High Pressure Valves, Fittings & Tubing

High Pressure Needle Valves

(30,000 -66,000 PSI /2069-4552 BAR)

1/4"	3/8"	9/16"	1" High Pressure

Specifications

Pressure rating	: 37,000 – 66,000 psi
Temp. Rating	: -100°F to 600°F
Body Material	: SS316 cold Worked
Stem	: 15-5 PH
Packing	: Glass filled Teflon

Typical Applications

- Hydraulic applications
- Pneumatic applications
- General plant service
- Isolating or venting

Features & Benefits

HTG Standard Needle Valve offer low-torque, fully open in 3-1/2 turn and compact design providing positive shutoff in applications up to 66,000 psi. Other features include:

- Two pieces heavy duty non-rotating stem for a reliable assembly.
- Bi-directional flow capability.
- Panel mounting option available.
- 4-sided tapered stem for maximum handle contact.
- Complete material traceability.

Optional

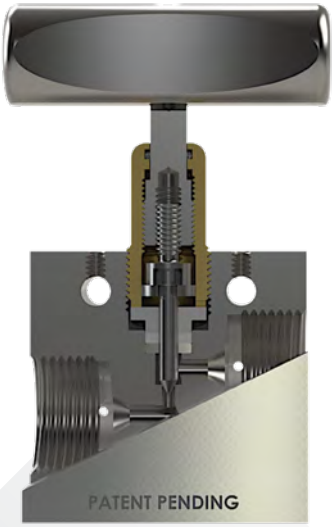
- Grafoil Packing for temperature up to 800°F
- Extended Stuffing Box for temperature up to 1200°F
- Air Actuator for remote control operation is available
- Can be manufactured to meet NACE MR0175 standard
- Quick Open Needle Valve
  - o Fully open in 1-3/4 turn
  - o Reduces throttling and therefore increase seat life

Quick Open Needle Valve

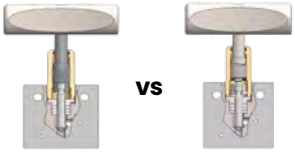
(30,000 -66,000 PSI /2069-4552 BAR)

Same features as the standard needle valve with the exception of:

- Valve is fully open or closed in as little as 1.75 turns. A high-pressure valve industry first!
- Stem is lifted off of the seat >2X faster than conventional valves, which increases seat life.
- Valve is closed 2x faster for quicker isolation.
- Less than half the number of turns to fully open compared to competitor's valves. Less operator fatigue when opening/closing.
- Three-piece, heavy-duty, non-rotating stem



Standard Valve
Medium Pressure, 9/16
Full travel in 4.5 turns



vs

Quick Open Valve
Medium Pressure, 9/16
Full travel in 2.25 turns

With Quick Open Valve the CV will be fully unblocked, thus allow full flow.

High Pressure Valves, Fittings & Tubing

High Pressure Check Valves
(30,000 -66,000 PSI /2069-4552 BAR)

1/4"	3/8"	9/16"	1" High Pressure

Specifications

Pressure rating : 37,000 to 66,000 psi
Ball Seat Poppet : -420°F to 1200°F
Soft Seat Poppet : -65°F to 250°F
Body Material : SS316 cold worked
Cracking Press. : 15 PSI

Typical Applications

- Hydraulic applications
- Pneumatic applications
- General plant service

Features & Benefits

- Prevents reverse flow where leak-tight shutoff is required.
- Ball Seat Poppet offers metal to metal seat for rapid cycling or severe environments.
- Soft Seat Poppet offers O-ring seat for fast shutoff and reliable seal.
- Nitrile is standard material of Soft Seat Poppet Check Valve.
- Complete material traceability.

High Pressure Fittings & Tubing
(30,000 -66,000 PSI /2069-4552 BAR)

1/4"	3/8"	9/16"	1" High Pressure

Specifications

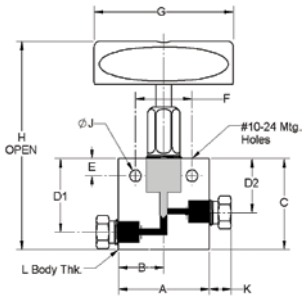
Pressure rating : 30,000 – 66,000 psi
Body Material : SS316 cold worked

Features & Benefits

- A complete range of elbows, tees, crosses and adaptors are available for all of the tubing connection sizes.
- Can be manufactured to meet NACE MR0175 standard.
- Other materials available on request.

High Pressure Standard Valves (30,000 - 37,000 PSI / 2069 - 2552 BAR)

High Pressure 2-Way Straight Valves

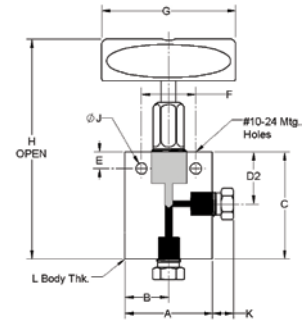


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
37,000	High Pressure Cone & Thread	1/4	**37NVS4HF**	0.093 (2.4)
		3/8	**37NVS6HF**	0.125 (3.2)
		9/16	**37NVS9HF**	0.125 (3.2)
30,000		1	**30NVS16MF**	0.438 (11.1)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	4.74 (120.4)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	4.74 (120.4)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.18 (131.6)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)
4.12 (105)	2.06 (52.3)	4.73 (121)	3.75 (95.3)	2.81 (71.4)	1.12 (28.4)	2.5 (63.5)	10.00 (254.0)	10.1 (138.7)	0.56 (14.2)	0.74 (18.8)	1.75 (44.4)

