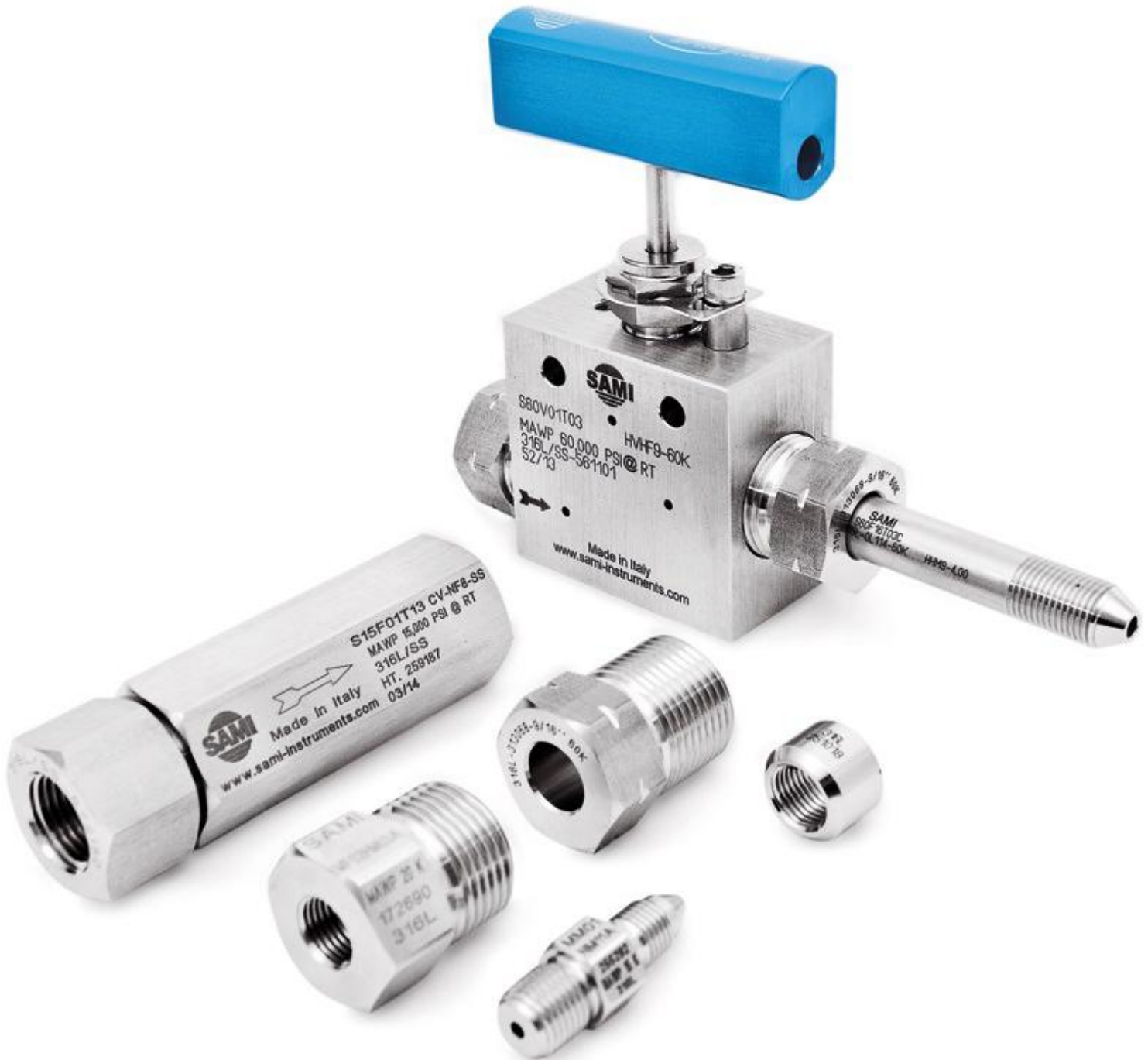


Medium and High Pressure

15.000-60.000 PSI



Contents

Low, Medium and High pressure valves - Contents

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15.000 psi

Ordering Information - Low Pressure Valves & Accessories - 15,000 psi

Valve Series	Body Pattern	In/Out	Material	Options
S15	V01	T11	A	X

Valve Series		Body Pattern		In/Out		Material		Options	
S15	15,000 p.s.i.	V01	F/F Two way straight valve	T11	1/4 " NPT	A	Aisi 316L	L	Oxygen Cleaning
		V02	F/F Two way angle valve	T12	3/8 " NPT	C	Aisi 316Ti	S	Sour gas Service
		V10	M/F Two way straight valve	T13	1/2 " NPT	D	Monel 400	W	Without Glands and Collars
		F01	F/F Soft Check Valve	T14	3/4 " NPT	E	Duplex F51	X	Handle in 316L
		F02	F/F Ball Check Valve	T15	1 " NPT	G	Super Duplex		
		F04	F/F NPT Elbow			H	Hastelloy C276		
		F05	F/F NPT Tee			I	Inconel 625		
		F06	F/F NPT Cross			J	Incoloy 825		
		F11	Male Plug						
		F16	NPT Male Nipples						
		F17	M/F NPT Street Elbows						
		F20	M/F NPT Street Tees						



ADDITIONAL FINAL LETTER FOR NIPPLES ONLY - Length	
A	2 3/4 "
B	3 "
C	4 "
D	6 "
E	8 "
F	10 "
G	12 "

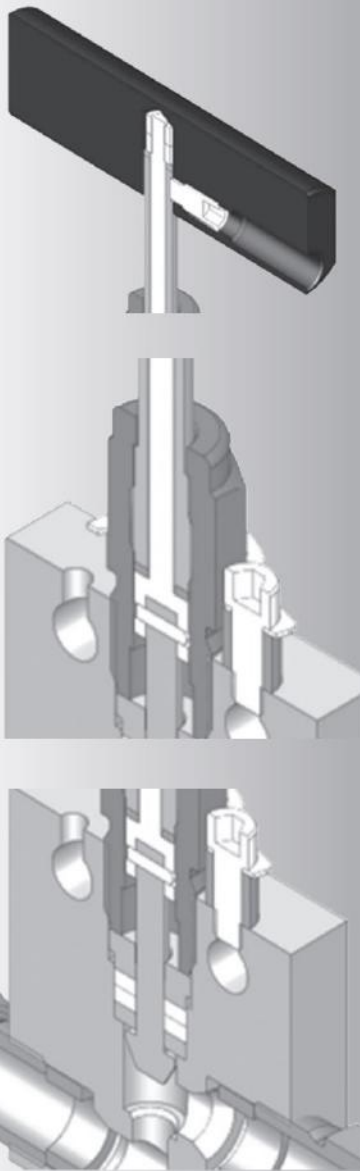


Please note: Not every configuration which can be created in the ordering information is feasible / available.

Needle Valves

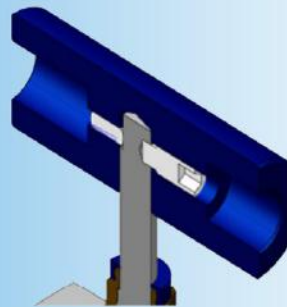
New version of our needle valves range

OLD



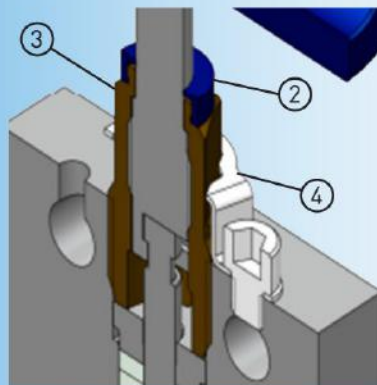
NEW

HANDLE



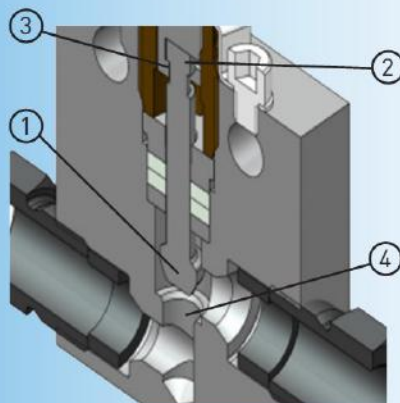
1. Faster assembly and disassembly thanks to the **self-centered system**
2. Also available **100% in AISI 316/316L** upon request, with better **ergonomics** for further comfort in manoeuvrability

BONNET



1. **Body bonnet** machined from **aluminum bronze** for reduced operation torque
2. **Dust prevention** cap
3. **Reduced bonnet** body **dimensions**
4. Improved **mechanical stop system** with metallic plate: no risk for loosening
5. High **durability** thanks to easy maintenance

STEM



1. **New stem in 17.4 ph** material, with heat treatment for **higher resistance**
2. **Fast hook-up** of stem on trim: no adjusting needed
3. **Reduced** number of **components**
4. Fully open in just **5 turns**
5. Ability to withstand **bi-directional flow**

Needle Valves 15kpsi

Low Pressure Needle Valves - 15,000 psi

SAMI INSTRUMENTS low pressure needle valves are designed for liquid and gas flow control.

Available in a variety of body styles, our valves are suitable for manual operation in temperature ranging from -196°C to 315°C (from -320°F to 600°F).

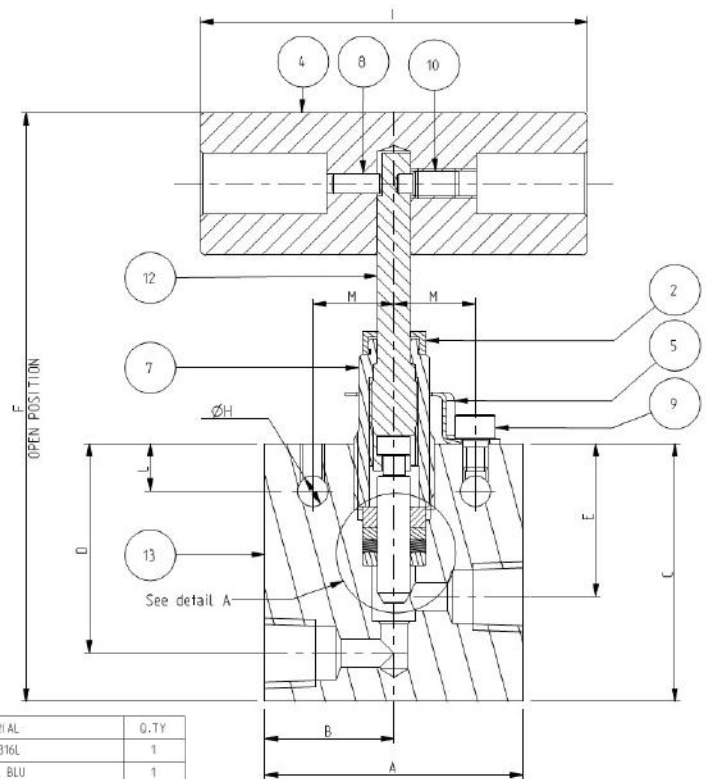
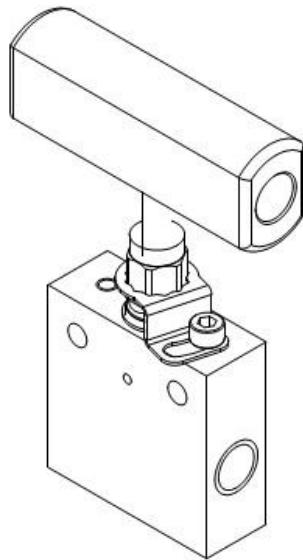
SAMI INSTRUMENTS low pressure needle valves are available in various sizes to satisfy different requirements:

- Pressure: 15,000 psi (1034 bar);
- Connections from 1/4" to 1" NPT threads;
- Non rotating stem prevents galling and scoring;
- Stem sleeve and packing gland materials have been selected to achieve extended thread cycles and reduced handle torque;
- Standard materials of construction include 316 L cold-worked stainless steel and glass-filled PTFE.



Needle Valves 15kpsi

Two Way Straight Needle Valves F/F - 15,000 psi



No	DESCRIPTION	MATERIAL	Q.TY
1	Anfi-extrusion ring	AISI 316L	1
2	Blue cap	HYTREL BLU	1
3	Gasket	Glass filled PTFE (Virgin PTFE for 1" NPT)	2 / 3
4	Handle	Anodized aluminum EN AW-6060 T6	1
5	Locking device	AISI 316L	1
6	Lower stem	ASTM A564 T630	1
7	Packing gland	CuAl11Fe6Ni6	1
8	Locking pin	A4 - AISI 316	1
9	Socket head cap screw	A4 - AISI 316L	1
10	Socket set screw	A4 - AISI 316L	1
11	Top packing washer	AISI 316L (CuAl11Fe6Ni6 for 1" NPT)	1
12	Upper stem	AISI 316L	1
13	Valve body	AISI 316L	1

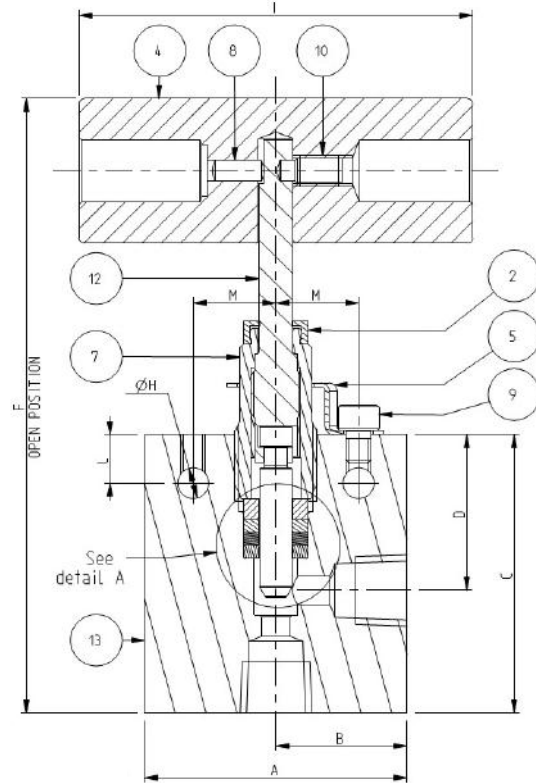
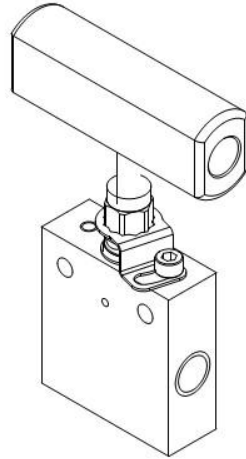
PLEASE NOTICE: the maximum working pressure for sizes 3/4" and 1" is 10.000

Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)	H mm (inch)	I mm (inch)	L mm (inch)	M mm (inch)	SP mm (inch)	Orifice mm (inch)
S15V01T11A	1/4" NPT	50.80 (2.00)	25.40 (1.00)	50.80 (2.00)	41.30 (1.63)	30.20 (1.19)	115.90 (4.60)	6.00 (0.24)	76.20 (3.00)	9.40 (0.37)	16.00 (0.63)	19.05 (0.75)	5.50 (0.22)
S15V01T12A	3/8" NPT	50.80 (2.00)	25.40 (1.00)	53.98 (2.13)	41.30 (1.63)	30.20 (1.19)	119.10 (4.70)	6.00 (0.24)	76.20 (3.00)	9.40 (0.37)	16.00 (0.63)	25.40 (1.00)	5.50 (0.22)
S15V01T13A	1/2" NPT	63.50 (2.50)	31.75 (1.25)	70.00 (2.76)	54.00 (2.13)	38.10 (1.50)	139.70 (5.50)	9.00 (0.35)	76.20 (3.00)	9.40 (0.37)	17.50 (0.69)	31.75 (1.25)	8.00 (0.31)
S10V01T14A*	3/4" NPT	76.20 (3.00)	38.10 (1.50)	95.25 (3.75)	73.00 (2.87)	57.00 (2.24)	184.8 (7.30)	11.50 (0.45)	232.70 (9.20)	16.00 (0.63)	22.35 (0.88)	44.45 (1.75)	11.10 (0.44)
S10V01T15A*	1" NPT	104.78 (4.13)	52.39 (2.06)	117.20 (2.80)	95.00 (3.74)	71.20 (2.80)	228.90 (9.00)	14.00 (0.55)	232.70 (9.20)	17.40 (0.69)	35.00 (1.38)	44.45 (1.75)	14.30 (0.56)

* = on request, minimum quantity may be requested

Needle Valves 15kpsi

Two Way Angle Needle Valves F/F - 15,000 psi



No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	1
2	Blue cap	HYTREL BLU	1
3	Gasket	Glass filled PTFE (Virgin PTFE for 1" NPT)	2 / 3
4	Handle	Anodized aluminum EN AW-6060 T6	1
5	Locking device	AISI 316L	1
6	Lower stem	ASTM A564 T630	1
7	Packing gland	CuAl11Fe0Ni6	1
8	Locking pin	A4 - AISI 316	1
9	Socket head cap screw	A4 - AISI 316L	1
10	Socket set screw	A4 - AISI 316L	1
11	Top packing washer	AISI 316L (CuAl11Fe0Ni6 for 1" NPT)	1
12	Upper stem	AISI 316L	1
13	Valve body	AISI 316L	1

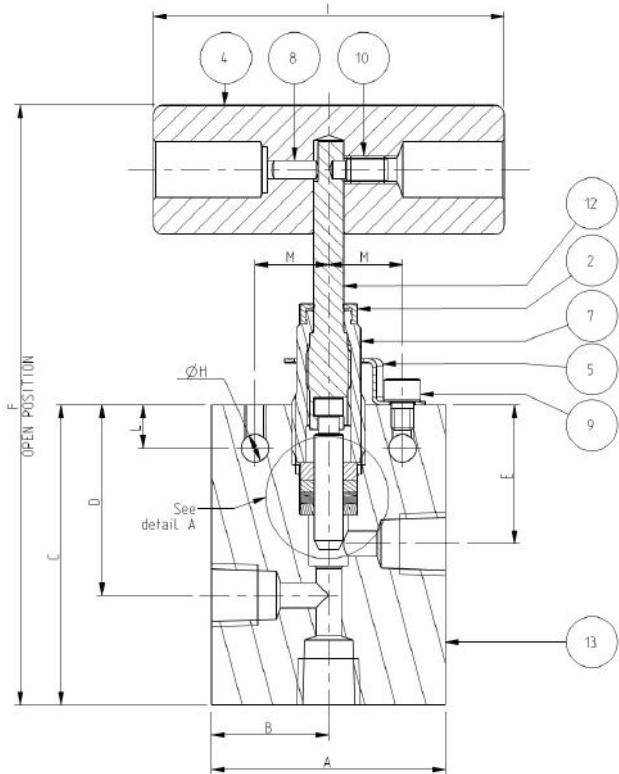
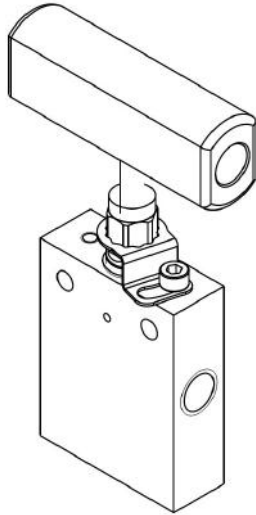
PLEASE NOTICE: the maximum working pressure for sizes 3/4" and 1" is 10.000

Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	F mm (inch)	H mm (inch)	I mm (inch)	L mm (inch)	M mm (inch)	SP mm (inch)	Orifice mm (inch)
S15V02T11A	1/4" NPT	50.80 (2.00)	25.40 (1.00)	53.98 (2.13)	30.20 (1.19)	119.10 (4.70)	6.00 (0.24)	76.20 (3.00)	9.40 (0.37)	16.00 (0.63)	19.05 (0.75)	5.50 (0.22)
S15V02T12A	3/8" NPT	50.80 (2.00)	25.40 (1.00)	54.77 (2.16)	30.20 (1.19)	119.90 (4.70)	6.00 (0.24)	76.20 (3.00)	9.40 (0.37)	16.00 (0.63)	25.40 (1.00)	5.50 (0.22)
S15V02T13A	1/2" NPT	63.50 (2.50)	31.75 (1.25)	70.00 (2.76)	38.13 (1.50)	139.70 (5.50)	9.00 (0.35)	76.20 (3.00)	9.40 (0.37)	17.50 (0.69)	31.75 (1.25)	8.00 (0.31)
S10V02T14A*	3/4" NPT	76.20 (3.00)	38.10 (1.50)	95.25 (3.75)	57.00 (2.24)	184.80 (7.30)	11.50 (0.45)	232.70 (9.20)	16.00 (0.63)	22.35 (0.88)	44.45 (1.75)	11.10 (0.44)
S10V02T15A*	1" NPT	104.78 (4.13)	52.39 (2.06)	117.20 (4.61)	71.20 (2.80)	228.90 (9.00)	14.00 (0.55)	232.70 (9.20)	17.40 (0.69)	35.00 (1.38)	44.45 (1.75)	14.30 (0.56)

* = on request, minimum quantity may be requested

Needle Valves 15kpsi

Three Way / Two on pressure Needle Valves F/F - 15,000 psi



No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	1
2	Blue cap	HYTREL BLU	1
3	Gasket	Glass filled PTFE (Virgin PTFE for 1" NPT)	2 / 3
4	Handle	Anodized aluminum EN AW-6060 T6	1
5	Locking device	AISI 316L	1
6	Lower stem	ASTM A564 T630	1
7	Packing gland	CuAlTiFeNi6	1
8	Locking pin	A4 - AISI 316	1
9	Socket head cap screw	A4 - AISI 316L	1
10	Socket set screw	A4 - AISI 316L	1
11	Top packing washer	AISI 316L (CuAlTiFeNi6 for 1" NPT)	1
12	Upper stem	AISI 316L	1
13	Valve body	AISI 316L	1

