



Max Working Pressure 15,000 psi (1034 bar)

Temperature Ratings: 0° to 800° F (-18° to 427° C)

Typical Applications

- Hydrostatic Test Systems
- Waterblast Applications
- Hydraulic Control Panels
- Wire Line Applications
- Instrumentation

Features and Benefits

- Tubing sizes available for 1/4", 3/8", 1/2"
- Non-rotating stem and bar stock body design
- Metal-to-metal seating achieves ideal shutoff, longer stem/seat service lifetime for abrasive flow, excellent corrosion resistance and greater durability for repeated on/off cycles.
- PTFE is the standard packing material
- Body material is 316 SS
- Stem material is 17-4PH SS
- Options for VEE or Regulating stem tips
- The locking device of packing gland is reliable
- 2-Way Straight

Other Options

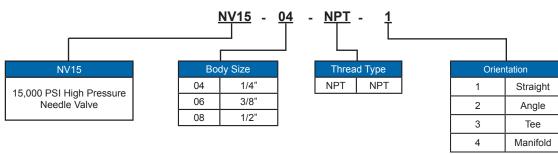
 Angle w/ replaceable seat, 3-way and 3-way manifold available upon request

Notes:

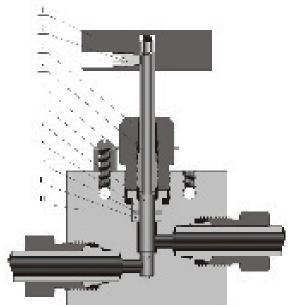
- The value of Cv shown are for 2-way straight valve pattern
- The value of Cv for 2-way angle pattern will be increase about 50% (Base on water)
- Extreme Temperatures
- PFTE is the standard packing material
- Normal Precise Metering valve with PFTE packing can be operated to 450°F (232°C)
- Normal Precise Metering valve with RPTFE glass packing can be operated to 600°F (316°C)
- Normal Precise Metering valve with Graphite packing can be operated to 800°F (427°C)

ORDERING INFORMATION

DNP AMERICAS PART NUMBERING SYSTEM:

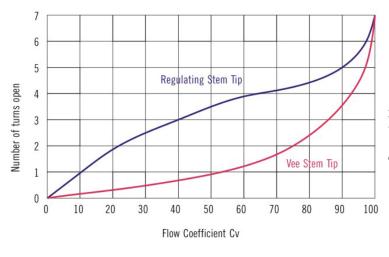




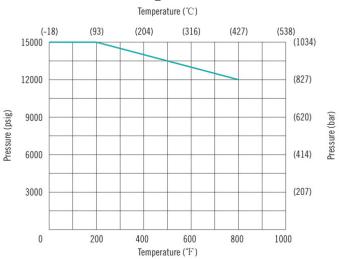


Item	Component	Material Grade/ASTM Specification
1	Handle	Stainless Steel
2	Handle Screw	Stainless Steel
3	Packing Gland	C63000/B150
4	Sleeve	316 SS/479
5	Locking Plate	304 SS/A240
6	Locking Screw	Stainless Steel
7	Stem	17-4PH/A564
8	Packing Ring	C63000/B150
9	Packing	PFTE/RPTFE/Graphite
10	Packing Washer	17-4PH/A564
11	Body	316 SS/A479
	Lubricant	Molybdenum disulfide

Flow Data at 100°F (38°C)



Pressure and Temperature

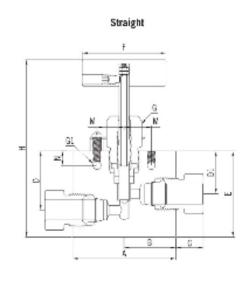


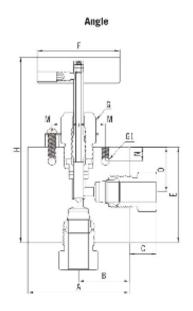
Technical Data

Tube O.D. in.	Orifice in. (mm)	Cv	Pressure @ Room Temperature psi (bar)
1/4	0.188 (4.77)	0.65	15,000 (1034)
3/8	0.250 (6.35)	0.95	15,000 (1034)
1/2	0.3.75 (9.53)	1.90	15,000 (1034)



Dimensions Straight and Angle





Dimensions (Straight)

