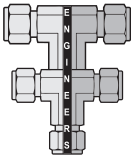




INSTRUMENTATION VALVES

NEEDLE VALVES | BALL VALVES | CHECK VALVES



Page 2	INSTRUMENTATION NEEDLE VALVES
page 2 to 6	TECHNICAL INFORMATION
page 7-8	SCREWED BONNET NEEDLE VALVE (SBNV)
	Female x Female (F)
	Male x Male (M)
	Male x Female (MF)
	ODT x ODT (T)
page 9	FORGED BODY NEEDLE VALVE (IBNVF)
	Female x Female (F)
	Male x Female (MF)
	Male x Male (M)
	ODT x ODT (T)
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	GAUGE SCREWED NEEDLE VALVE with Bleed plug (GSBNV-2)
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Page 19	INSTRUMENTATION CHECK VALVES
Page 20	ORDERING INFO CHECK VALVES

FEATURES

We manufacture needle valves using finest grade of raw materials and as per the international quality standards like ASTM, BIS, BS and more. Designed to be used with instrumentation equipment, these valves control, measure, equalize, drain the pressure of gases and liquids. Needle valves are available in different sizes, end connections and sealing styles. Constructed using materials like steel, SS-304, SS-316, brass, monel, hastelloy, titanium etc., these valves can be customized as per the specifications of the clients.

Needle valves are design and Manufactured to meet the requirements of Corrosive service, High pressure Sampling systems, Sour Gas applications etc.

TECHNICAL INFORMATION

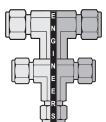
- One-piece bar stock construction with full material traceability.
- Back seating of stems in a fully open position prevents stem back out.
- All types of valves have a self centering, non rotating needle on the valve seat, alternative seating to choose for every application requiring bubble tight shut off.
- Safety Stop Pin (316 stainless steel pin prevents detachment of the bonnet from the body due to vibration).
- Bonnet-to-body-seat, metal-to-metal seal eliminates the need for O-ring seals.
- Dust Caps with color identification :
- Blue for isolation Red for drain /vent Green for equalizing
- Handle: T-bar metal (standard) or circular plastic (optional).
- Double bonnet (standard) or single bonnet (optional).
- Optional high temperature packing for compatibility to 1000 °F on certain models.
- All valves are designed in accordance with ASME/ANSI B16.34-1988 and ASME Section VIII, Div.1.
- Low torque operation.
- Spindle treated for durable operation.
- Standard Pressure and Temperature Ratings for SS316 /316 L is as under : 6000 psi @ 100 F (414 bar @ 40 C), 3460 psi @ 850 F (239 bar @ 454 C) & 3030 psi @ 1000 F (209 bar @ 538 C)

MATERIAL SPECIFICATION

Material	Body	Bonnet	Stem	Tip
Carbon Steel	CS A105	SS304	SS316	
Stainless Steel	SS316			
Monel	Alloy 400			Alloy
Sour Gas	SS316	Alloy 400		K500

THREAD SPECIFICATION

Description	Standard
British Parallel Pipe Thread	ISO/BS 2779 - NF, DIN - 3852
British Tapper Pipe Thread	BS 21 - IS 07, DIN - 3852
Metric Parallel Thread	ISO 6149 , DIN - 3852
Metric Tapper Thread	DIN - 3852
National Pipe Thread	ANS /ASME B.20.1-1983



BONNET TYPES

Small Screwed Bonnet Assembly
(Single Bonnet Assembly)

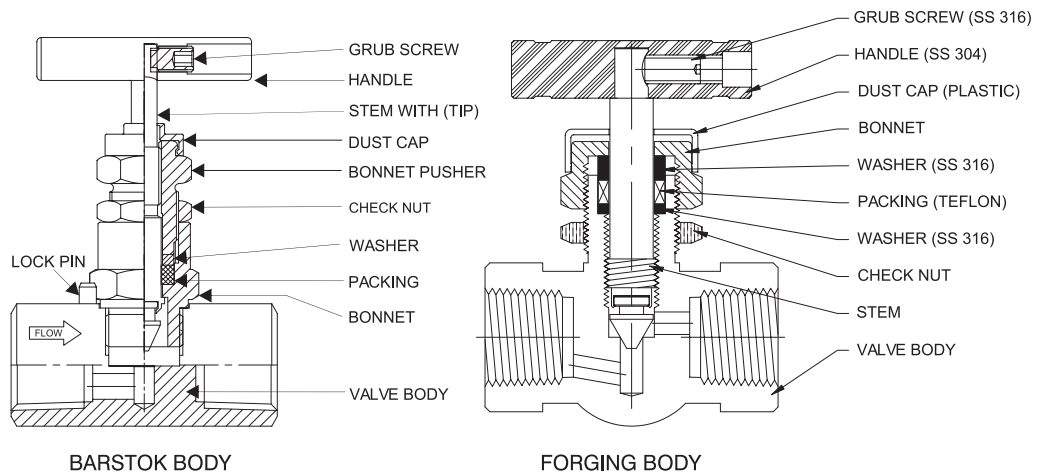


Screwed Bonnet Assembly
(Double Bonnet Assembly)

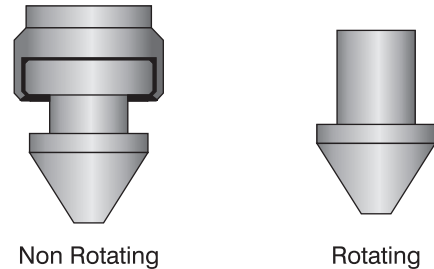


Grub Screw	for Anti Vibration Hold (SS)
Handle	to minimize torque. (SS 316, Nylon knob handle optional)
Dust Caps	to indicate application - Plastic. (Green - Equalizer, Blue - Isolate, Red - Drain)
Bonnet Pusher	Material same as bonnet.
Check Nut / Locking Nut	Material same as Bonnet.
Bonnet	with blow out proof Stem Design. (Material same as body)
Washer	Material same as Bonnet.
Packing	Standard Teflon, Choice of Packing available. Refer Ordering Instructions.
Locking Pin	adjustable Locking Arrangement also available
Spindle Non Rotating Tip	Thread rolled and burnished, Shut-Off Tip standard (Material same as Bonnet)
Valve Body	Choice of material & choice of Ends connection available, Refer ordering instructions.