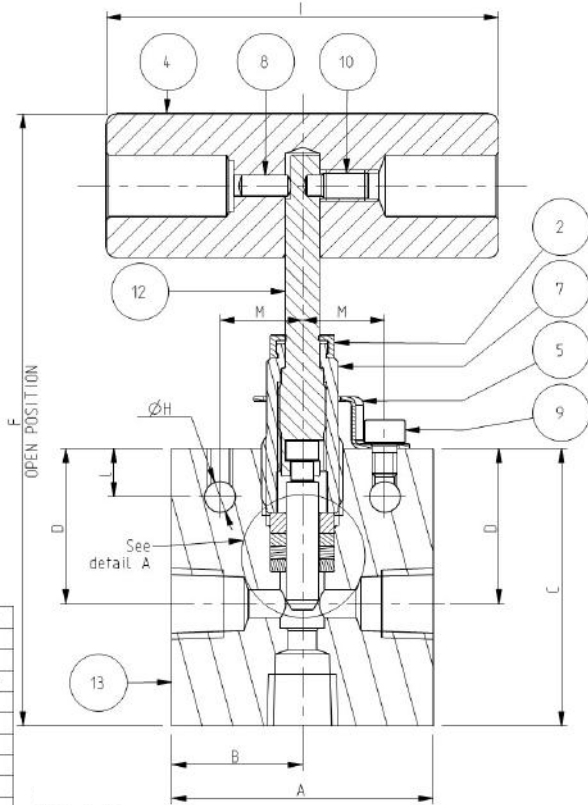
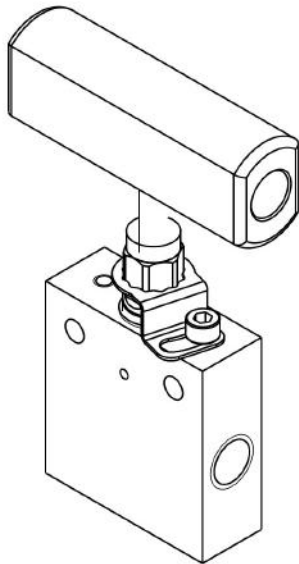
PLEASE NOTICE: the maximum working pressure for sizes 3/4" and 1" is 10.000

Order code	In/Out	A mm (Inch)	B mm (Inch)	C mm (Inch)	D mm (Inch)	E mm (Inch)	F mm (Inch)	H mm (Inch)	I mm (Inch)	L mm (Inch)	M mm (Inch)	SP mm (Inch)	Orifice mm (Inch)
S15V03T11A	1/4" NPT	50.80 (2.00)	25.40 (1.00)	65.09 (2.56)	41.30 (1.63)	30.2 (1.19)	130.20 (5.10)	6.00 (0.24)	76.20 (3.00)	9.40 (0.37)	16.00 (0.63)	19.05 (0.75)	5.50 (0.22)
S15V03T12A	3/8" NPT	50.80 (2.00)	25.40 (1.00)	65.88 (2.59)	41.30 (1.63)	30.2 (1.19)	131.00 (5.20)	6.00 (0.24)	76.20 (3.00)	9.40 (0.37)	16.00 (0.63)	25.40 (1.00)	5.50 (0.22)
S15V03T13A	1/2" NPT	63.50 (2.50)	31.75 (1.25)	85.73 (3.38)	54.00 (2.13)	38.1 (1.50)	155.40 (6.10)	9.00 (0.35)	76.20 (3.00)	9.40 (0.37)	17.50 (0.69)	31.75 (1.25)	8.00 (0.31)
S10V03T14A*	3/4" NPT	76.20 (3.00)	38.10 (1.50)	111.12 (4.37)	73.00 (2.87)	57.0 (2.24)	200.60 (7.90)	11.50 (0.45)	232.70 (9.20)	16.00 (0.63)	22.35 (0.88)	44.45 (1.75)	11.10 (0.44)
S10V03T15A*	1" NPT	104.78 (4.13)	52.39 (2.06)	141.29 (5.56)	95.00 (3.74)	71.2 (2.80)	253.00 (10.00)	14.00 (0.55)	232.70 (9.20)	17.40 (0.69)	35.00 (1.38)	44.45 (1.75)	14.30 (0.56)

* = on request, minimum quantity may be requested

Needle Valves 15kpsi

Three Way / One on pressure Needle Valves F/F - 15,000 psi



No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	1
2	Blue cap	HYTREL BLU	1
3	Gasket	Glass filled PTFE (Virgin PTFE for 1" NPT)	2 / 3
4	Handle	Anodized aluminum EN AW-6060 T6	1
5	Locking device	AISI 316L	1
6	Lower stem	ASTM A564 T630	1
7	Packing gland	CuAl1FeNi6	1
8	Locking pin	A4 - AISI 316	1
9	Socket head cap screw	A4 - AISI 316L	1
10	Socket set screw	A4 - AISI 316L	1
11	Top packing washer	AISI 316L (CuAl1FeNi6 for 1" NPT)	1
12	Upper stem	AISI 316L	1
13	Valve body	AISI 316L	1

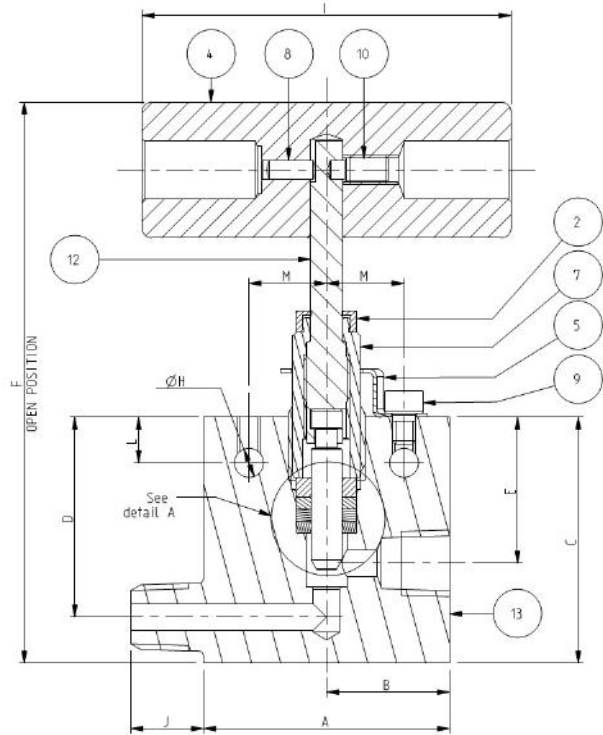
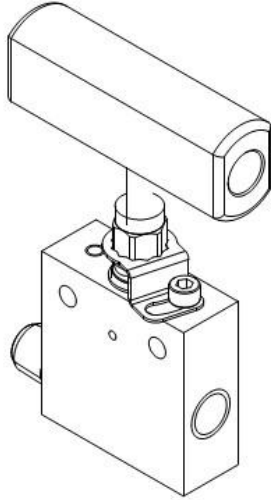
PLEASE NOTICE: the maximum working pressure for sizes 3/4" and 1" is 10.000

Order code	In/ Out	A mm (Inch)	B mm (Inch)	C mm (Inch)	D mm (Inch)	F mm (Inch)	H mm (Inch)	I mm (Inch)	L mm (Inch)	M mm (Inch)	SP mm (Inch)	Orifice mm (Inch)
S15V04T11A	1/4" NPT	50.80 (2.00)	25.40 (1.00)	53.98 (2.13)	30.20 (1.19)	119.10 (4.70)	6.00 (0.24)	76.20 (3.00)	9.40 (0.37)	16.00 (0.63)	19.05 (0.75)	5.50 (0.22)
S15V04T12A	3/8" NPT	50.80 (2.00)	25.40 (1.00)	54.77 (2.16)	30.20 (1.19)	119.10 (4.70)	6.00 (0.24)	76.20 (3.00)	9.40 (0.37)	16.00 (0.63)	25.40 (1.00)	5.50 (0.22)
S15V04T13A	1/2" NPT	63.50 (2.50)	31.75 (1.25)	70.00 (2.76)	38.13 (1.50)	139.70 (5.50)	9.00 (0.35)	76.20 (3.00)	9.40 (0.37)	17.50 (0.69)	31.75 (1.25)	8.00 (0.31)
S10V04T14A*	3/4" NPT	76.20 (3.00)	38.10 (1.50)	95.25 (3.75)	57.00 (2.24)	184.80 (7.30)	11.50 (0.45)	232.70 (9.20)	16.00 (0.63)	22.35 (0.88)	44.45 (1.75)	11.10 (0.44)
S10V04T15A*	1" NPT	104.78 (4.13)	52.39 (2.06)	117.20 (4.61)	71.20 (2.80)	228.90 (9.00)	14.00 (0.55)	232.70 (9.20)	17.40 (0.69)	35.00 (1.38)	44.45 (1.75)	14.30 (0.56)

* = on request, minimum quantity may be requested

Needle Valves 15kpsi

Two Way Straight Needle Valves M/F - 15,000 psi



No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	1
2	Blue cap	HYTREL BLU	1
3	Gasket	Glass filled PTFE (Virgin PTFE for 1" NPT)	2 / 3
4	Handle	Anodized aluminum EN AW-6060 T6	1
5	Locking device	AISI 316L	1
6	Lower stem	ASTM A564 T630	1
7	Packing gland	CuAlTiFeNi6	1
8	Locking pin	A4 - AISI 316	1
9	Socket head cap screw	A4 - AISI 316L	1
10	Socket set screw	A4 - AISI 316L	1
11	Top packing washer	AISI 316L (CuAlTiFeNi6 for 1" NPT)	1
12	Upper stem	AISI 316L	1
13	Valve body	AISI 316L	1



PLEASE NOTICE: the maximum working pressure for sizes 3/4" and 1" is

Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)	H mm (inch)	I mm (inch)	J mm (inch)	L mm (inch)	M mm (inch)	SP mm (inch)	Orifice mm (inch)
S15V10T11A	1/4" NPT	50.80 (2.00)	25.40 (1.00)	50.80 (2.00)	41.30 (1.63)	30.20 (1.19)	115.90 (4.60)	6.00 (0.24)	76.20 (3.00)	15.00 (0.60)	9.40 (0.37)	16.00 (0.63)	19.50 (0.77)	5.50 (0.22)
S15V10T12A	3/8" NPT	50.80 (2.00)	25.40 (1.00)	53.98 (2.13)	41.30 (1.63)	30.20 (1.19)	119.10 (4.70)	6.00 (0.24)	76.20 (3.00)	19.00 (0.70)	9.40 (0.37)	16.00 (0.63)	25.40 (1.00)	5.50 (0.22)
S15V10T13A	1/2" NPT	63.50 (2.50)	31.75 (1.25)	69.85 (2.75)	57.00 (2.24)	38.10 (1.50)	139.50 (5.50)	9.00 (0.35)	76.20 (3.00)	25.00 (1.00)	9.40 (0.37)	17.50 (0.69)	31.75 (1.25)	8.00 (0.31)
S10V10T14A*	3/4" NPT	76.20 (3.00)	38.10 (1.50)	95.25 (3.75)	76.00 (2.99)	57.00 (2.24)	184.80 (7.30)	11.50 (0.45)	232.70 (9.20)	25.00 (1.00)	16.00 (0.63)	22.35 (0.88)	44.45 (1.75)	11.10 (0.44)
S10V10T15A*	1" NPT	104.78 (4.13)	52.39 (2.06)	117.48 (4.63)	95.00 (3.74)	71.20 (2.80)	229.10 (9.00)	14.00 (0.55)	232.70 (9.20)	29.00 (1.10)	17.40 (0.69)	35.00 (1.38)	44.45 (1.75)	14.30 (0.56)

* = on request, minimum quantity may be requested

Check Valves 15kpsi

Soft Check Valves

Low pressure check valves are designed for liquid and gas flow control in chemical, industrial and oil & gas fields.

Ball Check Valves

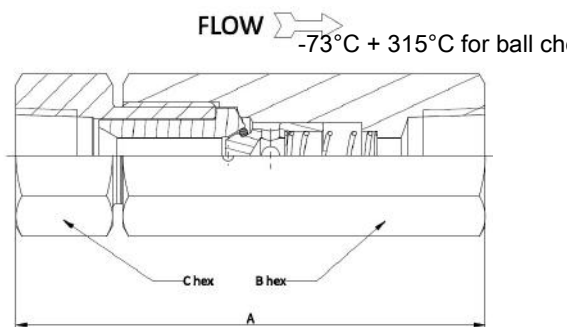
All SAMI INSTRUMENTS ball check valves have a long endurance and may also be employed with high temperatures.

Features:

SAMI INSTRUMENTS low pressure check valves are available in various tubing sizes to satisfy different requirements:

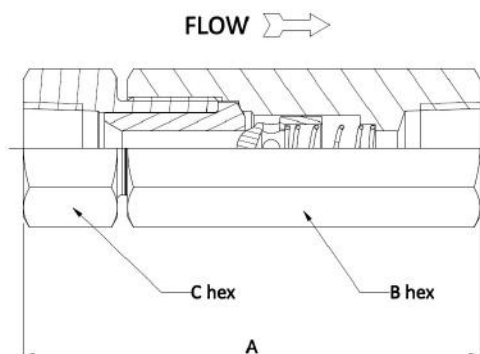
- Pressure: 15,000 psi (1034 bar).
- Connections from 1/4 " to 1/2" NPT.
- Standard materials of construction include 316 L cold-worked stainless steel.
- Standard O-ring material: NBR 90 Sh A
- Temperature range: -15°C + 180°C for soft check valve

Soft Check Valve



Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	ORIFICE mm (inch)
S15F01T11	1/4 " NPT	79.0 (3.111)	22.23 (0.875)	22.23 (0.875)	3.20 (0.126)
S15F01T12	3/8 " NPT	89.2 (3.511)	25.40 (1.000)	25.40 (1.000)	5.60 (0.220)
S15F01T13	1/2 " NPT	106.8 (4.204)	32.00 (1.260)	32.00 (1.260)	8.00 (0.315)
Standard cracking pressure: 20 p.s.i. (1.38 bar) ±30%					

Ball Check Valve



Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	ORIFICE mm (inch)
S15F02T11	1/4 " NPT	79.0 (3.111)	22.23 (0.875)	22.23 (0.875)	3.20 (0.126)
S15F02T12	3/8 " NPT	89.2 (3.511)	25.40 (1.000)	25.40 (1.000)	5.60 (0.220)
S15F02T13	1/2 " NPT	106.8 (4.204)	32.00 (1.260)	32.00 (1.260)	8.00 (0.315)
Standard cracking pressure: 20 p.s.i. (1.38 bar) ±30%					

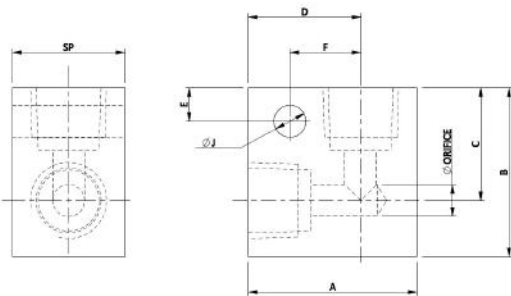
Accessories 15kpsi

Female elbows, tees and crosses are available in several NPT connection sizes.

Sami Instruments fittings are made of high tensile 316L Stainless Steel, unless otherwise specified.

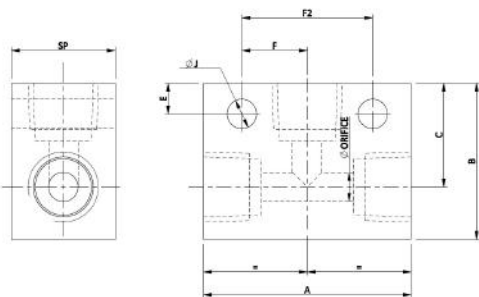
PLEASE NOTICE: the maximum working pressure for sizes 3/4" and 1" is 10.000 psi only.

Female Elbow



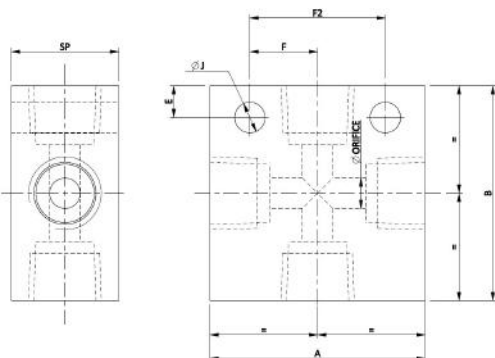
Order code	In/ Out	A mm (Inch)	B mm (Inch)	C mm (Inch)	D mm (Inch)	E mm (Inch)	F mm (Inch)	J mm (Inch)	SP mm (Inch)	Orifice mm (Inch)
S15F04T11	1/4" NPT	38.1 (1.50)	38.1 (1.50)	25.4 (1.00)	25.4 (1.00)	6.5 (0.26)	14.5 (0.57)	6.00 (0.24)	19.05 (0.75)	5.50 (0.22)
S15F04T12	3/8" NPT	38.1 (1.50)	38.1 (1.50)	25.4 (1.00)	25.4 (1.00)	8.00 (0.31)	16.00 (0.63)	7.00 (0.28)	25.4 (1.00)	7.50 (0.30)
S15F04T13	1/2" NPT	47.63 (1.88)	47.63 (1.88)	31.75 (1.25)	25.4 (1.00)	9.4 (0.37)	20.00 (0.79)	9.00 (0.35)	31.75 (1.25)	9.00 (0.35)
S15F04T14*	3/4" NPT	57.15 (2.25)	57.15 (2.25)	38.1 (1.50)	38.1 (1.50)	12.7 (0.69)	25.4 (1.00)	11.00 (0.43)	34.92 (1.37)	15.00 (0.59)
S15F04T15*	1" NPT	76.20 (3.00)	76.20 (3.00)	52.40 (2.06)	52.40 (2.06)	17.40 (0.69)	35.00 (1.38)	14.00 (0.55)	44.45 (1.75)	20.00 (0.79)

Female Tee



Order code	In/ Out	A mm (Inch)	B mm (Inch)	C mm (Inch)	E mm (Inch)	F mm (Inch)	F2 mm (Inch)	J mm (Inch)	SP mm (Inch)	Orifice mm (Inch)
S15F05T11	1/4" NPT	44.45 (1.75)	38.1 (1.50)	25.4 (1.00)	6.50 (0.26)	14.5 (0.57)	29.00 (1.14)	6.00 (0.24)	19.05 (0.75)	5.50 (0.22)
S15F05T12	3/8" NPT	50.8 (2.00)	38.1 (1.50)	25.4 (1.00)	8.00 (0.31)	16.00 (0.63)	32.00 (1.26)	7.00 (0.28)	25.4 (1.00)	7.50 (0.30)
S15F05T13	1/2" NPT	63.5 (2.50)	47.75 (1.88)	31.75 (1.25)	9.40 (0.37)	20.00 (0.79)	40.00 (1.57)	9.00 (0.35)	31.75 (1.25)	9.00 (0.35)
S15F05T14*	3/4" NPT	76.2 (3.00)	57.15 (2.25)	38.1 (1.50)	12.7 (0.50)	25.4 (1.00)	50.8 (2.00)	11.00 (0.43)	34.92 (1.37)	15.00 (0.59)
S15F05T15*	1" NPT	101.6 (4.00)	76.2 (3.00)	52.4 (2.06)	17.4 (0.69)	35.0 (1.38)	70.0 (2.76)	14.00 (0.55)	44.45 (1.75)	20.00 (0.79)

Female Cross



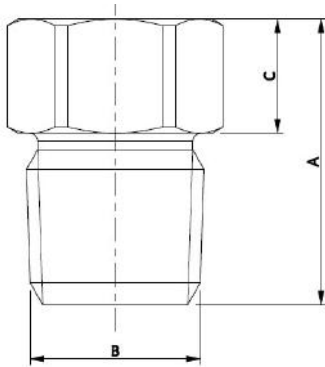
Order code	In/Out	A mm (inch)	B mm (inch)	E mm (inch)	F mm (inch)	F2 mm (inch)	J mm (inch)	SP mm (inch)	Orifice mm (Inch)
S15F06T11	1/4" NPT	44.45 (1.75)	44.45 (1.75)	6.50 (0.26)	14.5 (0.57)	29.00 (1.14)	6.00 (0.24)	19.05 (0.75)	5.50 (0.22)
S15F06T12	3/8" NPT	50.8 (2.00)	50.8 (2.00)	8.00 (0.31)	16.00 (0.63)	32.00 (1.26)	7.00 (0.28)	25.4 (1.00)	7.50 (0.30)
S15F06T13	1/2" NPT	63.5 (2.50)	63.5 (2.50)	9.40 (0.37)	20.00 (0.79)	40.00 (1.57)	9.00 (0.35)	31.75 (1.25)	9.00 (0.35)
S15F06T14*	3/4" NPT	76.2 (3.00)	76.2 (3.00)	12.7 (0.50)	25.4 (1.00)	50.8 (2.00)	11.0 (0.43)	34.92 (1.37)	15.00 (0.59)
S15F06T15*	1" NPT	101.6 (4.00)	101.6 (4.00)	17.4 (0.69)	35.0 (1.38)	70.0 (2.76)	14.0 (0.55)	44.45 (1.75)	20.00 (0.79)

* = on request, minimum quantity may be requested

Accessories 15kpsi

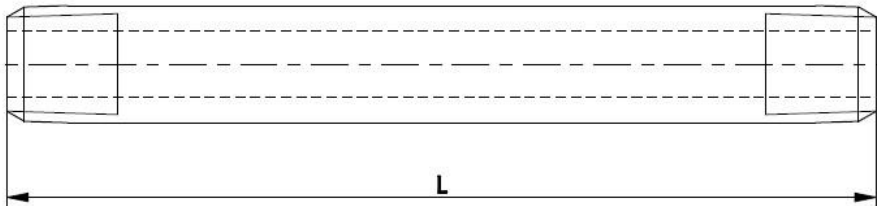
A wide range of male plugs and threaded male nipples are also available. Standard material is high tensile 316L Stainless Steel, unless otherwise specified.

Male Plug



Order code	A mm	B mm	C mm	HEX mm (Inch)	Max. working pressure
S15F11T11	24.00	1/4 " NPT	10.00	15.90 (5/8")	15.000 psi
S15F11T12	30.00	3/8 " NPT	12.00	19.05 (3/4")	15.000 psi
S15F11T13	35.00	1/2 " NPT	14.00	23.81 (15/16")	15.000 psi
S15F11T14*	37.00	3/4 " NPT	16.00	30.16 (1-3/16")	10.000 psi
S15F11T15*	43.00	1 " NPT	18.00	34.9 (1-3/8")	10.000 psi

Nipple



TUBE 1/4 "		
Order code	Length	L (mm)
S15F16T11A	2 3/4 "	69.85
S15F16T11B	3 "	76.20
S15F16T11C	4 "	101.60
S15F16T11D	6 "	152.40
S15F16T11E	8 "	203.20
S15F16T11F	10 "	254.00
S15F16T11G	12 "	304.80

TUBE 3/8 "		
Order code	Length	L (mm)
S15F16T12A	2 3/4 "	69.85
S15F16T12B	3 "	76.20
S15F16T12C	4 "	101.60
S15F16T12D	6 "	152.40
S15F16T12E	8 "	203.20
S15F16T12F	10 "	254.00
S15F16T12G	12 "	304.80

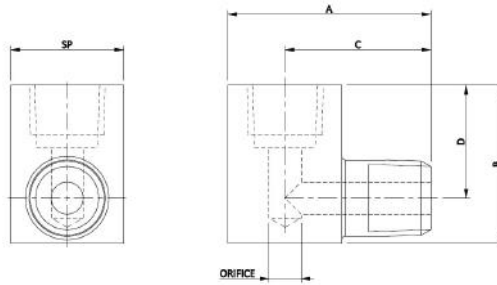
TUBE 1/2 "		
Order code	Length	L (mm)
S15F16T13A	2 3/4 "	69.85
S15F16T13B	3 "	76.20
S15F16T13C	4 "	101.60
S15F16T13D	6 "	152.40
S15F16T13E	8 "	203.20
S15F16T13F	10 "	254.00
S15F16T13G	12 "	304.80

PLEASE NOTICE: the maximum working pressure for sizes 3/4" and 1" is 10.000 psi only.