Tube OD	Orifice	A	В	С	D	D1	E	F	G	61	Н	М	N	Thickness
in.	n. in. (mm) in. (mm)													
1/4	0.188- (4.77)	2.00 (50.8)	1.00 (25.4)	0.44 (11.2)	1.62 (41.15)	1.19 (30.23)	2.00 (50.8)	3,00 (76.2)	0.75 (19.05)	0.22 (5.59)	4.50 (114.3)	0.62 (15.75)	0.38 (69.6)	0.75 (19.05)
3/8	0.250 (6.35)	2.00 (50.8)	1.00 (25.4)	0.53 (13.5)	1.62 (41.15)	1.19 (30.23)	2.00 (50.8)	3.00 (76.2)	0.75 (19.05)	0.22 (5.59)	4.50 (114.3)	0.62 (15.75)	0.38	0.75 (19.05)
1/2	0.375 (9.53)	2.50 (63.5)	1.25 (31.75)	0.43 (13.5)	2.38 (60.45)	1.75 (44.45)	2.88 (73.15)	4.00 (101.6)	(25.4)	0.34 (8.64)	5.95 (151.4)	0.69 (17.53)	0.50 (12.7)	1.00 (25.4)

Dimensions (Angle)

Tube OD	Orifice	A	В	C	D	D1	E	F	G	G1	н	М	N	Thickness
in.	in. (mm)													
1/4	0.188 (4.77)	2.00 (50.8)	1.00 (25.4)	0.44 (11.2)	1.19 (30.23)		2.19 (55.63)	3.00 (76.2)	0.75 (19.05)	0.22 (5.59)	5.00 (127.0)	0.62 (15.75)	0.38	0.75 (19.05)
3/8	0.250 (6.35)	2.00 (50.8)	1.00 (25.4)	0.53 (13.5)	1.19 (30.23)		2.19 (55.63)	3.00 (75.2)	0.75 (19.05)	0.22 (5.59)	5.00 (127.0)	0.62 (15.75)	0.38 (9.65)	0.75 (19.05)
1/2	0.375 (9.53)	2.50 (63.5)	1.25 (31.75)	0.53 (13.5)	1.75 (44.45)		3.38 (85.85)	4.00 (101.6)	1.00 (25.4)	0.34 (8.54)	6.45 (163.8)	0.69 (17.53)	0.50 (12.7)	1.00 (25.4)





Max Working Pressure 20,000 psi (1379 bar)

Temperature Ratings: 0° to 800° F (-18° to 427° C)

Typical Applications

- Hydrostatic Test Systems
- Waterblast Applications
- Hydraulic Control Panels
- Wire Line Applications
- Instrumentation

Features and Benefits

- Tubing sizes available for 1/4", 3/8", 9/16" and 3/4"
- Non-rotating stem and bar stock body design
- Metal-to-metal seating achieves ideal shutoff, longer stem/seat service lifetime for abrasive flow, excellent corrosion resistance and greater durability for repeated on/off cycles.
- PTFE is the standard packing material
- Body material is 316 SS
- Stem material is 17-4PH SS
- Options for VEE or Regulating stem tips
- The locking device of packing gland is reliable

Other Options

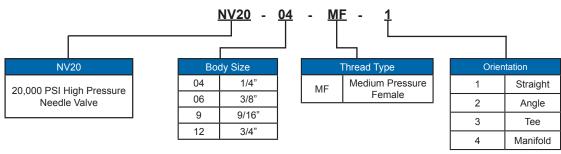
 Angle w/ replaceable seat, 3-way and 3-way manifold available upon request

Notes:

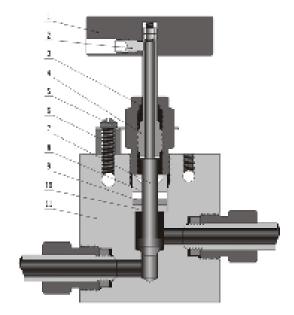
- The value of Cv shown are for 2-way straight valve pattern
- The value of Cv for 2-way angle pattern will be increase about 50% (Base on water)
- Extreme Temperatures
- PFTE is the standard packing material
- Normal Precise Metering valve with PFTE packing can be operated to 450°F (232°C)
- Normal Precise Metering valve with RPTFE glass packing can be operated to 600°F (316°C)
- Normal Precise Metering valve with Graphite packing can be operated to 800°F (427°C)



