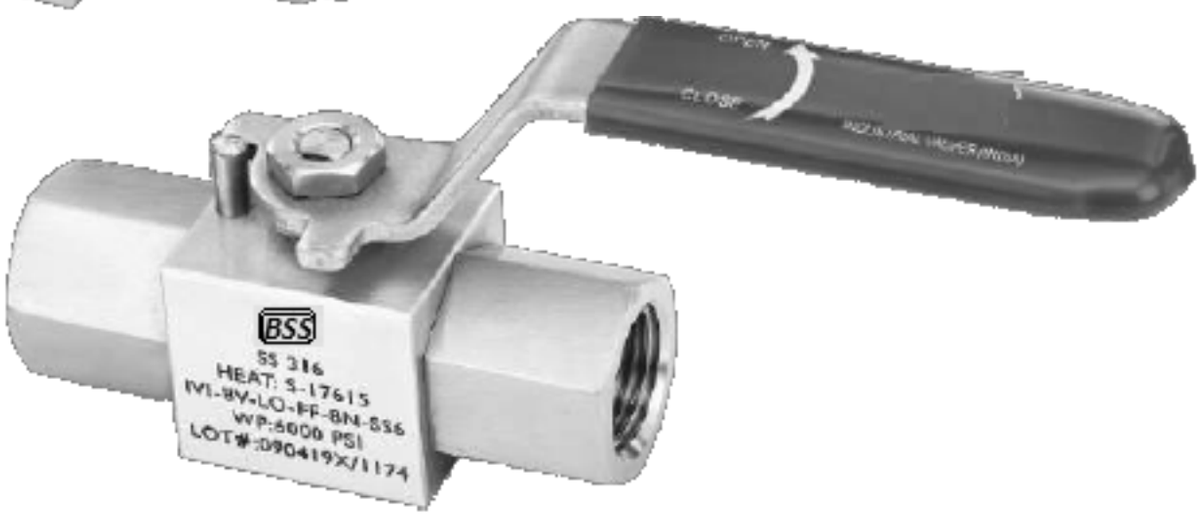
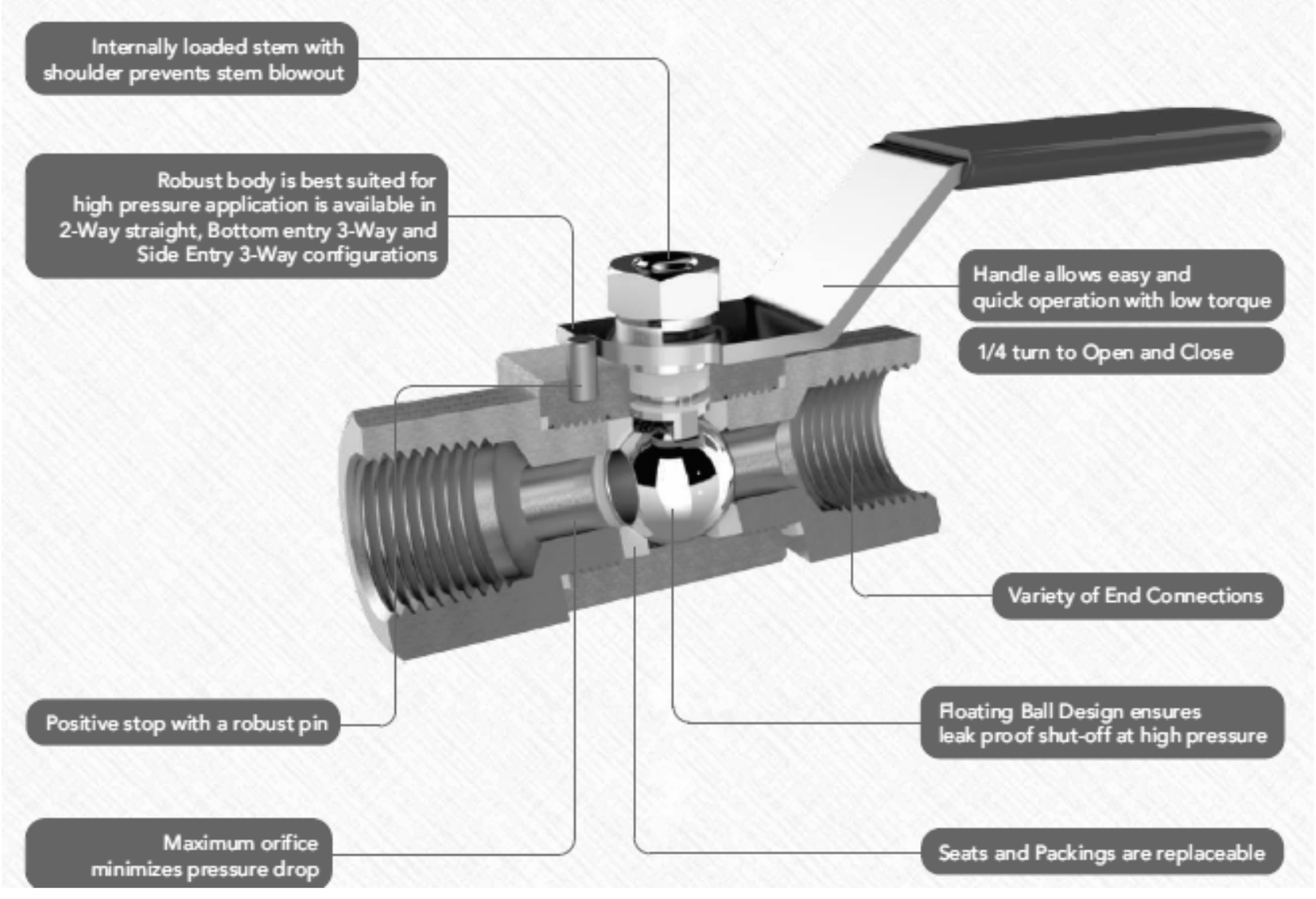
BALL VALVES