Accessories 15kpsi

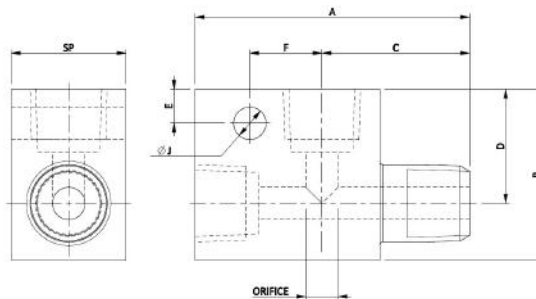
Street elbows, tees and crosses are available in several NPT connection sizes. Sami Instruments fittings are made of high tensile 316L Stainless Steel, unless otherwise specified.

Street Elbow



Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	SP mm (inch)	Orifice mm (inch)
S15F17T11	1/4 " NPT	38.1 (1.50)	38.1 (1.50)	28.6 (1.13)	25.4 (1.00)	19.05 (0.75)	5.500 (0.22)
S15F17T12	3/8 " NPT	44.45 (1.75)	38.1 (1.50)	31.75 (1.25)	25.4 (1.00)	25.4 (1.00)	7.500 (0.30)
S15F17T13	1/2 " NPT	57.15 (2.25)	44.45 (1.75)	41 (1.61)	31.75 (1.25)	31.75 (1.25)	9.000 (0.35)

Street Tee



Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)	J mm (inch)	SP mm (inch)	Orifice mm (inch)
S15F20T11	1/4 " NPT	50.8 (2.00)	38.1 (1.50)	28.6 (1.13)	25.4 (1.00)	6.5 (0.26)	14.5 (0.57)	6.0 (0.24)	19.05 (0.75)	5.500 (0.22)
S15F20T12	3/8 " NPT	63.5 (2.50)	38.1 (1.50)	38.1 (1.50)	25.4 (1.00)	8.0 (0.31)	16 (0.63)	7.0 (0.28)	25.4 (1.00)	7.500 (0.30)
S15F20T13	1/2 " NPT	76.2 (3.00)	47.625 (1.88)	41 (1.61)	31.75 (1.25)	9.5 (0.37)	20 (0.69)	9.0 (0.35)	31.75 (1.25)	9.000 (0.35)

20-30-60 Kpsi

Ordering Information - Medium/High Pressure Valves - 20/30/60 kpsi

Valve Series	Body Pattern	In/Out	Material	Options
S20	V01	T01	A	X

Valve Series	
S20	20,000 p.s.i.
S30	30,000 p.s.i.
S60	60,000 p.s.i.

Body Pattern	
V01	Two way straight valve
V02	Two way angle valve
V03	Three way valve - Two Pressure Connections
V04	Three way valve - One Pressure
F01	Soft Check Valve
F02	Ball Check Valve
F04	Elbow
F05	Tee
F06	Cross
F08	Union Coupling
F09	Bulkhead Coupling
F10	Cap
F11	Plug
F12	Collar
F13	Gland
F14	Anti-Vibration Gland
F16	Nipple

In/Out	
T01	1/4 "
T02	3/8 "
T03	9/16 " O.D.
T04*	3/4 "
T05*	1 " O.D.

* Not available for 60k psi

Material	
A	Aisi 316L
C	Aisi 316Ti
D	Monel 400
E	Duplex F51
G	Super Duplex F55
H	Hastelloy C276
I	Inconel 625
J	Incoloy 825

Options	
L	Oxygen
S	Sour gas Service
W	Without Glands and Collars
X	Handle in 316L



ADDITIONAL FINAL LETTER FOR NIPPLES ONLY - Length	
A	2 3/4 "
B	3 "
C	4 "
D	6 "
E	8 "
F	10 "
G	12 "



Please note: Not every configuration which can be created in the ordering information is feasible / avai-

Needle valves 20 kpsi

Medium Pressure Valves - 20,000 psi

SAMI INSTRUMENTS medium pressure valves are designed for liquid and gas flow control.

Available in a variety of body styles, our valves are suitable for manual operation in temperature ranging from -196°C to 315°C (from -320°F to 600°F).

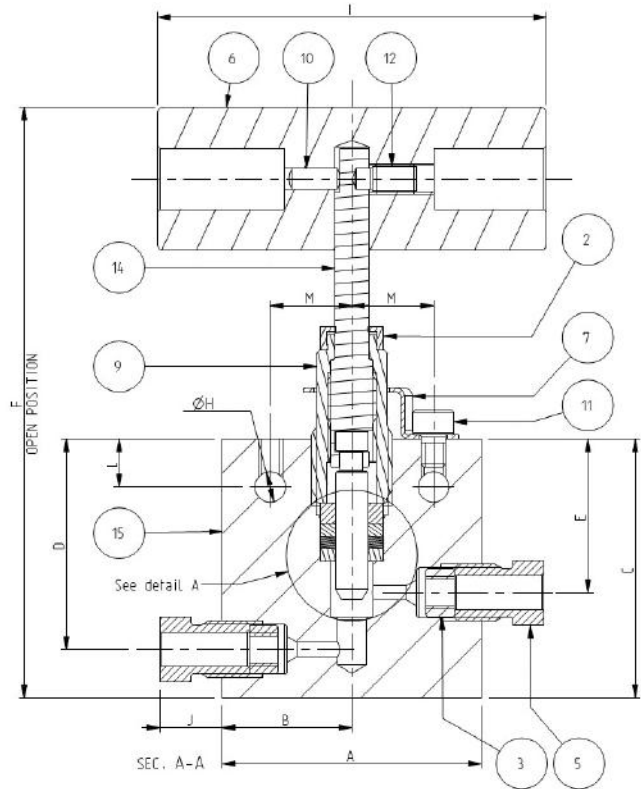
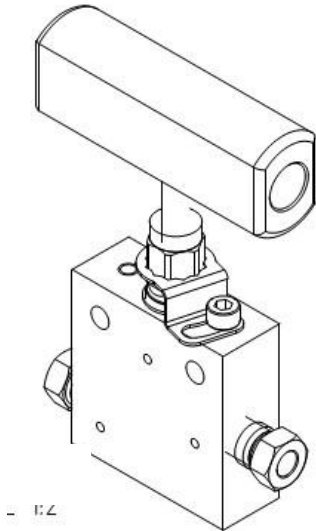
SAMI INSTRUMENTS medium pressure valves are available in various tubing sizes to satisfy different requirements:

- Pressure: 20,000 psi (1379 bar)
- Connections from 1/4" to 1" coned and threaded tube
- Non rotating stem prevents galling and scoring.
- Stem sleeve and packing gland materials have been selected to achieve extended thread cycles and reduced handle torque.
- Standard materials of construction include AISI 316L cold-worked stainless steel and glass-filled PTFE.



Needle Valves 20kpsi

Two Way Straight Needle Valves - 20,000 psi



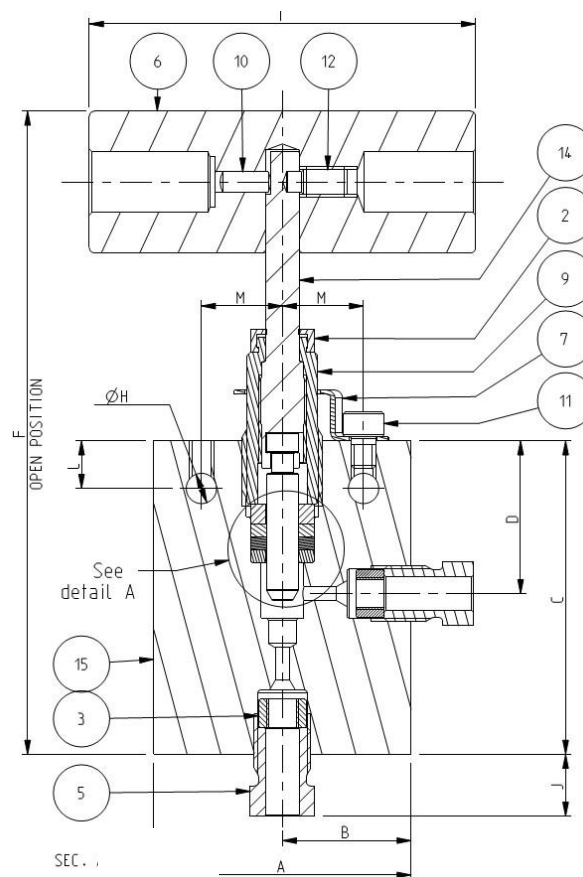
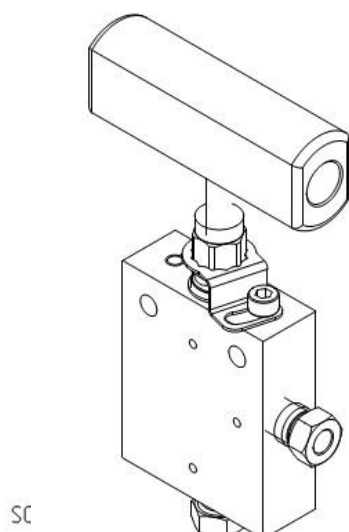
No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	1
2	Blue cap	HYTREL BLU	1
3	Collar	AISI 316L	2
4	Gasket	Glass filled PTFE (Virgin PTFE for 1" NPT)	2 / 3
5	Gland	AISI 316L	2
6	Handle	Anodized aluminum EN AW-6060 T6	1
7	Locking device	AISI 316L	1
8	Lower stem	ASIM A564 T630	1
9	Packing gland	CuAlTiFeNi6	1
10	Locking PIN	A4 - AISI 316	1
11	Socket head cap screw	A4 - AISI 316L	1
12	Socket set screw	A4 - AISI 316L	1
13	Top packing washer	AISI 316L (CuAlTiFeNi6 for 1" NPT)	1
14	Upper stem	AISI 316L	1
15	Valve body	AISI 316L	1

Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)	H mm (inch)	I mm (inch)	J mm (inch)	L mm (inch)	M mm (inch)	SP mm (inch)	Orifice mm (inch)
S20V01T01A	1/4" O.D.	50.80 (2.00)	25.40 (1.00)	50.80 (2.00)	41.30 (1.63)	30.20 (1.19)	115.90 (4.60)	6.00 (0.24)	76.20 (3.00)	12.20 (0.50)	9.40 (0.37)	16.00 (0.63)	19.05 (0.75)	5.50 (0.22)
S20V01T02A	3/8" O.D.	50.80 (2.00)	25.40 (1.00)	50.80 (2.00)	41.30 (1.63)	30.20 (1.19)	115.90 (4.60)	6.00 (0.24)	76.20 (3.00)	14.30 (0.60)	9.40 (0.37)	16.00 (0.63)	19.05 (0.75)	5.50 (0.22)
S20V01T03A	9/16" O.D.	63.50 (2.50)	31.75 (1.25)	70.00 (2.76)	57.30 (2.26)	41.40 (1.63)	139.70 (5.50)	9.00 (0.35)	76.20 (3.00)	18.60 (0.70)	9.40 (0.37)	17.50 (0.69)	25.40 (1.00)	8.00 (0.31)
S20V01T04A*	3/4" O.D.	76.20 (3.00)	38.10 (1.50)	95.25 (3.75)	76.20 (3.00)	57.20 (2.25)	184.80 (7.30)	11.50 (0.45)	232.70 (9.20)	18.80 (0.70)	16.00 (0.63)	22.35 (0.88)	34.90 (1.37)	11.10 (0.44)
S20V01T05A*	1" O.D.	104.78 (4.13)	52.39 (2.06)	117.20 (4.61)	95.00 (3.74)	71.20 (2.80)	228.90 (9.00)	14.00 (0.55)	232.70 (9.20)	21.30 (0.80)	17.40 (0.69)	35.00 (1.38)	44.45 (1.75)	14.30 (0.56)

* = on request, minimum quantity may be requested

Needle Valves 20kpsi

Two Way Angle Needle Valves - 20,000 psi



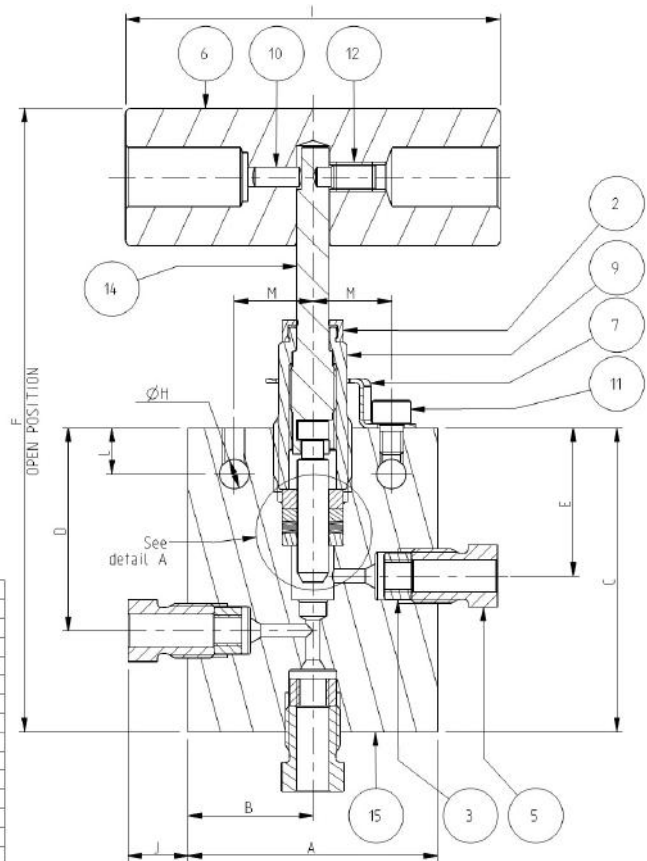
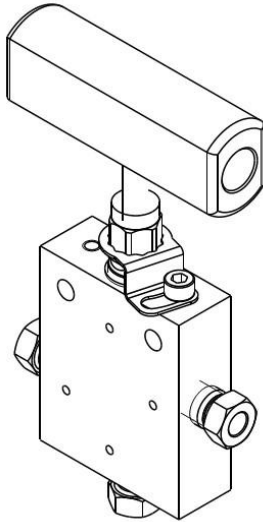
No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	1
2	Blue cap	HYTREL BLU	1
3	Collar	AISI 316L	2
4	Gasket	Glass filled PTFE (Virgin PTFE for 1" NPT)	2 / 3
5	Gland	AISI 316L	2
6	Handle	Anodized aluminum EN AW-6060 T6	1
7	Locking device	AISI 316L	1
8	Lower stem	ASTM A564 T630	1
9	Packing gland	CuAl11Fe6Ni6	1
10	Locking pin	A4 - AISI 316	1
11	Socket head cap screw	A4 - AISI 316L	1
12	Socket set screw	A4 - AISI 316L	1
13	Top packing washer	AISI 316L (CuAl11Fe6Ni6 for 1" NPT)	1
14	Upper stem	AISI 316L	1
15	Valve body	AISI 316L	1

Order code	In/Out	A mm (Inch)	B mm (Inch)	C mm (Inch)	D mm (Inch)	F mm (Inch)	H mm (Inch)	I mm (Inch)	J mm (Inch)	L mm (Inch)	M mm (Inch)	SP mm (Inch)	Orifice mm (Inch)
S20V02T01A	1/4" O.D.	50.80 (2.00)	25.40 (1.00)	61.90 (2.44)	30.20 (1.19)	127.00 (5.00)	6.00 (0.24)	76.20 (3.00)	12.20 (0.50)	9.40 (0.37)	16.00 (0.63)	19.05 (0.75)	5.50 (0.22)
S20V02T02A	3/8" O.D.	50.80 (2.00)	25.40 (1.00)	61.90 (2.44)	30.20 (1.19)	127.00 (5.00)	6.00 (0.24)	76.20 (3.00)	14.30 (0.60)	9.40 (0.37)	16.00 (0.63)	19.05 (0.75)	5.50 (0.22)
S20V02T03A	9/16" O.D.	63.50 (2.50)	31.75 (1.25)	85.73 (3.38)	41.43 (1.63)	155.40 (6.10)	9.00 (0.35)	76.20 (3.00)	18.60 (0.70)	9.40 (0.37)	17.50 (0.69)	25.40 (1.00)	8.00 (0.31)
S20V02T04A*	3/4" O.D.	76.20 (3.00)	38.10 (1.50)	107.95 (4.25)	57.15 (2.25)	197.50 (7.80)	11.50 (0.45)	232.70 (9.20)	18.80 (0.70)	16.00 (0.63)	22.35 (0.88)	34.90 (1.37)	11.10 (0.44)
S20V02T05A*	1" O.D.	104.78 (4.13)	52.39 (2.06)	130.18 (5.13)	71.19 (2.80)	241.80 (9.50)	14.00 (0.55)	232.70 (9.20)	21.30 (0.80)	17.40 (0.69)	35.00 (1.38)	44.45 (1.75)	14.30 (0.56)

* = on request, minimum quantity may be requested

Needle Valves 20kpsi

Three Way Needle Valves - Two Pressure Connections - 20,000 psi



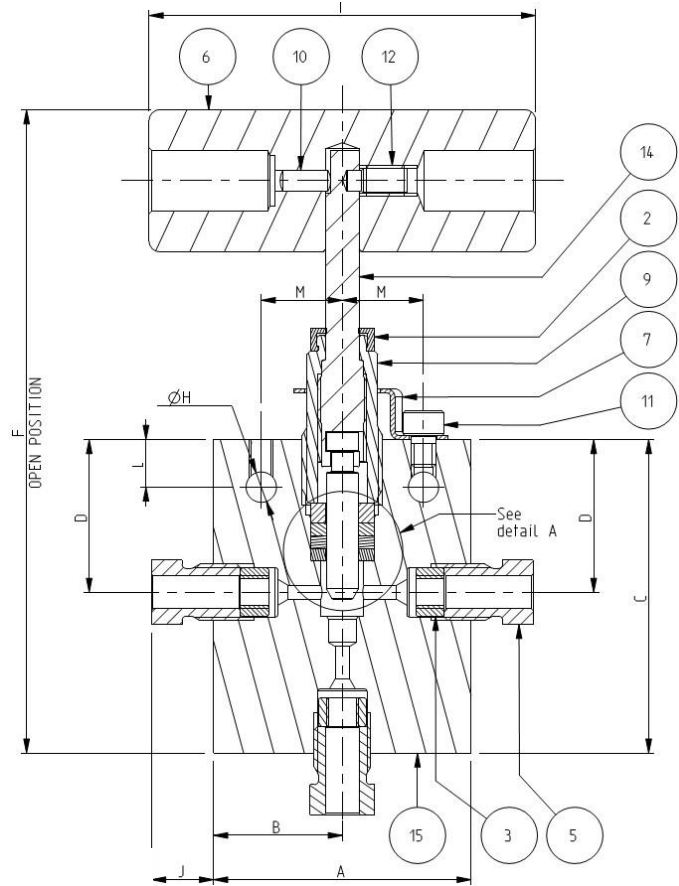
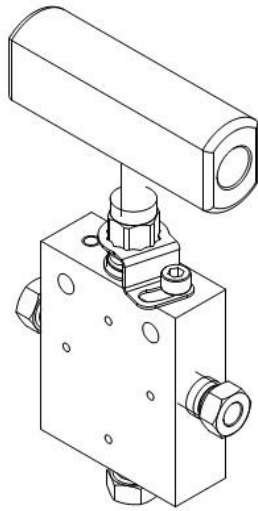
No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	1
2	Blue cap	HYTREL BLU	1
3	Collar	AISI 316L	3
4	Gasket	Glass filled PTFE (Virgin PTFE for 1" NPT)	2 / 3
5	Gland	AISI 316L	3
6	Handle	Anodized aluminum EN AW-6060 T6	1
7	Locking device	AISI 316L	1
8	Lower stem	ASTM A564 T630	1
9	Packing gland	CuAl1FeNi6	1
10	Locking pin	A4 - AISI 316	1
11	Socket head cap screw	A4 - AISI 316L	1
12	Socket set screw	A4 - AISI 316L	1
13	Top packing washer	AISI 316L (CuAl1FeNi6 for 1" NPT)	1
14	Upper stem	AISI 316L	1
15	Valve body	AISI 316L	1

Order code	In/Out	A mm (Inch)	B mm (Inch)	C mm (Inch)	D mm (Inch)	F mm (Inch)	H mm (Inch)	I mm (Inch)	J mm (Inch)	L mm (Inch)	M mm (Inch)	SP mm (Inch)	ORIFICE mm (Inch)
S20V03T01A *	1/4" O.D.	50.80 (2.00)	25.40 (1.00)	61.90 (2.44)	41.30 (1.63)	127.00 (5.00)	6.00 (0.24)	76.20 (3.0)	12.20 (0.50)	9.40 (0.37)	16.00 (0.63)	19.05 (0.75)	5.50 (0.22)
S20V03T02A *	3/8" O.D.	50.80 (2.00)	25.40 (1.00)	66.68 (2.63)	41.30 (1.63)	131.80 (5.20)	6.00 (0.24)	76.20 (3.0)	14.30 (0.60)	9.40 (0.37)	16.00 (0.63)	19.05 (0.75)	5.50 (0.22)
S20V03T03A *	9/16" O.D.	63.50 (2.50)	31.75 (1.25)	88.90 (3.50)	57.30 (2.26)	158.60 (6.20)	9.00 (0.35)	76.20 (3.0)	18.60 (0.70)	9.40 (0.37)	17.50 (0.69)	25.40 (1.00)	8.00 (0.31)
S20V03T04A *	3/4" O.D.	76.20 (3.00)	38.10 (1.50)	117.48 (4.63)	76.20 (3.00)	207.00 (8.10)	11.50 (0.45)	232.70 (9.20)	18.80 (0.70)	16.00 (0.63)	22.35 (0.88)	34.90 (1.37)	11.10 (0.44)
S20V03T05A *	1" O.D.	104.78 (4.13)	52.39 (2.06)	152.40 (6.00)	71.20 (2.80)	264.10 (10.40)	14.00 (0.55)	232.70 (9.20)	21.30 (0.80)	17.40 (0.69)	35.00 (1.38)	44.45 (1.75)	14.30 (0.56)

* = on request, minimum quantity may be requested

Needle Valves 20kpsi

Three Way Needle Valves - One Pressure Connection - 20,000 psi



No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	1
2	Blue cap	HYTREL BLU	1
3	Collar	AISI 316L	3
4	Gasket	Glass filled PTFE (Virgin PTFE for 1" NPT)	2 / 3
5	Gland	AISI 316L	3
6	Handle	Anodized aluminum EN AW-6060 T6	1
7	Locking device	AISI 316L	1
8	Lower stem	ASTM A564 T630	1
9	Packing gland	CuAlTiFeNi6	1
10	Locking pin	A4 - AISI 316	1
11	Socket head cap screw	A4 - AISI 316L	1
12	Socket set screw	A4 - AISI 316L	1
13	Top packing washer	AISI 316L (CuAlTiFeNi6 for 1" NPT)	1
14	Upper stem	AISI 316L	1
15	Valve body	AISI 316L	1

Order code	In/Out	A mm (Inch)	B mm (Inch)	C mm (Inch)	D mm (Inch)	F mm (Inch)	H mm (Inch)	I mm (Inch)	J mm (Inch)	L mm (Inch)	M mm (Inch)	SP mm (Inch)	ORIFICE mm (Inch)
S20V04T01A*	1/4" O.D.	50.80 (2.00)	25.40 (1.00)	61.90 (2.44)	30.20 (1.19)	127.00 (5.00)	6.00 (0.24)	76.20 (3.0)	12.20 (0.50)	9.40 (0.37)	16.00 (0.63)	19.05 (0.75)	5.50 (0.22)
S20V04T02A*	3/8" O.D.	50.80 (2.00)	25.40 (1.00)	61.90 (2.44)	30.20 (1.19)	127.00 (5.00)	6.00 (0.24)	76.20 (3.0)	14.30 (0.60)	9.40 (0.37)	16.00 (0.63)	19.05 (0.75)	5.50 (0.22)
S20V04T03A*	9/16" O.D.	63.50 (2.50)	31.75 (1.25)	85.73 (3.38)	41.43 (1.63)	155.40 (6.10)	9.00 (0.35)	76.20 (3.0)	18.60 (0.70)	9.40 (0.37)	17.50 (0.69)	25.40 (1.00)	8.00 (0.31)
S20V04T04A*	3/4" O.D.	76.20 (3.00)	38.10 (1.50)	107.95 (4.25)	57.15 (2.25)	197.50 (7.80)	11.50 (0.45)	232.70 (9.20)	18.80 (0.70)	16.00 (0.63)	22.35 (0.88)	34.90 (1.37)	11.10 (0.44)
S20V04T05A*	1" O.D.	104.78 (4.13)	52.39 (2.06)	130.18 (5.13)	71.19 (2.80)	241.80 (9.50)	14.00 (0.55)	232.70 (9.20)	21.30 (0.80)	17.40 (0.69)	35.00 (1.38)	44.45 (1.75)	14.30 (0.56)

* = on request, minimum quantity may be requested

Check Valves 20kpsi

Soft Check Valves

Medium pressure check valves are designed for liquid and gas flow control in chemical, industrial and oil & gas fields.