High Pressure 2-Way Angle Valves

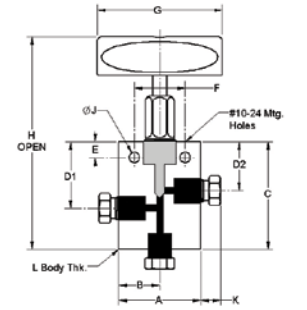


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
37,000	High Pressure Cone & Thread	1/4	**37NVA4HF**	0.093 (2.4)
		3/8	**37NVA6HF**	0.125 (3.2)
		9/16	**37NVA9HF**	0.125 (3.2)
30,000		1	**30NVA16MF**	0.438 (11.1)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	4.74 (120.4)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	4.86 (123.4)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.18 (131.6)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)
4.12 (105)	2.06 (52.3)	4.73 (121)	-	2.81 (71.4)	1.12 (28.4)	2.5 (63.5)	10.00 (254.0)	10.1 (138.7)	0.56 (14.2)	0.74 (18.8)	1.75 (44.4)

High Pressure 3-Way Valves with 2 Inlets



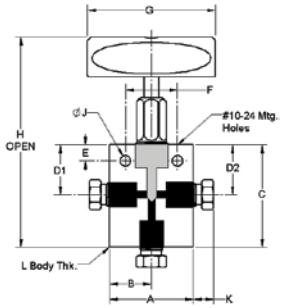
Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
37,000	High Pressure Cone & Thread	1/4	**37NVT2-4HF**	0.093 (2.4)
		3/8	**37NVT2-6HF**	0.125 (3.2)
		9/16	**37NVT2-9HF**	0.125 (3.2)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	4.86 (123.4)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	5.24 (133.1)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.62 (142.7)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

High Pressure Standard Valves (30,000 - 37,000 PSI / 2069 - 2552 BAR)

High Pressure 3-Way Valves with 1 Inlet

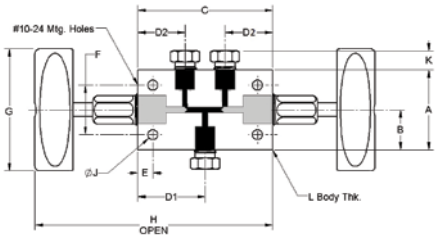


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
37,000	High Pressure Cone & Thread	1/4	**37NVT1-4HF**	0.093 (2.4)
		3/8	**37NVT1-6HF**	0.125 (3.2)
		9/16	**37NVT1-9HF**	0.125 (3.2)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	4.74 (120.4)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	4.86 (123.4)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.18 (131.6)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

High Pressure 3-Way, 2 Stems Valves

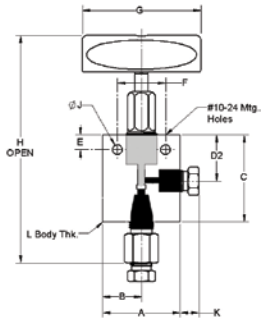


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
37,000	High Pressure Cone & Thread	1/4	**37NVT3-4HF**	0.093 (2.4)
		3/8	**37NVT3-6HF**	0.125 (3.2)
		9/16	**37NVT3-9HF**	0.125 (3.2)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
2.00 (50.8)	1.00 (25.4)	3.06 (77.7)	1.53 (38.9)	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)
2.00 (50.8)	1.00 (25.4)	3.25 (82.6)	1.62 (41.2)	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)
2.62 (66.5)	1.31 (33.3)	3.75 (95.3)	1.88 (47.8)	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)	1.50 (38.1)

High Pressure Replaceable Seat Valves



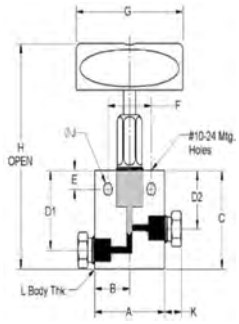
Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
37,000	High Pressure Cone & Thread	1/4	**37NVR4HF**	0.093 (2.4)
		3/8	**37NVR6HF**	0.125 (3.2)
		9/16	**37NVR9HF**	0.125 (3.2)
30,000		1	**30NVR16MF**	0.438 (11.1)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
2.00 (50.8)	1.00 (25.4)	3.12 (79.2)	-	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	5.83 (148.1)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
2.00 (50.8)	1.00 (25.4)	3.39 (86.1)	-	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	6.09 (154.7)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
2.62 (66.5)	1.31 (33.3)	3.82 (97.0)	-	1.19 (30.2)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	6.52 (165.6)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)
4.12 (105)	2.06 (52.3)	4.73 (121)	-	2.81 (71.4)	1.12 (28.4)	2.5 (63.5)	10.00 (254.0)	10.1 (138.7)	0.56 (14.2)	0.74 (18.8)	1.75 (44.4)

High Pressure Standard Valves (66,000 PSI / 4552 BAR)