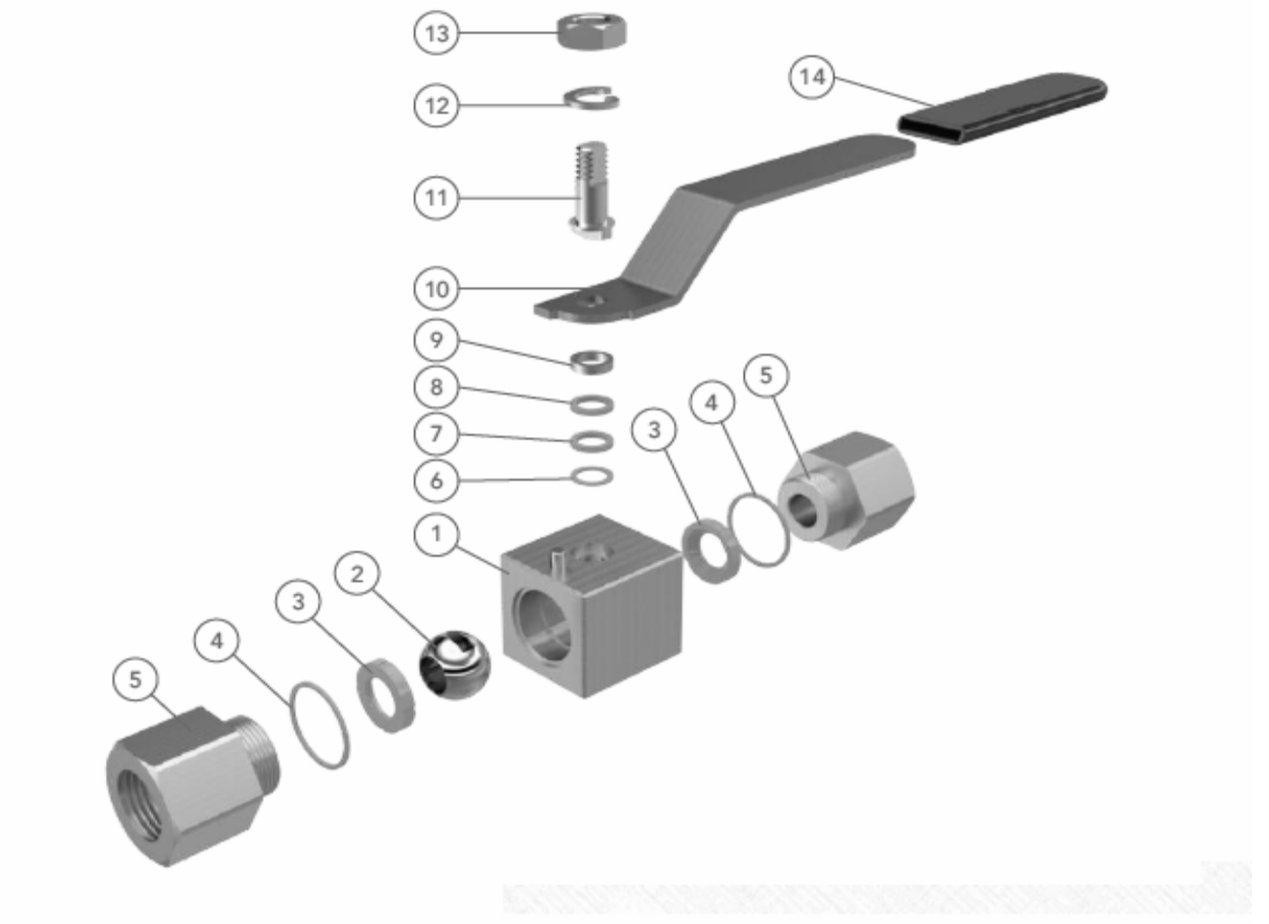
GUARANTEED
Reliability With
Economy

FEATURES AND BENEFITS



NOTE : Valves that have not been actuated for a period of time may have a higher initial actuation torque.
Valves are designed to control fluids in full open or full closed position.
Valves must be in open position during system test not to damage the valve seat.

BILL OF MATERIAL



Component	Materials Grade/ ASTM Specification
1. Body	A276 or A479/ SS316
2. Ball	
3. Seat	RPTFE/ DELRIN/ PEEK
4. End Seal	PTFE/ RPTFE
5. End Connector	A276 or A479/ SS316
6. Thrust Seal	PTFE/ RPTFE
7. Packing Ring	PTFE/ RPTFE

Component	Materials Grade/ ASTM Specification
8. Packing Ring	PTFE/ RPTFE
9. Gland	A 276 or A479/ SS316
10. Handle	SS 304
11. Stem	A 276 or A479/ SS316
12. Split Washer	SS 304
13. Handle Lock Nut	SS 304
14. Handle Sleeve	PVC