Ball Check Valves

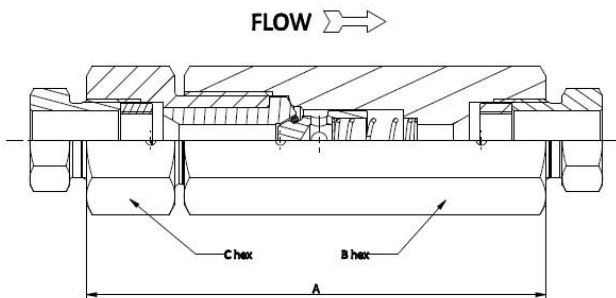
All SAMI INSTRUMENTS ball check valves have a long endurance and may also be employed with high temperatures.

Features:

SAMI INSTRUMENTS medium pressure check valves are available in various tubing sizes to satisfy different requirements:

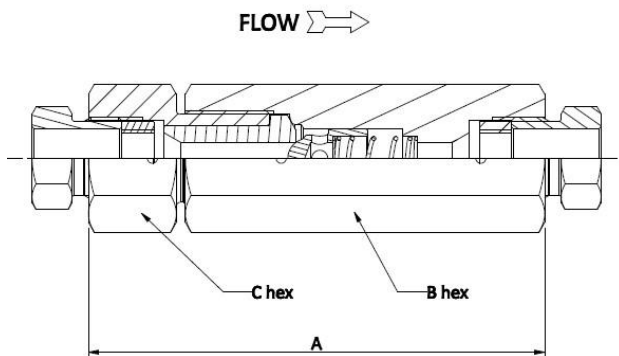
- Pressure: 20,000 psi (1379 bar).
- Connections from 1/4" to 9/16" O.D.
- Standard materials of construction include 316 L cold-worked stainless steel.
- Standard O-ring material: NBR 90 Sh A
- Temperature range: -15°C + 180°C for soft check valve
- -73°C + 315°C for ball check valves

Soft Check Valves



Order code	In/Out	A mm (Inch)	B mm (Inch)	C mm (Inch)	ORIFICE mm (Inch)
S20F01T01	1/4 " O.D.	73.0 (2.875)	22.23 (0.875)	22.23 (0.875)	2.80 (0.110)
S20F01T02	3/8 " O.D.	84.6 (3.330)	25.40 (1.000)	25.40 (1.000)	5.20 (0.205)
S20F01T03	9/16 " O.D.	114.3 (4.499)	32.00 (1.260)	32.00 (1.260)	8.00 (0.315)
Standard cracking pressure: 20 p.s.i. (1.38 bar) ±30%					

Ball Check Valves

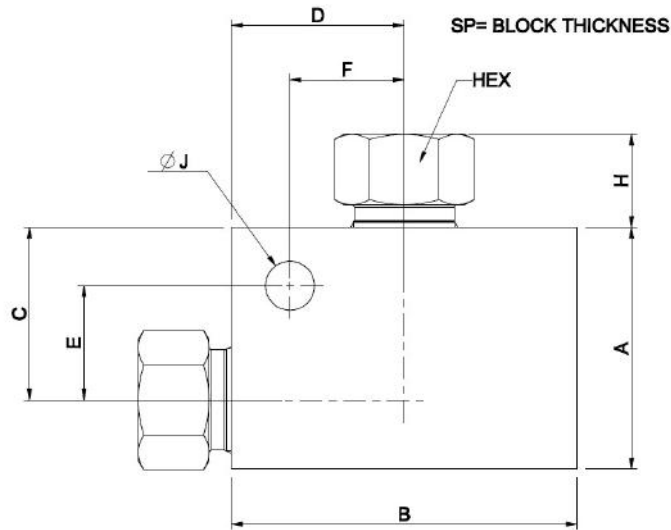


Order code	In/Out	A mm (Inch)	B mm (Inch)	C mm (Inch)	ORIFICE mm (Inch)
S20F02T01	1/4 " O.D.	73.0 (2.875)	22.23 (0.875)	22.23 (0.875)	2.80 (0.110)
S20F02T02	3/8 " O.D.	84.6 (3.330)	25.40 (1.000)	25.40 (1.000)	5.20 (0.205)
S20F02T03	9/16 " O.D.	114.3 (4.499)	32.00 (1.260)	32.00 (1.260)	8.00 (0.315)
Standard cracking pressure: 20 p.s.i. (1.38 bar) ±30%					

Accessories 20kpsi

A complete line of crosses, elbows and tees is available for all tubing connection sizes. Sami Instruments fittings are made of high tensile 316L Stainless Steel, unless otherwise specified.

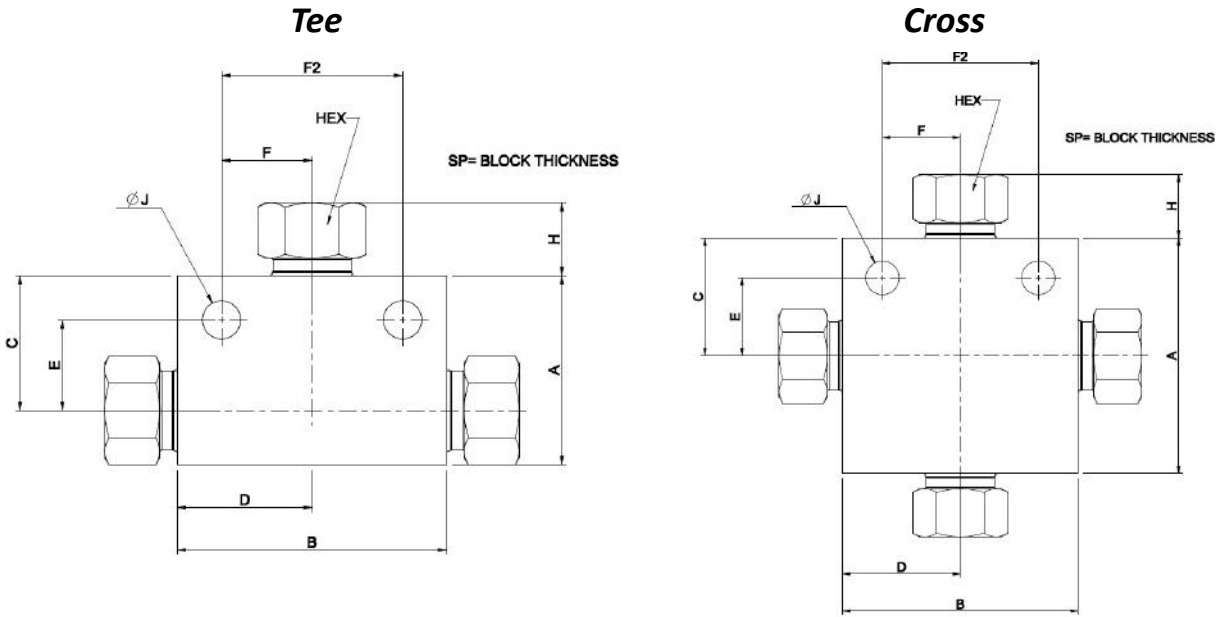
Elbow



Order code	In/Out	A mm	B mm	C mm	D mm	E mm	F mm	J mm	H mm	SP mm	HEX mm
S20F04T01	1/4 " O.D.	28.45	38.10	19.05	19.05	12.50	12.50	6.00	9.22	15.88	12.70
S20F04T02	3/8 " O.D.	35.05	50.80	25.40	25.40	16.00	16.00	7.00	12.78	19.05	15.87
S20F04T03	9/16 " O.D.	44.45	63.50	31.75	31.75	21.00	21.00	9.00	14.12	25.40	22.20
S20F04T04*	3/4 " O.D.	57.15	76.20	38.10	38.10	25.40	25.40	11.00	15.75	34.93	30.16
S20F04T05*	1 " O.D.	76.20	104.78	52.40	52.39	35.00	35.00	14.00	18.30	44.45	34.93

* = on request, minimum quantity may be requested

Accessories 20kpsi



Tee

Order code	In/Out	A mm	B mm	C mm	D mm	E mm	F mm	F2 mm	J mm	H mm	SP mm	HEX mm
S20F05T01	1/4 " O.D.	28.45	38.10	19.05	19.05	12.50	12.50	25.00	6.00	9.22	15.88	12.70
S20F05T02	3/8 " O.D.	35.05	50.80	25.40	25.40	16.00	16.00	32.00	7.00	12.78	19.05	15.87
S20F05T03	9/16 " O.D.	44.45	63.50	31.75	31.75	21.00	21.00	42.00	9.00	14.12	25.40	22.20
S20F05T04*	3/4 " O.D.	57.15	76.20	38.10	38.10	25.40	25.40	50.80	11.00	15.75	34.93	30.16
S20F05T05*	1 " O.D.	76.20	104.78	52.40	52.39	35.00	35.00	70.00	14.00	18.30	44.45	34.93

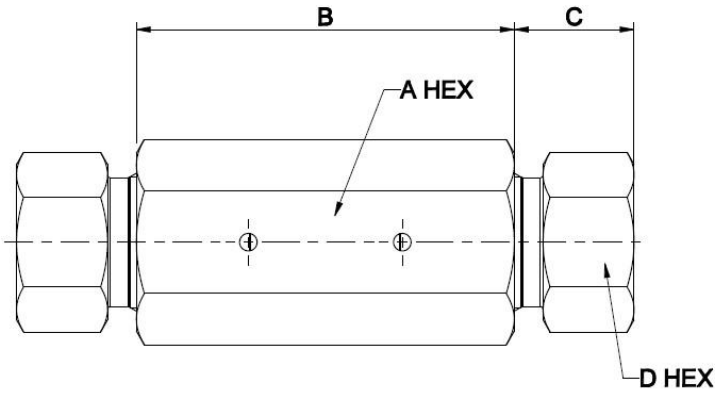
Cross

Order code	In/Out	A mm	B mm	C mm	D mm	E mm	F mm	F2 mm	J mm	H mm	SP mm	HEX mm
S20F06T01	1/4 " O.D.	38.10	38.10	19.05	19.05	12.50	12.50	25.00	6.00	9.22	15.88	12.70
S20F06T02	3/8 " O.D.	50.80	50.80	25.40	25.40	16.00	16.00	32.00	7.00	12.78	19.05	15.87
S20F06T03	9/16 " O.D.	63.50	63.50	31.75	31.75	21.00	21.00	42.00	9.00	14.12	25.40	22.20
S20F06T04*	3/4 " O.D.	76.20	76.20	38.10	38.10	25.40	25.40	50.80	11.00	15.75	34.93	30.16
S20F06T05*	1 " O.D.	104.78	104.78	52.39	52.39	35.00	35.00	70.00	14.00	18.30	44.45	34.93

* = on request, minimum quantity may be requested

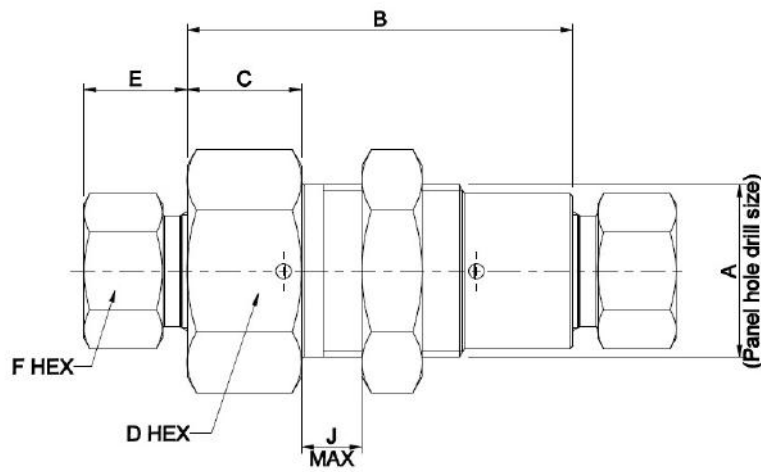
Accessories 20kpsi

Union Coupling



Order code	In/Out	A mm	B mm	C mm	D mm
S20F08T01	1/4" O.D.	15.87	41.00	9.22	12.70
S20F08T02	3/8" O.D.	19.05	45.00	12.78	15.87
S20F08T03	9/16" O.D.	25.40	54.00	14.12	22.20
S20F08T04*	3/4" O.D.	34.92	63.50	15.75	30.16
S20F08T05*	1" O.D.	44.45	89.00	18.30	34.93

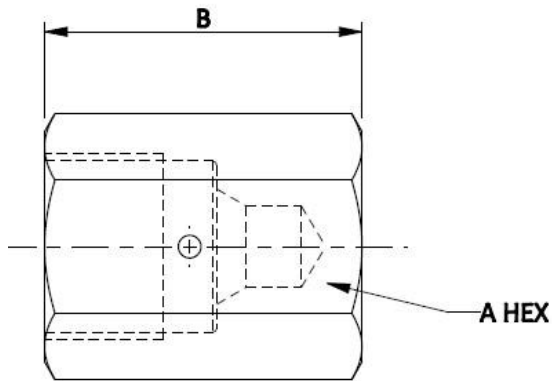
Bulkhead Coupling



Order code	In/Out	A mm	B mm	C mm	D mm	E mm	F mm	J mm
S20F09T01	1/4" O.D.	20.00	48.00	13.50	25.40	9.22	12.70	10.00
S20F09T02	3/8" O.D.	23.00	55.00	16.00	30.16	12.78	15.87	10.00
S20F09T03	9/16" O.D.	30.00	64.00	19.00	34.90	14.12	22.20	10.00

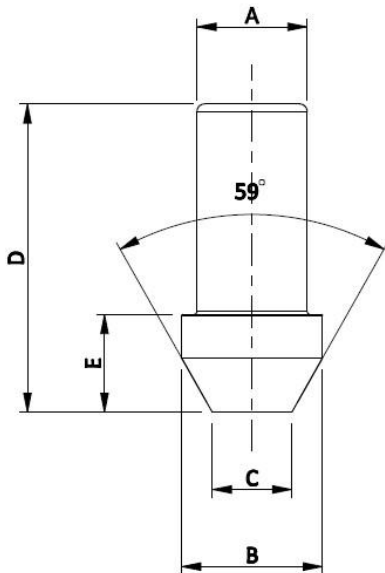
Accessories 20kpsi

Cap



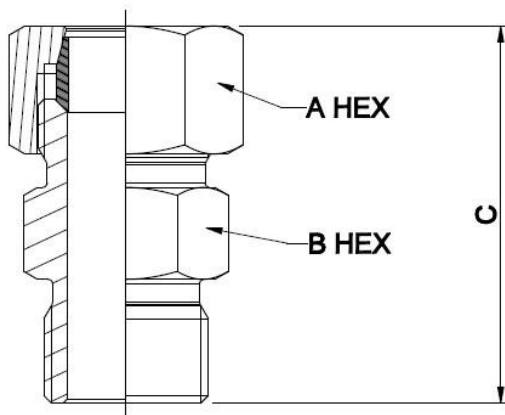
Order code	In/Out	A HEX mm	B mm
S20F10T01	1/4 " O.D.	15.87	21
S20F10T02	3/8 " O.D.	19.05	29
S20F10T03	9/16 " O.D.	25.4	35
S20F10T04*	3/4 " O.D.	34.92	44.5
S20F10T05*	1 " O.D.	44.45	57

Plug



Order code	In/Out	A mm	B mm	C mm	D mm	E mm
S20F11T01	1/4 " O.D.	6.35	9.5	3.6	23.5	8.7
S20F11T02	3/8 " O.D.	9.5	12.4	6.35	30.5	11.1
S20F11T03	9/16 " O.D.	14.3	18.3	10.3	40	12.7
S20F11T04*	3/4 " O.D.	18.9	23.8	14.3	42	15.4
S20F11T05*	1 " O.D.	25.2	31.8	18.3	56.5	20.4

Anti-vibration Gland

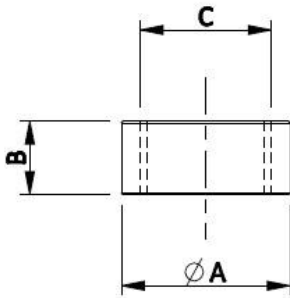


Order code	In/Out	A mm	B mm	C mm
S20F14T01	1/4 " O.D.	15.88	12.70	32.01
S20F14T02	3/8 " O.D.	19.05	15.88	37.21
S20F14T03	9/16 " O.D.	25.40	22.20	47.19
S20F14T04*	9/16 " O.D.	31.75	28.60	53.10
S20F14T05*	9/16 " O.D.	38.10	34.90	61.60

* = on request, minimum quantity may be requested

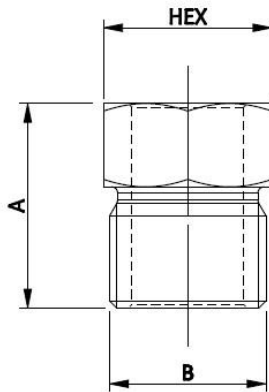
Accessories 20kpsi

Collar



Order code	In/Out	A mm	B mm	C
S20F12T01	1/4 " O.D.	9.50	5.60	1/4-28 UNF-2B left
S20F12T02	3/8 " O.D.	12.40	6.30	3/8-24 UNF-2B left
S20F12T03	9/16 " O.D.	18.40	8.00	9/16-18 UNF-2B left
S20F12T04*	3/4 " O.D.	23.80	9.60	3/4-16 UNF-2B left
S20F12T05*	1 " O.D.	31.80	12.90	1-14 UNF-2B left

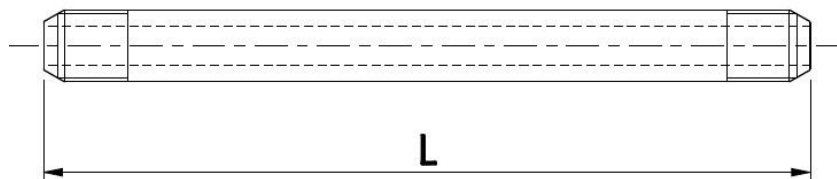
Gland



Order code	In/Out	A mm	B	HEX mm
S20F13T01	1/4 " O.D.	17.50	7/16-20 UNF-2A	12.70
S20F13T02	3/8 " O.D.	20.50	9/16-18 UNF-2A	15.87
S20F13T03	9/16 " O.D.	27.00	13/16-16 UN-2A	22.20
S20F13T04*	3/4 " O.D.	28.50	3/4-14 NPSM	28.60
S20F13T05*	1 " O.D.	38.10	1 3/8-12 UNF-2A	34.93

* = on request, minimum quantity may be requested

Nipple



TUBE 1/4 "		
Order code	Length	L (mm)
S20F16T01A	2 3/4 "	69.85
S20F16T01B	3 "	76.20
S20F16T01C	4 "	101.60
S20F16T01D	6 "	152.40
S20F16T01E	8 "	203.20
S20F16T01F	10 "	254.00
S20F16T01G	12 "	304.80

TUBE 3/8 "		
Order code	Length	L (mm)
S20F16T02A	2 3/4 "	69.85
S20F16T02B	3 "	76.20
S20F16T02C	4 "	101.60
S20F16T02D	6 "	152.40
S20F16T02E	8 "	203.20
S20F16T02F	10 "	254.00
S20F16T02G	12 "	304.80

TUBE 9/16 "		
Order code	Length	L (mm)
S20F16T03C	4 "	101.60
S20F16T03D	6 "	152.40
S20F16T03E	8 "	203.20
S20F16T03F	10 "	254.00
S20F16T03G	12 "	304.80

Needle Valves 30kpsi

Medium Pressure Needle Valves - 30,000 psi

SAMI INSTRUMENTS medium pressure valves are designed for liquid and gas flow control.

