

Pressure Rating

Valve	2-Way Straight Pattern psig (bar)	2-Way Angle Pattern psig (bar)	3-Way Switching psig (bar)
NBV130H1	2500 (172)	2500 (172)	2500 (172)
NBV130H2	3000 (206)	2500 (172)	2500 (172)
NBV130H3	2500 (172)	1500 (103)	1500 (103)
NBV130H4	2500 (172)	1500 (103)	1500 (103)

Flow Data at 70°F (21°C)

Cv	Pressure Drop to Atmosphere(Δp)psi					
	10			50		
	Air Flow, SCFM			Water Flow, US GPM		
0.50	6.9	19.1	33.9	1.6	3.5	5.0
0.60	8.3	23.0	40.7	1.9	4.2	6.0
0.90	12.0	34.0	61.0	2.8	6.4	9.0
1.2	17.0	46.0	81.0	3.8	8.5	12.0
1.5	21.0	57.0	100.0	4.7	11.0	15.0
1.6	22.0	61.0	110.0	5.0	11.0	16.0
2.4	33.0	92.0	160.0	7.6	17.0	24.0
2.6	36.0	99.5	176.0	8.2	18.0	26.0
3.0	41.5	115.0	203.0	9.5	21.0	30.0
6.0	83.0	230.0	407.0	19.0	42.0	60.0
6.3	87.2	241.0	427.0	19.9	44.5	63.0
6.4	88.6	245.0	434.0	20.2	45.3	64.0
12	166.0	459.0	814.0	38.0	85.0	120.0

Angle Type & 3-Way

Cv	Pressure Drop to Atmosphere(Δp)psi					
	10			50		
	Air Flow, SCFM			Water Flow, US GPM		
0.30	4.2	11.5	20.3	0.9	2.1	3.0
0.35	4.8	13.4	23.7	1.1	2.4	3.5
0.75	10.0	29.0	51.0	2.3	5.3	7.5
0.80	11.0	31.0	54.0	2.5	5.6	8.0
0.90	12.0	34.0	61.0	2.8	6.3	9.0
1.5	20.6	57.4	102.0	4.7	11.0	15.0
1.7	23.5	65.0	115.0	5.3	12.0	17.0
20.	27.7	76.5	136.0	6.3	14.0	20.0
3.5	48.4	134.0	237.0	11.0	25.0	35.0
3.8	52.6	145.0	258.0	12.0	27.0	38.0
4.6	63.7	176.0	312.0	15.0	33.0	46.0

Ordering Information

Example : NBV130H1 A - T 4 - SS

1 2 3 4 5

1. Valve Series

- NBVH130H1 • NBVH130H2 • NBVH130H3 • NBVH130H4

2. Pattern Designator

- BLANK : 2-Way Straight (Standard) • A:2-Way Angle • 3:3-Way

3. End Connection Type

- T : D-LOK Tube Fitting • F : Female Thread • M : Male Thread • MS : Male Thread to D-LOK Tube Fitting

4. End Connection Size

Tube O.D Designation					
Tube O.D (inch)	1/16	1/8	1/4	3/8	1/2
Designation	1	2	4	6	8
Tube O.D (mm)	3	6	8	10	12
Designation	3M	6M	8M	10M	12M

Pipe Thread Designation				
Size(inch)	1/8	1/4	3/8	1/2
Screwed NPT	2N	4N	6N	8N
Screwed BSPT	2R	4R	6R	8R

5. Material Designator

- SS(BLANK) : 316 Stainless Steel • B : BRASS



D-lok
130 SERIES ONE-PIECE
VALVE SERIES



Features

- Simple design with one piece body
- Tight and smooth, low torque and easy operation
- One-piece ball stem
- Panel mountable
- Variety of End Connections
- Straight, Angle and 3-Way flow patterns
- Each and every valve is tested at the factory