END CONNECTION LEGENDS

TUBE FITTING

Single Ferrule Tube Fitting

Double Ferrule Tube Fitting

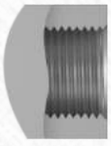
TAPERED PIPE THREADS

NPT Male Threads

NPT Female Threads

PARALLEL PIPE THREADS

BSP Parallel Male Threads



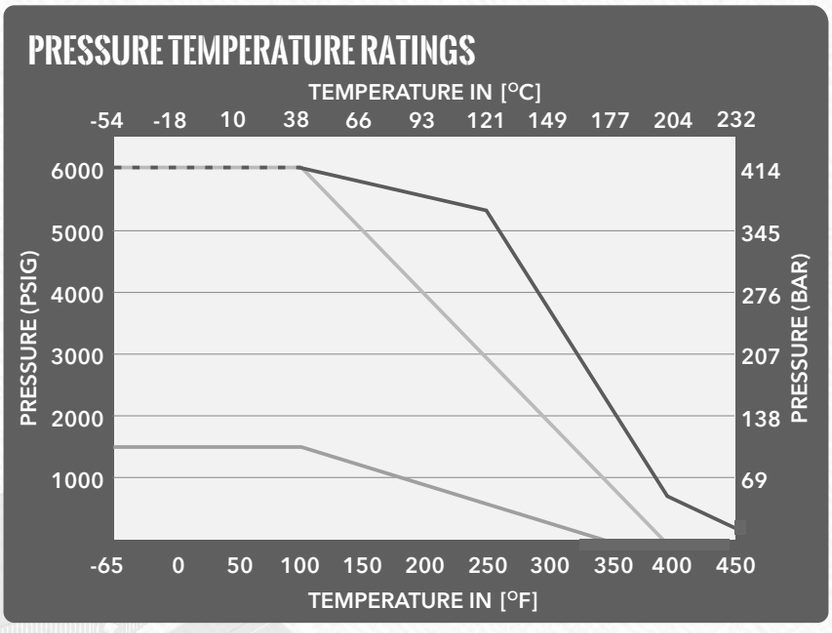
BSP Parallel Female Threads

WELD ENDS

Socket Welds Ends for Pipe & Tubes acc. to ASME B16.11

Butt Welds Ends for Pipe & Tubes acc. to ASME B16.9

PRESSURE TEMPERATURE RATINGS



PTFE RPTFE PEEK

ORDERING INFORMATION

BSS- BV- PM - FF - 8N - SS6 - N

MANUFACTURER

BSS

BASIC PART NO.

BV	2 Way Ball Valve
3BV	3 Way Ball Valve

VALVE BODY

Use Design	Valve Name
PM	Panel Mounted
LO	Lever Operated

INLET / OUTLET CONNECTION

F	Female NPT
M	Male NPT
TE	Tube OD

THREAD INLET / OUTLET CONNECTION

THREAD SIZE

Size	Use Code
1/4"	4
3/8"	6
1/2"	8
3/4"	12
1"	16

THREAD TYPE

Type	Use Code
NPT	N
BSP	G
BSPT	GT
SOCKET WELD	SW
BUTT WELD	BW

MATERIAL

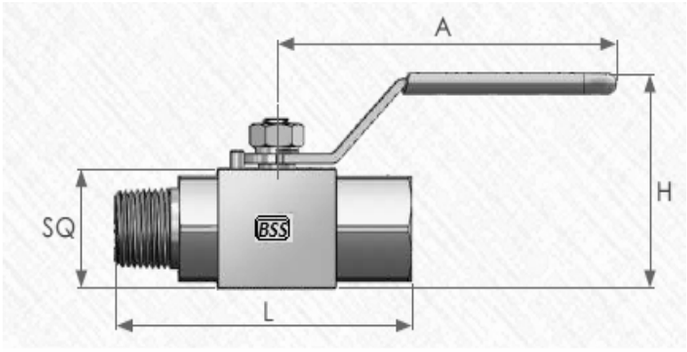
(SS6)	SS316	(M)	Monel 400
(SS6L)	SS316L	(HC-276)	Hastelloy C-276
(SS4)	SS304	(IC625)	Inconel 625
(D)	Duplex	(IC825)	Inconel 825
(SD)	Super Duplex	(CS)	Carbon Steel

SPECIAL REQUIREMENTS (MULTIPLE OPTIONS AVAILABLE)

