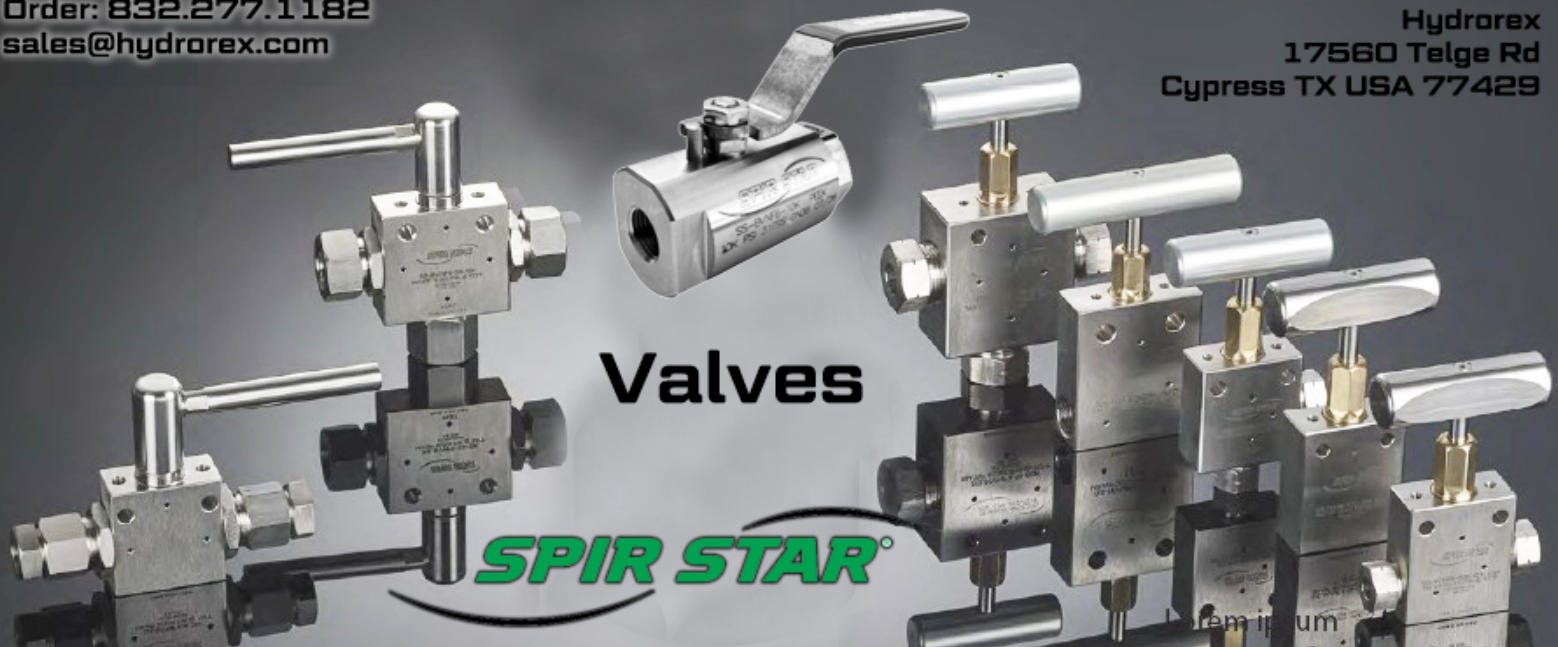




Needle Valves

SPIR STAR needle valves are made to the highest quality standards and thus achieve high safety and a long service life even when used in difficult operating conditions. The needle valves can be used with both gaseous and liquid media.

Their innovative design reduces vibrations, which eliminates the necessity of an external clamp to fasten the stem. The valves are also provided with relief holes.

In addition, the SPIR STAR valves are supplied including collar + gland nut.

Technical data:

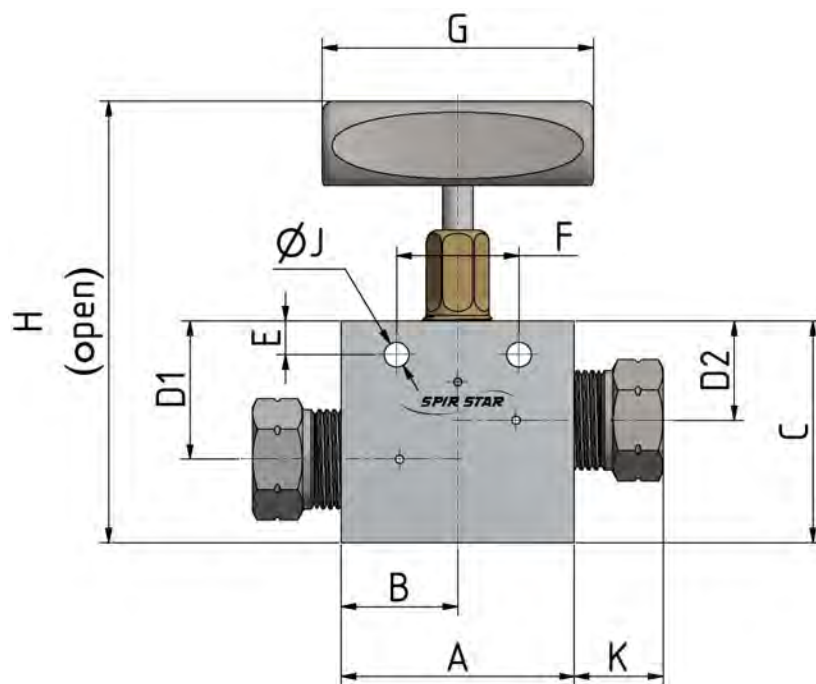
Thread Types:	High-Pressure, Medium-Pressure and NPT
Valve Types:	2-Way Straight Valves, 2-Way Angle Valves, 3-Way Valves (Two inlets under pressure / one inlet under pressure), 3-Way/2-Stem Valves Valves with replaceable seat
Material:	Body: 316 Stainless Steel Stem: 17-4PH Sealing: Glas filled Teflon
Max. Working Pressure:	4.140 bar // 60.000 psi
Temperature:	NPT : -18°C to +204°C HP/MP: -17°C to +315°C

Specials:

- extreme temperatures
- ultra high pressure valves up to 100.000 psi
- special materials
- pneumatic valves