Available in a variety of body styles, the valves are suitable for manual operation in temperature ranging from -73°C to 315°C (from -100°F to 600°F).

SAMI INSTRUMENTS high pressure valves are available in various tubing sizes to satisfy different requirements.

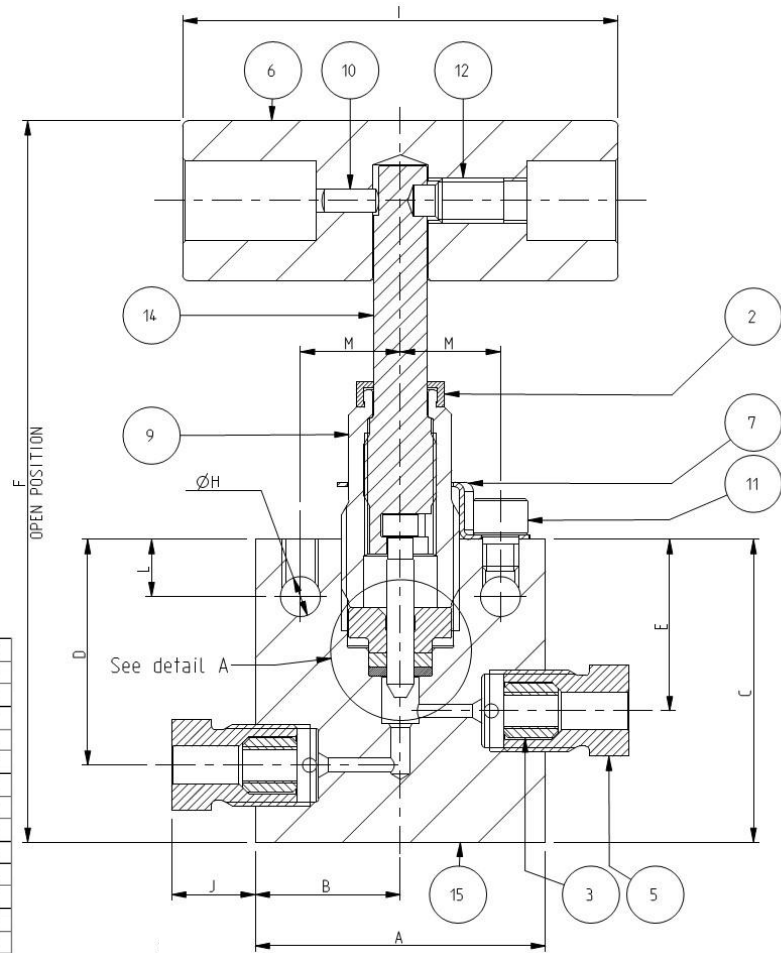
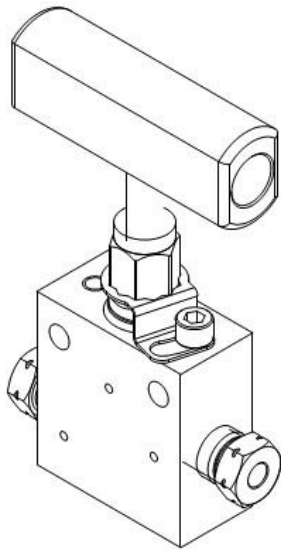
- Pressure 30,000 psi (2068 bar).
- Connections from 1/4" to 9/16" coned and threaded tube.
- Non rotating stem prevents galling and scoring.
- Stem sleeve and packing gland materials have been selected to achieve extended thread cycles and reduced handle torque.
- Standard materials of construction include 316 L cold-worked stainless steel and glass-filled PTFE.



30kpsi needle valve with optional 316L handle

Needle Valves 30kpsi

Two Way Straight Needle Valves - 30,000 psi



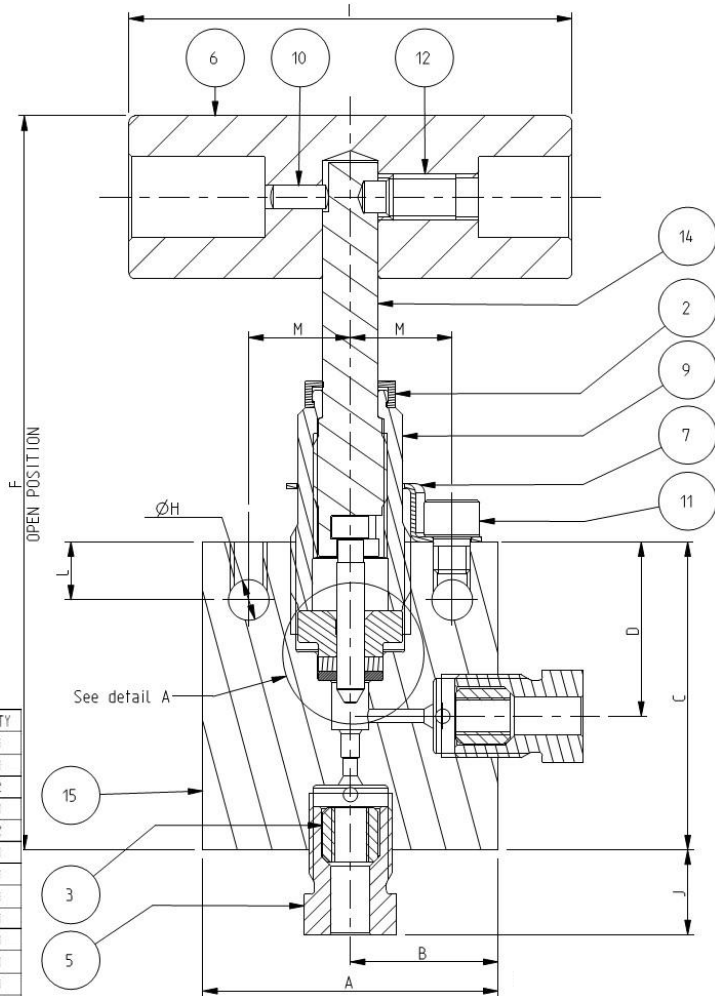
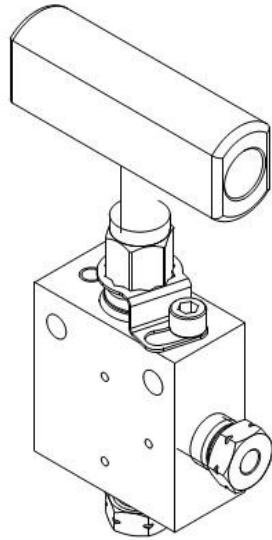
No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	1
2	Blue cap	HYTREL BLUE	1
3	Collar	AISI 316L	2
4	Gasket	Glass filled PTFE	1
5	Gland	AISI 316L	2
6	Handle	Anodized aluminum EN AW-6060 T6	1
7	Locking device	AISI 316L	1
8	Lower stem	ASTM A564 T630	1
9	Packing gland	CuAlNiFeNi6	1
10	Locking pin	A4 - AISI 316	1
11	Socket head cap screw	A4 - AISI 316L	1
12	Socket set screw	A4-70	1
13	Top packing washer	AISI 316L	1
14	Upper stem	AISI 316L	1
15	Valve body	AISI 316L	1

Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)	H mm (inch)	I mm (inch)	J mm (inch)	L mm (inch)	M mm (inch)	SP mm (inch)	Orifice mm (inch)
S30V01T01A	1/4 " O.D.	50.80 (2.00)	25.40 (1.00)	53.00 (2.09)	39.50 (1.56)	30.00 (1.18)	126.30 (5.00)	7.00 (0.28)	76.20 (3.00)	14.60 (0.60)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	3.20 (0.13)
S30V01T02A	3/8 " O.D.	50.80 (2.00)	25.40 (1.00)	53.00 (2.09)	39.50 (1.56)	30.00 (1.18)	126.30 (5.00)	7.00 (0.28)	76.20 (3.00)	18.70 (0.70)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	3.20 (0.13)
S30V01T03A	9/16 " O.D.	66.68 (2.63)	33.34 (1.31)	60.00 (2.36)	40.00 (1.57)	29.00 (1.14)	133.30 (5.20)	7.00 (0.28)	76.20 (3.00)	26.90 (1.10)	10.00 (0.39)	17.50 (0.69)	38.10 (1.50)	3.20 (0.13)

PLEASE NOTICE: high pressure needle valves size 3/4" and 1" O.D. are not available.

Needle Valves 30kpsi

Two Way Angle Needle Valves - 30,000 psi



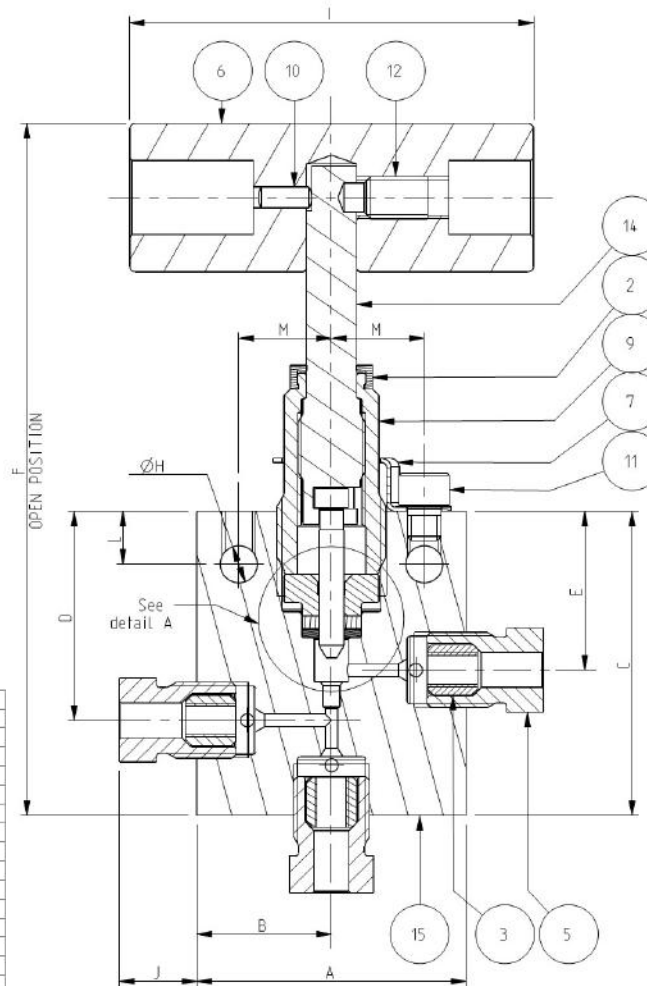
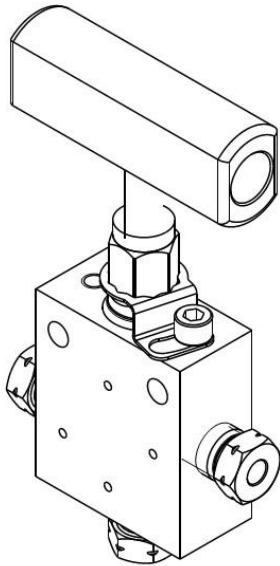
No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	1
2	Blue cap	HYTEL BLUE	1
3	Collar	AISI 316L	2
4	Gasket	Glass filled PTFE	1
5	Gland	AISI 316L	2
6	Handle	Anodized aluminum EN AW-6060 T6	1
7	Locking device	AISI 316L	1
8	Lower stem	ASTM A564 T630	1
9	Packing gland	CuAl11Fe9Ni6	1
10	Locking pin	A4 - AISI 316	1
11	Socket head cap screw	A4 - AISI 316L	1
12	Socket set screw	A4-70	1
13	Top packing washer	AISI 316L	1
14	Upper stem	AISI 316L	1
15	Valve body	AISI 316L	1

Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	F mm (inch)	H mm (inch)	I mm (inch)	J mm (inch)	L mm (inch)	M mm (inch)	SP mm (inch)	Orifice mm (inch)
S30V02T01A	1/4" O.D.	50.80 (2.00)	25.40 (1.00)	53.00 (2.09)	30.00 (1.18)	126.30 (5.00)	7.00 (0.28)	76.20 (3.0)	14.60 (0.60)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	3.20 (0.13)
S30V02T02A	3/8" O.D.	50.80 (2.00)	25.40 (1.00)	57.00 (2.24)	30.00 (1.18)	130.30 (5.1)	7.00 (0.28)	76.20 (3.0)	18.70 (0.70)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	3.20 (0.13)
S30V02T03A	9/16" O.D.	66.68 (2.63)	33.34 (1.31)	62.00 (2.44)	29.00 (1.14)	135.30 (5.30)	7.00 (0.28)	76.20 (3.0)	26.90 (1.10)	10.00 (0.39)	17.50 (0.69)	38.10 (1.50)	3.20 (0.13)

PLEASE NOTICE: high pressure needle valves size 3/4" and 1" O.D. are not available.

Needle Valves 30kpsi

Three Way Needle Valves - Two Pressure Connections - 30,000 psi



No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	1
2	Blue cap	HYTREL BLUE	1
3	Collar	AISI 316L	3
4	Gasket	Glass filled PTFE	1
5	Gland	AISI 316L	3
6	Handle	Anodized aluminum EN AW-6060 T6	1
7	Locking device	AISI 316L	1
8	Lower stem	ASTM A564 T630	1
9	Packing gland	CuAlTiFeNi6	1
10	Locking pin	A4 - AISI 316	1
11	Socket head cap screw	A4 - AISI 316L	1
12	Socket set screw	A4-70	1
13	Top packing washer	AISI 316L	1
14	Upper stem	AISI 316L	1
15	Valve body	AISI 316L	1

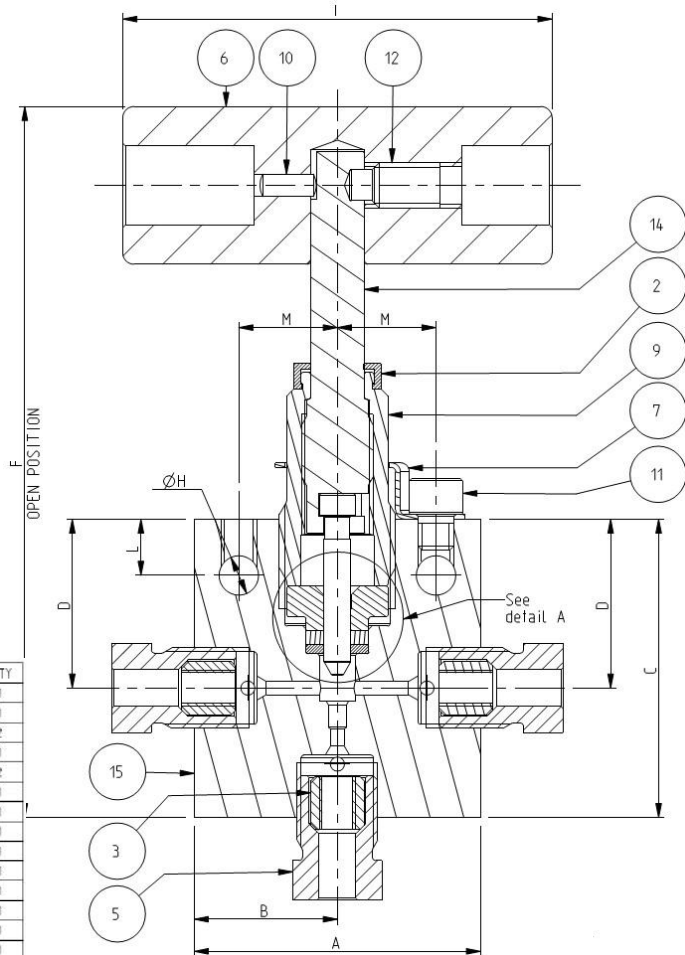
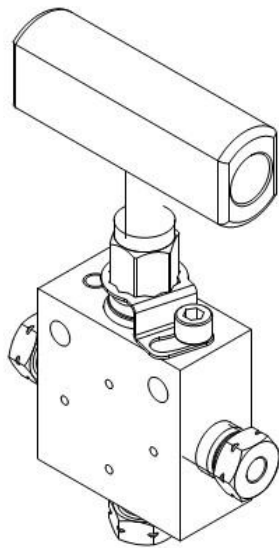
Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	F mm (inch)	H mm (inch)	I mm (inch)	J mm (inch)	L mm (inch)	M mm (inch)	SP mm (inch)	Orifice mm (inch)
S30V03T01A*	1/4" O.D.	50.80 (2.00)	25.40 (1.00)	57.50 (2.26)	39.50 (1.56)	130.80 (5.10)	7.00 (0.28)	76.20 (3.00)	14.60 (0.60)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	3.20 (0.13)
S30V03T02A*	3/8" O.D.	50.80 (2.00)	25.40 (1.00)	69.60 (2.74)	39.50 (1.56)	142.90 (5.60)	7.00 (0.28)	76.20 (3.00)	18.70 (0.70)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	3.20 (0.13)
S30V03T03A*	9/16" O.D.	66.68 (2.63)	33.34 (1.31)	77.50 (3.05)	40.00 (1.57)	150.80 (5.90)	7.00 (0.28)	76.20 (3.00)	26.90 (1.10)	10.00 (0.39)	17.50 (0.69)	38.10 (1.50)	3.20 (0.13)

* = on request, minimum quantity may be requested

➡ PLEASE NOTICE: high pressure needle valves size 3/4" and 1" O.D. are not available.

Needle Valves 30kpsi

Three Way Needle Valves - One Pressure Connection - 30,000 psi



No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	1
2	Blue cap	HYTREL BLUE	1
3	Collar	AISI 316L	2
4	Gasket	Glass filled PTFE	1
5	Gland	AISI 316L	2
6	Handle	Anodized aluminum EN AW-6060 T6	1
7	Locking device	AISI 316L	1
8	Lower stem	ASTM A564 T630	1
9	Packing gland	CuAlTiFeNi6	1
10	Locking pin	A4 - AISI 316	1
11	Socket head cap screw	A4 - AISI 316L	1
12	Socket set screw	A4-70	1
13	Top packing washer	AISI 316L	1
14	Upper stem	AISI 316L	1
15	Valve body	AISI 316L	1

Order code	In/Out	A mm (Inch)	B mm (Inch)	C mm (Inch)	D mm (Inch)	F mm (Inch)	H mm (Inch)	I mm (Inch)	J mm (Inch)	L mm (Inch)	M mm (Inch)	SP mm (Inch)	Orifice mm (Inch)
S30V04T01A*	1/4" O.D.	50.80 (2.00)	25.40 (1.00)	53.00 (2.09)	30.00 (1.18)	126.30 (5.00)	7.00 (0.28)	76.20 (3.00)	14.60 (0.60)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	3.20 (0.13)
S30V04T02A*	3/8" O.D.	50.80 (2.00)	25.40 (1.00)	57.00 (2.24)	30.00 (1.18)	130.30 (5.10)	7.00 (0.28)	76.20 (3.00)	18.70 (0.70)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	3.20 (0.13)
S30V04T03A*	9/16" O.D.	66.68 (2.63)	33.34 (1.31)	62.00 (2.44)	29.00 (1.14)	135.30 (5.30)	7.00 (0.28)	76.20 (3.00)	26.90 (1.10)	10.00 (0.39)	17.50 (0.69)	38.10 (1.50)	3.20 (0.13)

* = on request, minimum quantity may be requested

PLEASE NOTICE: high pressure needle valves size 3/4" and 1" O.D. are not available.

Needle Valves 60kpsi

High Pressure Needle Valves - 60,000 psi

SAMI INSTRUMENTS high pressure valves are designed for liquid and gas flow control.

Available in a variety of body styles, the valves are suitable for manual operation in temperature ranging from -73°C to 315°C (from -100°F to 600°F).

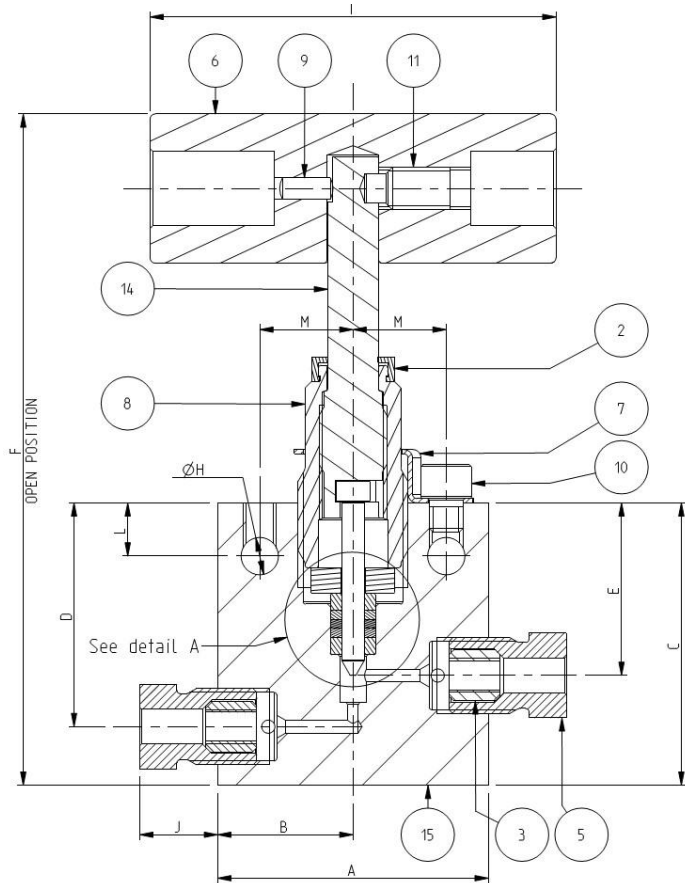
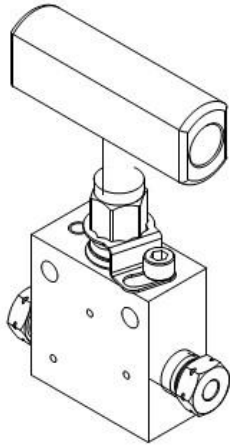
SAMI INSTRUMENTS high pressure valves are available in various tubing sizes to satisfy different requirements.

- Pressure 60,000 psi (4139 bar).
- Connections from 1/4" to 9/16" coned and threaded tube.
- Non rotating stem prevents galling and scoring.
- Stem sleeve and packing gland materials have been selected to achieve extended thread cycles and reduced handle torque.
- Standard materials of construction include 316 L cold-worked stainless steel and glass-filled PTFE.