High Pressure 2-Way Straight Valves

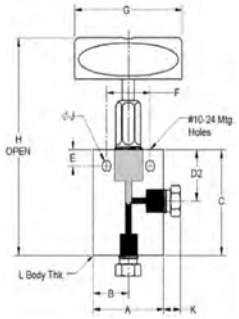


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
66,000	High Pressure Cone & Thread	1/4	**66NVS4HF**	0.062 (1.6)
		3/8	**66NVS6HF**	0.062 (1.6)
		9/16	**66NVS9HF**	0.062 (1.6)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	4.89 (124.2)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	5.02 (127.5)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.27 (133.9)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

High Pressure 2-Way Angle Valves

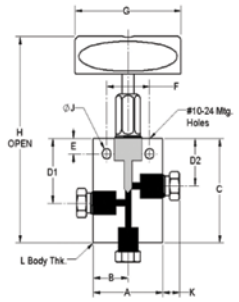


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
66,000	High Pressure Cone & Thread	1/4	**66NVA4HF**	0.062 (1.6)
		3/8	**66NVA6HF**	0.062 (1.6)
		9/16	**66NVA9HF**	0.062 (1.6)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	5.15 (130.8)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	5.39 (136.9)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.58 (141.7)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

High Pressure 3-Way Valves with 2 Inlets



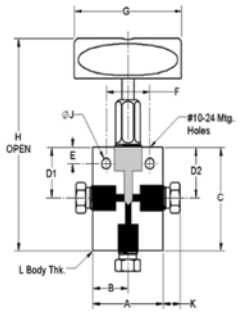
Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
66,000	High Pressure Cone & Thread	1/4	**66NVT2-4HF**	0.062 (1.6)
		3/8	**66NVT2-6HF**	0.062 (1.6)
		9/16	**66NVT2-9HF**	0.062 (1.6)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	5.15 (130.8)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	5.52 (140.2)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.82 (147.8)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

High Pressure Standard Valves (66,000 PSI / 4552 BAR)

High Pressure 3-Way Valves with 1 Inlet

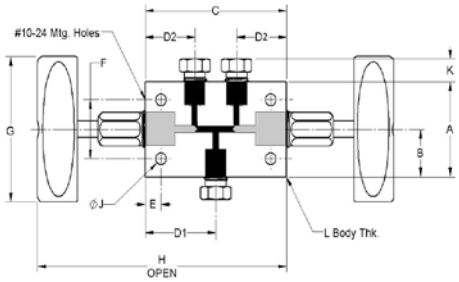


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
66,000	High Pressure Cone & Thread	1/4	**66NVT1-4HF**	0.062 (1.6)
		3/8	**66NVT1-6HF**	0.062 (1.6)
		9/16	**66NVT1-9HF**	0.062 (1.6)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	5.15 (130.8)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	5.39 (136.9)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.58 (141.7)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

High Pressure 3-Way, 2 Stems Valves

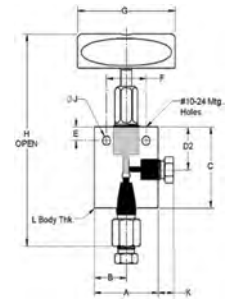


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
66,000	High Pressure Cone & Thread	1/4	**66NVT3-4HF**	0.062 (1.6)
		3/8	**66NVT3-6HF**	0.062 (1.6)
		9/16	**66NVT3-9HF**	0.062 (1.6)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
2.00 (50.8)	1.00 (25.4)	3.44 (87.4)	1.72 (43.7)	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)
2.00 (50.8)	1.00 (25.4)	3.75 (95.3)	1.88 (47.8)	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)
2.62 (66.5)	1.31 (33.3)	4.12 (104.7)	2.06 (82.3)	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)

High Pressure Replaceable Seat Valves



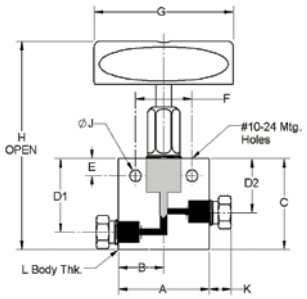
Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
66,000	High Pressure Cone & Thread	1/4	**66NVR4HF**	0.062 (1.6)
		3/8	**66NVR6HF**	0.062 (1.6)
		9/16	**66NVR9HF**	0.062 (1.6)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
2.00 (50.8)	1.00 (25.4)	3.45 (87.6)	-	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	6.19 (157.2)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
2.00 (50.8)	1.00 (25.4)	3.75 (95.25)	-	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	6.49 (164.8)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
2.62 (66.5)	1.31 (33.3)	4.00 (101.6)	-	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	6.74 (171.2)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

High Pressure Quick Open Valves (30,000 - 37,000 PSI / 2069 - 2552 BAR)

Quick Open High Pressure 2-Way Straight Valves

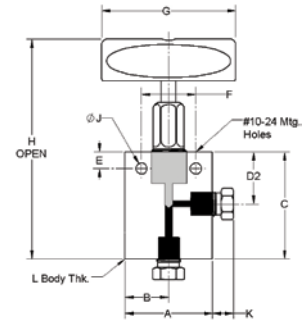


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
37,000	High Pressure Cone & Thread	1/4	**37NVSQ4HF**	0.093 (2.4)
		3/8	**37NVSQ6HF**	0.125 (3.2)
		9/16	**37NVSQ9HF**	0.125 (3.2)
30,000		1	**30NVSQ16MF**	0.438 (11.1)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	4.74 (120.4)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	4.74 (120.4)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.18 (131.6)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)
4.12 (105)	2.06 (52.3)	4.75 (121)	3.75 (95.3)	2.81 (71.4)	1.12 (28.4)	2.5 (63.5)	10.29 (261.3)	8.955 (227.5)	0.56 (14.2)	0.74 (18.8)	1.75 (44.4)