2-Way-Straight-Needle Valve

High-Pressure

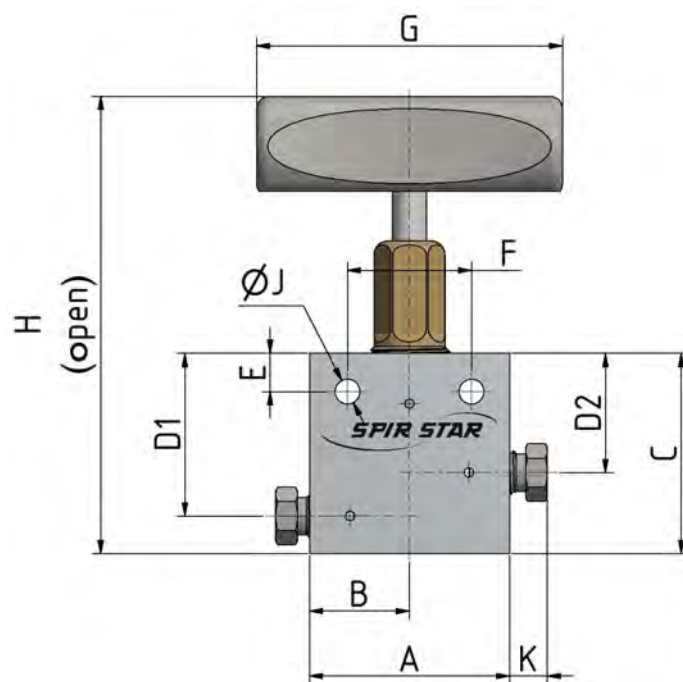


Part Number	Thread Description	Tube Thread	Screw-in Thread	Orifice		Repair Kit	Suitable Tubing
				mm	inch		
Working pressure 2.070 bar / 30.000 psi							
SS-NVHF4-30K	HF4	1/4"x28UNF LH	9/16"x18UNF	2,362	0,093	RK-NV-30K	TU-HP4-60K
SS-NVHF6-30K	HF6	3/8"x24UNF LH	3/4"-16UNF	3,175	0,125	RK-NV-30K	TU-HP6-60K
SS-NVHF9-30K	HF9	9/16"x18UNF LH	1-1/8"x12UNF	3,175	0,125	RK-NV-30K	TU-HP9-60K
Working pressure 4.140 bar / 60.000 psi							
SS-NVHF4-60K	HF4	1/4"x28UNF LH	9/16"x18UNF	1,575	0,062	RK-NV-60K	TU-HP4-60K
SS-NVHF6-60K	HF6	3/8"x24UNF LH	3/4"-16UNF	1,575	0,062	RK-NV-60K	TU-HP6-60K
SS-NVHF9-60K	HF9	9/16"x18UNF LH	1-1/8"x12UNF	1,575	0,062	RK-NV-60K	TU-HP9-60K

Part Number	Unit	Dimensions												
		A	B	C	D1	D2	E	F	G	H	I	J	K	L
SS-NVHF4-30K	mm	50,80	25,40	50,80	38,10	28,45	9,65	35,05	76,20	120,40	-	7,11	14,99	25,40
	inch	2,00	1,00	2,00	1,50	1,12	0,38	1,38	3,00	4,74	-	0,28	0,59	1,00
SS-NVHF4-60K	mm	50,80	25,40	53,85	42,93	33,27	9,65	35,05	76,20	124,21	-	7,11	14,99	25,40
	inch	2,00	1,00	2,12	1,69	1,31	0,38	1,38	3,00	4,89	-	0,28	0,59	1,00
SS-NVHF6-30K	mm	50,80	25,40	50,80	38,10	28,45	9,65	35,05	76,20	120,40	-	7,11	18,29	25,40
	inch	2,00	1,00	2,00	1,50	1,12	0,38	1,38	3,00	4,74	-	0,28	0,72	1,00
SS-NVHF6-60K	mm	50,80	25,40	57,15	42,93	33,27	9,65	35,05	76,20	127,51	-	7,11	18,29	25,40
	inch	2,00	1,00	2,25	1,69	1,31	0,38	1,38	3,00	5,02	-	0,28	0,72	1,00
SS-NVHF9-30K	mm	66,55	33,27	62,00	39,62	28,45	9,65	35,05	76,20	131,60	-	7,11	25,40	38,10
	inch	2,62	1,31	2,44	1,56	1,12	0,38	1,38	3,00	5,18	-	0,28	1,00	1,50
SS-NVHF9-60K	mm	66,55	33,27	63,50	44,45	33,27	9,65	35,05	76,20	133,86	-	7,11	25,40	38,10
	inch	2,62	1,31	2,50	1,75	1,31	0,38	1,38	3,00	5,27	-	0,28	1,00	1,50

2-Way-Straight-Needle Valve

Medium-Pressure



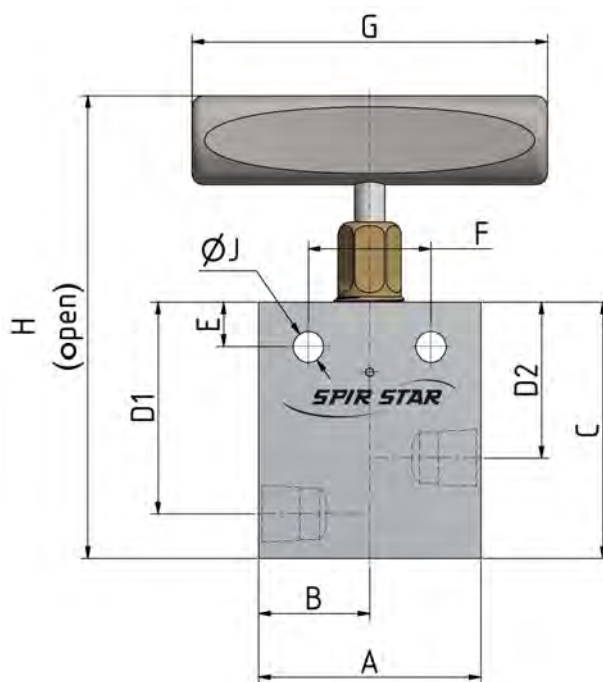
Part Number	Thread Description	Tube Thread	Screw-in Thread	Orifice		Repair Kit	Suitable Tubing
				mm	inch		
Working pressure 1.380 bar / 20.000 psi							
SS-NVMF4-20K	MF4	1/4"x28UNF LH	7/16"-20UNF	3,175	0,125	RK-NVMF4/MF6/NF4	TU-MP4-20K
SS-NVMF6-20K	MF6	3/8"x24UNF LH	9/16"x18UNF	5,080	0,200	RK-NVMF4/MF6/NF4	TU-MP6-20K
SS-NVMF9-20K	MF9	9/16"x18UNF LH	13/16"-16UNF	7,925	0,312	RK-NVNF8/NF6/MF9	TU-MP9-20K
SS-NVMF12-20K	MF12	3/4"x16UNF LH	3/4"x14NPSM	11,125	0,438	RK-NV12	TU-MP12-20K
SS-NVMF16-20K	MF16	1"x14UNF LH	1-3/8"x12UNF	14,275	0,562	RK-NV16	TU-MP16-20K

Part Number	Unit	Dimensions												
		A	B	C	D1	D2	E	F	G	H	I	J	K	L
SS-NVMF4-20K	mm	50,80	25,40	50,80	41,40	30,23	9,65	31,50	76,20	122,94	-	6,35	9,65	25,40
	inch	2,00	1,00	2,00	1,63	1,19	0,38	1,24	3,00	4,84	-	0,25	0,38	1,00
SS-NVMF6-20K	mm	50,80	25,40	50,80	41,40	30,23	9,65	31,50	76,20	122,94	-	6,35	12,19	25,40
	inch	2,00	1,00	2,00	1,63	1,19	0,38	1,24	3,00	4,84	-	0,25	0,48	1,00
SS-NVMF9-20K	mm	63,50	31,75	73,15	60,45	44,45	12,70	35,05	102,00	138,68	-	8,64	17,27	25,40
	inch	2,50	1,25	2,88	2,38	1,75	0,50	1,38	4,02	5,46	-	0,34	0,68	1,00
SS-NVMF12-20K	mm	76,20	38,10	95,25	76,20	57,15	15,75	44,45	204,98	179,58	-	11,18	14,99	35,05
	inch	3,00	1,50	3,75	3,00	2,25	0,62	1,75	8,07	7,07	-	0,44	0,59	1,38
SS-NVMF16-20K	mm	104,65	52,32	120,65	95,25	71,63	28,45	63,50	261,37	227,58	-	14,22	18,80	44,45
	inch	4,12	2,06	4,75	3,75	2,82	1,12	2,50	10,29	8,96	-	0,56	0,74	1,75