DNP AMERICAS PART NUMBERING SYSTEM:

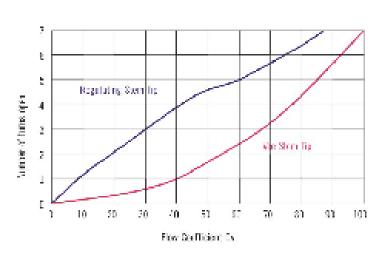




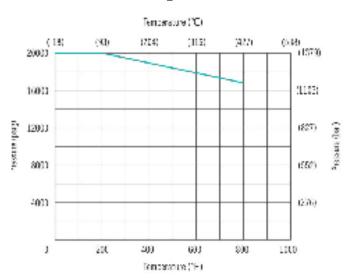


Item	Component	Material Grade/ASTM Specification				
1	Handle	Stainless Steel				
2	Handle Screw	Stainless Steel				
3	Packing Gland	C63000/B150				
4	Sleeve	316 SS/479				
5	Locking Plate	304 SS/A240				
6	Locking Screw	Stainless Steel				
7	Stem	17-4PH/A564				
8	Packing Ring	C63000/B150				
9	Packing	PFTE/RPTFE/Extend stuffing box valve with of Graphite				
10	Packing Washer	17-4PH/A564				
11	Body	316 SS/A479				
	Lubricant	Molybdenum disulfide				

Flow Data at 100°F (38°C)



Pressure and Temperature

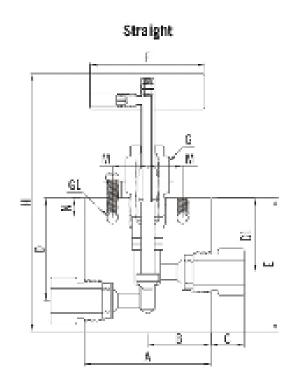


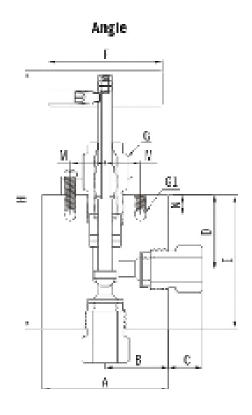
Technical Data

Tube O.D. in.	Orifice in. (mm)	Cv	Pressure & Room Temperature psi (bar)			
1/4	0.155 (3.13)	0.31	20,000 (1279)			
3/6	0.219 (5.36)	0.75	50,000 (1879)			
9/15	0.312 (7.92)	1.30	20,000 (157%)			
344	0.438 (11.13)	.2.50	20,000 (1579)			
1	0.562 (14.27)	4.40	20,000 (1379)			



<u>Dimensions Straight and Angle</u>





Dimensions (Straight)

Outside Diameter	Orifice	A	В	C	D	01	E	F	6	61	Н	М	N	Thickness
Tube Size in.	in. (mm)	in. (mm)												
14	0.125	2,00	1.00	0.00	1.52	3.19	2.89	2.90	0.70	0.22	4.69	0.62	0.38	0.7%
	(3.18)	(50.8)	(25.4)	(0.65)	(41.15)	(30.23)	(90.8)	(33.2)	(19.08)	(5.55)	(119.1)	(15.75)	(9.68)	(1.9.6%)
18	0.219	2,00	1.00	0.47	1.92	1.09	2.00	3.88	0.75	0.22	4.69	98.0	0.38	0.75
	(5.5%)	(5000)	(25.4)	(11.54)	(4.1.15)	(00.20)	(50.0)	(25.7)	(12/05)	(5.56)	(1.18.1)	(3.75)	(90(2))	(19.05)
9/15	0.202	2.50	1.25	03.46)	2.38	125	2.88	4.00	1.00	0.34	5.90	0.69	0.50	1.00
	(7.92)	(63.50	(31.75)	03.46)	060,440	(44.45)	(73.18)	(1.01.8)	(25.4)	(8.84)	(1.50.90	(17.5%)	(12.7)	23.40
3.4	0.428 (11.13)	3.00 (76.22	1.50 (38.1)	0.62 (15.75)	3.00 (76.2)	2.25 (57.15)	3.75 (95.25)	10.25 (260.4)	1.12 (28.4%)	0.44 (1.1.18)	7.00 (177.8)	0.88 (22.99)	0.63	1.38 (35.00)
ı	0.562	4.13	2.06	1.63	3.75	2.81	4.63	1025	1.63	0.56	9.00	135	1.13	1.75
	(14.27)	(104.5)	152.30	(16.00)	(95.25)	(71.37)	(117.0)	12004)	(41.15)	(14.22)	(2.28.0)	(31.7%)	(28.7)	(44.45)