Quick Open High Pressure 2-Way Angle Valves

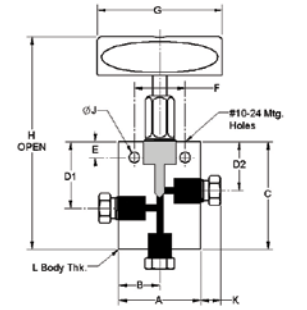


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
37,000	High Pressure Cone & Thread	1/4	**37NVAQ4HF**	0.093 (2.4)
		3/8	**37NVAQ6HF**	0.125 (3.2)
		9/16	**37NVAQ9HF**	0.125 (3.2)
30,000		1	**30NVAQ16MF**	0.56 (14.2)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	4.74 (120.4)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	4.74 (120.4)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.18 (131.6)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)
4.12 (105)	2.06 (52.3)	5.5 (140)	-	2.81 (71.4)	1.12 (28.4)	2.5 (63.5)	10.29 (261.3)	10.8 (275)	0.56 (14.2)	0.74 (18.8)	1.75 (44.4)

Quick Open High Pressure 3-Way Valves with 2 Inlets



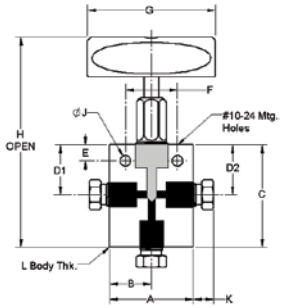
Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
37,000	High Pressure Cone & Thread	1/4	**37NVT2Q4HF**	0.093 (2.4)
		3/8	**37NVT2Q6HF**	0.125 (3.2)
		9/16	**37NVT2Q9HF**	0.125 (3.2)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	4.86 (123.4)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	5.24 (133.1)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.62 (142.7)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

High Pressure Quick Open Valves (30,000 - 37,000 PSI / 2069 - 2552 BAR)

Quick Open High Pressure 3-Way Vavles 1 Inlet

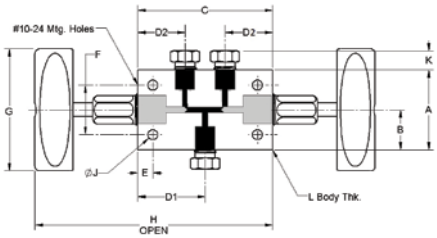


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
37,000	High Pressure Cone & Thread	1/4	**37NVT1Q4HF**	0.093 (2.4)
		3/8	**37NVT1Q6HF**	0.125 (3.2)
		9/16	**37NVT1Q9HF**	0.125 (3.2)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	4.74 (120.4)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	4.85 (123.4)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.18 (131.6)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

Quick Open High Pressure 3-Way, 2 Stems Valves

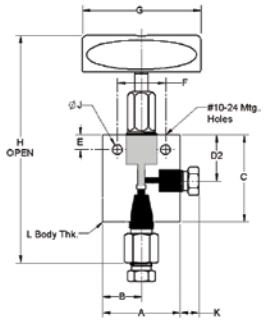


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
37,000	High Pressure Cone & Thread	1/4	**37NVT3Q4HF**	0.093 (2.4)
		3/8	**37NVT3Q6HF**	0.125 (3.2)
		9/16	**37NVT3Q9HF**	0.125 (3.2)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
2.00 (50.8)	1.00 (25.4)	3.06 (77.7)	1.53 (38.9)	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)
2.00 (50.8)	1.00 (25.4)	3.25 (82.6)	1.62 (41.2)	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)
2.62 (66.5)	1.31 (33.3)	3.75 (95.3)	1.88 (47.8)	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)	1.50 (38.1)

Quick Open High Pressure Replaceable Seat Valves



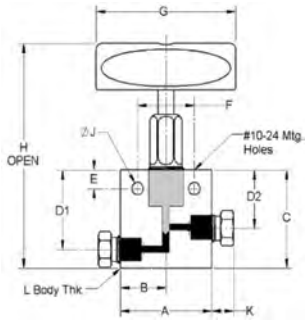
Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
37,000	High Pressure Cone & Thread	1/4	**37NVRQ4HF**	0.093 (2.4)
		3/8	**37NVRQ6HF**	0.125 (3.2)
		9/16	**37NVRQ9HF**	0.125 (3.2)
30,000		1	**30NVRQ16MF**	0.56 (14.2)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
2.00 (50.8)	1.00 (25.4)	3.12 (79.2)	-	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	5.83 (148.1)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
2.00 (50.8)	1.00 (25.4)	3.39 (86.1)	-	1.12 (28.5)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	6.09 (154.7)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
2.62 (66.5)	1.31 (33.3)	3.82 (97.0)	-	1.19 (30.2)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	6.52 (165.6)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)
4.12 (105)	2.06 (52.3)	5.5 (140)	-	2.81 (71.4)	1.12 (28.4)	2.5 (63.5)	10.00 (254.0)	10.8 (275)	0.56 (14.2)	0.74 (18.8)	1.75 (44.4)