Needle Valves 60kpsi

Two Way Straight Needle Valves - 60,000 psi



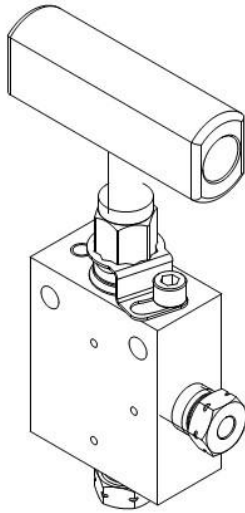
No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	2
2	Blue cap	HYTREL BLUE	1
3	Collar	AISI 316L	2
4	Gasket	Glass filled PTFE	3
5	Gland	AISI 316L	2
6	Handle	Anodized aluminum EN AW-6060 T6	1
7	Locking device	AISI 316L	1
8	Packing gland	CuAl11Fe6Ni6	1
9	Locking pin	A4 - AISI 316	1
10	Socket head cap screw	A4 - AISI 316L	1
11	Socket set screw	A4-70	1
12	Stem	ASTM A564 T630	1
13	Top packing washer	AISI 316L	1
14	Upper stem	AISI 316L	1
15	Valve Body	AISI 316L	1

Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)	H mm (inch)	I mm (inch)	J mm (inch)	L mm (inch)	M mm (inch)	SP mm (inch)	Orifice mm (inch)
S60V01T01A	1/4 " O.D.	50.80 (2.00)	25.40 (1.00)	53.00 (2.09)	42.00 (1.65)	32.40 (1.28)	126.00 (5.00)	7.00 (0.28)	76.20 (3.00)	14.60 (0.60)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	2.00 (0.06)
S60V01T02A	3/8 " O.D.	50.80 (2.00)	25.40 (1.00)	57.00 (2.24)	42.90 (1.69)	33.30 (1.31)	130.00 (5.10)	7.00 (0.28)	76.20 (3.00)	18.70 (0.70)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	2.00 (0.06)
S60V01T03A	9/16 " O.D.	66.68 (2.63)	33.34 (1.31)	63.50 (2.50)	45.50 (1.79)	33.30 (1.31)	136.50 (5.40)	7.00 (0.28)	76.20 (3.00)	26.90 (1.10)	10.00 (0.39)	17.50 (0.69)	38.10 (1.50)	2.00 (0.06)

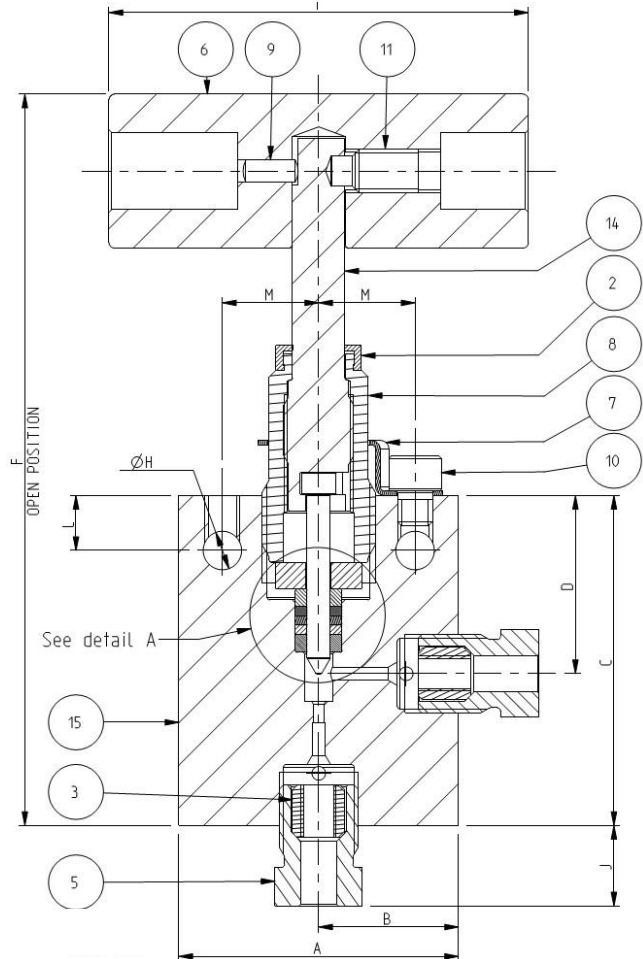
PLEASE NOTICE: high pressure needle valves size 3/4" and 1" O.D. are not available.

Needle Valves 60kpsi

Two Way Angle Needle Valves - 60,000 psi



No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	2
2	Blue cap	HYTREL BLUE	1
3	Collar	AISI 316L	2
4	Gasket	Glass filled PTFE	3
5	Gland	AISI 316L	2
6	Handle	Anodized aluminum EN AW-6060 T6	1
7	Locking device	AISI 316L	1
8	Packing gland	CuAl1Fe6Ni6	1
9	Locking pin	A4 - AISI 316	1
10	Socket head cap screw	A4 - AISI 316L	1
11	Socket set screw	A4-70	1
12	Stem	ASTM A564 T630	1
13	Top packing washer	AISI 316L	1
14	Upper stem	AISI 316L	1
15	Valve body	AISI 316L	1

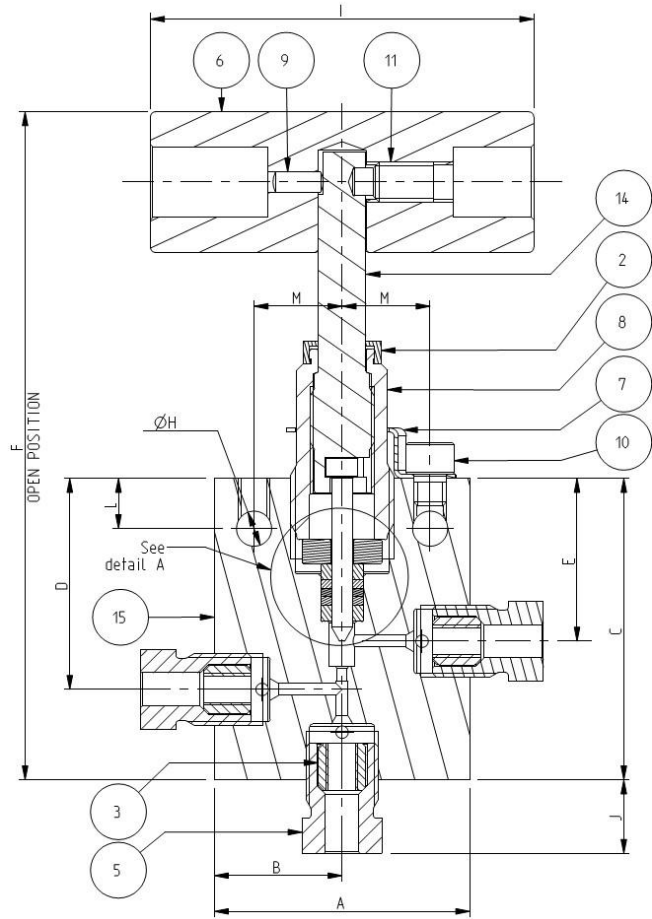
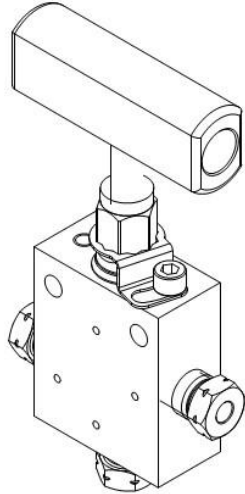


Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	F mm (inch)	H mm (inch)	I mm (inch)	J mm (inch)	L mm (inch)	M mm (inch)	SP mm (inch)	Orifice mm (inch)
S60V02T01A	1/4 " O.D.	50.80 (2.00)	25.40 (1.00)	60.00 (2.36)	32.40 (1.28)	133.00 (5.20)	7.00 (0.28)	76.20 (3.00)	14.60 (0.60)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	2.00 (0.08)
S60V02T02A	3/8 " O.D.	50.80 (2.00)	25.40 (1.00)	66.00 (2.60)	33.30 (1.31)	139.00 (5.50)	7.00 (0.28)	76.20 (3.00)	18.70 (0.70)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	2.00 (0.08)
S60V02T03A	9/16 " O.D.	66.68 (2.63)	33.34 (1.31)	71.00 (2.80)	33.30 (1.31)	144.00 (5.70)	7.00 (0.28)	76.20 (3.00)	26.90 (1.10)	10.00 (0.39)	17.50 (0.69)	38.10 (1.50)	2.00 (0.08)

➡ PLEASE NOTICE: high pressure needle valves size 3/4" and 1" O.D. are not available.

Needle Valves 60kpsi

Three Way Needle Valves - Two pressure connections - 60,000 psi



No	DESCRIPTION	MATERIAL	Q.TY
1	Anti-extrusion ring	AISI 316L	2
2	Blue cap	HYTREL BLUE	1
3	Collar	AISI 316L	3
4	Gasket	Glass filled PTFE	3
5	Gland	AISI 316L	3
6	Handle	Anodized aluminum EN AW-6060 T6	1
7	Locking device	AISI 316L	1
8	Packing gland	CuAl11Fe6Ni6	1
9	Locking pin	A4 - AISI 316	1
10	Socket head cap screw	A4 - AISI 316L	1
11	Socket set screw	A4-70	1
12	Stem	ASTM A564 T630	1
13	Top packing washer	AISI 316L	1
14	Upper stem	AISI 316L	1
15	Valve body	AISI 316L	1

Order code	In/Out	A mm (Inch)	B mm (Inch)	C mm (Inch)	D mm (Inch)	E mm (Inch)	F mm (Inch)	H mm (Inch)	I mm (Inch)	J mm (Inch)	L mm (Inch)	M mm (Inch)	SP mm (Inch)	Orifice mm (Inch)
S60V03T01A*	1/4" O.D.	50.80 (2.00)	25.40 (1.00)	60.00 (2.36)	42.00 (1.65)	32.40 (1.28)	133.00 (5.20)	7.00 (0.28)	76.20 (3.00)	14.60 (0.60)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	2.00 (0.08)
S60V03T02A*	3/8" O.D.	50.80 (2.00)	25.40 (1.00)	73.00 (2.87)	42.90 (1.69)	33.30 (1.31)	146.00 (5.70)	7.00 (0.28)	76.20 (3.00)	18.70 (0.70)	10.00 (0.39)	17.50 (0.69)	25.40 (1.00)	2.00 (0.08)
S60V03T03A*	9/16" O.D.	66.68 (2.63)	33.34 (1.31)	83.00 (3.27)	45.50 (1.79)	33.30 (1.31)	156.00 (6.10)	7.00 (0.28)	76.20 (3.00)	26.90 (1.10)	10.00 (0.39)	17.50 (0.69)	38.10 (1.50)	2.00 (0.08)

* = on request, minimum quantity may be requested



PLEASE NOTICE: high pressure needle valves size 3/4" and 1" O.D. are not available.

Check Valves 60kpsi

Soft Check Valves

High pressure check valves are designed for liquid and gas flow control in chemical, industrial and oil & gas fields.

Ball Check Valves

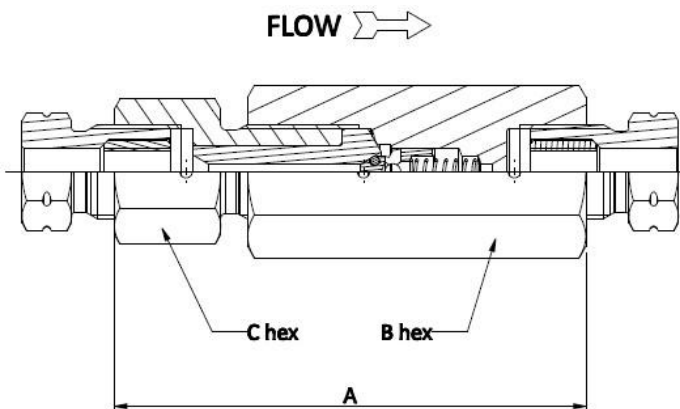
All SAMI INSTRUMENTS ball check valves have a long endurance and may also be employed with high temperatures.

Features:

SAMI INSTRUMENTS high pressure check valves are available in various tubing sizes to satisfy different requirements:

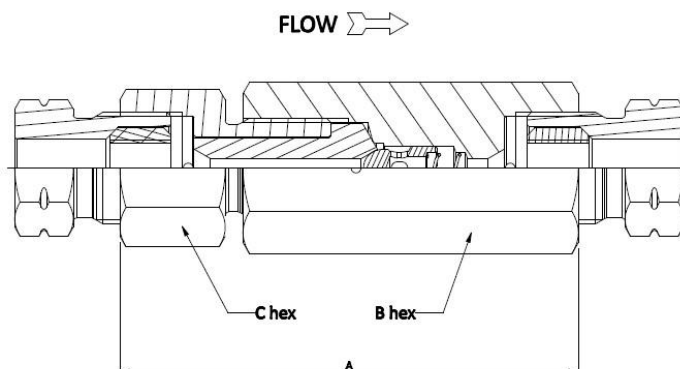
- Pressure: 60,000 psi (4139 bar).
- Connections from 1/4" to 9/16" O.D.
- Standard materials of construction include 316 L cold-worked stainless steel.
- Standard O-ring material: NBR 90 Sh A
- Temperature range: -15°C + 180°C for soft check valve
- -73°C + 315°C for ball check valves

Soft Check Valves



Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	ORIFICE mm (Inch)
S60F01T01	1/4 " O.D.	85.51 (3.367)	30.16 (1.187)	20.64 (0.813)	2.40 (0.094)
S60F01T02	3/8 " O.D.	95.41 (3.756)	30.16 (1.187)	25.40 (1.000)	3.20 (0.126)
S60F01T03	9/16 " O.D.	117.52 (4.627)	38.10 (1.500)	34.93 (1.375)	4.80 (0.189)
Standard cracking pressure: 20 p.s.i. (1.38 bar) ±30%					

Ball Check Valves



Order code	In/Out	A mm (inch)	B mm (inch)	C mm (inch)	ORIFICE mm (Inch)
S60F02T01	1/4 " O.D.	85.5 (3.367)	30.16 (1.187)	20.64 (0.813)	2.40 (0.094)
S60F02T02	3/8 " O.D.	95.4 (3.756)	30.16 (1.187)	25.40 (1.000)	3.20 (0.126)
S60F02T03	9/16 " O.D.	117.5 (4.627)	38.10 (1.500)	34.93 (1.375)	4.80 (0.189)
Standard cracking pressure: 20 p.s.i. (1.38 bar) ±30%					

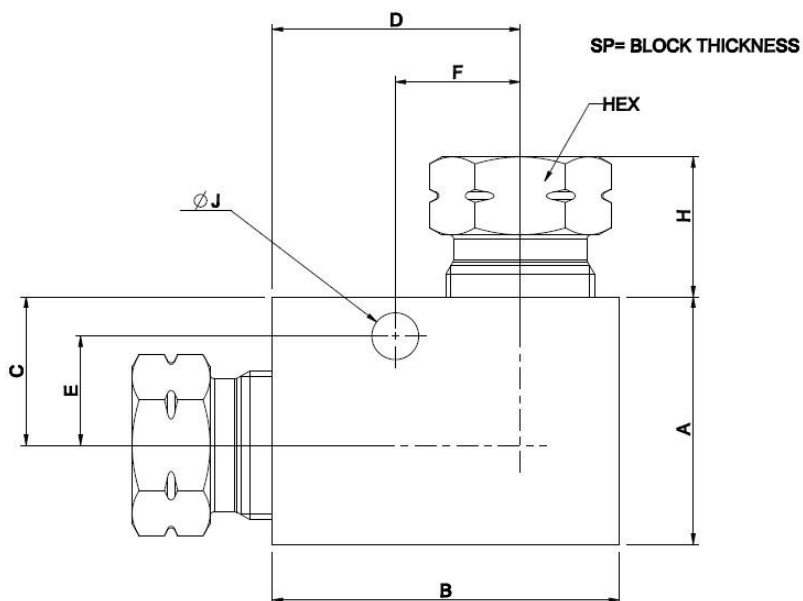


PLEASE NOTICE: high pressure valves size 3/4" and 1" O.D. are not available.

Accessories 60kpsi

A complete line of crosses, elbows and tees is available for all tubing connection sizes. Sami Instruments fittings are made of high tensile 316L Stainless Steel, unless otherwise specified.

Elbow

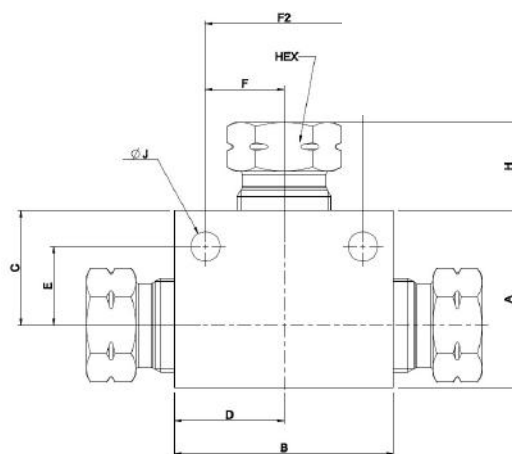


Order code	In/Out	A mm	B mm	C mm	D mm	E mm	F mm	J mm	H mm	SP mm	HEX mm
S60F04T01	1/4" O.D.	38.10	34.93	25.40	22.23	20.00	16.50	6.00	14.63	25.40	15.88
S60F04T02	3/8" O.D.	38.10	44.45	25.40	31.75	18.30	17.50	7.00	18.68	25.40	20.64
S60F04T03	9/16" O.D.	47.63	66.68	28.58	47.63	21.00	24.00	9.00	26.93	38.10	30.16

➔ **PLEASE NOTICE: high pressure accessories size 3/4" and 1" O.D. are not available.**

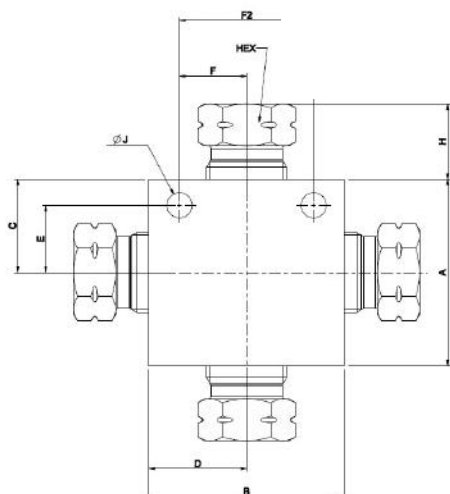
Accessories 60kpsi

Tee



Order code	In/Out	A mm	B mm	C mm	D mm	E mm	F mm	F2 mm	J mm	H mm	SP mm	HEX mm
S60F05T01	1/4" O.D.	34.93	50.80	22.23	25.40	16.50	16.50	33.00	6.00	14.63	25.40	15.88
S60F05T02	3/8" O.D.	39.69	50.80	26.99	25.40	17.50	17.50	35.00	7.00	18.68	25.40	20.64
S60F05T03	9/16" O.D.	53.98	66.68	34.93	33.34	24.00	24.00	48.00	9.00	26.93	38.10	30.16

Cross

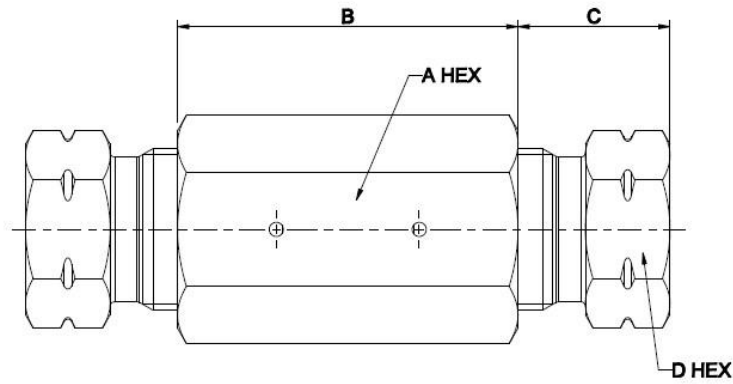


Order code	In/Out	A mm	B mm	C mm	D mm	E mm	F mm	F2 mm	J mm	H mm	SP mm	HEX mm
S60F06T01	1/4" O.D.	38.10	50.80	19.05	25.40	13.00	16.50	33.00	6.00	14.63	25.40	15.88
S60F06T02	3/8" O.D.	50.80	53.98	25.40	26.99	17.50	17.50	35.00	7.00	18.68	25.40	20.64
S60F06T03	9/16" O.D.	66.68	69.85	33.34	34.93	24.00	24.00	48.00	9.00	26.93	38.10	30.16

➔ PLEASE NOTICE: high pressure accessories size 3/4" and 1" O.D. are not available.

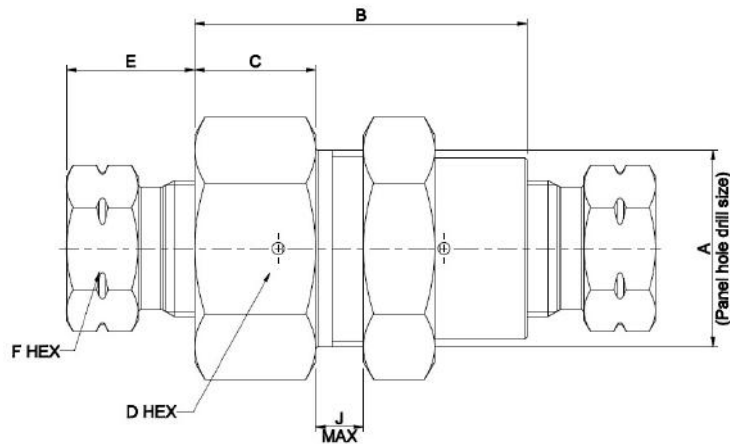
Accessories 60kpsi

Union Coupling



Order code	In/Out	A mm	B mm	C mm	D mm
S60F08T01	1/4" O.D.	25.40	44.45	14.63	15.88
S60F08T02	3/8" O.D.	25.40	50.85	18.68	20.64
S60F08T03	9/16" O.D.	34.93	60.33	26.93	30.16

Bulkhead Coupling



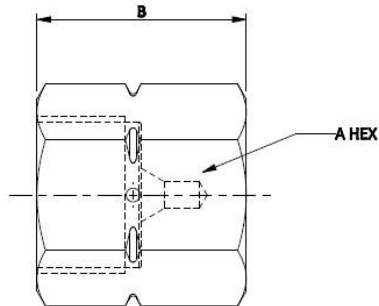
Order code	In/Out	A mm	B mm	C mm	D mm	E mm	F mm	J mm
S60F09T01	1/4" O.D.	23.00	50.80	12.70	30.16	14.63	15.88	10.00
S60F09T02	3/8" O.D.	30.00	60.33	19.00	34.90	18.68	20.64	10.00
S60F09T03	9/16" O.D.	43.00	69.85	25.40	47.63	26.93	30.16	10.00



PLEASE NOTICE: high pressure accessories size 3/4" and 1" O.D. are not available.