Dimensions (Angle)

Outside Diameter Orifice		A	8	C	D	01	E	F	6	61	Н	M	N	Thickness
Tube Size in.	in, (mm)	in. (mm)												
1/4	0.125 0.10	2.86 (00.8)	1.00 (25.4)	0.25 (9.65)	1.19 (34.23)		2.44 (61.9)	3.00 (76.2)	0.75 (19.00)	0.22 (5.59)	4.81 (122.3)	0.62 (85.75)	0.38 (9.50)	0.75 (19.00)
3/6	0.219 (5.58)	2.00 (50.8)	1,00 (25,4)	9.47 (01.94)	1.13 (34.23)		2.44 (81.5)	3,00 (76.2)	0.75 (19.05)	(5.59)	4.84 (122.5)	0.052 (15.75)	0.53 (0.85)	0.75 (19.05)
9/36	0.012 0.002	2.50 003.51	1.25 01.54	0.50 (18,46)	1.75 04.45)		3.36 (85.85)	4,00 (301,6)	1.00 (25.0)	0.34 (8.64)	5.40 (160.8)	0.6 0 (17,53)	0.50 (12.7)	1.80 (25.4)
3.4	0.438 (01.13)	3.00 (76.2)	1.50 (38.1)	0.62 (15.75)	2.25 017.150		4.2% (108.0)	10.25 (290.4)	1.12 (38.40)	0.44 (11.19)	7.50 (190.8)	0.88 (22.35)	0.53 (16.0)	1.38 (35.06)
1	0.562 (14.27)	4.12 (104.8)	2.06 (52.3)	0.65 (06.00)	2.81 (71.37)		5.13 (130.1)	10.35 (290.4)	1.62 (41.15)	0.56 (14.22)	9.56 (228.6)	1.25 (31.75)	1.13 (28.7)	1.35 (44.48)





Max Working Pressure 30,000 psi (2068 bar)

Temperature Ratings: 0° to 800° F (-18° to 427° C)

Typical Applications

- Hydrostatic Test Systems
- Waterblast Applications
- Hydraulic Control Panels
- Wire Line Applications
- Instrumentation

Features and Benefits

- Tubing sizes available for 1/4" to 9/16"
- Non-rotating stem and bar stock body design
- Metal-to-metal seating achieves ideal shutoff, longer stem/seat service lifetime for abrasive flow, excellent corrosion resistance and greater durability for repeated on/off cycles.
- PTFE is the standard packing material
- Body material is 316 SS
- Stem material is 17-4PH SS
- Options for VEE or Regulating stem tips
- The locking device of packing gland is reliable

Other Options

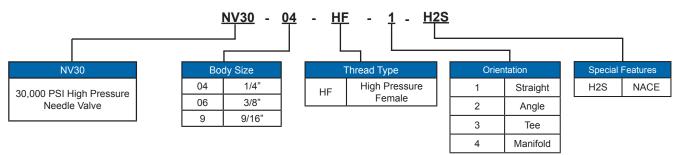
 Angle w/ replaceable seat, 3-way and 3-way manifold available upon request

Notes:

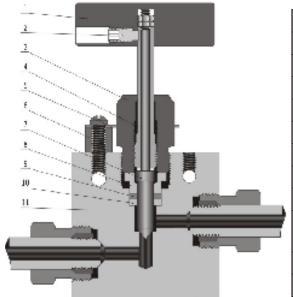
- The value of Cv shown are for 2-way straight valve pattern
- The value of Cv for 2-way angle pattern will be increase about 50% (Base on water)
- Extreme Temperatures
- PFTE is the standard packing material
- Normal Precise Metering valve with PFTE packing can be operated to 450°F (232°C)
- Normal Precise Metering valve with RPTFE glass packing can be operated to 600°F (316°C)
- Normal Precise Metering valve with Graphite packing can be operated to 800°F (427°C)