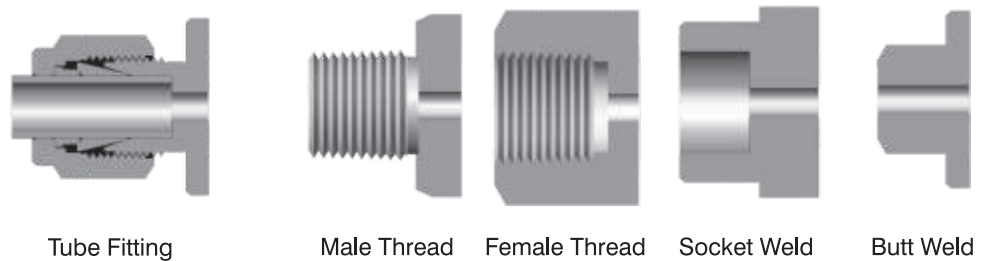
VALVE BODY / ASSEMBLY TYPES



Spindle Tip options

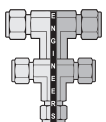


End Connection options



SALIENT FEATURES

- One-piece bar stock construction with full material traceability.
- Back seating of stems in a fully open position prevents stem back out.
- All types of valves have a self centering, non rotating needle on the valve seat, alternative seating to choose for every application requiring bubble tight shut off.
- Safety Stop Pin, 316 stainless steel pin prevents detachment of the bonnet from the body due to vibration.
- Stainless steel models of needle, gauge and instrument manifold valves, equipped with needle stems, meet NACE MR-01-75.
- Bonnet-to-body-seat, metal-to-metal seal eliminates the need for O-ring seals.
- Handle: T-bar metal (standard) or circular plastic optional.
- Double bonnet or single bonnet (optional)
- Optional high temperature packing for compatibility to 1000 °F on certain models.
- All valves are designed in accordance with ASME/ANSI B16.34-1988 and ASME Section VIII, Div.1.
- Low torque operation.
- Spindle treated for durable operation.



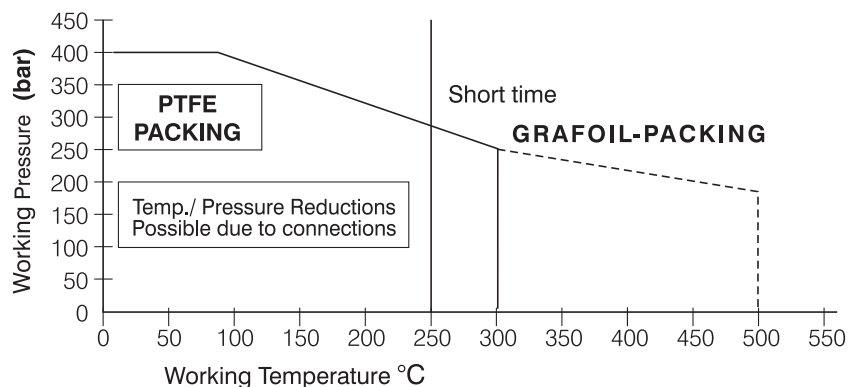
MANUFACTURING & TESTING STANDARDS

Description	Standard
Pressure & Temperature rating	ANSI B 16-34
Valves	ANSI B 16 - CLASS 2500
Sour Gas service Valves	ANSI B 31.1
Fittings	JIS B 2351 , BS 4368

PRESSURE & TEMPERATURE RATING

Material	Bar Stock	Forgings	Pressure & Temperature Rating PTFE	Grafoil
Stainless Steel	ASTM A 276	ASTM A182	6000 psi @ 200 F	6000 psi @ 200 F
Stainless Steel	ASME SA 479	ASME SA182	4000 psi @ 500 F	4000 psi @ 500 F
Brass	ASTM B 16	ASTM B 283	3000 psi @ 200 F	3000 psi @ 200 F
Brass	ASTM B 453	ASTM B 283	2000 psi @ 500 F	2000 psi @ 500 F
Carbon Steel	ASTM A 108	---	6000 psi @ 200 F	6000 psi @ 200 F
Carbon Steel	ASTM A 108	---	4000 psi @ 500 F	4000 psi @ 600 F
Alloy 400 / R -405	ASTM B 164	ASTM B 564	6000 psi @ 200 F	6000 psi @ 200 F
Alloy 400 / R -405	ASME SB 164	ASME SB 564	4000 psi @ 500 F	3000 psi @ 500 F
Alloy 600	ASTM B 166	ASTM B 564	6000 psi @ 200 F	6000 psi @ 200 F
Alloy 600	ASME SB 166	ASME SB 564	4000 psi @ 500 F	3000 psi @ 500 F
Alloy 20	ASTM B 473	ASTM B 462	6000 psi @ 200 F	6000 psi @ 200 F
Alloy 20	ASTM B 473	ASTM B 462	4000 psi @ 500 F	3000 psi @ 500 F
Alloy C276	ASTM B 574	ASTM B 564	6000 psi @ 200 F	6000 psi @ 200 F
Alloy C276	ASTM B 574	ASTM B 564	4000 psi @ 500 F	3000 psi @ 500 F
Titanium	ASTM B 348	ASTM B 381	6000 psi @ 200 F	6000 psi @ 200 F
Titanium	ASTM B 348	ASTM B 381	4000 psi @ 500 F	3000 psi @ 500 F

Pressure - Temperature Ratings



HOW TO ORDER

- Select a basic ordering number. Example SBNV-8Mx8F-
- Add a material designator. Example: SBNV-8Mx8F-SS
- Use suffix 'S' for Straight type, 'A' for Angle type.
- Select a basic ordering number. Example IBNVS-8Mx8F- Change suffix. Example IBNVA-8Mx8F-

MATERIAL DESIGNATOR

Material	SS316	SS304	Carbon Steel	Monel	Brass	Hastelloy
Designator	S6	S4	CS	M	B	HC

PIPE THREAD SIZE DESIGNATOR

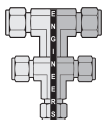
Thread Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"
Designator	2	4	6	8	12	16

END CONNECTION DESIGNATOR

End Connection	Female x Female	Male x Female	Male x Male	OD x OD
Designator	F	MF	M	T

THREAD DESIGNATOR

Thread Type	NPT	BSPB	BSPF
Designator	N	IP	IT



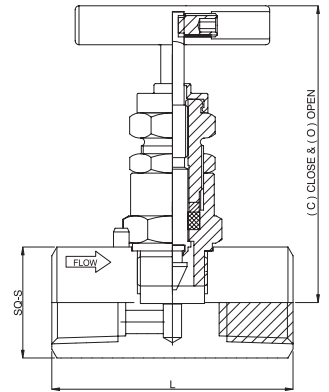
Warning for Your Safety

The system designer and user have the sole responsibility to select products suitable for their special application requirements to ensure the proper installation. Operation and maintenance of the product. Application details, material compatibility and product ratings should all be considered in the individual selection. Improper selection or use of products can cause property damage or personal injury. FLUIDLOK accept no liability for any improper selection, installation, operation or maintenance.