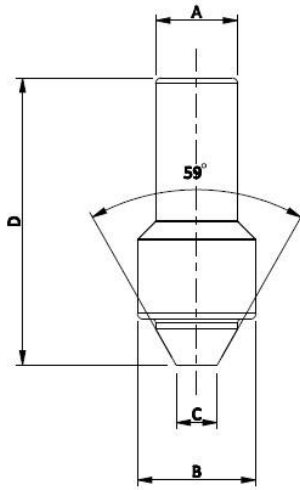
Accessories 60kpsi

Cap



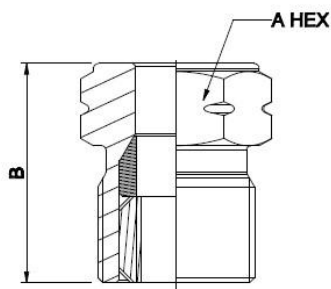
Order code	In/Out	A HEX mm	B mm
S60F10T01	1/4 " O.D.	19.05	22.23
S60F10T02	3/8 " O.D.	25.4	31.75
S60F10T03	9/16 " O.D.	34.925	38.1

Plug



Order code	In/Out	A mm	B mm	C mm	D mm
S60F11T01	1/4 " O.D.	6.35	9.5	3.18	28
S60F11T02	3/8 " O.D.	9.5	12.7	5.56	37
S60F11T03	9/16 " O.D.	14.3	20.64	7.14	50

Anti-Vibration Gland



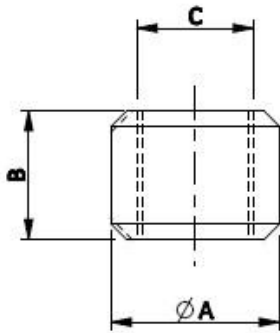
Order code	In/Out	A mm	B mm
S60F14T01	1/4 " O.D.	15.88	22.00
S60F14T02	3/8 " O.D.	20.64	30.00
S60F14T03	9/16 " O.D.	30.16	40.00



PLEASE NOTICE: high pressure accessories size 3/4" and 1" O.D. are not available.

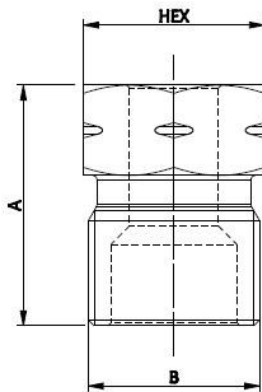
Accessories 60kpsi

Collar



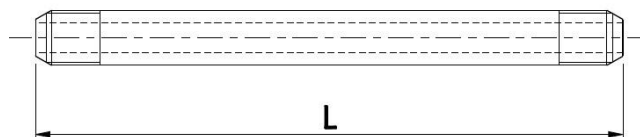
Order code	In/Out	A mm	B mm	C
S60F12T01	1/4 " O.D.	9.500	9.500	1/4-28 UNF-2B left
S60F12T02	3/8 " O.D.	12.700	13.500	3/8-24 UNF-2B left
S60F12T03	9/16 " O.D.	20.640	15.800	9/16-18 UNF-2B left

Gland



Order code	In/Out	A mm	B	HEX mm
S60F13T01	1/4 " O.D.	22	9/16-18 UNF-2A	15.88
S60F13T02	3/8 " O.D.	30	3/4-16 UNF-2A	20.64
S60F13T03	9/16 " O.D.	40	1 1/8-12 UN-2A	30.16

Nipple



TUBE 1/4 "		
Order code	Length	L (mm)
S60F16T01A	2 3/4 "	69.85
S60F16T01B	3 "	76.20
S60F16T01C	4 "	101.60
S60F16T01D	6 "	152.40
S60F16T01E	8 "	203.20
S60F16T01F	10 "	254.00
S60F16T01G	12 "	304.80

TUBE 3/8 "		
Order code	Length	L (mm)
S60F16T02A	2 3/4 "	69.85
S60F16T02B	3 "	76.20
S60F16T02C	4 "	101.60
S60F16T02D	6 "	152.40
S60F16T02E	8 "	203.20
S60F16T02F	10 "	254.00
S60F16T02G	12 "	304.80

TUBE 9/16 "		
Order code	Length	L (mm)
S60F16T03A	2 3/4 "	69.85
S60F16T03B	3 "	76.20
S60F16T03C	4 "	101.60
S60F16T03D	6 "	152.40
S60F16T03E	8 "	203.20
S60F16T03F	10 "	254.00
S60F16T03G	12 "	304.80



PLEASE NOTICE: high pressure accessories size 3/4" and 1" O.D. are not available.

Ball Valves

Ordering Information - Low-Medium-High Pressure Ball Valves

Valve Series	Body Pattern	In/Out
B15	V01	T11

Valve Series	
B15	15,000 p.s.i.
B20	20,000 p.s.i.

Body Pattern	
V01	Two way straight valve

In/Out	
T11	1/4 " NPT
T12	3/8 " NPT
T13	1/2 " NPT
T15	1 " NPT
T14	3/4 " NPT
T01	1/4 " O.D.
T02	3/8 " O.D.
T03	9/16 " O.D.
T04	3/4 " O.D.
T05	1 " O.D.



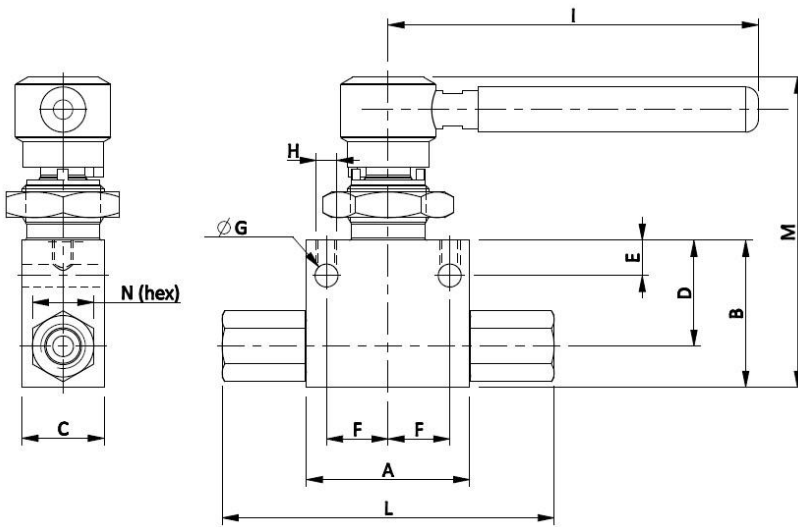
➔ **PLEASE NOTICE: Sami's medium pressure ball valves are not suitable for gas medium**

Ball Valves

B15-Series Ball Valve

15,000 psi

Sami Instruments medium pressure valves are designed for flow control and are available in various tubing sizes to satisfy different requirements. Connections from 1/4 " to 1" NPT-F.

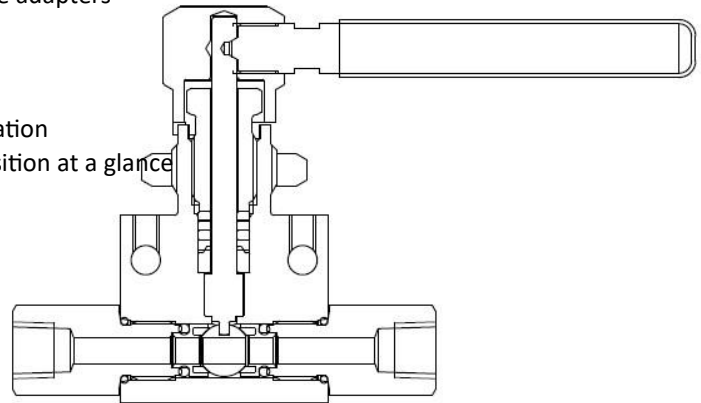


Specifications

- Pressure 15,000 Psi (1034 Bar)
- Positive sealing ensured by pressure loaded seats
- Maximum safety ensured by blowout-proof stem and ball
- Versatile installation thanks to wide choice of replaceable connections.
- Minimum pressure drop assured by straight through flow path.

PLEASE NOTICE: Sami B15 series ball valves are not suitable for gas medium

- AISI 316L cold-worked stainless steel body and side adapters
- PEEK ball seals
- Stem packings in glass-filled Teflon
- Viton o-rings
- Quick open and close thanks to quarter-turn operation
- Flow indicating handle allows to indicate valve position at a glance
- Bi-directional flow capabilities.
- Panel mounting: 1.06" (26.0 mm) dia
0.43" (11.0 mm) max thickness



PLEASE NOTICE: the maximum working pressure for sizes 3/4" and 1" is 10.000 psi only.

Order code	Connections Inlet/outlet	A (mm) (inch)	B (mm) (inch)	C (mm) (inch)	D (mm) (inch)	E (mm) (inch)	F (mm) (inch)	G (mm) (inch)	H (mm) (inch)	I (mm) (inch)	L (mm) (inch)	M (mm) (inch)	N (mm) (inch)	Orifice mm (inch)
B15V01T11	1/4" NPT-F	50.5 (1.99)	45.5 (1.79)	25.4 (1)	32.8 (1.29)	10.9 (0.43)	19.05 (0.75)	7.1 (0.28)	1/4"-20 UNC	114.5 (4.49)	102.7 (4.04)	96 (3.78)	19.05 (0.75)	6.4 (0.25)
B15V01T12	3/8" NPT-F	50.5 (1.99)	45.5 (1.79)	25.4 (1)	32.8 (1.29)	10.9 (0.43)	19.05 (0.75)	7.1 (0.28)	1/4"-20 UNC	114.5 (4.49)	102.7 (4.04)	96 (3.78)	25.4 (1)	6.4 (0.25)
B15V01T13	1/2" NPT-F	76.2 (3)	53.5 (2.1)	34.9 (1.37)	36 (1.42)	10.9 (0.43)	19.05 (0.75)	7.1 (0.28)	1/4"-20 UNC	114.5 (4.49)	137.1 (5.4)	104 (4.10)	34.9 (1.38)	9.5 (0.374)
B15V01T14*	3/4" NPT-F	76.2 (3)	53.5 (2.1)	34.9 (1.37)	36 (1.42)	10.9 (0.43)	19.05 (0.75)	7.1 (0.28)	1/4"-20 UNC	114.5 (4.5)	129.5 (5.09)	104 (4.10)	34.9 (1.38)	9.5 (0.374)
B15V01T15*	1" NPT-F	76.2 (3)	53.5 (2.1)	34.9 (1.37)	36 (1.42)	10.9 (0.43)	19.05 (0.75)	7.1 (0.28)	1/4"-20 UNC	114.5 (4.5)	158.3 (6.2)	104 (4.10)	44.45 (1.75)	9.5 (0.374)

* = on request, minimum quantity may be requested

Ball Valves

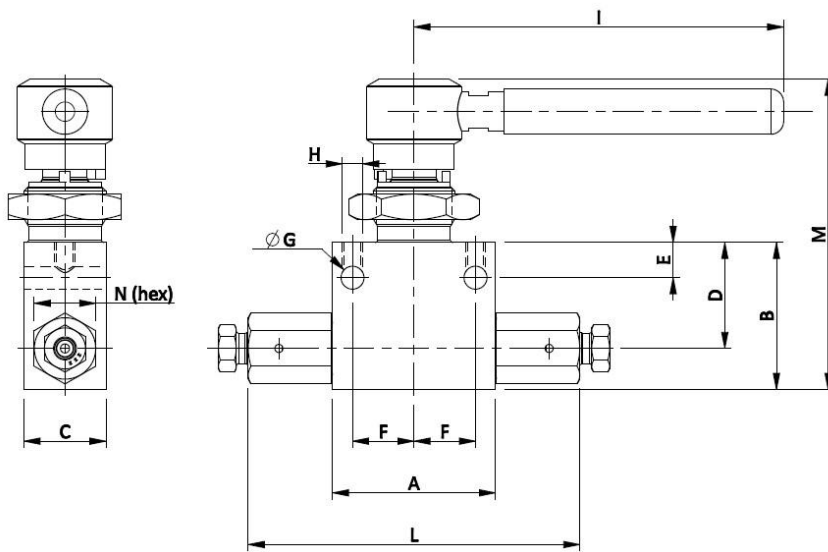
B20-Series Ball Valve

20,000 psi

Sami Instruments high pressure valves are designed for flow control and are available in various tubing sizes to satisfy different requirements. Connections from 1/4" to 3/4" O.D.

Specifications

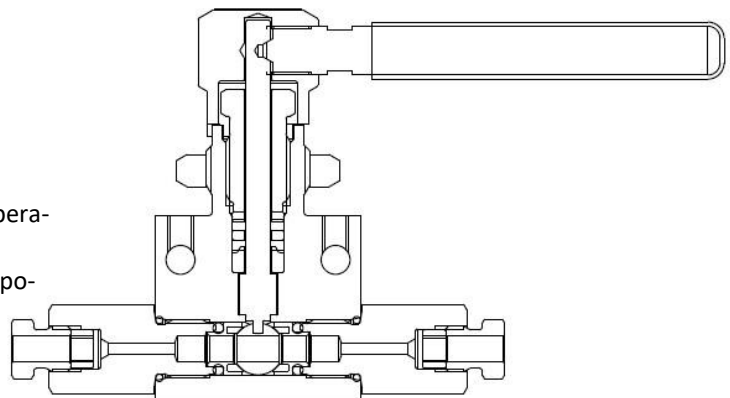
- Pressure 20,000 Psi (1380 Bar)
- Positive sealing ensured by pressure loaded seats
- Maximum safety ensured by blowout-proof stem and ball
- Versatile installation thanks to wide choice of replaceable connections.
- Minimum pressure drop assured by straight through flow path.



PLEASE NOTICE: Sami's B20 series ball valves are not suitable for gas medium

Features

- 316 cold-worked stainless steel body and side adapters
- PEEK ball seals
- Stem packings in glass-filled Teflon
- Viton o-rings
- Quick open and close thanks to quarter-turn operation
- Flow indicating handle allows to indicate valve position at a glance
- Bi-directional flow capabilities.
- Panel mounting: 1.06" (26.0 mm) dia
0.43" (11.0 mm) max thickness



Order code	Connections Inlet/outlet	A (mm) (inch)	B (mm) (inch)	C (mm) (inch)	D (mm) (inch)	E (mm) (inch)	F (mm) (inch)	G (mm) (inch)	H (mm) (inch)	I (mm) (inch)	L (mm) (inch)	M (mm) (inch)	N (mm) (inch)	Orifice mm (inch)
B20V01T01	1/4" O.D.	50.5 (1.99)	45.5 (1.79)	25.4 (1)	32.8 (1.29)	10.9 (0.43)	19.05 (0.75)	7.1 (0.28)	1/4"-20 UNC	114 (4.49)	102.7 (4.04)	96 (3.78)	19.05 (0.75)	2.8 (0.11)
B20V01T02	3/8" O.D.	50.5 (1.99)	45.5 (1.79)	25.4 (1)	32.8 (1.29)	10.9 (0.43)	19.05 (0.75)	7.1 (0.28)	1/4"-20 UNC	114 (4.49)	102.7 (4.04)	96 (3.78)	19.05 (0.75)	5.2 (0.205)
B20V01T03	9/16" O.D.	76.2 (3)	53.45 (2.1)	34.9 (1.37)	36 (1.42)	10.9 (0.43)	19.05 (0.75)	7.1 (0.28)	1/4"-20 UNC	114 (4.49)	143 (5.63)	104 (4.09)	34.9 (1.375)	9 (0.354)
B20V01T04*	3/4" O.D.	76.2 (3)	53.45 (2.1)	34.9 (1.37)	36 (1.42)	10.9 (0.43)	19.05 (0.75)	7.1 (0.28)	1/4"-20 UNC	114 (4.49)	153.5 (6.04)	104 (4.09)	34.9 (1.375)	9.5 (0.374)
B20V01T05*	1" O.D.	76.2 (3)	53.45 (2.1)	34.9 (1.37)	36 (1.42)	10.9 (0.43)	19.05 (0.75)	7.1 (0.28)	1/4"-20 UNC	114 (4.49)	177 (6.97)	104 (4.09)	44.45 (1.75)	9.5 (0.374)

* = on request, minimum quantity may be requested

Adapters

ORDERING INFORMATION

FIRST CONNECTION

SERIES		MALE/FEMALE		SIZE	
--------	--	-------------	--	------	--

H	High pressure 30k-60k psi	M	Male	01	1/4" C&T
M	Medium Pressure 20k psi	F	Female	02	3/8" C&T
N	NPT/JIC Series 10k-15k psi			03	9/16" C&T

CODING SYSTEM PRIORITIES:

- Female connections before male connections (ex: High pressure Male 1/2" x Medium pressure Female 1/4": MF01HM03A.).
- If both connections are male or female, the one with highest rating goes first (ex.: Medium Pressure Male 1/4" x High Pressure Male 1/2": HM03MM01A).
- If both connections have the same rating and are both male or both female, the one with bigger size goes first (ex: High Pressure Male 1/4" x High Pressure Male 1/2": HM03HM01A).

SPECIAL CASES WITH THE SAME RATING:

- ⇒ High Pressure C&T before Type M
- ⇒ High Pressure C&T before BSPP
- ⇒ Type M before BSPP
- ⇒ BSPP ext. before BSPP int.
- ⇒ JIC before NPT-M

WORKING PRESSURES:

- the Maximum Working Pressure of the adapters will be the lowest of the two pressures selected.
- For example: HM03MM02A (9/16" 60.000 psi x 3/8" 20.000 psi) will have a maximum operating pressure of 20.000 psi.
- The maximum pressure for NPT connections is 15.000 psi, except for sizes 3/4" and 1" which is 10.000 psi only.
- The rating for BSPP adapters is 30.000 psi.
- The rating for JIC adapters is 10.000 psi.

PLEASE NOTICE:

- The connections Type M and BSPP INT are male only.
- High pressure connections 3/4" and 1" coned and threaded 60.000 psi are not available.

04	3/4" C&T
05	1" C&T
09	1/16" NPT (15.000 psi only)
10	1/8" NPT (15.000 psi only)
11	1/4" NPT (15.000 psi only)
12	3/8" NPT (15.000 psi only)
13	1/2" NPT (15.000 psi only)
14	3/4" NPT (10.000 psi only)
15	1" NPT (10.000 psi only)
21	9/16"-18 TYPE M (50.000 psi only)
22	3/4" - 16 TYPE M (30.000 psi only)
23	7/8" - 14 TYPE M (50.000 psi only)
24	1" - 12 TYPE M (30.000 psi only)
25	1 1/8" - 12 TYPE M (50.000 psi only)
26	1 5/16" - 12 TYPE M (20.000 psi only)
30	1/4" JIC (10.000 psi only)
31	3/8" JIC (10.000 psi only)
32	1/2" JIC (10.000 psi only)
33	3/4" JIC (10.000 psi only)
34	1" JIC (10.000 psi only)
L1	1/4" C&T - LEFT
L2	3/8" C&T - LEFT
L3	9/16" C&T - LEFT
L4	3/4" C&T - LEFT
L5	1" C&T - LEFT
40	1/8" Gas (BSPP) ext (30.000 psi only)
41	1/4" Gas (BSPP) ext (30.000 psi only)
42	1/2" Gas (BSPP) ext (30.000 psi only)
43	3/8" Gas (BSPP) ext (30.000 psi only)
44	3/4" Gas (BSPP) ext (30.000 psi only)
50	1/8" Gas (BSPP) int (30.000 psi only)
51	1/4" Gas (BSPP) int (30.000 psi only)
52	1/2" Gas (BSPP) int (30.000 psi only)
53	3/8" Gas (BSPP) int (30.000 psi only)
54	3/4" Gas (BSPP) int (30.000 psi only)

Please note: Not every configuration which can be created in the ordering information is feasible / available.

Adapters

ORDERING INFORMATION

SECOND CONNECTION				MATERIAL			
SERIES	MALE/FEMALE	SIZE		MATERIAL			
H	High pressure 30k-60k psi	M	Male	01	1/4" C&T	A	Aisi 316L
M	Medium Pressure 20k psi	F	Female	02	3/8" C&T	C	Aisi 316 Ti
N	NPT/JIC Series 10k-15k psi			03	9/16" C&T	D	Monel 400
				04	3/4" C&T	E	Duplex F51
				05	1" C&T	G	Super Duplex F55
				09	1/16" NPT (15.000 psi only)	H	Hastelloy C276
				10	1/8" NPT (15.000 psi only)	I	Inconel 625
				11	1/4" NPT (15.000 psi only)	J	Incoloy 825
				12	3/8" NPT (15.000 psi only)	L	Titanium
				13	1/2" NPT (15.000 psi only)	M	A350-LF2
				14	3/4" NPT (10.000 psi only)	N	F44
				15	1" NPT (10.000 psi only)	P	6M0
				21	9/16"-18 TYPE M (50.000 psi only)	Q	ASTM B148
				22	3/4" - 16 TYPE M (30.000 psi only)		
				23	7/8" - 14 TYPE M (50.000 psi only)		
				24	1" - 12 TYPE M (30.000 psi only)		
				25	1 1/8" - 12 TYPE M (50.000 psi only)		
				26	1 5/16" - 12 TYPE M (20.000 psi only)		
				30	1/4" JIC (10.000 psi only)		
				31	3/8" JIC (10.000 psi only)		
				32	1/2" JIC (10.000 psi only)		
				33	3/4" JIC (10.000 psi only)		
				34	1" JIC (10.000 psi only)		
				L1	1/4" C&T - LEFT		
				L2	3/8" C&T - LEFT		
				L3	9/16" C&T - LEFT		
				L4	3/4" C&T - LEFT		
				L5	1" C&T - LEFT		
				40	1/8" Gas (BSPP) ext (30.000 psi only)		
				41	1/4" Gas (BSPP) ext (30.000 psi only)		
				42	1/2" Gas (BSPP) ext (30.000 psi only)		
				43	3/8" Gas (BSPP) ext (30.000 psi only)		
				44	3/4" Gas (BSPP) ext (30.000 psi only)		
				50	1/8" Gas (BSPP) int (30.000 psi only)		
				51	1/4" Gas (BSPP) int (30.000 psi only)		
				52	1/2" Gas (BSPP) int (30.000 psi only)		
				53	3/8" Gas (BSPP) int (30.000 psi only)		
				54	3/4" Gas (BSPP) int (30.000 psi only)		

CODING SYSTEM PRIORITIES:

- Female connections before male connections (ex.: High pressure Male 1/2" x Medium pressure Female 1/4": MF01HM03A.).
- If both connections are male or female, the one with highest rating goes first (ex.: Medium Pressure Male 1/4" x High Pressure Male 1/2": HM03MM01A).
- If both connections have the same rating and are both male or both female, the one with bigger size goes first (ex: High Pressure Male 1/4" x High Pressure Male 1/2": HM03HM01A).