High Pressure Quick Open Valves (66,000 PSI / 4552 BAR)

Quick Open High Pressure 2-Way Straight Valves

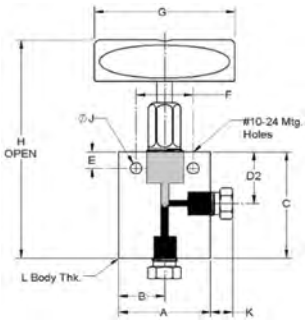


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
66,000	High Pressure Cone & Thread	1/4	**66NVSQ4HF**	0.062 (1.6)
		3/8	**66NVSQ6HF**	0.062 (1.6)
		9/16	**66NVSQ9HF**	0.062 (1.6)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	4.89 (124.2)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	5.02 (127.5)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.27 (133.9)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

Quick Open High Pressure 2-Way Angle Valves

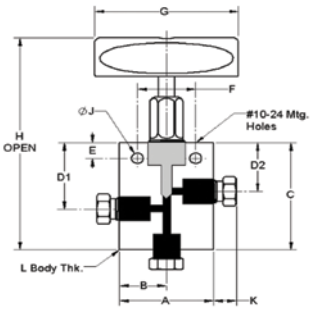


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
66,000	High Pressure Cone & Thread	1/4	**66NVAQ4HF**	0.062 (1.6)
		3/8	**66NVAQ6HF**	0.062 (1.6)
		9/16	**66NVAQ9HF**	0.062 (1.6)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	5.15 (130.8)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	5.39 (136.9)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.58 (141.7)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

Quick Open High Pressure 3-Way Valves with 2 Inlets



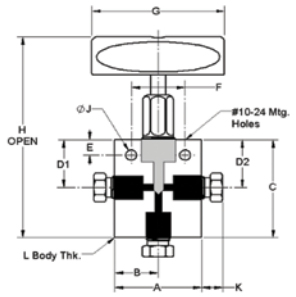
Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
66,000	High Pressure Cone & Thread	1/4	**66NVT2Q4HF**	0.062 (1.6)
		3/8	**66NVT2Q6HF**	0.062 (1.6)
		9/16	**66NVT2Q9HF**	0.062 (1.6)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	5.15 (130.8)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	5.52 (140.2)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.82 (147.8)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

High Pressure Quick Open Valves (66,000 PSI / 4552 BAR)

Quick Open High Pressure 3-Way ValVes with 1 Inlet

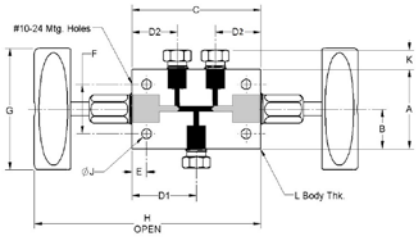


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
66,000	High Pressure Cone & Thread	1/4	**66NVT1Q4HF**	0.062 (1.6)
		3/8	**66NVT1Q6HF**	0.062 (1.6)
		9/16	**66NVT1Q9HF**	0.062 (1.6)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
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)	5.15 (130.8)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
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)	5.39 (136.9)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
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)	5.58 (141.7)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

Quick Open High Pressure 3-Way, 2 Stems Valves

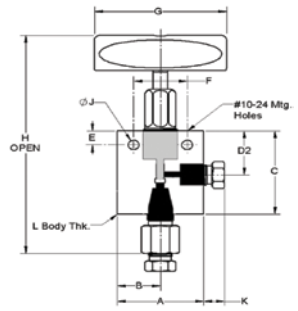


Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
66,000	High Pressure Cone & Thread	1/4	**66NVT3Q4HF**	0.062 (1.6)
		3/8	**66NVT3Q6HF**	0.062 (1.6)
		9/16	**66NVT3Q9HF**	0.062 (1.6)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
2.00 (50.8)	1.00 (25.4)	3.44 (87.4)	1.72 (43.7)	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)
2.00 (50.8)	1.00 (25.4)	3.75 (95.3)	1.88 (47.8)	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)
2.62 (66.5)	1.31 (33.3)	4.12 (104.7)	2.06 (82.3)	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)

Quick Open High Pressure 2-Way Replaceable Seat Valves



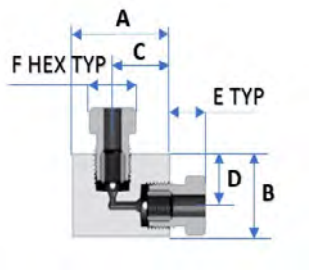
Pressure (PSI)	Connection Type	End Connection Size in.	Part Number	Orifice in. (mm)
66,000	High Pressure Cone & Thread	1/4	**66NVRQ4HF**	0.062 (1.6)
		3/8	**66NVRQ6HF**	0.062 (1.6)
		9/16	**66NVRQ9HF**	0.062 (1.6)

Dimensions, in. (mm)