Part No. SBNV



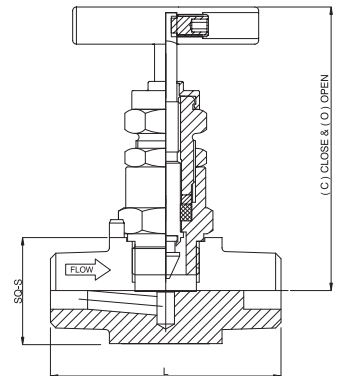
FEMALE x FEMALE (F)



FLUIDLOK Part No.	End Connection size (in)			Sq.S	Dimensions (mm)			
	IN	OUT	Orifice		L	C	O	CV
SBNV-S-2F	1/8F	1/8F	4	20	40	55	61	0.35
SBNV-S-4F	1/4F	1/4F	4	25	55	71.5	76.5	0.35
SBNV-S-6F	3/8F	3/8F	4	25	55	71.5	76.5	0.35
SBNV-S-8F	1/2F	1/2F	6	28.5	62	71.5	76.5	0.85
SBNV-S-12F	3/4F	3/4F	6	38	62	71.5	76.5	0.85
SBNV-S-16F	1 F	1 F	8	42	80	82	87	1.2



MALE x MALE (M)



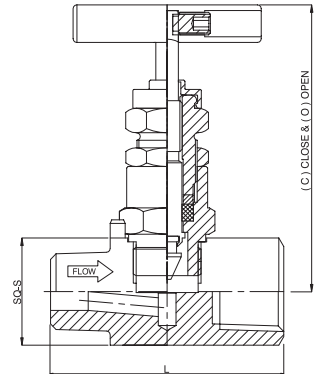
FLUIDLOK Part No.	End Connection size (in)			Sq.S	Dimensions (mm)			
	IN	OUT	Orifice		L	C	O	CV
SBNV-S-2M	1/8M	1/8M	4	20	40	55	61	0.35
SBNV-S-4M	1/4M	1/4M	4	25	55	71.5	76.5	0.35
SBNV-S-6M	3/8M	3/8M	4	25	55	71.5	76.5	0.35
SBNV-S-8M	1/2M	1/2M	6	28.5	62	71.5	76.5	0.85
SBNV-S-12M	3/4M	3/4M	6	38	62	71.5	76.5	0.8
SBNV-S-16M	1 M	1 M	8	42	80	82	87	1.2

Dimensions are for reference only and are subject to change without Notice

Part No. SBNV



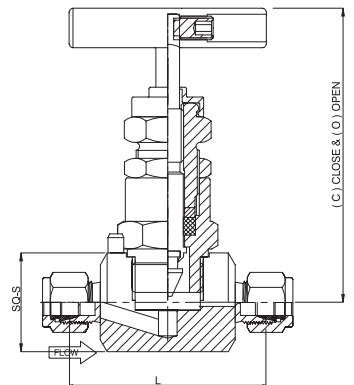
MALE x FEMALE (MF)



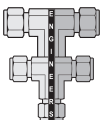
FLUIDLOK Part No.	End Connection size (in)			Sq.S	Dimensions (mm)			
	IN	OUT	Orifice		L	C	O	CV
SBNV-S-2MF	1/8M	1/8F	4	20	40	55	61	0.35
SBNV-S-4MF	1/4M	1/4F	4	25	55	71.5	76.5	0.35
SBNV-S-6MF	3/8M	3/8F	4	25	55	71.5	76.5	0.35
SBNV-S-8MF	1/2M	1/2F	6	28.5	62	71.5	76.5	0.85
SBNV-S-12MF	3/4M	3/4F	6	38	62	71.5	76.5	0.85
SBNV-S-16MF	1 M	1 F	8	42	80	82	87	1.2



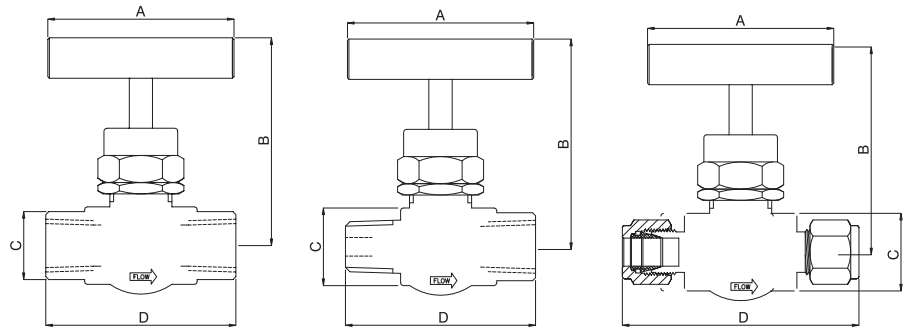
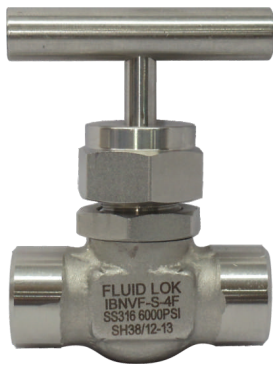
ODT x ODT (T)



FLUIDLOK Part No.	End Connection size (in)			Sq.S	Dimensions (mm)			
	IN	OUT	Orifice		L	C	O	CV
SBNV-S-2T	1/8T	1/8T	2.4	20	40	55	61	0.12
SBN V-S-4T	1/4T	1/4T	4	25	55	71.5	76.5	0.35
SBNV-S-6T	3/8T	3/8T	4	25	55	71.5	76.5	0.35
SBN V-S-8T	1/2T	1/2T	6	28.5	62	71.5	76.5	0.85
SBNV-S-12T	3/4T	3/4T	6	38	62	71.5	76.5	0.85
SBNV-S-16T	1T	1T	8	42	80	82	87	1.2