2-Way-Straight-Needle Valve



NPT



Part Number	Thread Description	Tube Thread	Screw-in Thread	Orifice		Repair Kit	Suitable Tubing
				mm	inch		
Working pressure 1.035 bar / 15.000 psi							
SS-NVNF4-15K	NF4		1/4"	6,400	0,252	RK-NVMF4/MF6/NF4	
SS-NVNF6-15K	NF6		3/8"	7,900	0,311	RK-NVNF8/NF6/MF9	
SS-NVNF8-15K	NF8		1/2"	7,900	0,311	RK-NVNF8/NF6/MF9	

Part Number	Unit	Dimensions												
		A	B	C	D1	D2	E	F	G	H	I	J	K	L
SS-NVNF4-15K	mm	50,80	25,40	50,80	41,28	30,20	9,70	31,50	76,20	123,00	-	6,40	-	25,40
	inch	2,00	1,00	2,00	1,63	1,19	0,38	1,24	3,00	4,84	-	0,25	-	1,00
SS-NVNF6-15K	mm	63,50	31,80	73,20	60,40	44,50	12,70	35,00	102,00	139,00	-	8,70	-	25,40
	inch	2,50	1,25	2,88	2,38	1,75	0,50	1,38	4,02	5,47	-	0,34	-	1,00
SS-NVNF8-15K	mm	63,50	31,80	76,20	60,40	44,50	12,70	35,00	102,00	142,00	-	8,70	-	31,60
	inch	2,50	1,25	3,00	2,38	1,75	0,50	1,38	4,02	5,59	-	0,34	-	1,24

In order to achieve the highest quality standards and ensure high safety and a long service life even under difficult operating conditions, all SPIR STAR ball valves are manufactured in trunnion style.

In this connection, we would like to emphasize that the valves can be offered with various orifice sizes. The valves are also provided with relief holes.

The marking on the valves allows them to be traced at any time.

In addition, the SPIR STAR ball valves are supplied including collar + gland nut.

Technical data:

Thread Types:	High Pressure, Medium Pressure and NPT
Valves Types:	2-Way Straight Valves, 3-Way Valves (90° diverting), 3-Way Valves (180° switching),
Material:	Body: 316 Stainless Steel Sealing: O-Ring with PEEK Backup Ring
Max. Working Pressure	1.380 bar // 20.000 psi
Temperature	-28°C to +204°C

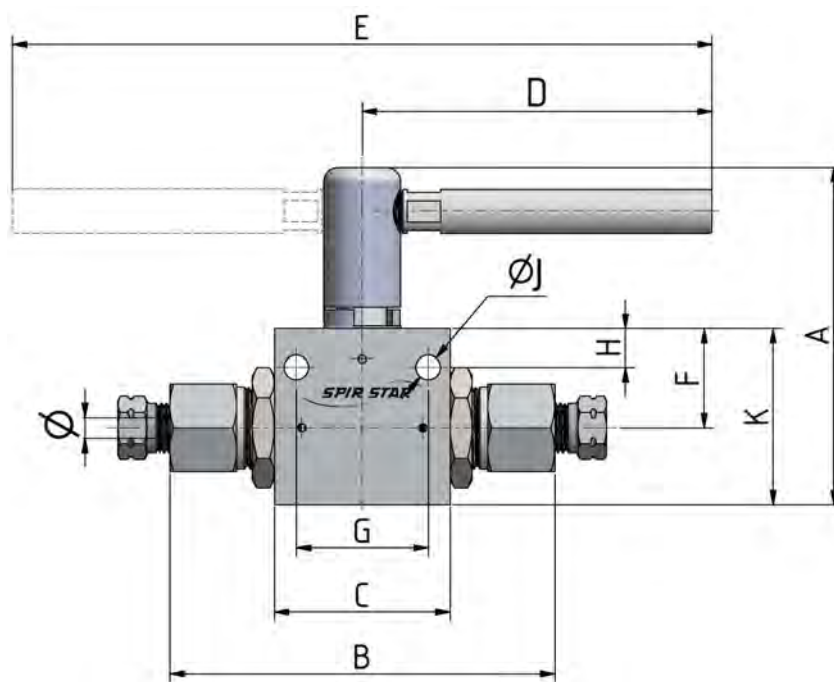
Specials:

- extreme temperatures
- special materials
- electrical actuators

ATTENTION: We recommend not to use SPIR STAR ball valves with molecular gases (helium/hydrogen).

2-Way-Straight-Ball Valve

High-Pressure

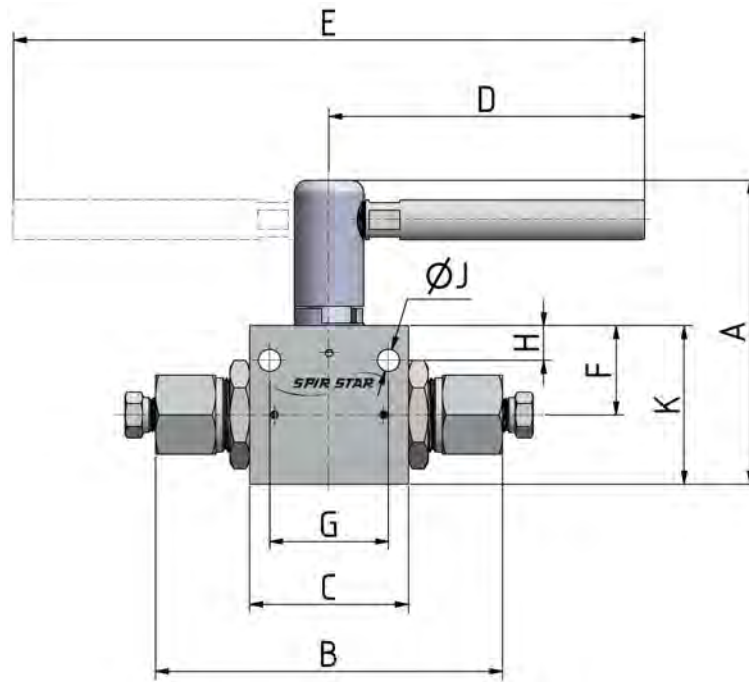


Part Number	Thread Description	Tube Thread	Screw-in Thread	Orifice		Repair Kit	Suitable Tubing
				mm	inch		
Working pressure 1.380 bar / 20.000 psi							
SS-BVHF4-4-20K	HF4	1/4"x28UNF LH	9/16"x18UNF	6,350	0,250	RK-BV4T	TU-HP4-60K
SS-BVHF6-4-20K	HF6	3/8"x24UNF LH	3/4"-16UNF	6,350	0,250	RK-BV4T	TU-HP6-60K
SS-BVHF9-4-20K	HF9	9/16"x18UNF LH	1-1/8"x12UNF	6,350	0,250	RK-BV4T	TU-HP9-60K