(HL)	Handle Locking
(N)	NACE Compliance
(FS)	Fire Safe

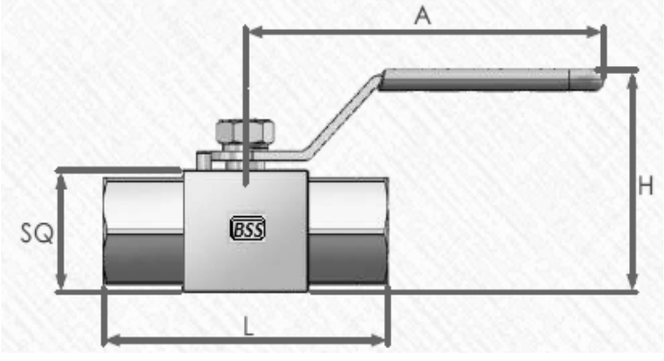
LEVER OPERATED

MALE X FEMALE



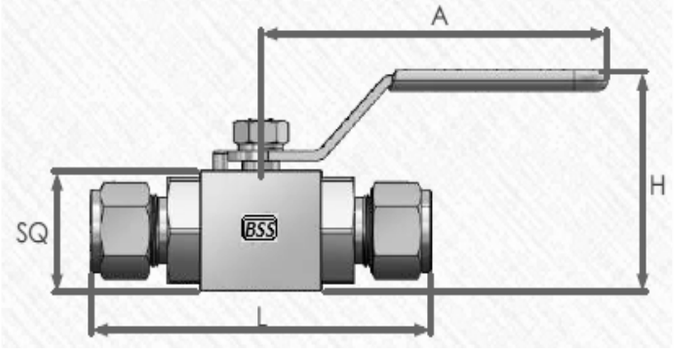
End Conn. Male X Female	Orifice	Cv	Dimensions (mm) L	SQ	H	A
1/4" NPT	6.35	2.5	70	32	65	85
3/8" NPT	6.35	2.5	70	32	65	85
1/2" NPT	10.0	7.5	95	40	85	115
3/4" NPT	15.8	19.0	115	50	105	135
1" NPT	19.0	30.0	120	50	105	135

FEMALE X FEMALE



End Conn. Female X Female	Orifice	Cv	Dimensions (mm) L	SQ	H	A
1/4" NPT	6.35	2.5	65	32	65	85
3/8" NPT	6.35	2.5	65	32	65	85
1/2" NPT	10.0	7.5	90	40	85	115
3/4" NPT	15.8	19.0	110	50	105	135
1" NPT	19.0	30.0	115	50	105	135

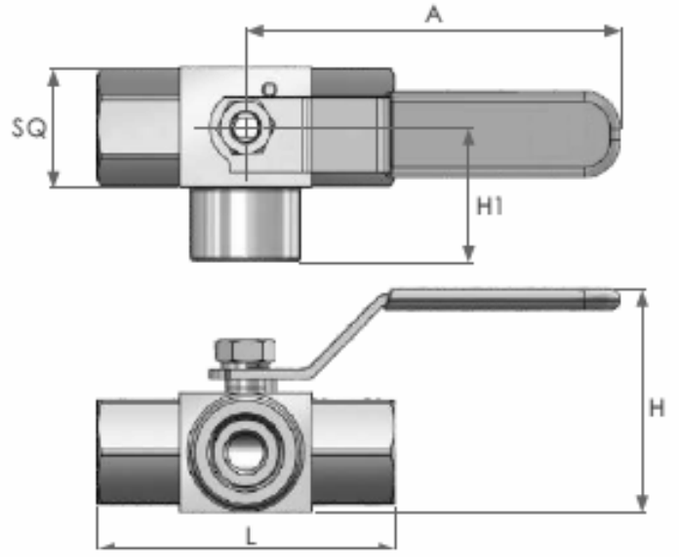
TUBE OD



End Conn. Tube OD	Orifice	Cv	Dimensions (mm) L	SQ	H	A
1/4" OD	4.8	1.2	80	32	65	85
3/8" OD	6.35	2.5	85	32	65	85
1/2" OD	8.0	4.5	100	35	85	115
3/4" OD	15.8	19.0	120	50	105	135
1" OD	19.0	30.0	130	50	105	135

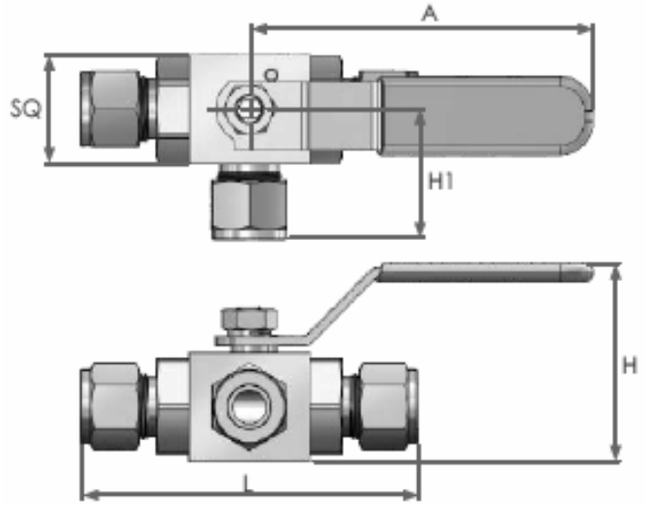
3 WAY LEVER OPERATED

FEMALE X FEMALE (SIDE ENTRY)



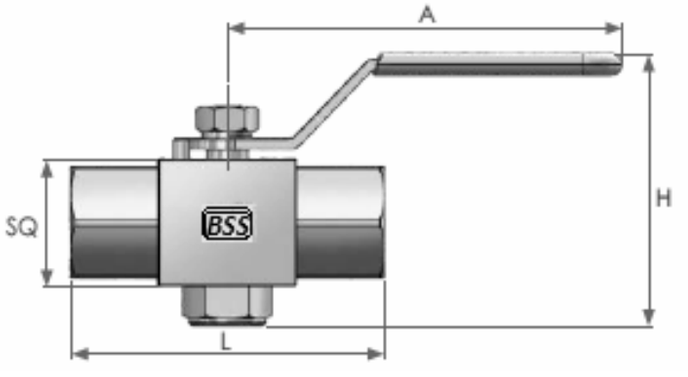
End Conn. Female X Female	Orifice	Dimensions (mm) L	SQ	H	H1	A
1/4" NPT	6.35	65	32	65	30	85
3/8" NPT	6.35	65	32	65	30	85
1/2" NPT	10.0	90	40	85	40	115
3/4" NPT	15.8	110	50	105	50	135
1" NPT	19.0	115	50	105	50	135