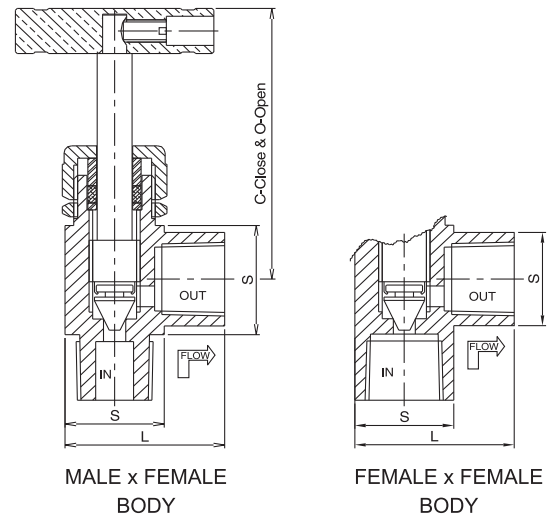
Part No. IBNVF



FLUIDLOK Part No.	End Connection (in)			Dimensions (mm)			
	E1	E2	O	A	B (Close)	C	D
IBNVF-S-2T	1/8T	1/8T	2.3	50	60	20	54
IBNVF-S-4T	1/4T	1/4T	4	50	60	25	59
IBNVF-S-6T	3/8T	3/8T	4	50	60	25	62
IBNVF-S-8T	1/2T	1/2T	4	50	72	31	67
IBNVF-S-2M	1/8M	1/8M	2.3	50	60	20	44
IBNVF-S-4M	1/4M	1/4M	4	50	60	25	50
IBNVF-S-6M	3/8M	3/8M	4	50	60	25	52
IBNVF-S-8M	1/2M	1/2M	4	50	72	31	62
IBNVF-S-2F	1/8F	1/8F	2.3	50	60	20	44
IBNVF-S-4F	1/4F	1/4F	4	50	60	25	50
IBNVF-S-6F	3/8F	3/8F	4	50	60	25	52
IBNVF-S-8F	1/2F	1/2F	4	50	72	31	62
IBNVF-S-2Mx2F	1/8M	1/8F	2.3	50	60	20	44
IBNVF-S-4Mx4F	1/4M	1/4F	4	50	60	25	50
IBNVF-S-6Mx6F	3/8M	3/8F	4	50	60	25	52
IBNVF-S-8Mx8F	1/2M	1/2F	4	50	72	31	62
IBNVF-S-2Fx2M	1/8F	1/8M	2.3	50	60	20	44
IBNVF-S-4Fx4M	1/4F	1/4M	4	50	60	25	50
IBNVF-S-6Fx6M	3/8F	3/8M	4	50	60	25	52
IBNVF-S-8Fx8M	1/2F	1/2M	4	50	72	31	62

Dimensions are for reference only and are subject to change without Notice

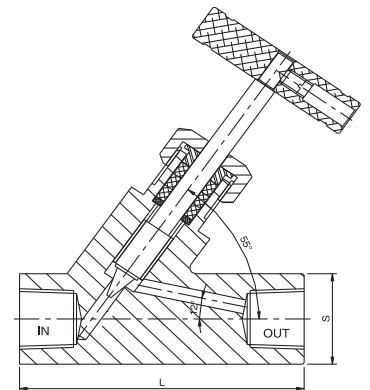
Part No. IBNVF



ANGLE TYPE

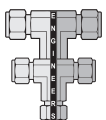
FLUIDLOK Part No.	End Connection size (in)		Orifice	Sq.S	Dimensions (mm)		
	IN	OUT			L	C	O
IBNVF-A-2MF	1/8M	1/8F	4	24	36	68	75
IBNVF-A-4MF	1/4M	1/4F	4	24	77	77	84
IBNVF-A-6MF	3/8M	3/8F	5	24	77	77	84
IBNVF-A-8MF	1/2M	1/2F	6	34	51	79	86
IBNVF-A-12MF	3/4M	3/4F	8	38	54	115	122

Part No. IBNVF



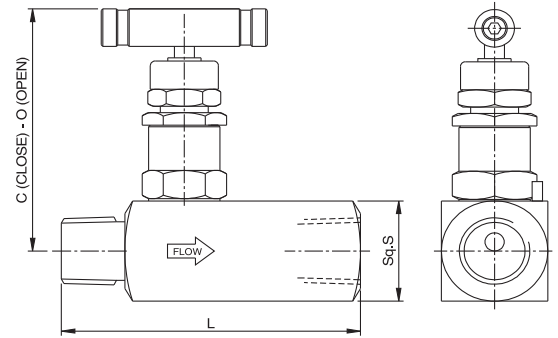
Y-TYPE

FLUIDLOK Part No.	End Connection size (in)		Orifice	Dimensions (mm)	
	IN	OUT		Sq.S	L
IBNVF-Y-2F	1/8F	1/8F	3	20	70
IBNVF-Y-4F	1/4F	1/4F	3	25	75
IBNVF-Y-6F	3/8F	3/8F	4	25	75
IBNVF-Y-8F	1/2F	1/2F	4.8	32	95



Gauge Screwed Needle Valve

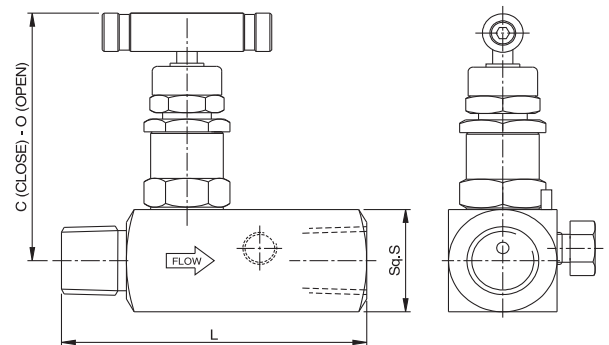
Part No. GSNV-1



FLUIDLOK Part No.	End Connection (in)		SQ-S	Dimensions (mm)			Orifice	CV
	IN	OUT		C	O	L		
GSNV1-8Mx8F	1/2M	1/2F	32	71.5	71.5	70	4.7	0.45
GSNV1-12Mx8F	3/4M	1/2F	38	71.5	71.5	70	4.7	0.45

Gauge Screwed Needle Valve With Bleed Plug

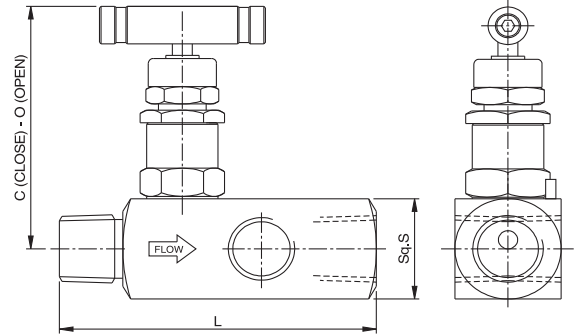
Part No. GSNV-2



FLUIDLOK Part No.	End Connection (in)		SQ-S	Dimensions (mm)			Orifice	CV
	IN	OUT		C	O	L		
GSNV2-8Mx8F	1/2M	1/2F	32	71.5	71.5	90	4.7	0.45
GSNV2-12Mx8F	3/4M	1/2F	38	71.5	71.5	90	4.7	0.45