SPECIAL CASES WITH THE SAME RATING:

- ⇒ High Pressure C&T before Type M
- ⇒ High Pressure C&T before BSPP
- ⇒ Type M before BSPP
- ⇒ BSPP ext. before BSPP int.
- ⇒ JIC before NPT-M

WORKING PRESSURES:

- the Maximum Working Pressure of the adapters will be the lowest of the two pressures selected.
- For example: HM03MM02A (9/16" 60.000 psi x 3/8" 20.000 psi) will have a maximum operating pressure of 20.000 psi.
- The maximum pressure for NPT connections is 15.000 psi, except for sizes 3/4" and 1" which is 10.000 psi only.
- The rating for BSPP adapters is 30.000 psi.
- The rating for JIC adapters is 10.000 psi.

PLEASE NOTICE:

- The connections Type M and BSPP INT are male only.
- High pressure connections 3/4" and 1" coned and threaded 60.000 psi are not available.

Options	
SL	Slimline
L	90° Elbow Adapter
2P	Connection Assembled with Gland and Collar
V	45° Elbow Adapter

Please note: Not every configuration which can be created in the ordering information is feasible / available.

Adapters

Sami also provides a complete range of adapters in order to connect easily from tube to tube and from tube to pipe. Standard body material: high tensile AISI 316L stainless steel.

The charts in the following pages will guide you to choose the best adapter for your application.



Adapters

MALE BY MALE ADAPTERS	
	<u>HIGH PRESSURE C&T</u>
HIGH PRESSURE C&T MALE	Example: HM03HM01A: 9/16" HP Male x 1/4" HP Male 60.000 psi 316L
MEDIUM PRESSURE C&T MALE	Example: HM02MM01A: 3/8" HP Male x 1/4" MP Male 20.000 psi 316L
NPT MALE	Example: HM02NM13A: 3/8" HP Male x 1/2" NPT Male 15.000 psi 316L
TYPE M	Example: HM03HM21A: 9/16" HP Male x 9/16" Type M 50.000 psi 316L
JIC MALE	Example: HM01NM30A: 1/4" HP Male x 1/4" JIC Male 10.000 psi 316L

MALE BY MALE ADAPTERS	
	<u>MEDIUM PRESSURE C&T</u>
HIGH PRESSURE C&T MALE	Example: HM03MM01A: 9/16" HP Male x 1/4" MP Male 20.000 psi 316L
MEDIUM PRESSURE C&T MALE	Example: MM04MM01A: 3/4" MP Male x 1/4" MP Male 20.000 psi 316L
NPT MALE	Example: MM01NM13A: 1/4" HP Male x 1/2" NPT Male 15.000 psi 316L
TYPE M	Example: HM21MM02A: 9/16" Type M x 3/8" MP Male 20.000 psi 316L
JIC MALE	Example: MM01NM30A: 1/4" MP Male x 1/4" JIC Male 10.000 psi 316L

Adapters

MALE BY MALE ADAPTERS	
	<u>NPT SERIES</u>
HIGH PRESSURE C&T MALE	Example: HM03NM11A: 9/16" HP Male x 1/4" NPT Male 15.000 psi 316L
MEDIUM PRESSURE C&T MALE	Example: MM02NM11A: 3/8" MP Male x 1/4" NPT Male 15.000 psi 316L
NPT MALE	Example: NM13NM12A: 1/2" NPT Male x 3/8" NPT Male 15.000 psi 316L
TYPE M	Example: HM21NM13A: 9/16" Type M x 1/2" NPT Male 15.000 psi 316L
JIC MALE	Example: NM30NM11A: 1/4" JIC Male x 1/4" NPT Male 10.000 psi 316L

FEMALE BY MALE ADAPTERS	
	<u>HIGH PRESSURE C&T</u>
HIGH PRESSURE C&T MALE	Example: HF03HM01A: 9/16" HP Female x 1/4" HP Male 60.000 psi 316L
MEDIUM PRESSURE C&T MALE	Example: HF03MM02A: 9/16" HP Female x 3/8" MP Male 20.000 psi 316L
NPT MALE	Example: HF01NM13A: 1/4" HP Female x 1/2" NPT Male 15.000 psi 316L
JIC MALE	Example: HF01NM30A: 1/4" HP Female x 1/4" JIC Male 10.000 psi 316L

Adapters

FEMALE BY MALE ADAPTERS	
	<i>MEDIUM PRESSURE C&T</i>
HIGH PRESSURE C&T MALE	Example: MF03HM01A: 9/16" MP Female x 1/4" HP Male 20.000 psi 316L
MEDIUM PRESSURE C&T MALE	Example: MF02MM01A: 3/8" MP Female x 1/4" MP Male 20.000 psi 316L
NPT MALE	Example: MF03NM12A: 9/16" MP Female x 3/8" NPT Male 15.000 psi 316L
TYPE M	Example: MF02HM21A: 3/8" MP Female x 9/16" Type M 20.000 psi 316L
JIC MALE	Example: MF01NM30A: 1/4" MP Female x 1/4" JIC Male 10.000 psi 316L
BSP EXT. MALE	Example: MF01HM42A: 1/4" MP Female x 1/2" BSP Male Ext. 20.000 psi 316L

FEMALE BY MALE ADAPTERS	
	<i>NPT SERIES</i>
HIGH PRESSURE C&T MALE	Example: NF13HM01A: 1/2" NPT Female x 1/4" HP Male 15.000 psi 316L
MEDIUM PRESSURE C&T MALE	Example: NF13MM02A: 1/2" NPT Female x 3/8" MP Male 15.000 psi 316L
NPT MALE	Example: NF11NM13A: 1/4" NPT Female x 1/2" NPT Male 15.000 psi 316L
TYPE M	Example: NF12HM21A: 3/8" NPT Female x 9/16" Type M 15.000 psi 316L
JIC MALE	Example: NF11NM30A: 1/4" NPT Female x 1/4" JIC Male 10.000 psi 316L
BSP EXT. MALE	Example: NF11HM42A: 1/4" NPT Female x 1/2" BSP Male Ext. 15.000 psi 316L

Adapters

FEMALE BY FEMALE ADAPTERS	
	<u>HIGH PRESSURE C&T</u>
HIGH PRESSURE C&T FEMALE	Example: HF03HF03A: 9/16" HP Female x 9/16" HP Female 60.000 psi 316L
MEDIUM PRESSURE C&T FEMALE	Example: HF02MF01A: 3/8" HP Female x 1/4" MP Female 20.000 psi 316L
NPT FEMALE	Example: HF02NF12A: 3/8" HP Female x 3/8" NPT Female 15.000 psi 316L
TYPE M	TYPE M CONNECTIONS ARE MALE ONLY
JIC FEMALE	Example: HF01NF32A: 1/4" HP Female x 1/2" JIC Female 10.000 psi 316L
BSPP EXT. FEMALE	Example: HF02HF42A: 3/8" HP Female x 1/2" BSPP Ext. Female 30.000 psi 316L

FEMALE BY FEMALE ADAPTERS	
	<u>MEDIUM PRESSURE C&T</u>
HIGH PRESSURE C&T FEMALE	Example: HF03MF03A: 9/16" HP Female x 9/16" MP Female 20.000 psi 316L
MEDIUM PRESSURE C&T FEMALE	Example: MF03MF01A: 9/16" MP Female x 1/4" MP Female 20.000 psi 316L
NPT FEMALE	Example: MF03NF12A: 9/16" MP Female x 3/8" NPT Female 15.000 psi 316L
TYPE M	TYPE M CONNECTIONS ARE MALE ONLY
JIC FEMALE	Example: MF01NF32A: 1/4" MP Female x 1/2" JIC Female 10.000 psi 316L
BSPP EXT. FEMALE	Example: HF42MF02A: 1/2" BSPP Ext. Female x 3/8" MP Female 20.000 psi 316L

Adapters

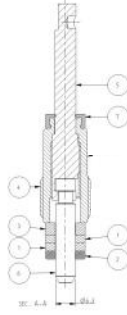
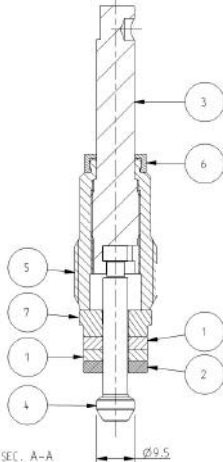
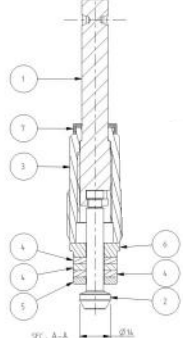
FEMALE BY FEMALE ADAPTERS	
	<u>NPT SERIES</u>
HIGH PRESSURE C&T FEMALE	Example: HF03NF13A: 9/16" HP Female x 1/2" NPT Female 15.000 psi 316L
MEDIUM PRESSURE C&T FEMALE	Example: MF01NF11A: 1/4" MP Female x 1/4" NPT Female 15.000 psi 316L
NPT FEMALE	Example: NF13NF12A: 1/2" NPT Female x 3/8" NPT Female 15.000 psi 316L
TYPE M	TYPE M CONNECTIONS ARE MALE ONLY
JIC FEMALE	Example: NF32NF11A: 1/2" JIC Female x 1/4" NPT Female 10.000 psi 316L
BSPP EXT. FEMALE	Example: HF42NF12A: 1/2" BSPP Ext. Female x 3/8" NPT Female 15.000 psi 316L

Repair Kits

Repair Kits BONNET

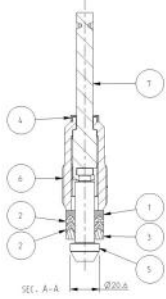
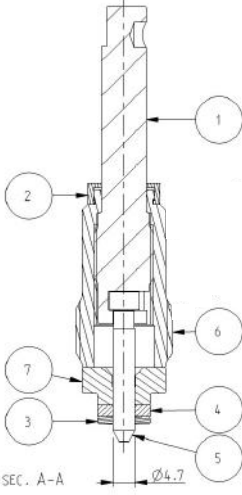
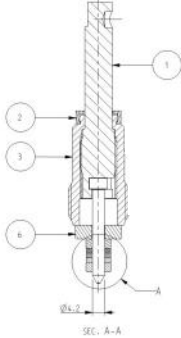
Sami also offers repair kits for the bonnets of its low, medium and high pressure valves.
 Standard bonnet material: 316L stainless steel.

You can choose the correct repair kit from the chart below, using the Sami valve p/no to guide you.

Repair kit code	To be used with	Drawing
S20K01-001	S15V01T11, S15V01T12, S15V02T11, S15V02T12, S15V03T11, S15V03T12, S15V04T11, S15V04T12, S15V10T11, S15V10T12, S20V01T01, S20V01T02, S20V02T01, S20V02T02, S20V03T01, S20V03T02, S20V04T01, S20V04T02, S20V10T01, S20V10T02	
S20K01-002	S15V01T13, S15V02T13, S15V03T13, S15V04T13, S15V10T13, S20V01T03, S20V02T03, S20V03T03, S20V04T03	
S20K01-003 *	S15V01T14, S15V02T14, S15V03T14, S15V04T14, S15V10T14, S20V01T04, S20V02T04, S20V03T04, S20V04T04	

Repair Kits

Repair Kits BONNET

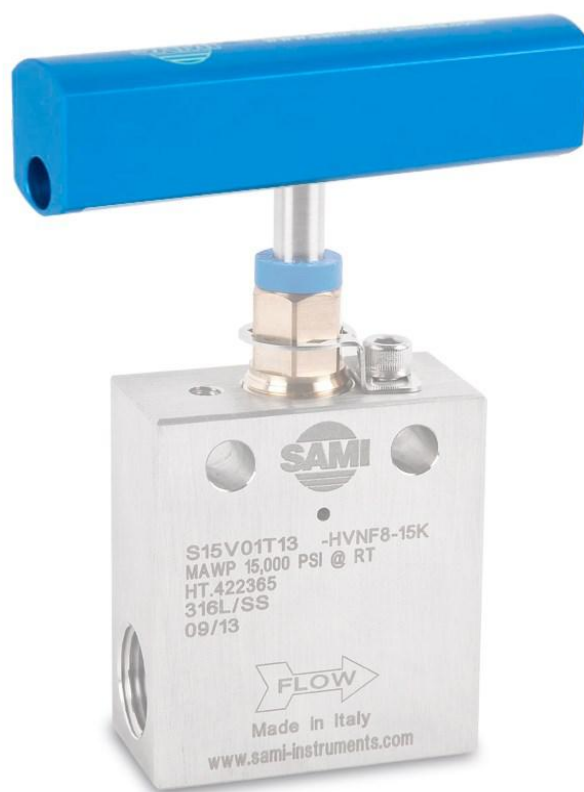
Repair kit code	To be used with	Drawing
<p>S20K01-004 *</p>	<p>S15V01T15, S15V02T15, S15V03T15, S15V04T15, S15V10T15, S20V01T05, S20V02T05, S20V03T05, S20V04T05</p>	
<p>S30K01-001</p>	<p>S30V01T01, S30V01T02, S30V01T03, S30V02T01, S30V02T02, S30V02T03, S30V03T01, S30V03T02, S30V03T03, S30V04T01, S30V04T02, S30V04T03</p>	
<p>S60K01-001</p>	<p>S60V01T01, S60V01T02, S60V01T03, S60V02T01, S60V02T02, S60V02T03, S60V03T01, S60V03T02, S60V03T03, S60V04T01, S60V04T02, S60V04T03</p>	

* = on request, minimum quantity may be requested

Repair Kits

Repair Kits HANDLES in ALUMINUM

Repair kit code	To be used with
S20K02-002	S15V01T11, S15V01T12, S15V02T11, S15V02T12, S15V03T11, S15V03T12, S15V04T11, S15V04T12, S15V10T11, S15V10T12, S20V01T01, S20V01T02, S20V02T01, S20V02T02, S20V03T01, S20V03T02, S20V04T01, S20V04T02
S60K02-002	S15V01T13, S15V02T13, S15V03T13, S15V04T13, S15V10T13, S20V01T03, S20V02T03, S20V03T03, S20V04T03, S30V01T01, S30V01T02, S30V01T03, S30V02T01, S30V02T02, S30V02T03, S30V03T01, S30V03T02, S30V03T03, S30V04T01, S30V04T02, S30V04T03, S60V01T01, S60V01T02, S60V01T03, S60V02T01, S60V02T02, S60V02T03, S60V03T01, S60V03T02, S60V03T03, S60V04T01, S60V04T02, S60V04T03



Repair Kits

Repair Kits HANDLES in 316L


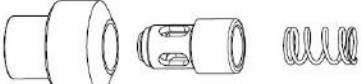

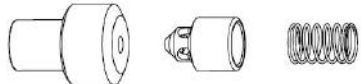
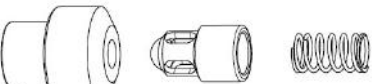




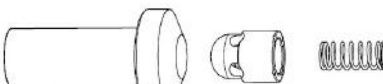
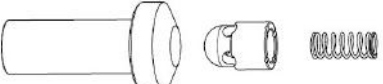

Repair kit code	To be used with
S20K02-001	S15V01T11, S15V01T12, S15V02T11, S15V02T12, S15V03T11, S15V03T12, S15V04T11, S15V04T12, S15V10T11, S15V10T12, S20V01T01, S20V01T02, S20V02T01, S20V02T02, S20V03T01, S20V03T02, S20V04T01, S20V04T02
S60K02-001	S15V01T13, S15V02T13, S15V03T13, S15V04T13, S15V10T13, S20V01T03, S20V02T03, S20V03T03, S20V04T03, S30V01T01, S30V01T02, S30V01T03, S30V02T01, S30V02T02, S30V02T03, S30V03T01, S30V03T02, S30V03T03, S30V04T01, S30V04T02, S30V04T03, S60V01T01, S60V01T02, S60V01T03, S60V02T01, S60V02T02, S60V02T03, S60V03T01, S60V03T02, S60V03T03, S60V04T01, S60V04T02, S60V04T03
S20K02-003*	S15V01T14, S15V01T15, S15V02T14, S15V02T15, S15V03T14, S15V03T15, S15V04T14, S15V04T15, S15V10T14, S15V10T15, S20V01T04, S20V02T04, S20V03T04, S20V04T04, S20V01T05, S20V02T05, S20V03T05, S20V04T05



* = on request, minimum quantity may be requested

Repair Kits

Repair Kits for Check Valves

Repair kit code	For valve no.	Description	Drawing
AS20F01-005-001	S20F01T01	Soft Check Valve 20 kpsi 1/4 " O.D.	
AS20F01-006-001	S20F01T02	Soft Check Valve 20 kpsi 3/8 " O.D.	
AS20F01-004-001	S20F01T03	Soft Check Valve 20 kpsi 9/16 " O.D.	
AS20F02-002-001	S20F02T01	Ball Check Valve 20 kpsi 1/4 " O.D.	
AS20F02-003-001	S20F02T02	Ball Check Valve 20 kpsi 3/8 " O.D.	
AS20F02-001-001	S20F02T03	Ball Check Valve 20 kpsi 9/16 " O.D.	
AS60F01-006-001	S60F01T01	Soft Check Valve 60 kpsi 1/4 " O.D.	
AS60F01-007-001	S60F01T02	Soft Check Valve 60 kpsi 3/8 " O.D.	
AS60F01-005-001	S60F01T03	Soft Check Valve 60 kpsi 9/16 " O.D.	
AS60F02-001-001	S60F02T01	Ball Check Valve 60 kpsi 1/4 " O.D.	
AS60F02-002-001	S60F02T02	Ball Check Valve 60 kpsi 3/8 " O.D.	
AS60F02-003-001	S60F02T03	Ball Check Valve 60 kpsi 9/16 " O.D.	

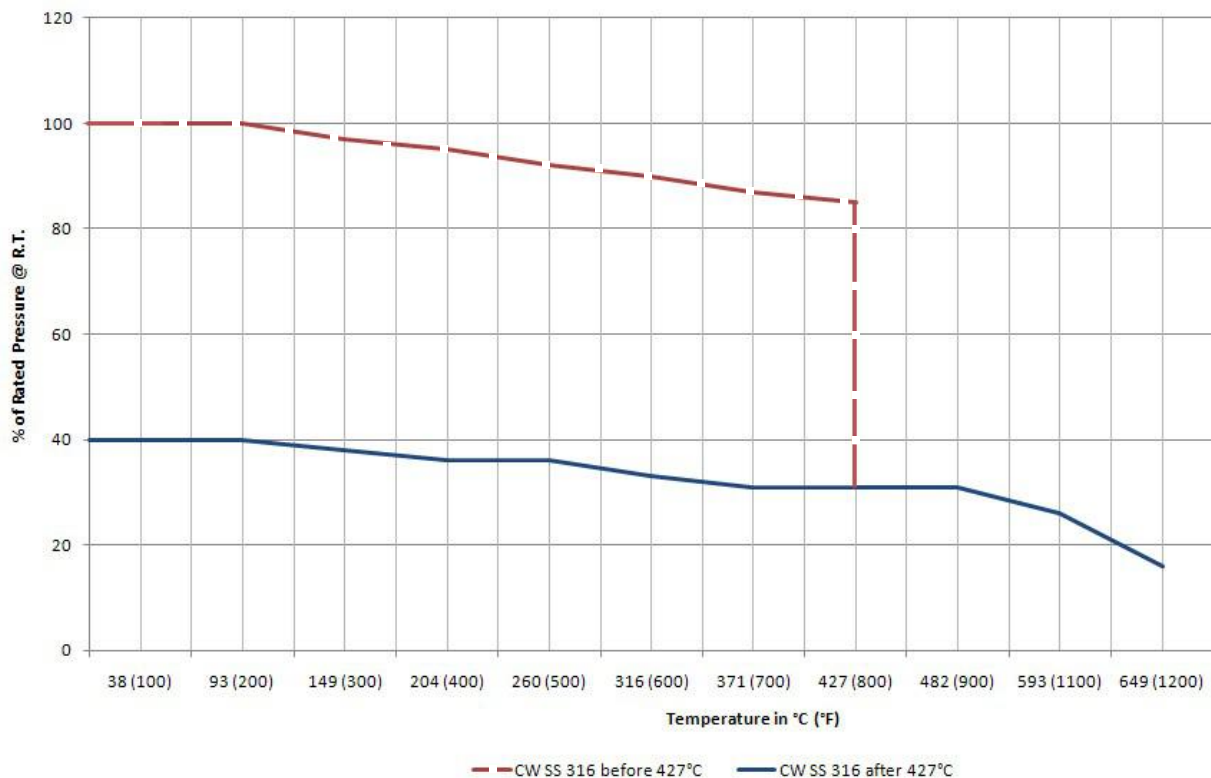
Technical info

Pressure/Temperature Rating Curve: SS 316 & SS 304

The chart below illustrates the maximum working pressure to which SS 316 valves and fittings can resist, according to the various temperatures. The values on the vertical axis are expressed as a percentage of the R.T. pressure rating of the item. For instance, an item with 10,000 psi (690 bar) rating pressure at R.T. would have a rating of 9,000 psi (621 bar) at the temperature of 316°C (600°F), i.e. 90% of its rating.

Please note that the chart and values below are for reference only and may change according to different features in pressure and temperature of trim and packing materials.

The chart is only valid provided that the working temperature of cold-worked SS 316 does not exceed 427°C (800°F). When exceeding this temperature the material will be permanently altered and the items should be considered as annealed material, i.e. they will use 40% of the cold-working rating for future operations.



Technical info

Cv values for Needle Valves

Please find below the Cv values for 2-way **needle straight valves**.

To determine Cv value of **needle angle valves**, please **increase** the value of the straight valve **by 50%** (based on water).

Needle code	Pressure	In/Out	Rated Cv
S20V01T01	20.000 psi	1/4 " O.D.	0.31
S20V01T02	20.000 psi	3/8 " O.D.	0.75
S20V01T03	20.000 psi	9/16 " O.D.	1.30
S20V01T04	20.000 psi	3/4 " O.D.	2.50
S20V01T05	20.000 psi	1 " O.D.	4.40

Needle code	Pressure	In/Out	Rated Cv
S30V01T01	30.000 psi	1/4 " O.D.	0.12
S30V01T02	30.000 psi	3/8 " O.D.	0.23
S30V01T03	30.000 psi	9/16 " O.D.	0.33

Needle code	Pressure	In/Out	Rated Cv
S60V01T01	60.000 psi	1/4 " O.D.	0.08
S60V01T02	60.000 psi	3/8 " O.D.	0.09
S60V01T03	60.000 psi	9/16 " O.D.	0.14

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