Part Number	Unit	Dimensions												
		A	B	C	D1	D2	E	F	G	H	I	J	K	L
SS-BVHF4-4-20K	mm	97,30	110,50	50,80	101,10	-	-	28,70	38,10	11,20	-	7,10	50,80	-
	inch	3,83	4,35	2,00	3,98	-	-	1,13	1,50	0,44	-	0,28	2,00	-
SS-BVHF6-4-20K	mm	97,30	110,50	50,80	101,10	-	-	28,70	38,10	11,20	-	7,10	50,80	-
	inch	3,83	4,35	2,00	3,98	-	-	1,13	1,50	0,44	-	0,28	2,00	-
SS-BVHF9-4-20K	mm	97,30	110,50	50,80	101,10	-	-	28,70	38,10	11,20	-	7,10	50,80	-
	inch	3,83	4,35	2,00	3,98	-	-	1,13	1,50	0,44	-	0,28	2,00	-

2-Way-Straight-Ball Valve

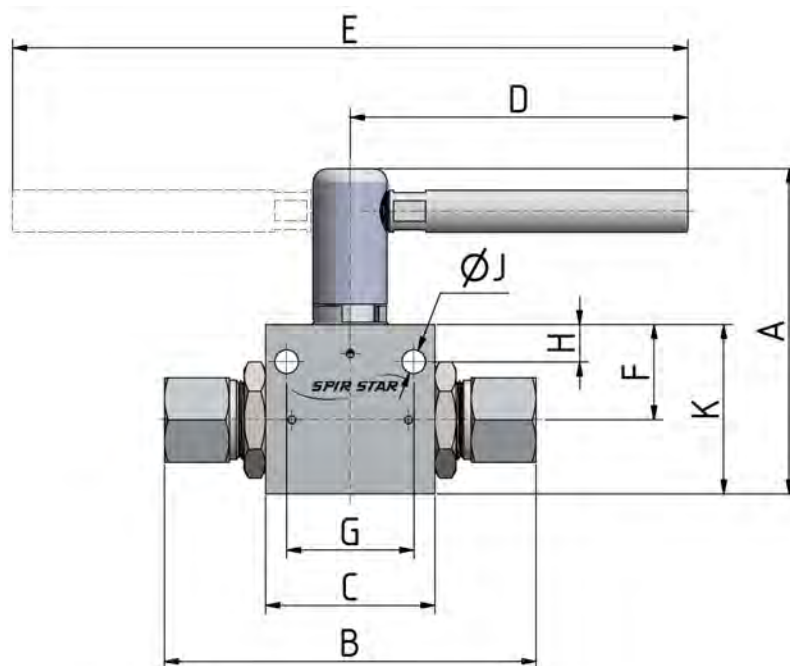
Medium-Pressure



Part Number	Thread Description	Tube Thread	Screw-in Thread	Orifice		Repair Kit	Suitable Tubing
				mm	inch		
Working pressure 1.035 bar / 15.000 psi							
SS-BVMF12-8-15K	MF12	3/4"x16UNF LH	3/4"x14NPSM	12,700	0,500	RK-BV8T	TU-MPI2-20K
SS-BVMF16-8-15K	MF16	1"x14UNF LH	1-3/8"x12UNF	12,700	0,500	RK-BV8T	TU-MPI6-20K
Working pressure 1.380 bar / 20.000 psi							
SS-BVMF4-4-20K	MF4	1/4"x28UNF LH	7/16"-20UNF	6,350	0,250	RK-BV4T	TU-MP4-20K
SS-BVMF4-6-20K	MF4	1/4"x28UNF LH	7/16"-20UNF	9,530	0,375	RK-BV6T	TU-MP4-20K
SS-BVMF6-4-20K	MF6	3/8"x24UNF LH	9/16"x18UNF	6,350	0,250	RK-BV4T	TU-MP6-20K
SS-BVMF6-6-20K	MF6	3/8"x24UNF LH	9/16"x18UNF	9,530	0,375	RK-BV6T	TU-MP6-20K
SS-BVMF9-4-20K	MF9	9/16"x18UNF LH	13/16"-16UNF	6,350	0,250	RK-BV4T	TU-MP9-20K
SS-BVMF9-6-20K	MF9	9/16"x18UNF LH	13/16"-16UNF	9,530	0,375	RK-BV6T	TU-MP9-20K
SS-BVMF12-6-20K	MF12	3/4"x16UNF LH	3/4"x14NPSM	9,530	0,375	RK-BV6T	TU-MPI2-20K

Part Number	Unit	Dimensions												
		A	B	C	D1	D2	E	F	G	H	I	J	K	L
SS-BVMF4-4-20K	mm	97,30	110,50	50,80	101,10	-	-	28,70	38,10	11,20	-	7,10	50,80	-
	inch	3,83	4,35	2,00	3,98	-	-	1,13	1,50	0,44	-	0,28	2,00	-
SS-BVMF4-6-20K	mm	110,20	140,70	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	63,50	-
	inch	4,34	5,54	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,50	-
SS-BVMF6-4-20K	mm	97,30	110,50	50,80	101,10	-	-	28,70	38,10	11,20	-	7,10	50,80	-
	inch	3,83	4,35	2,00	3,98	-	-	1,13	1,50	0,44	-	0,28	2,00	-
SS-BVMF6-6-20K	mm	110,20	140,70	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	63,50	-
	inch	4,34	5,54	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,50	-
SS-BVMF9-4-20K	mm	97,30	110,50	50,80	101,10	-	-	28,70	38,10	11,20	-	7,10	50,80	-
	inch	3,83	4,35	2,00	3,98	-	-	1,13	1,50	0,44	-	0,28	2,00	-
SS-BVMF9-6-20K	mm	110,20	140,70	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	63,50	-
	inch	4,34	5,54	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,50	-
SS-BVMF12-6-20K	mm	110,20	140,70	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	63,50	-
	inch	4,34	5,54	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,50	-
SS-BVMF12-8-15K	mm	141,50	195,30	104,90	130,30	-	260,60	44,70	76,20	12,70	-	7,10	78,50	-
	inch	5,57	7,69	4,13	5,13	-	10,26	1,76	3,00	0,50	-	0,28	3,09	-
SS-BVMF16-8-15K	mm	141,50	195,30	104,90	130,30	-	260,60	44,70	76,20	12,70	-	7,10	78,50	-
	inch	5,57	7,69	4,13	5,13	-	10,26	1,76	3,00	0,50	-	0,28	3,09	-