ORDERING INFORMATION

DNP AMERICAS PART NUMBERING SYSTEM:

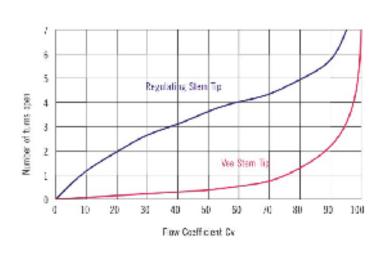




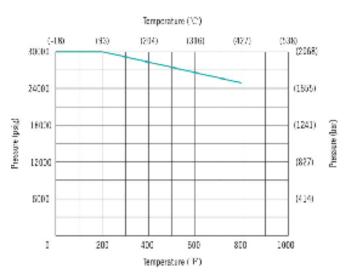


Item	Component	Material Grade/ASTM Specification
1	Handle	Stainless Steel
2	Handle Screw	Stainless Steel
3	Packing Gland	C63000/B150
4	Sleeve	316 SS/479
5	Locking Plate	304 SS/A240
6	Locking Screw	Stainless Steel
7	Stem	17-4PH/A564
8	Packing Ring	17-4PH/A564
9	Packing	PFTE/RPTFE/Extend stuffing box
		valve with of Graphite
10	Packing Washer	17-4PH/A564
11	Body	316 SS/A479
	Lubricant	Molybdenum disulfide

Flow Data at 100°F (38°C)



Pressure and Temperature

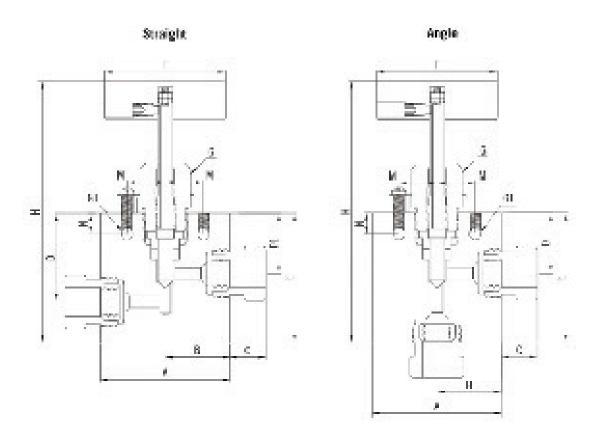


Technical Data

Tube O.D. in.	Orifice in. (mm)	Rated Cv	Pressure @ Room Temperature psi (bar)
1/4	0.094 (2.39)	0.12	30,000 (2068)
3/8	0.125 (3.18)	0.23	30,000 (2068)
9/16	0.125 (3.18)	0.33	30,000 (2068)



Dimensions Straight and Angle



Dimensions (Straight)

Tube 00	Orifice	A	B	C	D	D1	E	F	G	61	Н	М	N	Thickness
in.	in. (mm) (n. (mm)													
JA	0.094	2,00	1.00	0.50	1.50	1.12	2,00	3.00	1.00	0.22	4.62	0.69	0.33	1.00
	(5.30)	(50.8)	(35.4)	(12.7)	(38.1)	(28.45)	(50.8)	(78.2)	(25.4)	(8.59)	(1.12.4)	(17.53)	(9.65)	(25.4)
3/8	0.125	2,00	1.00	0.53	1.50	1.13	2.00	3.00	1.00	0.22	4.58	0.60	0.33	J./00
	(3.18)	(50.8)	(25.4)	(13.5)	(35.1)	(28.43)	(51.8)	(76.2)	(25.4)	(5.59)	(1.15.5)	(17.53)	(9.67)	(25.4)
5/15	0.125	7.62	131	0.81	1.56	1.17	9.44	3.00	1.60	1.28	5.05	0.69	0.33	1.50
	(2.18)	005,550	(3320)	(20.5/)	09.023	128,450	(81.39)	(75.2)	625 40	(7.11)	(1.28.5)	(17.53)	(9.65)	(28.1)

