SDBV Series Ball Valves for DIN Standard

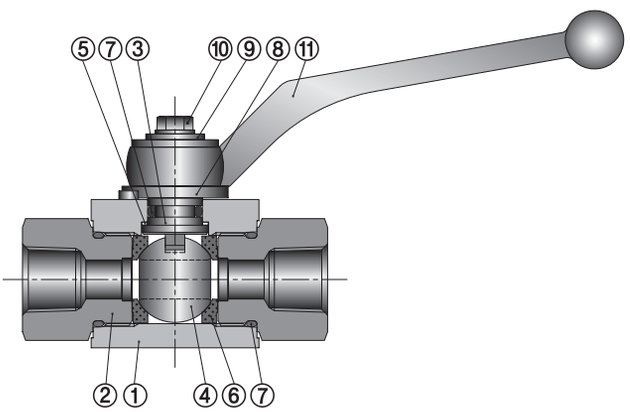
Features

- Pressure rating up to 500bar @ 21˚C.
- Temperature rating from -20˚C to 100˚C with POM and FKM standard.
- Conforms to DIN standard.
- Compact design with maximum orifice.
- Variety of end connections such as DIN2353 “L” & “S” series, Male/Female DIN / ISO / BSP and NPT threads.
- Handle is only available in cast stainless steel standard.
- Every valve is 100% factory tested with Nitrogen @ 1000psig (69bar).

Applications

- Hydraulic fluids, Compressed air, Lubricants and Fuel oil system

Materials of Construction



No	Component	Material
1	Body	SS316 / A479 or A276 DIN 17440 / 1.4401
2	End Connector	
3	Stem	
4	Ball	
5	Stem Bearing	PEEK
6	Ball Seat	POM (Optional PTFE)
7	Stem & End Seal	FKM
8	Locking Device	Stainless Steel
9	Upper Washer	Stainless Steel
10	Hex Bolt	Stainless Steel
11	Handle	A351 CF8M

Temperature Rating

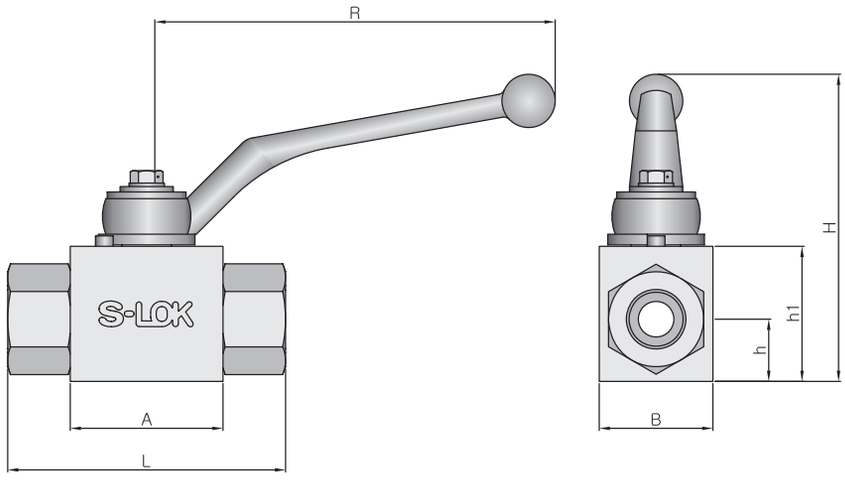
Seal Material	Temperature Range
NBR	-23 to 121˚C
FKM	-23 to 200˚C
EPDM	-46 to 149˚C

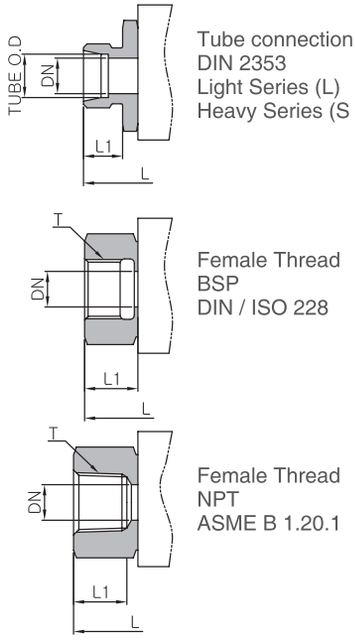
Seat Material	Temperature Range
POM	-30 to 100˚C
PTFE	-54 to 65˚C

Testing

- Every valve is tested for bubble-tight leakage at both seat and stem packing with nitrogen @ 1000psig (69bar).
- Seats have a maximum allowable leak rate of 0.1(SCCM).
- Hydraulic shell test is performed at 1.5 times the working pressure.