NPT

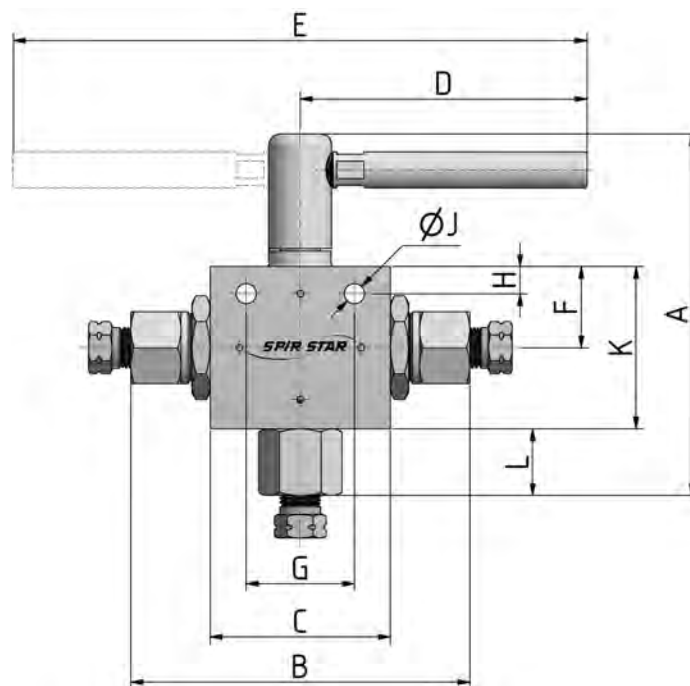


Part Number	Thread Description	Tube Thread	Screw-in Thread	Orifice		Repair Kit	Suitable Tubing
				mm	inch		
Working pressure 690 bar / 10.000 psi							
SS-BVNF12-8-10K	NF12		3/4"	12,700	0,500	RK-BV8T	
SS-BVNF16-8-10K	NF16		1"	12,700	0,500	RK-BV8T	
Working pressure 1.035 bar / 15.000 psi							
SS-BVNF4-4-15K	NF4		1/4"	6,350	0,250	RK-BV4T	
SS-BVNF4-6-15K	NF4		1/4"	9,530	0,375	RK-BV6T	
SS-BVNF6-4-15K	NF6		3/8"	6,350	0,250	RK-BV4T	
SS-BVNF6-6-15K	NF6		3/8"	9,530	0,375	RK-BV6T	
SS-BVNF8-4-15K	NF8		1/2"	6,350	0,250	RK-BV4T	
SS-BVNF8-6-15K	NF8		1/2"	9,530	0,375	RK-BV6T	
SS-BVNF8-8-15K	NF8		1/2"	12,700	0,500	RK-BV8T	

Part Number	Unit	Dimensions												
		A	B	C	D1	D2	E	F	G	H	I	J	K	L
SS-BVNF4-4-15K	mm	97,30	110,50	50,80	101,10	-	-	28,70	38,10	11,20	-	7,10	50,80	-
	inch	3,83	4,35	2,00	3,98	-	-	1,13	1,50	0,44	-	0,28	2,00	-
SS-BVNF4-6-15K	mm	110,20	140,70	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	63,50	-
	inch	4,34	5,54	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,50	-
SS-BVNF6-4-15K	mm	97,30	110,50	50,80	101,10	-	-	28,70	38,10	11,20	-	7,10	50,80	-
	inch	3,83	4,35	2,00	3,98	-	-	1,13	1,50	0,44	-	0,28	2,00	-
SS-BVNF6-6-15K	mm	110,20	140,70	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	63,50	-
	inch	4,34	5,54	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,50	-
SS-BVNF8-4-15K	mm	97,30	110,50	50,80	101,10	-	-	28,70	38,10	11,20	-	7,10	50,80	-
	inch	3,83	4,35	2,00	3,98	-	-	1,13	1,50	0,44	-	0,28	2,00	-
SS-BVNF8-6-15K	mm	110,20	140,70	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	63,50	-
	inch	4,34	5,54	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,50	-
SS-BVNF8-8-15K	mm	141,50	195,30	104,90	130,30	-	260,60	44,70	76,20	12,70	-	7,10	78,50	-
	inch	5,57	7,69	4,13	5,13	-	10,26	1,76	3,00	0,50	-	0,28	3,09	-
SS-BVNF12-8-10K	mm	141,50	195,30	104,90	130,30	-	260,60	44,70	76,20	12,70	-	7,10	78,50	-
	inch	5,57	7,69	4,13	5,13	-	10,26	1,76	3,00	0,50	-	0,28	3,09	-
SS-BVNF16-8-10K	mm	141,50	195,30	104,90	130,30	-	260,60	44,70	76,20	12,70	-	7,10	78,50	-
	inch	5,57	7,69	4,13	5,13	-	10,26	1,76	3,00	0,50	-	0,28	3,09	-

3-Way-180° Switching-Ball Valve

High-Pressure

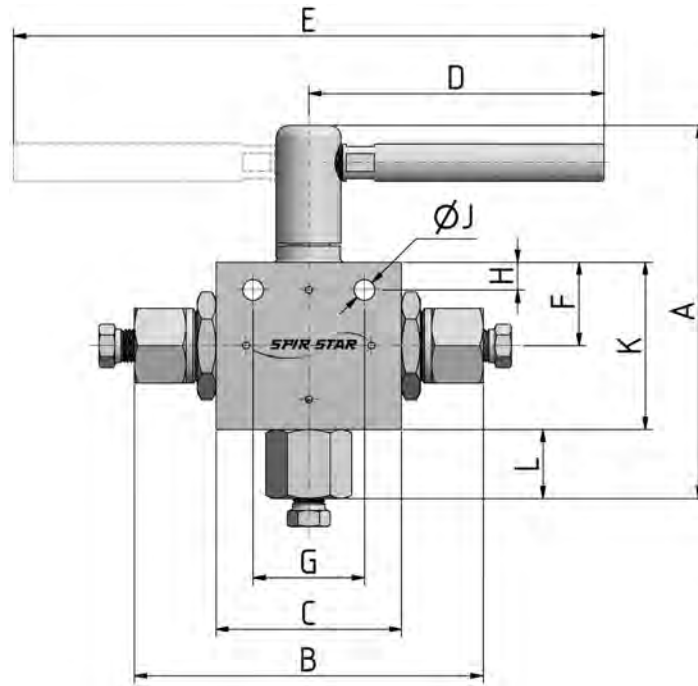


Part Number	Thread Description	Tube Thread	Screw-in Thread	Orifice		Repair Kit	Suitable Tubing
				mm	inch		
Working pressure 1.380 bar / 20.000 psi							
SS-BVHF4-3S-20K	HF4	1/4"x28UNF LH	9/16"x18UNF	4,780	0,188		TU-HP4-60K
SS-BVHF6-3S-20K	HF6	3/8"x24UNF LH	3/4"-16UNF	4,780	0,188		TU-HP6-60K
SS-BVHF9-3S-20K	HF9	9/16"x18UNF LH	1-1/8"x12UNF	4,780	0,188		TU-HP9-60K

Part Number	Unit	Dimensions												
		A	B	C	D1	D2	E	F	G	H	I	J	K	L
SS-BVHF4-3S-20K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVHF6-3S-20K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVHF9-3S-20K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06