Dimensions (Angle)

Tube 00	Tube 00 Orifice A B C D D1								G	61	Н	М	N	Thickness	
in.	in. (mm)		in. (mm)												
1/4	0.094 (2.39)	2000 (50.80	1.00 (25.4)	0.50 (12.7)	1.12 (28.45)		2.00 (11.8)	3.00 (76.2)	1.00 (21.4)	1.22 (5.59)	4.52 (1.17.4)	0.69 (17.53)	0.38 (9.65)	1.00 (25.4)	
3/8	0.125 (2.18)	2.00 (50.80	1.00 (25.4)	0.53 (10.5)	1.12 (23.45)		2.00 (51.8)	3.00 176.21	1.00 (25.4)	1.22 (5.59)	4.58 (1.15.9)	0.69 (17.59)	0.33 (9.65)	1.00 (25.4)	
9/15	0.125 (2.18)	2.62 (66.55)	1.31 (33.27)	(121 (20.57)	1.12 (28.45)		2.44 (61.38)	3.00 (76.2)	1.00 (25,4)	1.28 (7.11)	5.05 (178.5)	0 <i>E</i> 0 (17.53)	0.33 (9.65)	1.50 (28.1)	





Max Working Pressure 60,000 psi (4137 bar)

Temperature Ratings: 0° to 800° F (-18° to 427° C)

Typical Applications

- Hydrostatic Test Systems
- Waterblast Applications
- Hydraulic Control Panels
- Wire Line Applications
- Instrumentation

Features and Benefits

- Tubing sizes available for 1/4" to 9/16"
- Non-rotating stem and bar stock body design
- Metal-to-metal seating achieves ideal shutoff, longer stem/seat service lifetime for abrasive flow, excellent corrosion resistance and greater durability for repeated on/off cycles.
- PTFE is the standard packing material
- Body material is 316 SS
- Stem material is 17-4PH SS
- Options for VEE or Regulating stem tips
- The locking device of packing gland is reliable

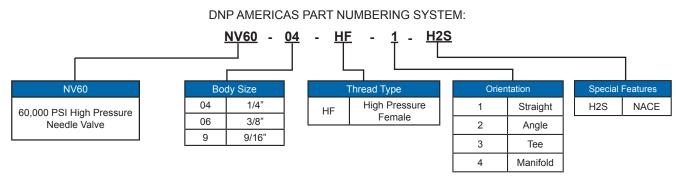
Other Options

 Angle w/ replaceable seat, 3-way and 3-way manifold available upon request

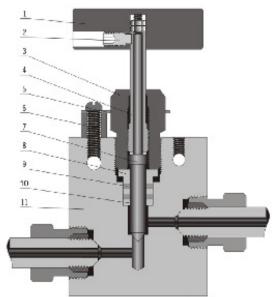
Notes:

- The value of Cv shown are for 2-way straight valve pattern
- The value of Cv for 2-way angle pattern will be increase about 50 (Base on water)
- Extreme Temperatures
- PFTE is the standard packing material
- Normal Precise Metering valve with PFTE packing can be operated to 450°F (232°C)
- Normal Precise Metering valve with RPTFE glass packing can be operated to 600°F (316°C)
- Normal Precise Metering valve with Graphite packing can be operated to 800°F (427°C)



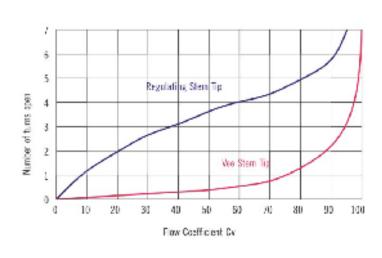




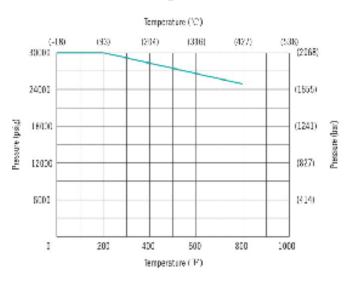


Item	Component	Material Grade/ASTM Specification				
1	Handle	Stainless Steel				
2	Handle Screw	Stainless Steel				
3	Packing Gland	C63000/B150				
4	Sleeve	316 SS/479				
5	Locking Plate	304 SS/A240				
6	Locking Screw	Stainless Steel				
7	Stem	17-4PH/A564				
8	Packing Ring	17-4PH/A564				
9	Packing	PFTE/RPTFE/Extend stuffing box				
		valve with of Graphite				
10	Packing Washer	17-4PH/A564				
11	Body	316 SS/A479				
	Lubricant	Molybdenum disulfide				