TUBE OD (SIDE ENTRY)



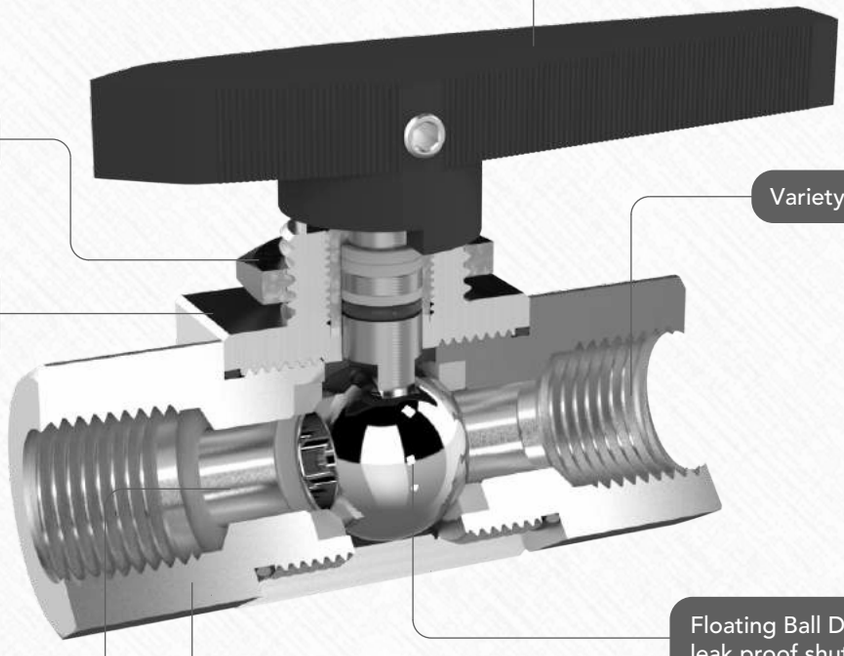
End Conn. Tube OD	Orifice	Dimensions (mm) L	SQ	H	H1	A
1/4" OD	4.8	80	32	65	30	85
3/8" OD	6.35	85	32	65	30	85
1/2" OD	8.0	100	35	85	40	115
3/4" OD	15.8	120	50	105	50	135
1" OD	19.0	130	50	105	50	135

FEMALE X FEMALE (BOTTOM ENTRY)



End Conn. Female X Female	Orifice	Cv	Dimensions (mm) L	SQ	H	A
1/4" NPT	6.35	2.5	65	32	75	85
3/8" NPT	6.35	2.5	65	32	75	85
1/2" NPT	10.0	7.5	90	40	95	115
3/4" NPT	15.8	19.0	110	50	115	135
1" NPT	19.0	30.0	115	50	115	135

FEATURES AND BENEFITS



Handle indicates flow direction.

Handle allows easy and quick operation with low torque and 1/4 turn to Open and Close

Panel mounting nut provides easy installation

Variety of End Connections

Body is available in 2-Way Straight, 2-Way Angle and 3-Way configurations

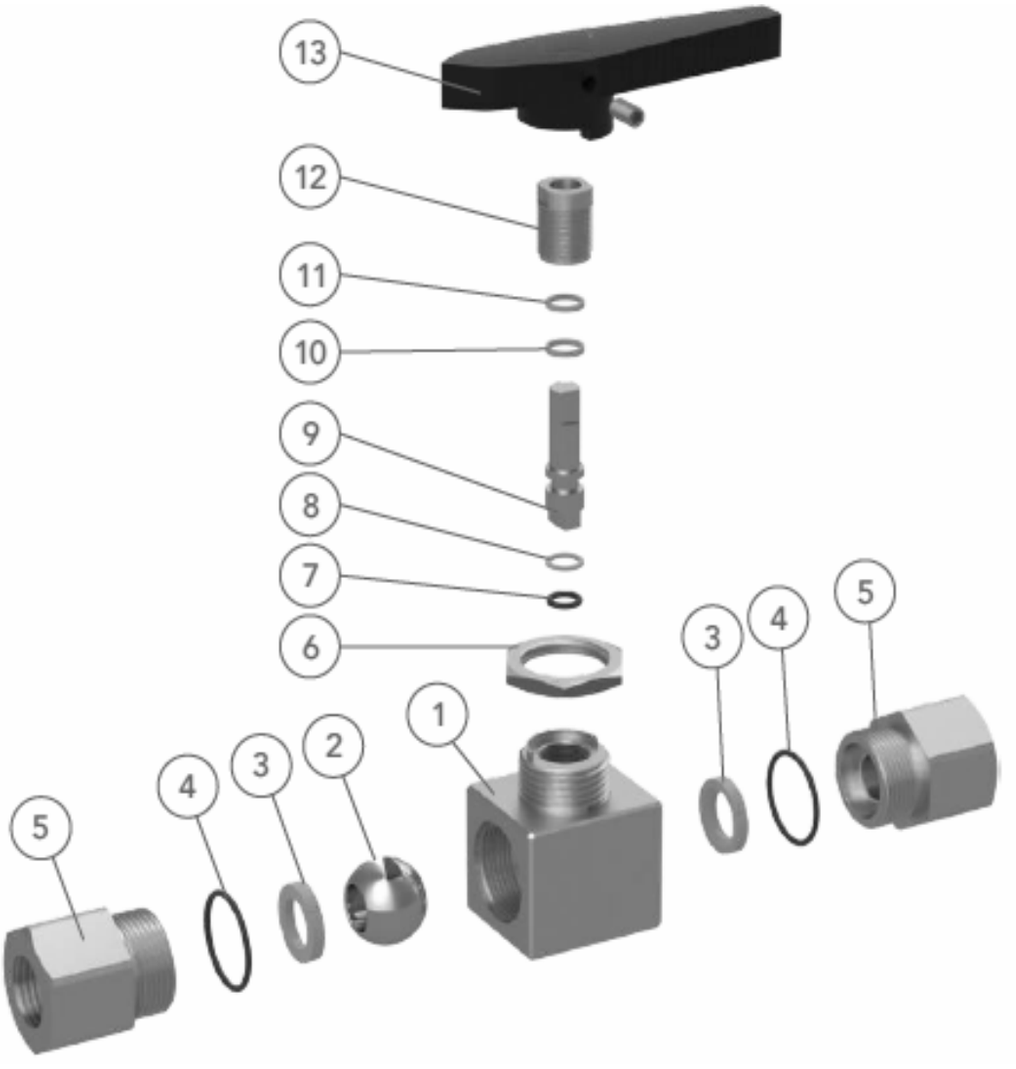
Floating Ball Design ensures leak proof shut-off at high pressure