3-Way-180° Switching-Ball Valve

Medium-Pressure



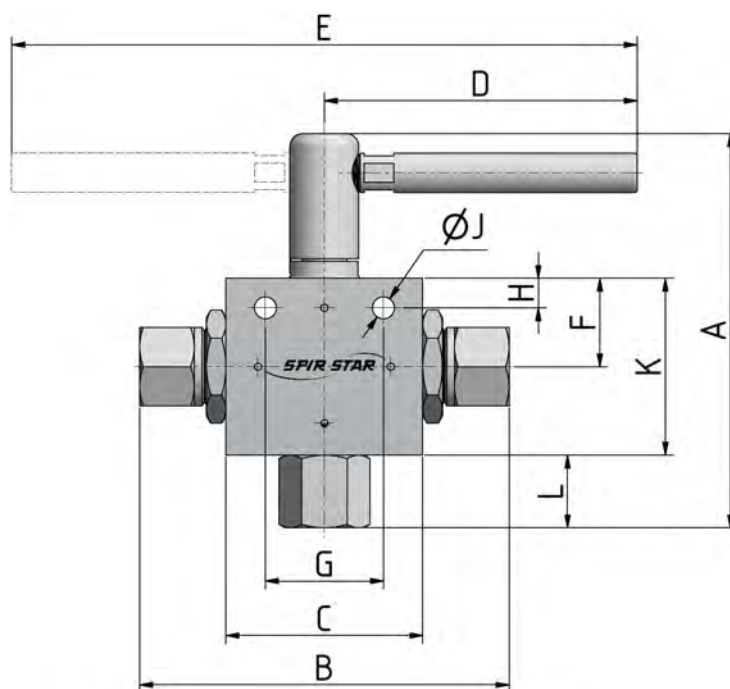
Part Number	Thread Description	Tube Thread	Screw-in Thread	Orifice		Repair Kit	Suitable Tubing
				mm	inch		
Working pressure 690 bar / 10.000 psi							
SS-BVMF12-8S-10K	MF12	3/4"x16UNF LH	3/4"x14NPSM	12,700	0,500		TU-MP12-20K
SS-BVMF16-8S-10K	MF16	1"x14UNF LH	1-3/8"x12UNF	12,700	0,500		TU-MP16-20K
Working pressure 1.035 bar / 15.000 psi							
SS-BVMF6-6S-15K	MF6	3/8"x24UNF LH	9/16"x18UNF	9,530	0,375		TU-MP6-20K
SS-BVMF9-6S-15K	MF9	9/16"x18UNF LH	13/16"-16UNF	9,530	0,375		TU-MP9-20K
SS-BVMF12-6S-15K	MF12	3/4"x16UNF LH	3/4"x14NPSM	9,530	0,375		TU-MP12-20K
Working pressure 1.380 bar / 20.000 psi							
SS-BVMF4-3S-20K	MF4	1/4"x28UNF LH	7/16"-20UNF	4,780	0,188		TU-MP4-20K
SS-BVMF6-3S-20K	MF6	3/8"x24UNF LH	9/16"x18UNF	4,780	0,188		TU-MP6-20K
SS-BVMF9-3S-20K	MF9	9/16"x18UNF LH	13/16"-16UNF	4,780	0,188		TU-MP9-20K

Part Number	Unit	Dimensions												
		A	B	C	D1	D2	E	F	G	H	I	J	K	L
SS-BVMF4-3S-20K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVMF6-3S-20K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVMF6-6S-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	7,10	-	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	0,28	-	2,88	1,06
SS-BVMF9-3S-20K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVMF9-6S-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	7,10	-	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	0,28	-	2,88	1,06
SS-BVMF12-6S-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	7,10	-	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	0,28	-	2,88	1,06
SS-BVMF12-8S-10K	mm	198,90	197,40	104,90	130,00	-	260,35	-	42,20	76,20	12,70	7,10	84,80	43,20
	inch	7,83	7,77	4,13	5,12	-	10,25	-	1,66	3,00	0,50	0,28	3,34	1,70
SS-BVMF16-8S-10K	mm	198,90	197,40	104,90	130,00	-	260,35	-	42,20	76,20	12,70	7,10	84,80	43,20
	inch	7,83	7,77	4,13	5,12	-	10,25	-	1,66	3,00	0,50	0,28	3,34	1,70

3-Way-180° Switching-Ball Valve



NPT

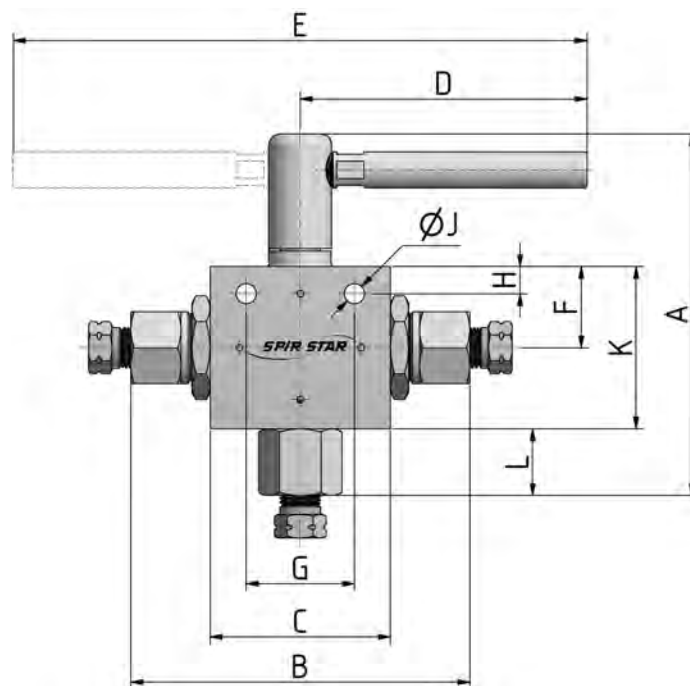


Part Number	Thread Description	Tube Thread	Screw-in Thread	Orifice		Repair Kit	Suitable Tubing
				mm	inch		
Working pressure 690 bar / 10.000 psi							
SS-BVNF8-8S-10K	NF8		1/2"	12,700	0,500		
SS-BVNF12-8S-10K	NF12		3/4"	12,700	0,500		
SS-BVNF16-8S-10K	NF16		1"	12,700	0,500		
Working pressure 1.035 bar / 15.000 psi							
SS-BVNF4-3S-15K	NF4		1/4"	4,780	0,188		
SS-BVNF4-6S-15K	NF4		1/4"	9,530	0,375		
SS-BVNF6-3S-15K	NF6		3/8"	4,780	0,188		
SS-BVNF6-6S-15K	NF6		3/8"	9,530	0,375		
SS-BVNF8-3S-15K	NF8		1/2"	4,780	0,188		
SS-BVNF8-6S-15K	NF8		1/2"	9,530	0,375		

Part Number	Unit	Dimensions												
		A	B	C	D1	D2	E	F	G	H	I	J	K	L
SS-BVNF4-3S-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVNF4-6S-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	7,10	-	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	0,28	-	2,88	1,06
SS-BVNF6-3S-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVNF6-6S-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	7,10	-	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	0,28	-	2,88	1,06
SS-BVNF8-3S-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVNF8-6S-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	7,10	-	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	0,28	-	2,88	1,06
SS-BVNF8-8S-10K	mm	198,90	197,40	104,90	130,00	-	260,35	-	42,20	76,20	12,70	7,10	84,80	43,20
	inch	7,83	7,77	4,13	5,12	-	10,25	-	1,66	3,00	0,50	0,28	3,34	1,70
SS-BVNF12-8S-10K	mm	198,90	197,40	104,90	130,00	-	260,35	-	42,20	76,20	12,70	7,10	84,80	43,20
	inch	7,83	7,77	4,13	5,12	-	10,25	-	1,66	3,00	0,50	0,28	3,34	1,70
SS-BVNF16-8S-10K	mm	198,90	197,40	104,90	130,00	-	260,35	-	42,20	76,20	12,70	7,10	84,80	43,20
	inch	7,83	7,77	4,13	5,12	-	10,25	-	1,66	3,00	0,50	0,28	3,34	1,70