Specifications

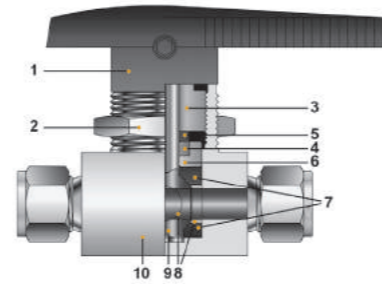
Pressure rating	3000psig (206bar)@70°F (21°C)
Temperature rating	50 to 150°F (10 to 65°C) with PTFE seat and packing
Body material	316 stainless steel and Brass
Port Connections	1/16" to 3/4" and 3mm to 12mm
Orifice	0.052" and 0.406" (1.3mm to 10.3mm)

Testing

- Each Valve is tested with nitrogen at 1000psig(69bar) to maximum allowable leak rate of 0.1 SCCM.

Packing Adjustment

- Valves are adjusted for factory testing at 1000psig(69bar).
- Packing must be readjusted for service at higher pressures



Materials of Construction

No.	Component	Material Grade / ASTM Specification	
		Stainless Steel	Brass
1	Handle	Zinc	
	Set Screw	Stainless Steel	
2	Panel Nut	Stainless Steel	Brass
3	Packing Bolt	SS316 / A276	Brass / B16
*4	Packing	PTFE	
5	Upper Packing Gland	SS316 / A276	
6	Lower Packing Gland		
*7	Upper&Lower Ball Seat	PTFE	
*8	Side Disc	SS316 - Sintered	
	Side Ring		
*9	Ball Stem	SS316 / A276	
*10	Body	SS316 / A182	Brass / B16

* Wetted components are marked

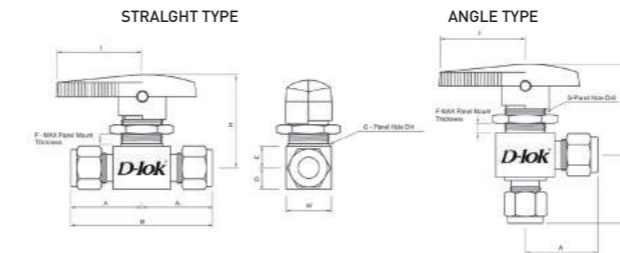
NBV 130 SERIES 2 WAY VALVE

Table of dimensions

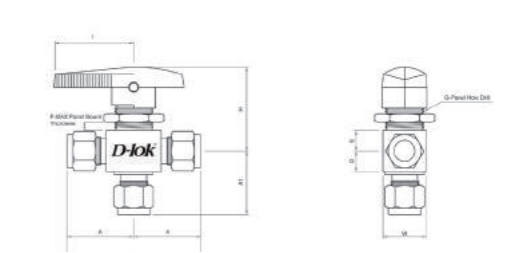
Order Number	Orifice	Cv	End Connections		Dimensions (mm)										
			Inlet	Outlet	A	A1	B	D	E	F	G	H	I	W	
NBV130 H1	S 1	1.3	0.1	1/16" D-LOK		21.3	21.3	42.6	7.1	8.7	6.4	15.0	36.0	29.0	15.0
	S 3M	2.4	0.2	3mm D-LOK		25.4	25.4	50.8							
	S 2		0.2	1/8" D-LOK		20.6	20.6	41.2							
	F 2N	3.2	0.5	1/8" FEMALE NPT		27.7	27.7	55.4							
	S 6M		0.6	6mm D-LOK		25.4	25.4	50.8							
NBV130 H2	S 4		0.6	1/4" D-LOK		26.2	26.2	52.4	9.4	11.2	4.8	19.8	43.7	38.5	19.8
	F 4N	4.8	1.2	1/8" FEMALE NPT		25.4	25.4	50.8							
	F 4R		0.9	1/4" FEMALE NPT		30.2	30.2	60.4							
	F 4R		0.9	1/4" ISO FEMALE		25.4	25.4	50.8							
	M 4N		1.2	1/4" MALE NPT		25.4	30.2	55.6							
	MS 4N-4		1.6	1/4" MALE NPT	1/4" D-LOK	31.0	31.0	62.0							
	S 6M		2.4	6mm D-LOK		32.5	32.5	65.0							
	S 4		2.4	1/4" D-LOK											
	S 8M		1.5	8mm D-LOK											
	S 6		1.5	3/8" D-LOK											
NBV130 H3	F 4N	7.1	3.0	1/4" FEMALE NPT		31.8	31.8	63.6	14.2	14.2	9.4	28.5	56.1	51.0	28.5
	F 6N		2.6	3/8" FEMALE NPT		38.9	38.9	77.8							
	F 6R		2.6	3/8" ISO FEMALE											
	S 6		6.0	3/8" D-LOK											
	S 10M		6.0	10mm D-LOK											
NBV130 H4	F 8N	10.3	6.3	1/2" FEMALE NPT		39.6	39.6	79.2	17.5	17.5	9.4	38.1	71.8	75.0	40.0
	F 8R		6.3	1/2" ISO FEMALE		50.0	50.0	100							
	S 12M		12.0	12mm D-LOK											
	S 8		12.0	1/2" D-LOK											
	S 12		6.4	3/4" D-LOK											