Compact maximum flow design

Three-piece design for easy installation and maintenance

NOTE : Valves that have not been actuated for a period of time may have a higher initial actuation torque.
Valves are designed to control fluids in full open or full closed position.
Valves must be in open position during system test not to damage the valve seat.

BILL OF MATERIAL

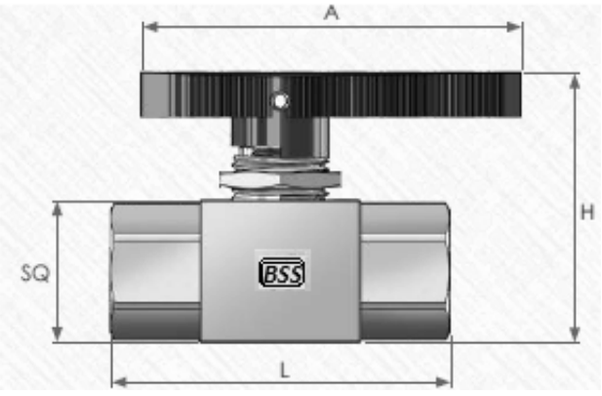


Component	Materials Grade/ ASTM Specification
1. Body	A276 or A479/ SS316
2. Ball	
3. Seat	RPTFE/ DELRIN/ PEEK
4. End Seal	FKM/ VITON/ BUNA N
5. End Connector	A276 or A479 / SS316
6. Check Nut	SS 316
7. Packing Seal	FKM/ VITON/ BUNA N

Component	Materials Grade/ ASTM Specification
8. Back up Ring	PTFE/ RPTFE
9. Stem	A276 or A479/ SS316
10. Packing Ring	PTFE / RPTFE
11. Packing Ring	PTFE / RPTFE
12. Gland Nut	A276 or A479 / SS316
13. Handle	Nylon + SS 304
14. Handle Screw	SS 304

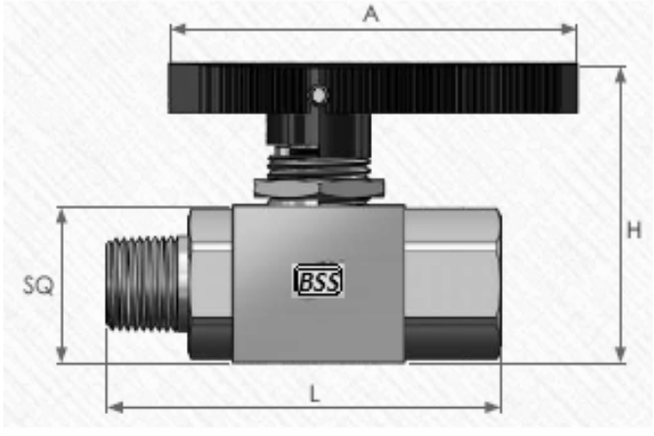
PANEL MOUNTED

FEMALE X FEMALE



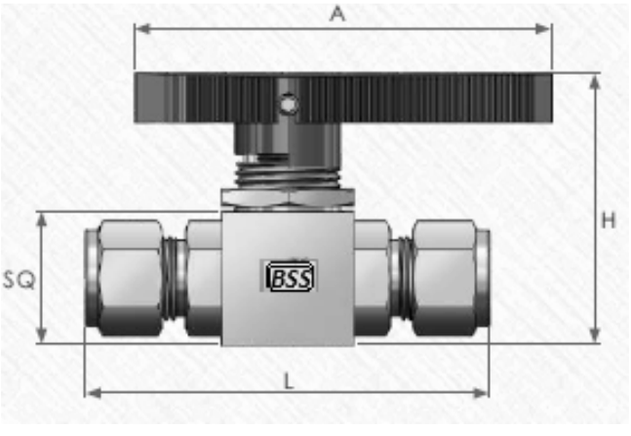
End Conn. Female X Female	Orifice	Cv	Dimensions (mm) L	SQ	H	A
1/4" NPT	4.8	1.2	65	25.4	60	68
3/8" NPT	6.35	2.5	65	25.4	70	68
1/2" NPT	10.0	7.5	90	35	78	88
3/4" NPT	15.8	19.0	110	50	100	88
1" NPT	19.0	30.0	115	50	100	88