3-Way-90° Diverting-Ball Valve

High-Pressure

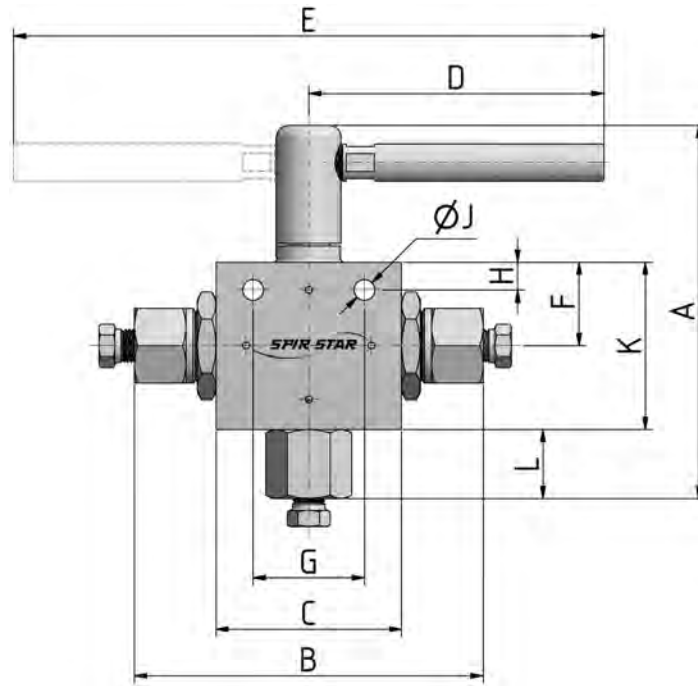


Part Number	Thread Description	Tube Thread	Screw-in Thread	Orifice		Repair Kit	Suitable Tubing
				mm	inch		
Working pressure 1.380 bar / 20.000 psi							
SS-BVHF4-3D-20K	HF4	1/4"x28UNF LH	9/16"x18UNF	4,780	0,188		TU-HP4-60K
SS-BVHF6-3D-20K	HF6	3/8"x24UNF LH	3/4"-16UNF	4,780	0,188		TU-HP6-60K
SS-BVHF9-3D-20K	HF9	9/16"x18UNF LH	1-1/8"x12UNF	4,780	0,188		TU-HP9-60K

Part Number	Unit	Dimensions												
		A	B	C	D1	D2	E	F	G	H	I	J	K	L
SS-BVHF4-3D-20K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVHF6-3D-20K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVHF9-3D-20K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06

3-Way-90° Diverting-Ball Valve

Medium-Pressure



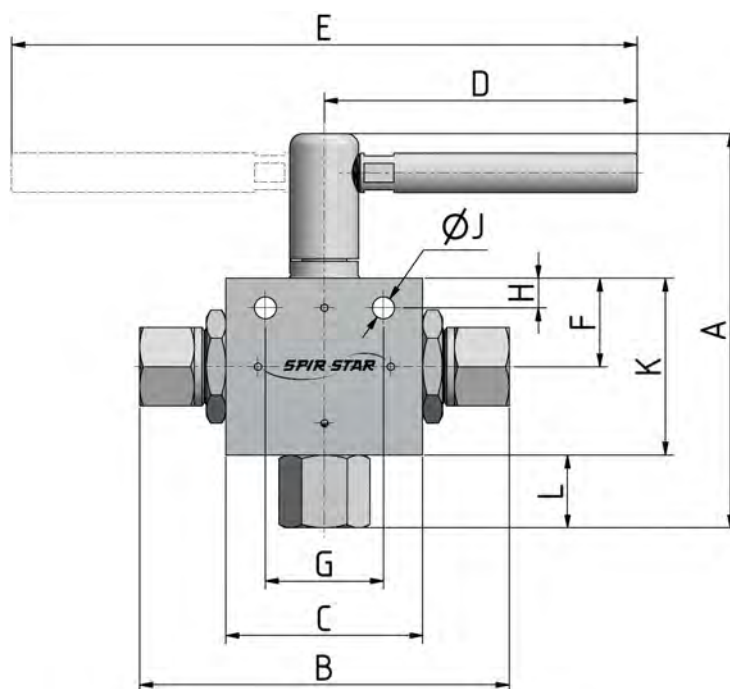
Part Number	Thread Description	Tube Thread	Screw-in Thread	Orifice		Repair Kit	Suitable Tubing
				mm	inch		
Working pressure 690 bar / 10.000 psi							
SS-BVMF12-8D-10K	MF12	3/4"x16UNF LH	3/4"x14NPSM	12,700	0,500		TU-MP12-20K
SS-BVMF16-8D-10K	MF16	1"x14UNF LH	1-3/8"x12UNF	12,700	0,500		TU-MP16-20K
Working pressure 1.035 bar / 15.000 psi							
SS-BVMF6-6D-15K	MF6	3/8"x24UNF LH	9/16"x18UNF	9,530	0,375		TU-MP6-20K
SS-BVMF9-6D-15K	MF9	9/16"x18UNF LH	13/16"-16UNF	9,530	0,375		TU-MP9-20K
SS-BVMF12-6D-15K	MF12	3/4"x16UNF LH	3/4"x14NPSM	9,530	0,375		TU-MP12-20K
Working pressure 1.380 bar / 20.000 psi							
SS-BVMF4-3D-20K	MF4	1/4"x28UNF LH	7/16"-20UNF	4,780	0,188		TU-MP4-20K
SS-BVMF6-3D-20K	MF6	3/8"x24UNF LH	9/16"x18UNF	4,780	0,188		TU-MP6-20K
SS-BVMF9-3D-20K	MF9	9/16"x18UNF LH	13/16"-16UNF	4,780	0,188		TU-MP9-20K

Part Number	Unit	Dimensions												
		A	B	C	D1	D2	E	F	G	H	I	J	K	L
SS-BVMF4-3D-20K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVMF6-3D-20K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVMF6-6D-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	7,10	-	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	0,28	-	2,88	1,06
SS-BVMF9-3D-20K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVMF9-6D-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	7,10	-	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	0,28	-	2,88	1,06
SS-BVMF12-6D-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	7,10	-	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	0,28	-	2,88	1,06
SS-BVMF12-8D-10K	mm	198,90	197,40	104,90	130,00	-	260,35	-	42,20	76,20	12,70	7,10	84,80	43,20
	inch	7,83	7,77	4,13	5,12	-	10,25	-	1,66	3,00	0,50	0,28	3,34	1,70
SS-BVMF16-8D-10K	mm	198,90	197,40	104,90	130,00	-	260,35	-	42,20	76,20	12,70	7,10	84,80	43,20
	inch	7,83	7,77	4,13	5,12	-	10,25	-	1,66	3,00	0,50	0,28	3,34	1,70

3-Way-90° Diverting-Ball Valve



NPT



Part Number	Thread Description	Tube Thread	Screw-in Thread	Orifice		Repair Kit	Suitable Tubing
				mm	inch		
Working pressure 690 bar / 10.000 psi							
SS-BVNF8-8D-10K	NF8		1/2"	12,700	0,500		
SS-BVNF12-8D-10K	NF12		3/4"	12,700	0,500		
SS-BVNF16-8D-10K	NF16		1"	12,700	0,500		
Working pressure 1.035 bar / 15.000 psi							
SS-BVNF4-3D-15K	NF4		1/4"	4,780	0,188		
SS-BVNF4-6D-15K	NF4		1/4"	9,530	0,375		
SS-BVNF6-3D-15K	NF6		3/8"	4,780	0,188		
SS-BVNF6-6D-15K	NF6		3/8"	9,530	0,375		
SS-BVNF8-3D-15K	NF8		1/2"	4,780	0,188		
SS-BVNF8-6D-15K	NF8		1/2"	9,530	0,375		