Dimensions





DIN 2353 Light (L) Tube Series

Ordering Number		DN	PB	End Connections		Dimensions (mm)								Weight (kg)
				Inlet	Outlet	L	L1	A	B	H	h	h1	R	
SDBV1	6L	4	315	6mm		67.0	10.0	40.0	26.0	82.0	13.5	33.0	115.0	0.4
	8L	6		8mm		67.0	10.0							0.4
	10L	6		10mm		74.0	11.0							0.5
SDBV2	12L	10	315	12mm		74.0	11.0	43.0	32.0	87.0	17.5	38.0	115.0	0.6
SDBV3	15L	13	315	15mm		82.0	12.0	48.0	35.0	89.0	19.0	40.0	115.0	0.7
	18L	13		18mm		82.0	12.0							0.8
SDBV4	22L	20	160	22mm		101.0	14.0	62.0	49.0	114.0	24.5	57.0	159.0	2.1
SDBV5	28L	25	160	28mm		108.0	14.0	66.2	58.0	122.0	29.5	65.0	159.0	2.3
	35L	25		35mm		112.0	16.0							2.3

DIN 2353 Heavy (S) Tube Series

Ordering Number		DN	PB	End Connections		Dimensions (mm)								Weight (kg)
				Inlet	Outlet	L	L1	A	B	H	h	h1	R	
SDBV1	8S	4	500	8mm		73.0	12.0	40.0	26.0	82.0	13.5	33.0	115.0	0.4
	10S	6		10mm		73.0	12.0							0.4
SDBV2	12S	6	500	12mm		76.0	12.0	43.0	32.0	87.0	17.5	38.0	115.0	0.5
	14S	10		14mm		80.0	14.0							0.6
SDBV3	16S	13	400	16mm		86.0	14.0	48.0	35.0	89.0	19.0	40.0	115.0	0.7
	20S			20mm		90.0	16.0							0.8
SDBV4	25S	20	315	25mm		109.0	18.0	62.0	49.0	114.0	24.5	57.0	159.0	2.1
SDBV5	30S	25	315	30mm		120.0	20.0	66.2	58.0	122.0	29.5	65.0	159.0	2.3
	38S			38mm		124.0	22.0							2.3

Female BSP (DIN / ISO 228)

Ordering Number		DN	PB	End Connections		Dimensions (mm)								Weight (kg)
				Inlet	Outlet	L	L1	A	B	H	h	h1	R	
SDBV1	F-2G	6	500	PF 1/8″		68.8	10.0	40.0	26.0	82.0	13.5	33.0	115.0	0.4
	F-4G			PF 1/4″		68.8	14.0							0.4
SDBV2	F-6G	10	500	PF 3/8″		71.9	14.0	43.0	32.0	87.0	17.5	38.0	115.0	0.6
SDBV3	F-8G	13	500	PF 1/2″		82.3	16.5	48.0	35.0	89.0	19.0	40.0	115.0	0.7
SDBV4	F-12G	20	315	PF 3/4″		95.4	18.0	62.0	49.0	114.0	24.5	57.0	159.0	1.6
SDBV5	F-16G	25	315	PF 1″		112.7	20.0	66.2	58.0	122.0	29.5	65.0	159.0	2.3
SDBV6	F-20G	32	315	PF 1-1/4″		120.0	22.0	68.0	75.0	165.0	37.5	82.0	260.0	4.4
SDBV7	F-24G	38	315	PF 1-1/2″		130.0	24.0	85.0	95.0	182.0	47.5	99.1	260.0	6.8
SDBV8	F-32G	50	315	PF 2″		140.0	26.0	100.0	115.0	198.0	57.5	115.2	260.0	9.5

Female NPT (ASME B 1.20.1)

Ordering Number		DN	PB	End Connections		Dimensions (mm)								Weight (kg)
				Inlet	Outlet	L	L1	A	B	H	h	h1	R	
SDBV1	F-4N	6	500	NPT 1/4″		68.8	15.0	40.0	26.0	82.0	13.5	33.0	115.0	0.4
SDBV2	F-6N	10	500	NPT 3/8″		78.0	15.0	43.0	32.0	87.0	17.5	38.0	115.0	0.7
SDBV3	F-8N	13	500	NPT 1/2″		104.0	20.5	48.0	35.0	89.0	19.0	40.0	115.0	1.0
SDBV4	F-12N	20	315	NPT 3/4″		102.0	21.5	62.0	49.0	114.0	24.5	57.0	159.0	1.8
SDBV5	F-16N	25	315	NPT 1″		119.0	25.4	66.2	58.0	122.0	29.5	65.0	159.0	2.5
SDBV6	F-20N	32	315	NPT 1-1/4″		120.0	27.0	68.0	75.0	165.0	37.5	82.0	260.0	4.4
SDBV7	F-24N	38	315	NPT 1-1/2″		130.0	27.0	85.0	95.0	182.0	47.5	99.1	260.0	6.8
SDBV8	F-32N	50	315	NPT 2″		162.0	31.0	100.0	115.0	198.0	57.5	115.2	260.0	11.5

Ordering Information

SDBV1	F	4G	TE	NB	SG	S6
Valve Series	Connection Type	Connection Size	Seat Material	Seal Material	Sour Gas	Body Material
	• **Nil** : Din 2353 Bite • **F** : Female Thread	• **2** : 1/8 ″ • **4** : 1/4 ″ • **6** : 3/8 ″ • **8** : 1/2 ″ • **12** : 3/4 ″ • **16** : 1 ″ • **20** : 1-1/4 ″ • **24** : 1-1/2 ″ • **32** : 2 ″	• **Nil** : POM (Standard) • **PK** : PEEK • **TE** : PTFE	• **Nil** : FKM (Standard) • **NB** : NBR • **EP** : EPDM	• **Nil** : Without (Standard) • **SG** : Sour Gas Service	• **S6** : 316 Stainless Steel • **CS** : Carbon Steel