MALE X FEMALE



End Conn. Female X Female	Orifice	Cv	Dimensions (mm) L	SQ	H	A
1/4" NPT	4.8	1.2	70	25.4	60	68
3/8" NPT	6.35	2.5	70	25.4	75	68
1/2" NPT	10.0	7.5	95	35	78	88
3/4" NPT	15.8	19.0	115	50	100	88
1" NPT	19.0	30.0	120	50	100	88

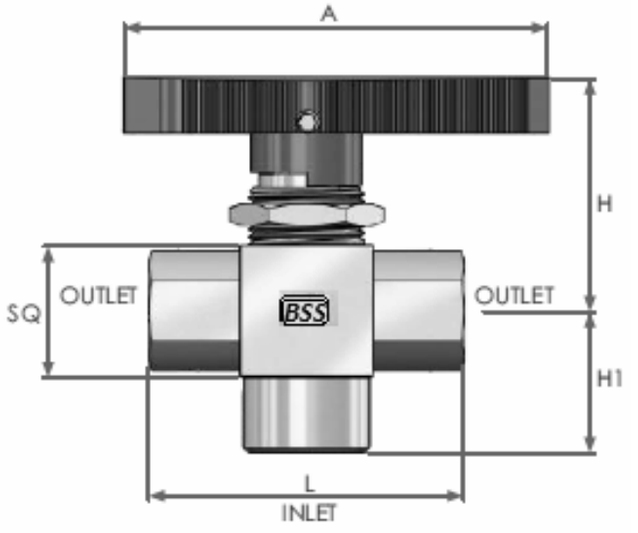
TUBE OD



End Conn. Tube OD	Orifice	Cv	Dimensions (mm) L	SQ	H	A
1/4" OD	4.8	1.2	80	25.4	60	68
3/8" OD	6.35	2.5	82	25.4	60	68
1/2" OD	8.0	4.5	92	30	75	88
3/4" OD	15.8	19.0	120	50	100	88
1" OD	19.0	30.0	130	50	100	88

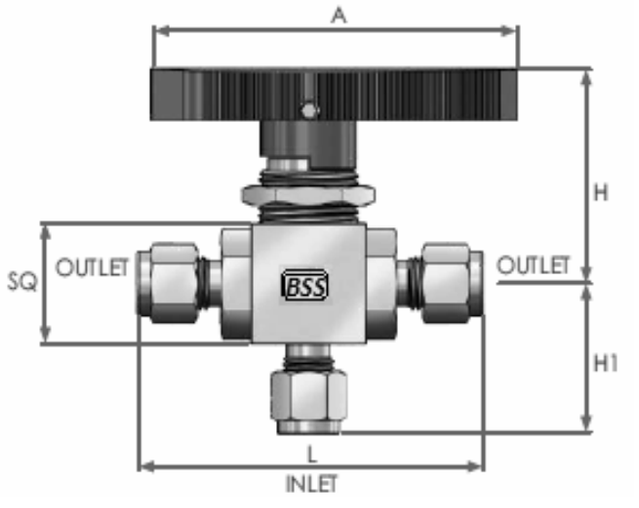
3 WAY PANEL MOUNTED

FEMALE X FEMALE



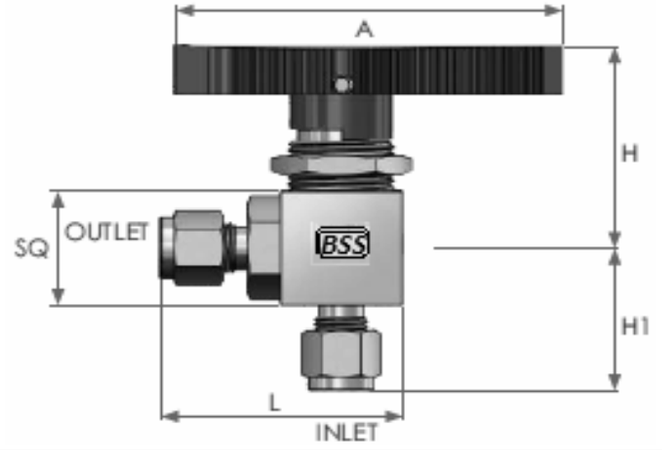
End Conn. Female X Female	Orifice	Dimensions (mm) L	SQ	H	H1	A
1/4" NPT	4.8	65	25.4	45	30	68
3/8" NPT	8.0	65	32	50	30	68
1/2" NPT	8.0	90	35	50	42	88
3/4" NPT	15.8	110	50	75	50	88
1" NPT	19.0	115	50	75	50	88

TUBE OD



End Conn. Tube OD	Orifice	Dimensions (mm) L	SQ	H	H1	A
1/4" OD	4.8	80	25.4	45	30	68
3/8" OD	6.35	82	25.4	45	30	68
1/2" OD	8.0	92	30	50	40	88
3/4" OD	15.8	120	50	75	50	88
1" OD	19.0	130	50	75	50	88