A	B	C	D1	D2	E	F	G	H	J	K	L
2.00 (50.8)	1.00 (25.4)	3.45 (87.6)	-	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	6.19 (157.2)	0.28 (7.1)	0.59 (15.0)	1.00 (25.4)
2.00 (50.8)	1.00 (25.4)	3.75 (95.25)	-	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	6.49 (164.8)	0.28 (7.1)	0.72 (18.3)	1.00 (25.4)
2.62 (66.5)	1.31 (33.3)	4.00 (101.6)	-	1.31 (33.3)	0.38 (9.7)	1.38 (35.0)	3.00 (76.2)	6.74 (171.2)	0.28 (7.1)	1.00 (25.4)	1.50 (38.1)

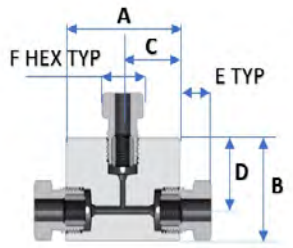
High Pressure Fittings (Up to 66,000 PSI / 4552 BAR)

High Pressure Elbows



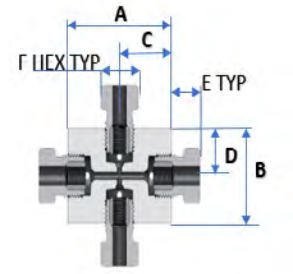
Part Number	Pressure (PSI)	Connections	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Thickness (in.)
66L4HF	66,000	1/4" HP.F	1.50	1.00	0.88	0.63	0.50	0.62	0.75
66L6HF	66,000	3/8" HP.F	2.00	1.50	1.25	1.00	0.60	0.81	1.00
66L9HF	66,000	9/16" HP.F	2.62	1.88	1.88	1.13	0.81	1.18	1.50
30L16HF	30,000	1" HP.F	3.00	3.00	2.06	2.06	0.72	1.38	1.75

High Pressure Tees



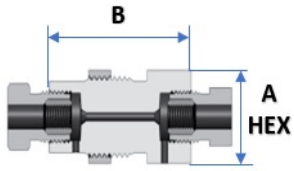
Part Number	Pressure (PSI)	Connections	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Thickness (in.)
66T4HF	66,000	1/4" HP.F	2.00	1.25	1.00	0.88	0.50	0.62	1.00
66T6HF	66,000	3/8" HP.F	2.00	1.56	1.00	1.06	0.60	0.81	1.00
66T9HF	66,000	9/16" HP.F	2.62	2.12	1.31	1.38	0.81	1.18	1.50
30T16HF	30,000	1" HP.F	4.12	3.00	2.06	2.06	0.72	1.38	1.75

High Pressure Crosses



Part Number	Pressure (PSI)	Connections	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	Thickness (in.)
66X4HF	66,000	1/4" HP.F	2.00	1.25	1.00	0.62	0.50	0.62	1.00
66X6HF	66,000	3/8" HP.F	2.00	2.12	1.00	1.06	0.60	0.81	1.00
66X9HF	66,000	9/16" HP.F	2.62	2.75	1.31	1.38	0.81	1.18	1.50
30X16HF	30,000	1" HP.F	4.12	4.12	2.06	2.06	0.72	1.38	1.75

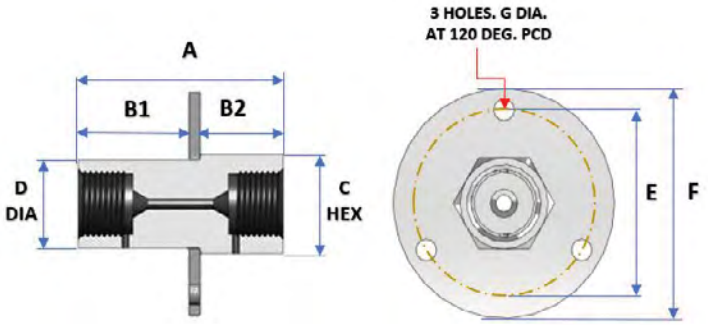
High Pressure Bulkhead Couplings



Part Number	Pressure (PSI)	Connections	A (in.)	B (in.)	Panel Cutout (in.)
66BU4HF	66,000	1/4" HP.F	1.00	2.00	0.94
66BU6HF	66,000	3/8" HP.F	1.38	2.38	1.12
66BU9HF	66,000	9/16" HP.F	1.87	2.75	1.75
30BU16HF	30,000	1" HP.F	2.12	3.50	2.00

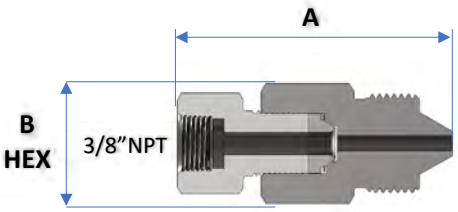
High Pressure Fittings (Up to 66,000 PSI / 4552 BAR)

High Pressure Bulkhead Couplings c/w Welding Plates



Part Number	Pressure (PSI)	Connections	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	Panel Cutout (in.)
66BU4HF-RW	66,000	1/4" HP.F	1.25	0.57	0.75	0.71	2.05	2.52	0.24	0.75
66BU6HF-RW	66,000	3/8" HP.F	1.66	0.77	1.00	0.94	2.05	2.52	0.24	0.98
66BU9HF-RW	66,000	9/16" HP.F	2.10	0.99	1.38	1.30	2.05	2.52	0.24	1.34
30BU16HF-RW	30,000	1" HP.F	3.50	1.69	1.75	1.65	2.24	2.76	0.28	1.69