Dimensions are for reference only and are subject to change without Notice

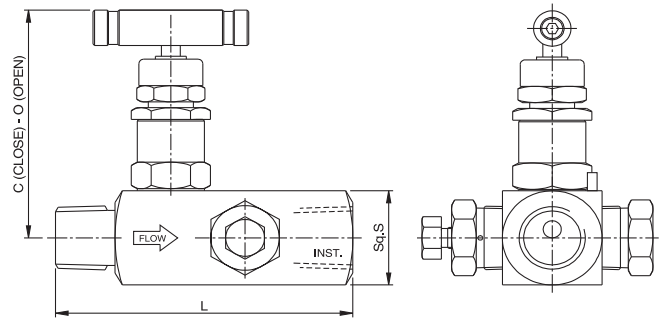
Part No. GRSNV-1



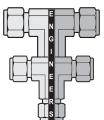
FLUIDLOK Part No.	End Connection (in)			Dimensions (mm)				Orifice	CV
	IN	OUT	SQ-S	C	O	L			
GRSNV1-8Mx8F	1/2M	1/2F	32	71.5	71.5	102 (4.01")	4.7 (0.18")	0.45	
GRSNV1-12Mx8F	3/4M	1/2F	38	71.5	71.5	102 (4.01")	4.7 (0.18")	0.45	

Gauge Root Screwed Needle Valve With Bleed Plug & Valve

Part No. GRSNV-2



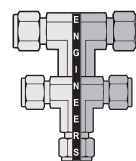
FLUIDLOK Part No.	End Connection (in)			Dimensions (mm)				Orifice	CV
	IN	OUT	SQ-S	C	O	L			
GRSNV2-8Mx8F	1/2M	1/2F	32	71.5	71.5	102 (4.01")	4.7 (0.18")	0.45	
GRSNV2-12Mx8F	3/4M	1/2F	38	71.5	71.5	102 (4.01")	4.7 (0.18")	0.45	



FLUIDLOK



INSTRUMENTATION BALL VALVES



FLUIDFIT ENGINEERS PVT. LTD.

HOW TO ORDER

FLUID LOK Ball Valves are ordered by part number as listed in this catalogue.

ABBREVIATION

Seat	PEEK	DERLIN	PTFE
Designator	P	D	PT

PRESSURE DESIGNATOR

Pressure	1,500 psi	3,000 psi	6,000 psi	10,000 psi
Designator	1.5K	3K	6K	10K

BORE DESIGNATOR

Bore Type	Reduce Bore	Reduce Bore
Designator	RB	FB

MATERIAL

Type	SS316	SS304	Carbor Steel	Monel	Brass	Hastalloy
Designator	S6	S4	CS	MO	B	HC

PIPE THREAD SIZE DESIGNATOR

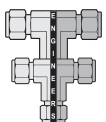
Nom. Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"
Designator	2	4	6	8	12	16

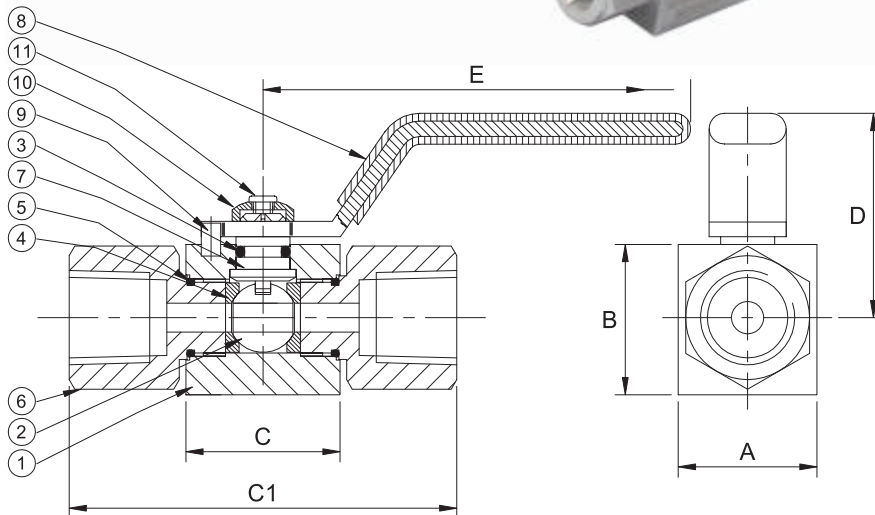
END CONNECTION THREADS

Thread Type	NPT	BSPP	BSPT	Male	Female
Designator	N	IP	IT	M	F

DESIGNATION STYLE A letter or combination of letters and numbers are used to designate the type of valves. Eg. PMBV2 = 2 way Panel Mount. Please see visual Index.

Code	Valve Type	Code	Valve Type
PMBV2	2 way Panel Mount	LBV-RND	Lever Type
PMBV3	3 way Panel Mount	2PHBV-RND	2 piece Round body High PSI
PMBV4	4 way Panel Mount	2PHBV-SQ	2 piece Square body High PSI





MATERIAL			
P. No.	Description	Qty.	Material
1	VALVE BODY	1	ASTM A 182 F316
2	BALL	1	SS 316 (AISI-316)
3	STEM PACKING	1	SS 316 (AISI-316)
4	BALL SEAT	2	PTFE
5	CONNECTOR SEAL	2	SS 316 (AISI-316)
6	CONNECTOR	2	SS 316 (AISI-316)
7	STEM	1	SS 316 (AISI-316)
8	HANDLE	1	SS316/MS Powder Coat
9	LOCK PIN	1	SS 316 (AISI-316)
10	WASHER	1	SS 316 (AISI-316)
11	SCREW	1	S.S.

