.8)	1.63 (41.28)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	2.54 (64.5)	0.25 (6.4)	1.00 (25.4)
		3/8	15NVQ6N1	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	2.88 (73.2)	2.38 (60.4)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	2.32 (58.9)	0.34 (8.7)	1.00 (25.4)
		1/2	15NVQ8N1	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	3.00 (76.2)	2.38 (60.4)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	2.32 (58.9)	0.34 (8.7)	1.00 (25.4)

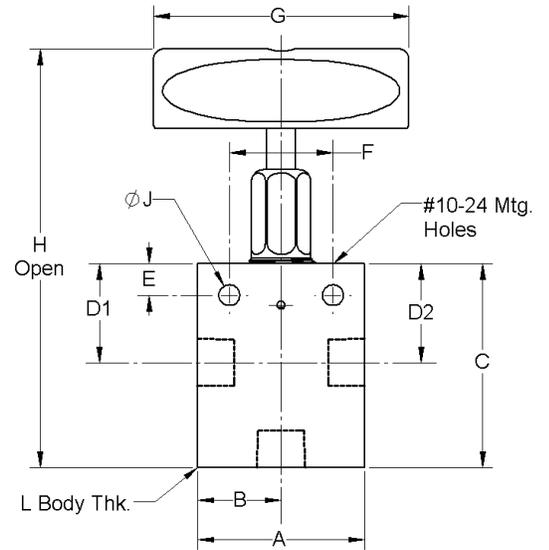
2-Way Angle

Pressure Rating	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)	Dimensions, in. (mm)										
					A	B	C	D1	E	F	G	H	J	L	
15,000 PSI	Female NPT	1/4	15NVQ4N2	0.25 (6.4)	2.00 (50.8)	1.00 (25.4)	2.44 (62.0)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	2.54 (64.5)	0.25 (6.4)	1.00 (25.4)	
		3/8	15NVQ6N2	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	3.38 (85.9)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	2.32 (58.9)	0.34 (8.7)	1.00 (25.4)	
		1/2	15NVQ8N2	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	3.38 (85.9)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	2.32 (58.9)	0.34 (8.7)	1.00 (25.4)	

3-Way 2 Inlet



3-Way 2 Outlet



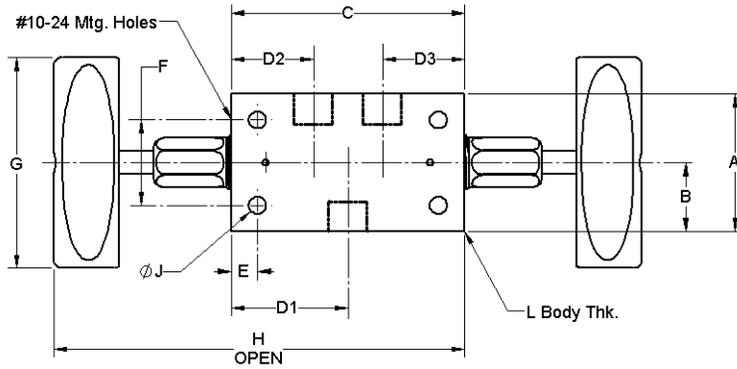
3-Way 2 Inlet

Pressure Rating	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)	Dimensions, in. (mm)										
					A	B	C	D1	D2	E	F	G	H	J	L
15,000 PSI	Female NPT	1/4	15NVQ4N3	0.25 (6.4)	2.00 (50.8)	1.00 (25.4)	2.62 (66.5)	1.63 (41.3)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	2.54 (64.5)	0.25 (6.4)	1.00 (25.4)
		3/8	15NVQ6N3	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	3.62 (85.9)	2.38 (60.4)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	2.32 (58.9)	0.34 (8.7)	1.00 (25.4)
		1/2	15NVQ8N3	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	3.62 (85.9)	2.38 (60.4)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	2.32 (58.9)	0.34 (8.7)	1.25 (31.8)

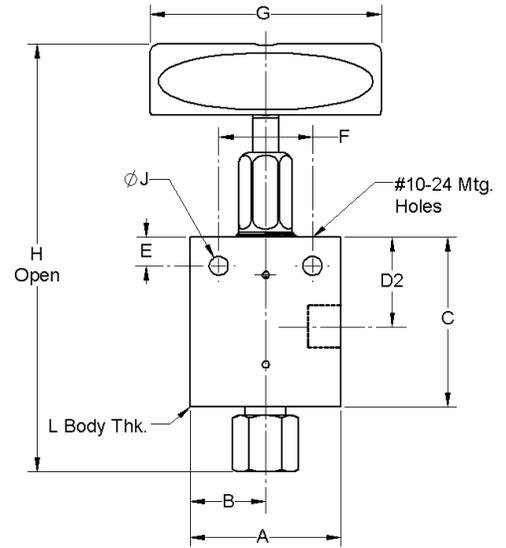
3-Way 2 Outlet

Pressure Rating	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)	Dimensions, in. (mm)									
					A	B	C	D1	E	F	G	H	J	L
15,000 PSI	Female NPT	1/4	15NVQ4N4	0.25 (6.4)	2.00 (50.8)	1.00 (25.4)	2.44 (62.0)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	2.54 (64.5)	0.25 (6.4)	1.00 (25.4)
		3/8	15NVQ6N4	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	3.38 (85.9)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	2.32 (58.9)	0.34 (8.7)	1.00 (25.4)
		1/2	15NVQ8N4	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	3.38 (85.9)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	2.32 (58.9)	0.34 (8.7)	1.25 (31.8)

2-Stem Manifold



Replaceable Seat



2-Stem Manifold

Pressure Rating	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)	Dimensions, in. (mm)											
					A	B	C	D1	D2	D3	E	F	G	H	J	L
15,000 PSI	Female NPT	1/4	15NVQ4N5	0.25 (6.4)	2.00 (50.8)	1.00 (25.4)	3.38 (85.9)	1.69 (42.9)	1.19 (30.2)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	9.06 (230.1)	0.25 (6.4)	1.00 (25.4)
		3/8	15NVQ6N5	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	5.12 (130.0)	2.56 (65.0)	1.75 (44.5)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	10.28 (261.1)	0.34 (8.7)	1.00 (25.4)
		1/2	15NVQ8N5	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	5.12 (130.0)	2.56 (65.0)	1.75 (44.5)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	10.28 (261.1)	0.34 (8.7)	1.25 (31.8)

Replaceable Seat

Pressure Rating	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)	Dimensions, in. (mm)									
					A	B	C	D1	E	F	G	H	J	L
15,000 PSI	Female NPT	1/4	15NVQ4N6	0.25 (6.4)	2.00 (50.8)	1.00 (25.4)	3.13 (79.5)	1.19 (30.2)	0.38 (9.7)	1.24 (31.5)	3.00 (76.2)	5.09 (129.3)	0.25 (6.4)	1.00 (25.4)
		3/8	15NVQ6N6	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	4.47 (113.5)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	5.83 (148.1)	0.34 (8.7)	1.00 (25.4)
		1/2	15NVQ8N6	0.312 (7.9)	2.50 (63.5)	1.25 (31.8)	4.47 (113.5)	1.75 (44.5)	0.50 (12.7)	1.38 (35.0)	4.00 (102.0)	5.83 (148.1)	0.34 (8.7)	1.25 (31.8)