SR DN 15÷50

Ball check valve

SR
DN 15÷50

The SR check valve allows the passage of fluid in a single direction.

BALL CHECK VALVE

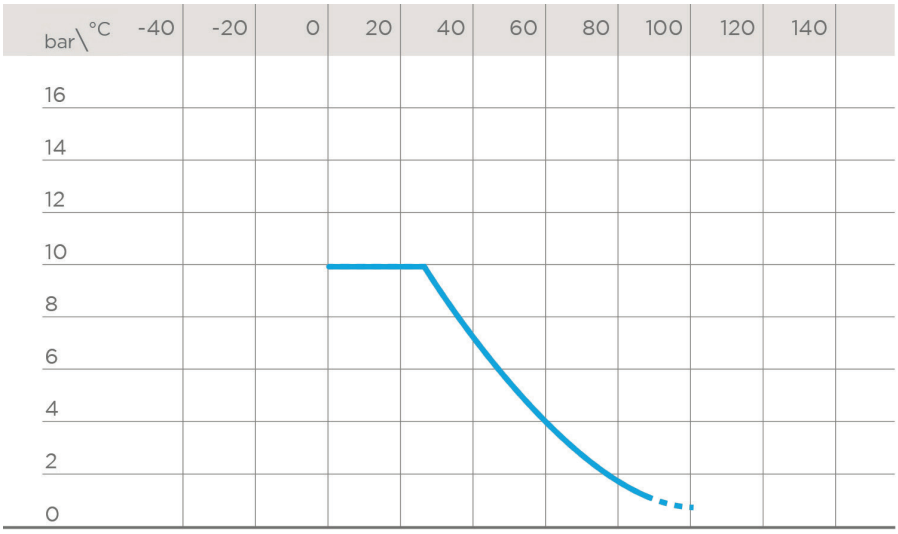
- Connection system for weld joints
- PN10 **valve body made for PP-H injection moulding** and European Directive 2014/68/EU (PED) compliant for pressurised equipment. ISO 9393 compliant test requirements
- The valve can only be used with fluids with specific weight under 1,20 g/cm3
- **Sealing system with antiblow out design**
- Ball entirely in talc-filled PP
- Can be maintained with the valve body installed
- Can be **installed** in either a **vertical** (preferable) or **horizontal position**

Technical specifications	
Construction	Ball check valve
Size range	DN 15 ÷ 50
Nominal pressure	PN 10 with water at 20° C
Temperature range	0 °C ÷ 100 °C
Coupling standards	**Welding:** EN ISO 15494. Can be coupled to pipes according to EN ISO 15494
Reference standards	**Construction criteria:** EN ISO 16137, EN ISO 15494
	Test methods and requirements: ISO 9393
	Installation criteria: EN 14728, DVS 2207-11, DVS 2208-1, UNI 11318
Valve material	**Body:** PP-H **Ball:** PP
Seal material	FKM (spare set in EPDM available on request)

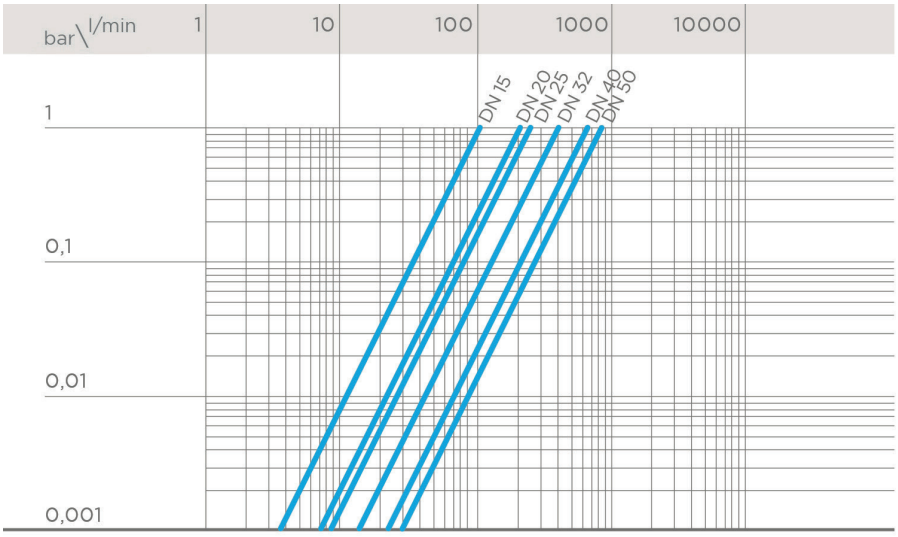
TECHNICAL DATA

PRESSURE VARIATION ACCORDING TO TEMPERATURE

For water and non-hazardous fluids to which the material is classified as CHEMICALLY RESISTANT. In other cases, a reduction of the nominal pressure PN is required (25 years with safety factor).