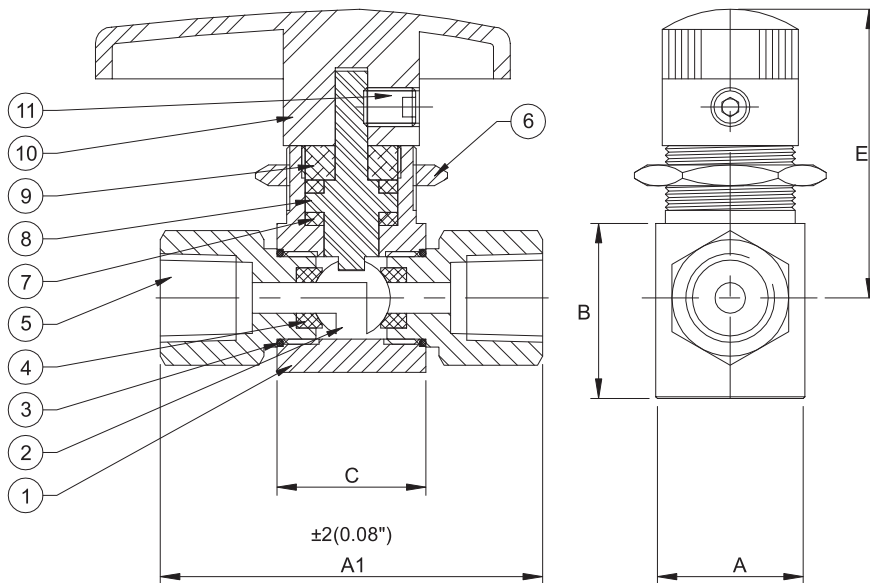
PRESSURE TEMPERATURE RATING			
Material	SS 316	Carbon	
Pressure Class	Temp °F	PSI	PSI
ANSI 2500 lbs	20° to 100°	6000	6170
	200°	5160	5625
	300°	4660	5470
	400°	4280	5280

PRESSURE		
PSI	Kg/c, m2	Bar
1	0.07	0.069
14.22	1	0.981
14.5	1.02	1

DIMENSION								
Size	Orifice	A	B	C	C1			D
					FxF	MxM	TxT	
1/4"	5 (0.20")	30 (1.18")	32 (1.26")	40 (1.57")	76 (2.99")	88 (3.46")	95 (3.74")	49 (1.93")
3/8"	8 (0.31")	30 (1.18")	32 (1.26")	40 (1.57")	76 (2.99")	88 (3.46")	104 (4.09")	49 (1.93")
1/2"	9.5 (0.37")	35 (1.38")	38.1 (1.5")	48 (1.89")	96 (3.78")	106 (4.17")	115 (4.53")	64 (2.52")
3/4"	12 (0.47")	43 (1.69")	49 (1.93")	60 (2.36")	108 (4.25")	118 (4.64")	123 (4.84")	67 (2.64")
1"	20 (0.79")	50 (1.97")	56 (2.20")	67 (2.64")	125 (4.92")	135 (5.31")	150 (4.90")	67 (2.64")

- Features :** SS316 construction for corrosion resistance.
 Available in Square or Round valve body.
 Full or reduced Bore for excellent flow.
 Peek/Delrin seat for better performance.
- Physical Features :** Pressure rating 400 Kg/cm²
- Material Options :** Brass, Ss 316, Carbon Steel, C.s., Bronze, Hastalloy, Monel, Etc. Optional Kel-F, Polyaman packing available with high pressure Valves.
- Standards :** BS 5750; ISO 9001-2000; MSS SP-99
- Tests :** Each valve is tested with nitrogen at 1000 psi for seat and seal leakage mawp is 6000 psi @70°F Temp.
- Hydro Tests :** Performed with pure water at 1-1/2 times of the working pressure. Other tests like helium, seismic are available upon request.
- End Connections :** End Connections available In NPT / BSPP / JIC / SAE

Dimensions are for reference only and are subject to change without Notice



MATERIAL			
P. No.	Description	Qty.	Material
1	VALVE BODY	1	SS 316
2	BALL	1	SS 316
3	BALL PACKING	2	PTFE
4	O-RING	2	VITON
5	CONNECTOR	2	SS 316
6	CHECK NUT	1	SS 316
7	STEAM PACKING	2	PTFE
8	STEAM	1	SS 316
9	GLAND NUT	1	SS 316
10	HANDLE	1	STD
11	GRUB SCREW	1	S.S.

DIMENSION							
Size	Orifice	B	A1 (Male)	A1 (Female)	A	C	E
1/4"	5 (0.20)	30 (1.18)	88 (3.46)	76 (2.99)	40 (1.57)	45 (1.77)	49 (1.93)
3/8"	8 (0.31)	30 (1.18)	88 (3.46)	76 (2.99)	40 (1.57)	45 (1.77)	49 (1.93)
1/2"	9.5 (0.37)	35 (1.38)	111 (4.37)	96 (3.78)	53 (2.09)	48 (1.89)	64 (2.52)
3/4"	12 (0.47)	43 (1.69)	118 (4.64)	108 (4.25)	60 (2.36)	60 (2.36)	67 (2.64)
1"	20 (0.79)	55 (2.16)	136 (5.35)	126 (4.96)	68 (2.68)	68 (2.68)	67 (2.64)

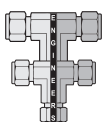
TEMPERATURE RATINGS		
PTFE	-65°F to 350°F	(-54°C to 177°C)
PCTFE	-65°F to 350°F	(-54°C to 177°C)
PEEK	-65°F to 450°F	(-54°C to 232°C)
Nitrile Rubber	-40°F to 250°F	(-40°C to 121°C)
Fluorocarbon Rubber	-15°F to 350°F	(-26°C to 232°C)
Ethylene Propylene Rubber	-65°F to 300°F	(-54°C to 149°C)
Highly Fluoronated, Fluorocarbon Rubber	-15°F to 200°F	(-26°C to 93°C)