ANGLE PATTERN TUBE OD

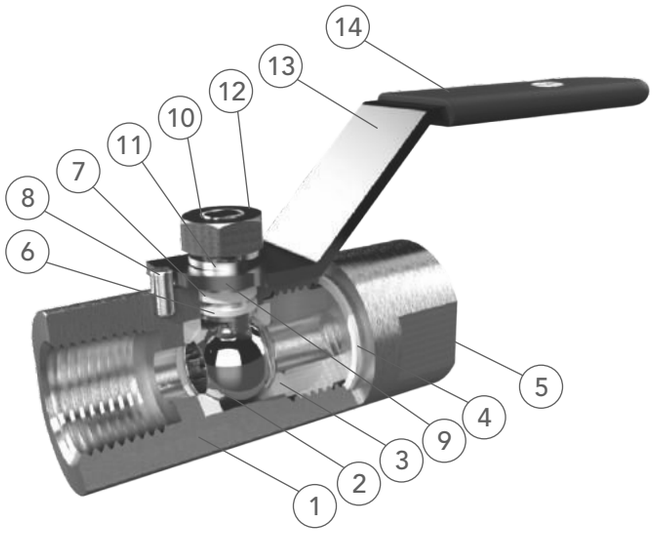


End Conn. Tube OD	Orifice	Dimensions (mm) L	SQ	H	H1	A
1/4" OD	4.8	55	25.4	45	30	68
3/8" OD	6.35	55	25.4	45	30	68
1/2" OD	8.0	60	30	50	40	88
3/4" OD	15.8	85	50	75	50	88
1" OD	19.0	95	50	75	50	88

ROUND BODY

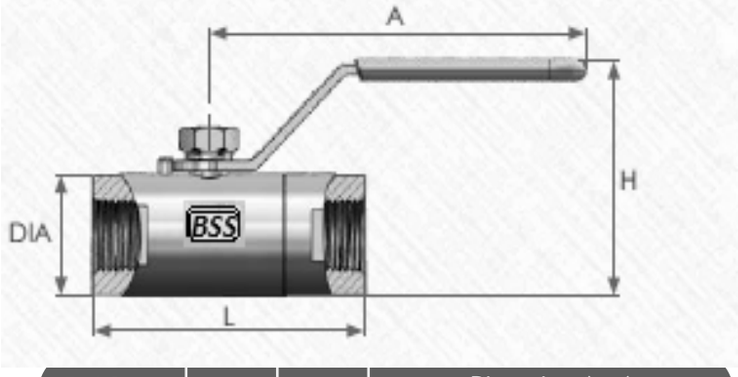
FEATURE

- Blowout proof design with internally loaded stem
- Low Torque Operation
- Handle indicates the flow direction
- Seat wear compensation by free floating ball
- Positive stop with a robust pin
- All Ball Valves have a standard working pressure of 1500psi
- Various end ports include NPT, BSPP, BSPT, Metric, Tube OD, etc



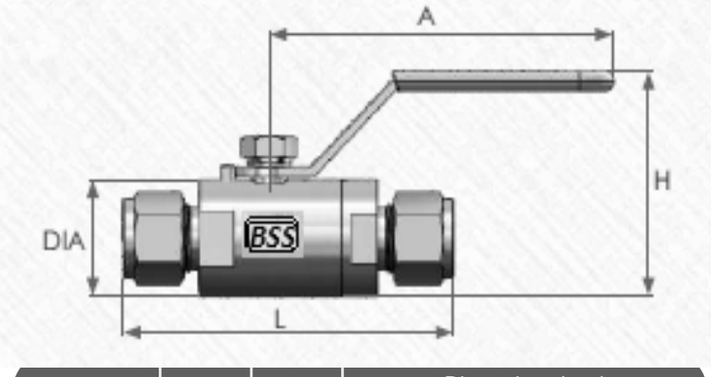
Component	Materials Grade/ ASTM Specification
1. BODY	A276 or A479/ SS316
2. BALL	
3. SEAT	RPTFE/ DELRIN
4. END SEAL	PTFE/ RPTFE
5. END CONNECTOR	A276 or A479 / SS316
6. THRUST SEAL	PTFE/ RPTFE
7. PACKING RING	PTFE/ RPTFE
8. LOCKING PIN	SS 304
9. GLAND	A276 or A479 / SS316
10. STEM	A276 or A479 / SS316
11. SPLIT WASHER	SS 304
12. HANDLE LOCK NUT	SS 304
13. HANDLE	SS 304
14. HANDLE SLEEVE	PVC

FEMALE X FEMALE



End Conn. Female X Female	Orifice	Cv	Dimensions (mm) L	DIA	H	A
1/4" NPT	6.35	1.2	60	27	60	85
3/8" NPT	6.35	2.5	60	27	60	85
1/2" NPT	10.0	7.5	80	32	82	115

TUBE OD



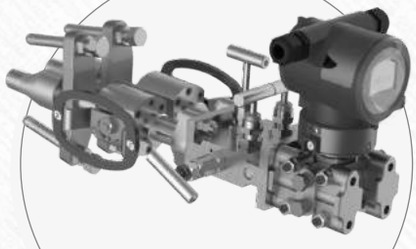
End Conn. Tube OD	Orifice	Cv	Dimensions (mm) L	DIA	H	A
1/4" OD	6.35	2.5	75	27	60	85
3/8" OD	6.35	2.5	85	27	60	85
1/2" OD	10.0	7.5	100	32	82	115

OTHER PRODUCT

INSTRUMENT MANIFOLDS

NEEDLE VALVES

TUBE FITTINGS



HOOK-UPS

PIPE FITTINGS

CHECK VALVES

BLOCK AND BLEED VALVES

GAUGE ROOT VALVES

HIGH PRESSURE VALVES AND FITTINGS