PRESSURE DROP GRAPH



MINIMUM PRESSURE

Minimum sealing pressure (valve in horizontal position)

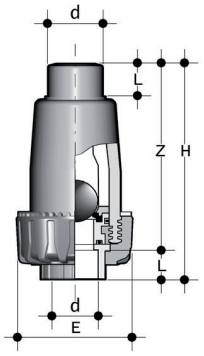
DN	15	20	25	32	40	50
bar	0,4	0,4	0,4	0,4	0,4	0,4

K_V100 FLOW COEFFICIENT

The K_V100 flow coefficient is the Q flow rate of litres per minute of water at a temperature of 20°C that will generate Δp= 1 bar pressure drop at a certain valve position. The Kv100 values shown in the table are calculated with the valve completely open.

DN	15	20	25	32	40	50
Kv100 l/min	110	205	240	410	650	840

DIMENSIONS



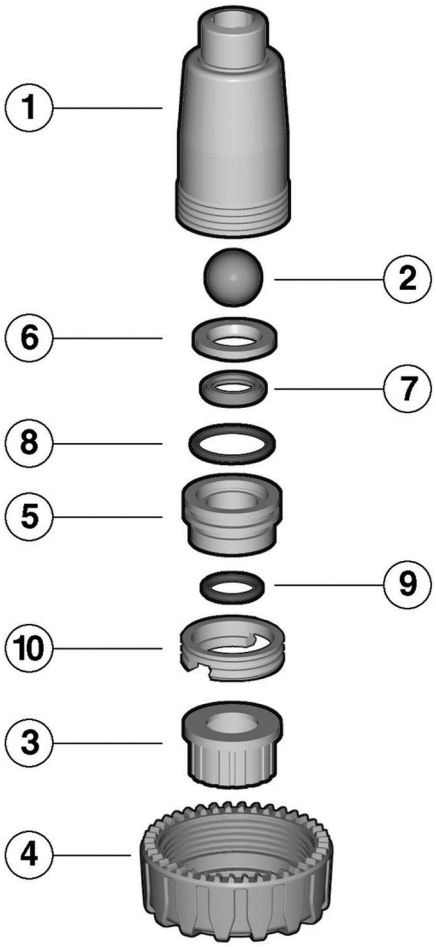
SRIM

Ball check valve with ends for socket welding, metric series

d	DN	PN	E	H	L	Z	g	FKM code
20	15	10	55	105	16	89	75	SRIM020F
25	20	10	66	126	19	107	140	SRIM025F
32	25	10	74	148	22	126	215	SRIM032F
40	32	10	86	172	26	146	320	SRIM040F
50	40	10	99	189	31	158	440	SRIM050F
63	50	10	120	224	38	186	750	SRIM063F

COMPONENTS

EXPLODED VIEW



1 Body (PP-H - 1)
2 Ball (PP-H talc filled - 1)*
3 End connector (PP-H - 1)*
4 Union nut (PP-H - 1)*
5 Support clip (PP-H - 1)
6 Ball seat (EPDM or FKM - 1)*
7 Gland packing ring (PP-H - 1)
8 Radial seal O-Ring (EPDM or FKM - 1)*
9 Socket seal O-Ring (EPDM or FKM - 1)*

* Spare parts
The material of the component and the quantity supplied are indicated between brackets

DISASSEMBLY

1) Isolate the valve from the flow.
2) Unscrew the union nut (4).
3) Unscrew the carrier (5) using the VKD valve handle insert supplied; remove the gland packaging ring (6) to access the ball seat (7).
4) Remove the ball (2) from inside the body (1).

ASSEMBLY

1) Insert the ball (2) in the body (1).
2) Place the O-rings (9) and (8) in the carrier housings (5).
3) Place the seal (7) between the carrier (5) and the gland packing ring (6).
4) Screw the carrier (5) into the body (1) to limit stop, using the VKD valve handle insert supplied.
5) Insert the stub (3) and screw the union nut (4) making sure that the socket seal O-ring (9) does not exit its seat.

Note: maintenance operations can be carried out with the valve body installed. During assembly, it is advisable to lubricate the rubber seals. Mineral oils are not recommended for this task as they react aggressively with EPDM rubber.

INSTALLATION

1) The SR check valve can be installed on vertical or horizontal axis pipes.
2) Install the valve such that the arrow on the body indicates the direction of fluid flow.