* Dimensions shown with D-LOK nuts measure in the finger-tight, where applicable.
 * All dimensions are for reference only, subject to change

NBV130H Series : 2-Way (On - Off Valve)



NBV130H Series : 3-Way (Switching Valve)



NBV 130 SERIES 2 WAY VALVE

Table of dimensions

Order Number	Orifice	Cv	End Connections		Dimensions (mm)										
			Inlet	Outlet	A	A1	B	D	E	F	G	H	I	W	
NBV130 H13	S 1	1.3	0.08	1/16" D-LOK		21.3	20.6	42.6	7.1	8.7	6.4	15.0	36.0	29.0	15.0
	S 3M	2.4	0.15	3mm D-LOK		25.4	24.6	50.8							
	S 2		0.15	1/8" D-LOK		20.6	20.6	41.2							
	F 2N	3.2	0.3	1/8" FEMALE NPT		27.7	26.9	55.4							
	S 6M		0.35	6mm D-LOK		25.4	25.4	50.8							
NBV130 H23	S 4		0.35	1/4" D-LOK		26.2	26.2	52.4	9.4	11.2	4.8	19.8	43.7	38.5	19.8
	F 4N	4.8	0.75	1/4" FEMALE NPT		25.4	30.2	55.6							
	F 4R		0.9	1/4" ISO FEMALE		30.2	30.2	60.4							
	MS 4N-4		0.8	1/4" MALE NPT	1/4" D-LOK	25.4	31.0	62.0							
	S 6M		0.9	6mm D-LOK											
	S 4		0.8	1/4" D-LOK											
	S 8M		0.8	8mm D-LOK											
	F 4N		1.7	1/4" FEMALE NPT		31.8	31.8	63.6							
	F 6N		1.5	3/8" FEMALE NPT											
	F 6R		1.5	3/8" ISO FEMALE											
NBV130 H33	S 6		2.0	3/8" D-LOK		38.9	38.9	77.8	14.2	14.2	9.4	28.5	56.1	51.0	28.5
	S 10M		2.0	10mm D-LOK											
	F 8N		3.5	1/2" FEMALE NPT		39.6	39.6	79.2							
	F 8R		4.6	1/2" ISO FEMALE		50.0	50.0	100							
	S 12M		3.8	12mm D-LOK											
NBV130 H43	S 8		4.6	1/2" D-LOK					17.5	17.5	9.4	38.1	71.8	75.0	38.1
	S 8		4.6	1/2" D-LOK											
	S 12		3.8	3/4" D-LOK											

* Dimensions shown with D-LOK nuts measure in the finger-tight, where applicable.
 * All dimensions are for reference only, subject to change