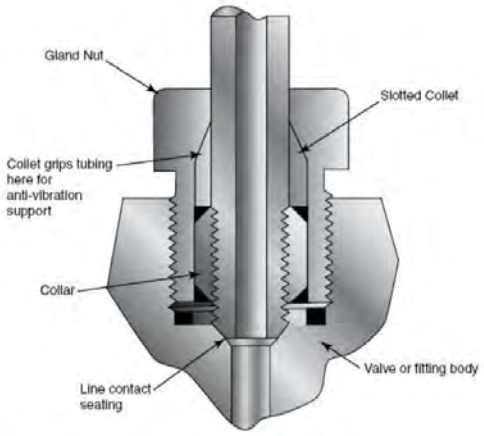
High Pressure Safety Heads

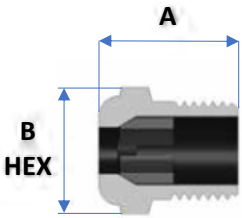


Part Number	Pressure (PSI)	Connections	A (in.)	B (in.)
66SH4HM	66,000	1/4" HP.M	1.88	1.13
66SH6HM	66,000	3/8" HP.M	2.13	1.50
66SH9HM	66,000	9/16" HP.M	2.75	1.50

High Pressure Fittings (Up to 66,000 PSI / 4552 BAR)

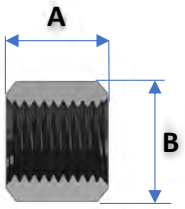
High Pressure Anti-Vibration Gland Assemblies





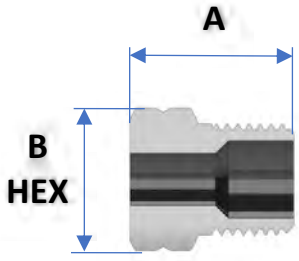
Tube Size	Pressure (PSI)	Anti-vibration	A (in.)	B (in.)
1/4"HP	66,000	66AV4H	0.81	0.63
3/8"HP	66,000	66AV6H	1.13	0.81
9/16"HP	66,000	66AV6H	1.56	1.81

High Pressure Collars



Part Number	Pressure (PSI)	Tube Size	A (in.)	B (in.)
66CL4H	66,000	1/4" OD	0.38	0.38
66CL6H	66,000	3/8" OD	0.50	0.53
66CL9H	66,000	9/16" OD	0.81	0.63
30CL16H	30,000	1" OD	1.00	1.25

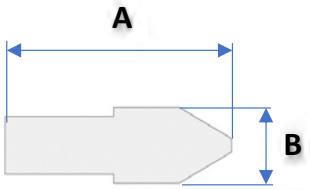
High Pressure Glands



Part Number	Pressure (PSI)	Tube Size	A (in.)	B (in.)
66GL4H	66,000	1/4" OD	0.88	0.63
66GL6H	66,000	3/8" OD	1.19	0.81
66GL9H	66,000	9/16" OD	1.50	1.19
30GL16H	30,000	1" OD	1.38	1.50

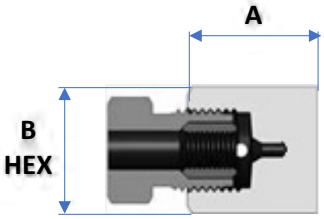
High Pressure Fittings (Up to 66,000 PSI / 4552 BAR)

High Pressure Plugs



Part Number	Pressure (PSI)	Tube Size	A (in.)	B (in.)
66PL4H	66,000	1/4" OD	1.16	0.38
66PL6H	66,000	3/8" OD	1.56	0.50
66PL9H	66,000	9/16" OD	2.00	0.81
30PL16H	30,000	1" OD	2.38	1.25

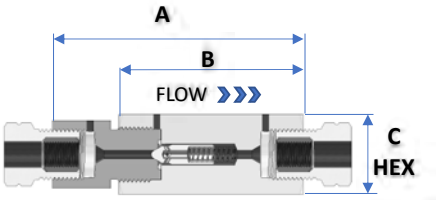
High Pressure Caps



Part Number	Pressure (PSI)	Tube Size	A (in.)	B (in.)
66CA4HF	66,000	1/4" HP.F	0.87	0.75
66CA6HF	66,000	3/8" HP.F	1.25	1.00
66CA9HF	66,000	9/16" HP.F	1.50	1.38
30CA16HF	30,000	1" HP.F	3.00	1.75

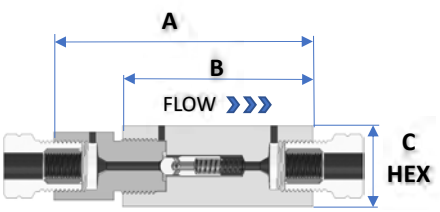
High Pressure Check Valves (Up to 66,000 PSI / 4552 BAR)

Ball Check Valves



Part Number	Pressure (PSI)	Connections	Orifice (in.)	A (in.)	B (in.)	C (in.)
66BCV4HF	66,000	1/4" HP.F	0.094	3.26	2.50	1.25
66BCV6HF	66,000	3/8" HP.F	0.125	3.75	2.75	1.25
66BCV9HF	66,000	9/16" HP.F	0.188	4.63	3.38	1.50
30BCV16HF	30,000	1" HP.F	0.438	6.54	5.63	1.88