Part Number	Unit	Dimensions												
		A	B	C	D1	D2	E	F	G	H	I	J	K	L
SS-BVNF4-3D-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVNF4-6D-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	7,10	-	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	0,28	-	2,88	1,06
SS-BVNF6-3D-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVNF6-6D-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	7,10	-	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	0,28	-	2,88	1,06
SS-BVNF8-3D-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	-	7,10	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	-	0,28	2,88	1,06
SS-BVNF8-6D-15K	mm	146,80	147,30	76,20	102,10	-	-	35,10	50,80	10,40	7,10	-	73,20	26,90
	inch	5,78	5,80	3,00	4,02	-	-	1,38	2,00	0,41	0,28	-	2,88	1,06
SS-BVNF8-8D-10K	mm	198,90	197,40	104,90	130,00	-	260,35	-	42,20	76,20	12,70	7,10	84,80	43,20
	inch	7,83	7,77	4,13	5,12	-	10,25	-	1,66	3,00	0,50	0,28	3,34	1,70
SS-BVNF12-8D-10K	mm	198,90	197,40	104,90	130,00	-	260,35	-	42,20	76,20	12,70	7,10	84,80	43,20
	inch	7,83	7,77	4,13	5,12	-	10,25	-	1,66	3,00	0,50	0,28	3,34	1,70
SS-BVNF16-8D-10K	mm	198,90	197,40	104,90	130,00	-	260,35	-	42,20	76,20	12,70	7,10	84,80	43,20
	inch	7,83	7,77	4,13	5,12	-	10,25	-	1,66	3,00	0,50	0,28	3,34	1,70

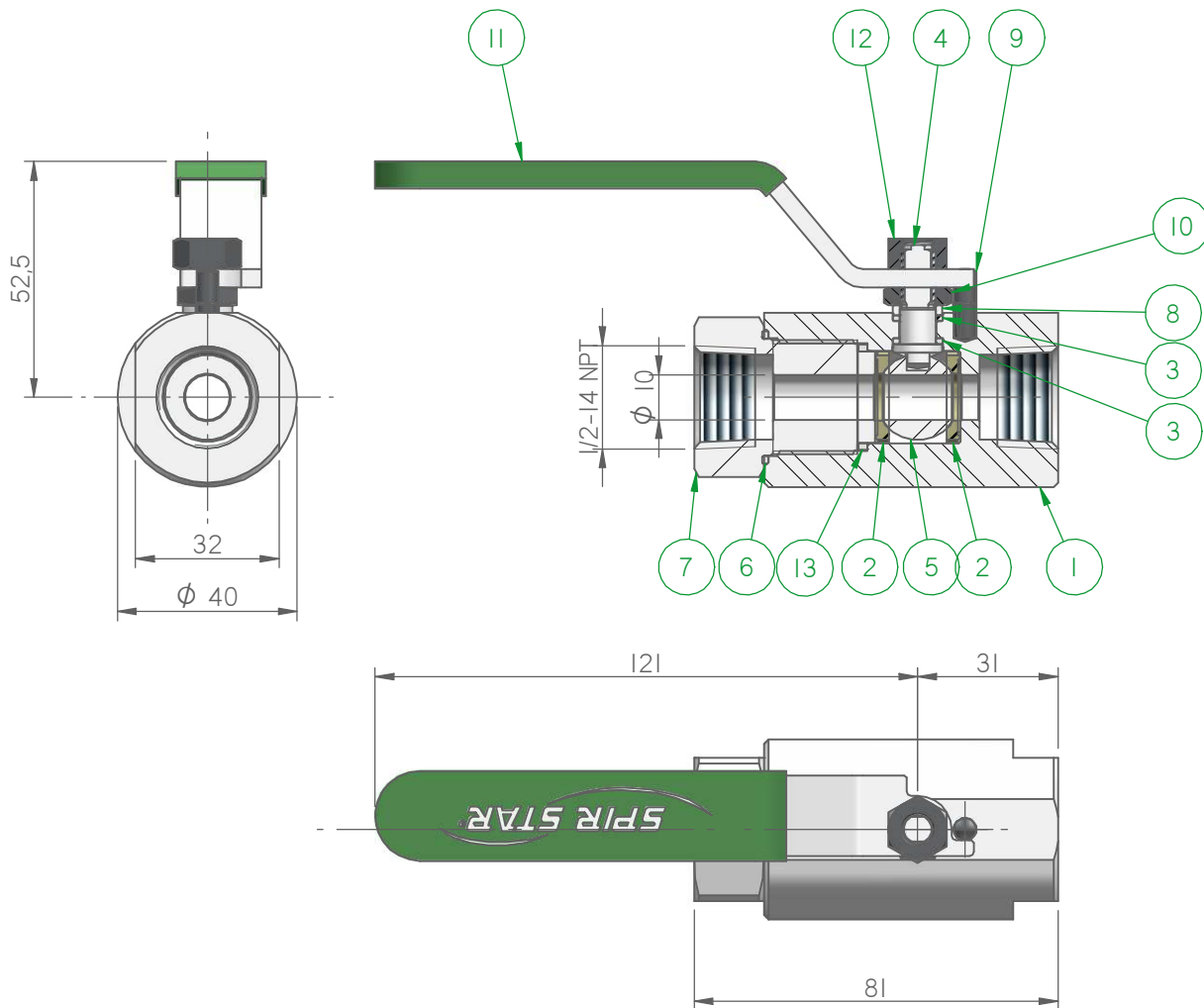
SPIR STAR check valves distinguish themselves by their long useful life and prevent return flow and damage in pressure systems.

In this range of products, SPIR STAR AG offers both ball and O-ring check valves.

While the O-ring check valve is frequently used in gas applications, the ball check valve can often be found in applications with high temperatures and dynamic pressures.

Technical data:

Thread Types:	High-Pressure, Medium-Pressure and NPT		
Valve Types:	Soft Seated Check Valves Ball Seated Check Valves		
Material:	Body: 316 Stainless Steel Sealing: PEEK		
Max. Working Pressure:	4.140 bar // 60.000 psi		
Cracking Pressure:	1 bar // 15 psi		
Temperature:	Soft seated valve HP/MP:	-45°C bis +204 °C	
	Soft seated valve NPT:	-18°C bis +204°C	
	Ball seated valve HP/MP:	-80°C bis +260°C	
	Ball seated valve NPT:	-18°C bis +204°C	



BILL OF MATERIALS

POS.	DESCRIPTION	MATERIAL	QTY
1	BODY 1/2 NPT-F FOR B2C BALL 10MM	AISI 316L	1
2	SEAT BVSB BALL 10MM	PEEK	2
3	STEM SEAL B2C BALL 10MM	PEEK	2
4	STEM FOR B2C BALL 10MM	AISI 316L	1
5	BALL BVSB 6/10K PSI 10MM	AISI 316L	1
6	BODY SEAL B2C BALL 10MM	PTFE	1
7	END CONNECTOR 1/2 NPT-F B2C 10MM	AISI 316L	1
8	STEM WASHER BVSB 10MM	AISI 316L	1
9	PIN 5X16 - ISO 8741	A2	1
10	HEXAGONAL NUT M8 - DIN 936	A2	1
11	HANDLE B2C H27 PVC GREEN SPiR STAR LOGO	AISI 316L	1
12	HEXAGONAL NUT M8 - DIN 934	A4	1
13	INTERNAL GASKET BVSB 10MM	PTFE	1

MODEL

MODEL	RATING	MATERIAL	PACKING	IN	OUT	INSIDE DIAMETER	WEIGHT	NOTE
SS-BVNF8-10K	10K psi	AISI 316L	PEEK	1/2" NPT-F	1/2" NPT-F	10mm/0,39in	0,6 Kg	Packing material PEEK as standard max temperature 220 °C.

The dimensions shown apply only to the illustrated valve – if you need the dimensions for your individual type or should you still not find your options at all please contact the factory.