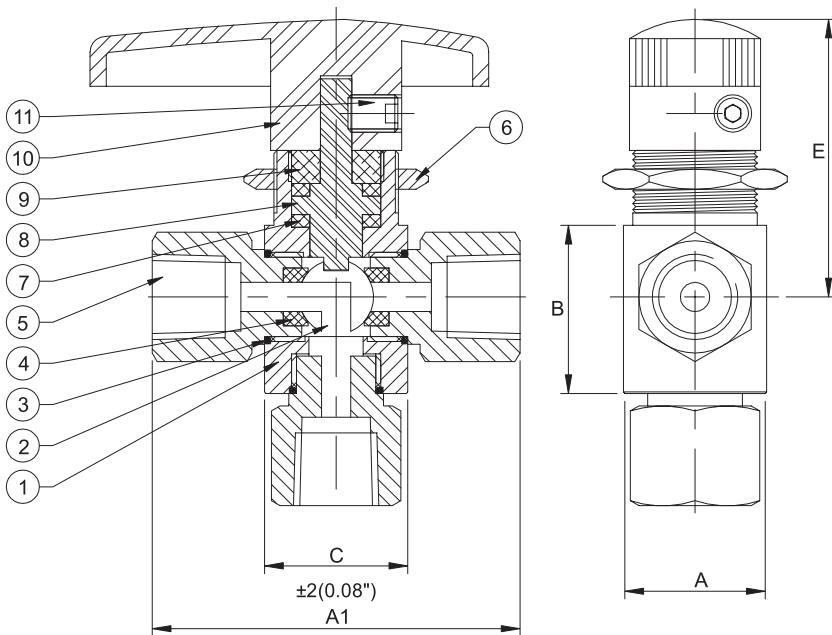
- Features :**
- SS316 construction for corrosion resistance.
 - Full or reduced Bore for excellent flow.
 - Peek/Delrin seat for better performance.
 - Ball hard chrome plated for smooth operation.
 - Micro Finished balll,
 - Provides a positive seal Bi-directional flow.
 - Panel Mountable.
 - Handle indicates flow direction.
 - Low operating torques.
 - Positive handle stops.
 - Color coated handles.

Physical Features : Pressure rating 400 Kg/cm2

Material Options : Brass, SS 316, Carbon Steel, inc625, Hastalloy, Etc.

Dimensions are for reference only and are subject to change without Notice





MATERIAL			
P. No.	Description	Qty.	Material
1	VALVE BODY	1	SS 316
2	BALL	1	SS 316
3	BALL PACKING	2	PTFE
4	O-RING	2	VITON
5	CONNECTOR	2	SS 316
6	CHECK NUT	1	SS 316
7	STEAM PACKING	2	PTFE
8	STEAM	1	SS 316
9	GLAND NUT	1	SS 316
10	HANDLE	1	STD
11	GRUB SCREW	1	S.S.

DIMENSION							
Size	Orifice	B	A1 (Male)	A1 (Female)	A	C	E
1/4"	5 (0.20)	30 (1.18)	88 (3.46)	76 (2.99)	40 (1.57)	45 (1.77)	49 (1.93)
3/8"	8 (0.31)	30 (1.18)	88 (3.46)	76 (2.99)	40 (1.57)	45 (1.77)	49 (1.93)
1/2"	9.5 (0.37)	35 (1.38)	111 (4.37)	96 (3.78)	53 (2.09)	48 (1.89)	64 (2.52)
3/4"	12 (0.47)	43 (1.69)	118 (4.64)	108 (4.25)	60 (2.36)	60 (2.36)	67 (2.64)
1"	20 (0.79)	55 (2.16)	136 (5.35)	126 (4.96)	68 (2.68)	68 (2.68)	67 (2.64)

TEMPERATURE RATINGS		
PTFE	-65°F to 350°F	(-54°C to 177°C)
PCTFE	-65°F to 350°F	(-54°C to 177°C)
PEEK	-65°F to 450°F	(-54°C to 232°C)
Nitrile Rubber	-40°F to 250°F	(-40°C to 121°C)
Fluorocarbon Rubber	-15°F to 350°F	(-26°C to 232°C)
Ethylene Propylene Rubber	-65°F to 300°F	(-54°C to 149°C)
Highly Fluoronated, Fluorocarbon Rubber	-15°F to 200°F	(-26°C to 93°C)

- Features :**
- SS316 construction for corrosion resistance.
 - Full or reduced Bore for excellent flow.
 - PeeK/Delrin seat for better performance.
 - Ball hard chrome plated for smooth operation.
 - Micro Finished ballll,
 - Provides a positive seal Bi-directional flow.
 - Panel Mountable.
 - Handle indicates flow direction.
 - Low operating torques.
 - Positive handle stops.
 - Color coated handles.

Physical Features : Pressure rating 400 Kg/cm2

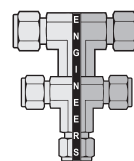
Material Options : Brass, SS 316, Carbon Steel, inc625, Hastalloy, Etc.

Dimensions are for reference only and are subject to change without Notice

FLUIDLOK



INSTRUMENTATION CHECK VALVES



FLUIDFIT ENGINEERS PVT. LTD.

HOW TO ORDER

FLUID LOK Check Valves are ordered by part number as listed in this catalogue.

ABBREVIATION

Valve Type	Check Valve
Designator	CV

PRESSURE DESIGNATOR

Pressure	6,000 psi
Designator	6K

CRACKING PRESSURE

Pressure	3.5 psi to 50 psi
Designator	CP

MATERIAL

Type	SS316	SS304	Carbor Steel	Monel	Brass	Hastalloy
Designator	S6	S4	CS	MO	B	HC

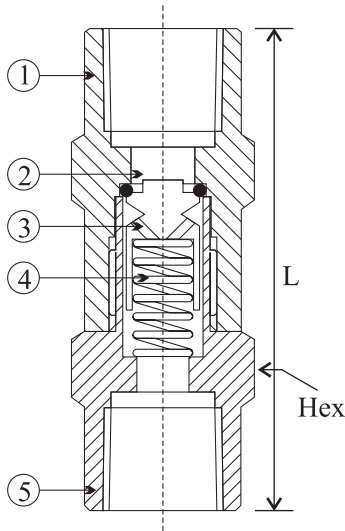
PIPE THREAD SIZE DESIGNATOR (INLET x OUTLET)

Nom. Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"
Designator	2	4	6	8	12	16

END CONNECTION THREADS

Thread Type	NPT	BSPP	BSPT	Male	Female	OD
Designator	N	IP	IT	M	F	T

DESIGNATION STYLE A letter or combination of letters and numbers are used to designate the type of valves. Eg. CV = Check Valve.



MATERIAL			
P. No.	Description	Qty.	Material
1	Valve Body-1	1	A479-316 SS
2	O-Ring	1	Viton/Buna-N
3	Poppet	1	A479-316 SS
4	Spring	1	302 SS
5	Valve Body-2	1	A479-316 SS

PRESSURE / TEMPERATURE RATINGS		
Materials	Size	Pressure Rating
316 SS	1/8" to 3/4"	5000 psig CWP (345 bar)
316 SS	1"	3000 psig CWP (207 bar)
BRASS	1/8" to 1"	3000 psig CWP (207 bar)

WORKING TEMPERATURES	
Materials	Temperatures
Viton seal	15 F to 375 F (26C to 190C)
Fluorocarbon Rubber	15 F to 400 F (26C to 204C)
Buna-N Rubber	30 F to 275 F (34C to 135C)
Neoprene Rubber	45 F to 250 F (43C to 121C)

Orifice : 1.078" to 0.656" (2 mm to 16.7 mm)

Cv Factor : 0.18 to 6.56

Working Choice of fixed pressure cracking points from 1/3 to 25 psi (0.02 to 1.75 bar) or as per customers requirements.