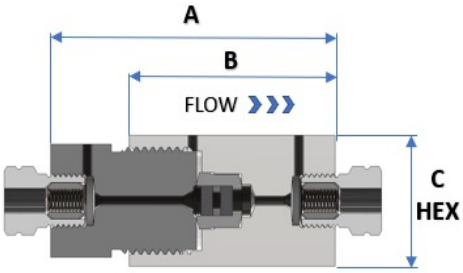
Soft Seat Check Valves



Part Number	Pressure (PSI)	Connections	Orifice (in.)	A (in.)	B (in.)	C (in.)
66SCV4HF	66,000	1/4" HP.F	0.094	3.26	2.50	1.25
66SCV6HF	66,000	3/8" HP.F	0.125	3.75	2.75	1.25
66SCV9HF	66,000	9/16" HP.F	0.188	4.63	3.38	1.50
30SCV16HF	30,000	1" HP.F	0.438	6.54	5.63	1.88

High Pressure In-Line Filters (Up to 66,000 PSI / 4552 BAR)

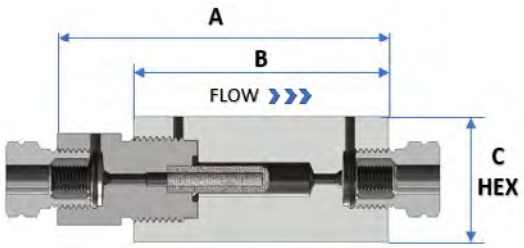
In-Line Disc Filter



Part Number	Pressure (PSI)	Connections	Orifice (in.)	A (in.)	B (in.)	C (in.)	Micron Size Filter Available					
							0.5	2	5	10	40	100
66LF4HF	66,000	1/4" HP.F	0.094	3.26	2.50	1.25	●	●	●	●	●	●
66LF6HF	66,000	3/8" HP.F	0.125	3.75	2.75	1.25	●	●	●	●	●	●
66LF9HF	66,000	9/16" HP.F	0.188	4.63	3.38	1.50	●	●	●	●	●	●

* Insert desired micron filter
Example: 66LF4HF-5 is a 1/4"HP In-Line filter with 5 micron filter

In-line Cup Filter



Part Number	Pressure (PSI)	Connections	Orifice (in.)	A (in.)	B (in.)	C (in.)	Micron Size Filter Available					
							0.5	2	5	10	40	100
66CF4HF	66,000	1/4" HP.F	0.094	3.26	2.50	1.25	●	●	●	●	●	●
66CF6HF	66,000	3/8" HP.F	0.125	3.75	2.75	1.25	●	●	●	●	●	●
66CF9HF	66,000	9/16" HP.F	0.188	4.63	3.38	1.50	●	●	●	●	●	●

* Insert desired micron filter
Example: 66CF4HF-5 is a 1/4"HP Cup filter with 5 micron filter

High Pressure Tubing & Nipples (UP TO 60,000PSI / 4138 BAR)

HTG's high pressure tubing is capable of operating up to 60,000 psi and range in size from 1/4" to 1" tube size. Tubing is cold drawn, seamless and high yield & tensile strength in connection with high elongation

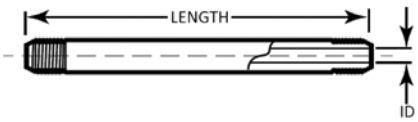
Standard tubing is available in 316 stainless steel tubing, other materials available by request

-* Tubing is stocked in lengths of 20-27 feet

High Pressure Tubing

Part Number	Tubing Size	Connections	Material	Pressure (PSI)
60TU4H-*	1/4" O.D. x 0.083" I.D.	1/4" HP	SS316	60,000
60TU6H-*	3/8" O.D. x 0.125" I.D.	3/8" HP	SS316	60,000
60TU9H-*	9/16" O.D. x 0.187" I.D.	9/16" HP	SS316	60,000
40TU9H-*	9/16" O.D. x 0.250" I.D.	9/16" HP	SS316	40,000
30TU16H-*	1" O.D. x 0.438" I.D.	1" HP	SS316	30,000

High Pressure Coned and Threaded Nipples



Length	Tubing Size				
	1/4" O.D. x 0.083" I.D. (60,000 psi)	3/8" O.D. x 0.125" I.D. (60,000 psi)	9/16" O.D. x 0.187" I.D. (60,000 psi)	9/16" O.D. x 0.250" I.D. (40,000 psi)	1" O.D. x 0.438" I.D. (30,000 psi)
2 3/4"	**60N4H-2.75**				
3"	**60N4H-3**	**60N6H-3**			
4"	**60N4H-4**	**60N6H-4**	**60N9H-4**	**40N9H-4**	
6"	**60N4H-6**	**60N6H-6**	**60N9H-6**	**40N9H-6**	**30N16H-6**
8"	**60N4H-8**	**60N6H-8**	**60N9H-8**	**40N9H-8**	**30N16H-8**
10"	**60N4H-10**	**60N6H-10**	**60N9H-10**	**40N9H-10**	**30N16H-10**
12"	**60N4H-12**	**60N6H-12**	**60N9H-12**	**40N9H-12**	**30N16H-12**