Flow Data at 100°F (38°C)



Pressure and Temperature

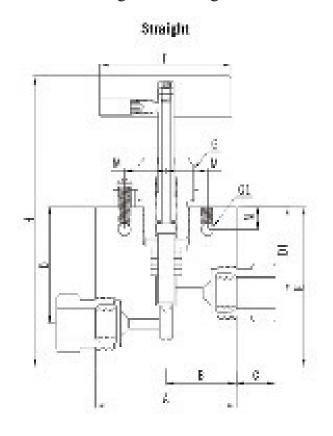


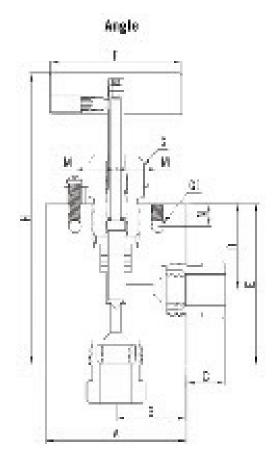
Technical Data

Tube O.D. in.	Orifice in. (mm)	Rated Cv	Pressure @ Room Temperature psi (bar)				
1/4	0.062 (1.57)	0.08	60,000 (4137)				
3/8	0.062 (1.57)	0.09	60,000 (4137)				
9/16	0.078 (1.98)	0.14	60,000 (4137)				



Dimensions Straight and Angle





Dimensions (Straight)

Tube 00 in.	Orifice in. (mm)	A	В	C	D	D1	E	F	6	G1	Н	M	N	Thickness
		in. (mm)												
[24]	0.062	2.00	1.00	0.50	1.59	1.31	2,00	3.00	1.00	0.22	4.75	0.88	0.38	1.00
	(1.57)	(50.8)	(25.4)	(2.7)	(42.98)	(33.27)	(50.8)	(78.2)	(25.0)	(5.59)	(120.5)	(17.53)	(0.65)	(25.4)
3/8	0.062	2,00	1.00	0.50	1.59	1.21	(2.00	3.00	1.00	0.22	4,75	0.68	0.36	1.00
	(1.57)	(50.8)	(25.4)	(18.6)	(42.98)	(83.27)	(50.8)	(76.2)	(25.4)	(6.59)	(120.7)	(17.53)	(9.67)	(25.4)
976	0.078	2,62	1.31	1.72	1.75	1.31	2,50	2.00	1.60	0.28	5.13	0.68	0.38	1.50
	(1.58)	(96,50)	(23.27)	(18.29)	(44.45)	(23.27)	(63.5)	(76.2)	(24.4)	(7.11)	(£00.3)	(17.5d)	(9.65)	(38.1)

Dimensions (Angle)

Tuhe OD in.	Orifice in. (mm)	A	В	C	D	D1	E	F	G	G1	н	М	M	Thickness
		in. (mm)												
1/4	0.062 (1.57)	2.00 (90.8)	1.00 (25.4)	1.50 (12.7)	1.31 533(27)		2.38 (60.45)	5.00 (76.2)	1.60 (25.4)	0.29 (1.59)	5.00 (127.00	0.65 (17,53)	0.33 (9.55)	[1.00 (25.4)
3/4	0.062 (1.57)	2.00 (50.8)	1.00 (25.4)	1.53 (21.5)	1.31 (30.27)		7 62 (86.55)	3.00 (76.2)	1 (0 (25.4)	0.20 (5.58)	5.25 (133.4)	0.65 (17.53)	0.38 (0.65)	1.00 (25.4)
9/16	0.078 (1.58)	2.62 (86.55)	1.31 (35.27)	1.72 (18.20)	11.31 (33.27)		2.8L (71.37)	3.00 (76.2)	1.00 (25.4)	0.28 (7.11)	5.44 (138.2)	0.65 (17.53)	0.38 (0.65).	1.50 (38.1)