Features :

Check Valve are specially designed & manufactured for flow control of fluids and gases in corrosive & hazardous environment. These valves are used in process control, Instrumentation and flow control application. Valves are precision machined with designer durability and maximum efficiency to provide high quality and flow cost alternatives in fluid and gaseous control systems of different applications, to meet the exact standards of our customers growing demands.

Material :

Available in high grade stainless steel, brass materials.

Tests :

Each Check valve is 100% factory tested for both crack & reseal.

End Connections :

Variety of end connections includes male / female threaded NPT, BSP, BSPT, ISO, DIN and JIS tapered pipe ends.



DIAMENSION				
Part No.	Inlet	Outlet	L	Hex
CV-2FF	1/8"NPT-F	1/8"NPT-F	50	19
CV-2MM	1/8"NPT-M	1/8"NPT-M	54	19
CV-2OD	1/8" OD	1/8" OD	69	19
CV-4FF	1/4"NPT-F	1/4"NPT-F	60	19
CV-4MM	1/4"NPT-M	1/4"NPT-M	63	19
CV-4OD	1/4" OD	1/4" OD	72	19
CV-6FF	3/8"NPT-F	3/8"NPT-F	60	22
CV-6MM	3/8"NPT-M	3/8"NPT-M	63	19
CV-6OD	3/8" OD	3/8" OD	74	19
CV-8FF	1/2"NPT-F	1/2"NPT-F	84	32
CV-8MM	1/2"NPT-M	1/2"NPT-M	73	22
CV-8OD	1/2" OD	1/2" OD	79	22
CV-12FF	3/4"NPT-F	3/4"NPT-F	84	35
CV-12 MM	3/4"NPT-M	3/4"NPT-M	99	32
CV-12OD	3/4" OD	3/4" OD	106	32
CV-16FF	1"NPT-F	1"NPT-F	99	40.5
CV-16MM	1"NPT-M	1"NPT-M	115	35
CV-16OD	1" OD	1" OD	118	35

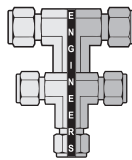
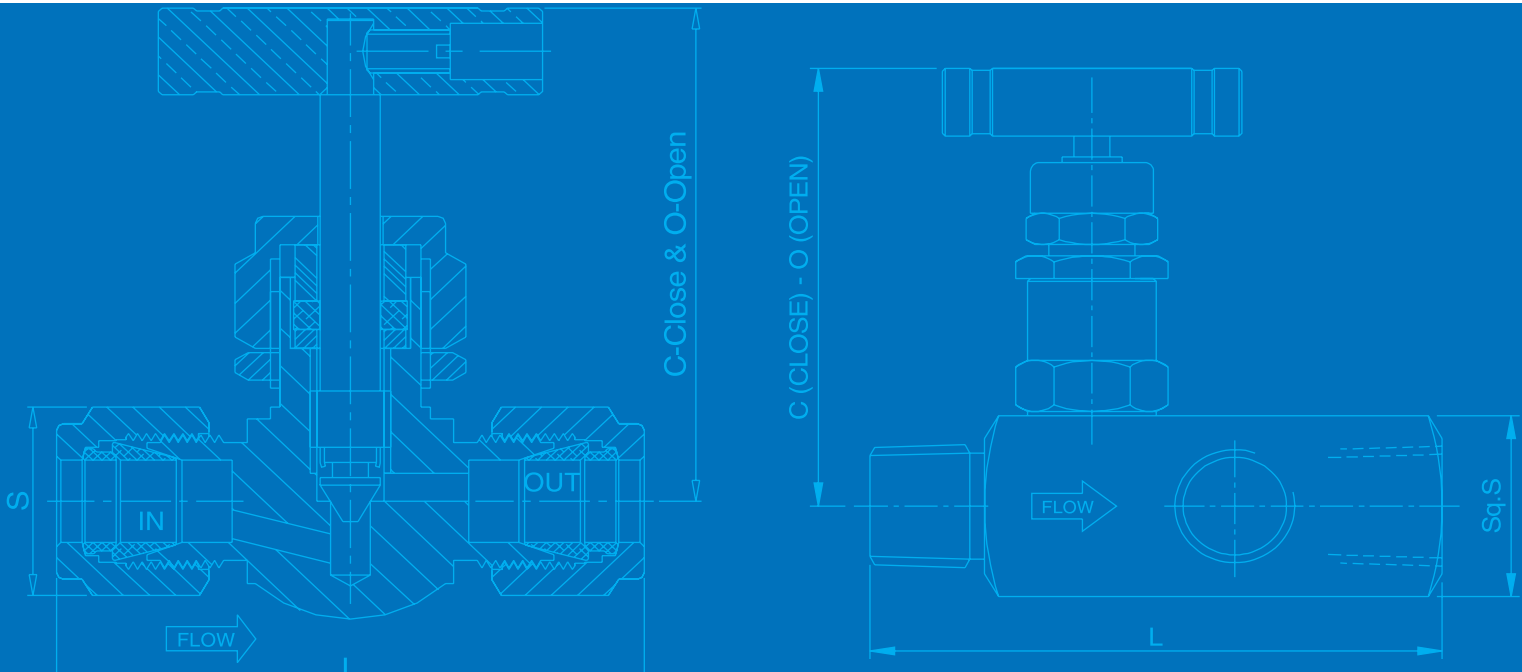
Note : Valves may initially crack at higher than subsequent cracking pressure if are not actuated for a period of time.

Dimensions are for reference only and are subject to change without Notice

FLUIDLOK[®]

INSTRUMENTATION VALVES

NEEDLE VALVES | BALL VALVES | CHECK VALVES



FLUIDFIT ENGINEERS PVT. LTD.

Unit #16, Supreme Industrial Estate, Near Bhajansons Diary, Kaman Bhiwandi Road,
Chinchoti Phata, Village Devdal, Vasai (E), Pin 201 208, India.

Tel : +91-9833852031 Fax: +91-22-23080308

E-mail : sales@fluidfitengg.com Web: www.fluidfitengg.com / www.valvesin.com



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