

BSK1 Bellows Sealed Globe Valves

Description

Manually operated isolation globe valves equipped with spinning handwheel that rotates clockwise and anticlockwise to open/close the valve, used as on-off valves (flat head plug) on steam, condensate, hot or cold water and other compatible non-corrosive fluids. They are robust and compact units with bodies in cast iron, bellows sealed spindle and flanged connections. To facilitate the plug closure under high pressure conditions, valves with larger dimensions (DN150, DN200 and DN250) are equipped with pressure balancing discs.

Standards

These products fully comply with the requirements of the European Pressure Equipment Directive 2014/68/EU and carries bear the **CE** mark.

Certifications

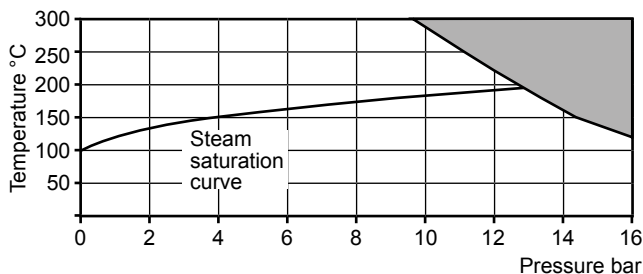
On request, BSK1 valves can be supplied with "Manufacturer's Typical Test Report" as drawn up by the manufacturer.


Note: All certification / inspection requirements must be stated at the time of order placement.

Size and pipe connections

Flanged EN 1092 PN 16, standard
DN15, 20, 25, 32, 40, 50, 65, 80, 100, 125, 150, 200 e 250

Pressure - temperature limits



 The product must not be used in this region

Body design conditions	PN 16
PMA - Maximum allowable pressure	@ 120°C 16 bar
TMA - Maximum allowable temperature	@ 9,6 bar 300°C
Minimum allowable temperature	- 10°C
PMO - Maximum operating pressure	@ 195°C 12,9 bar
TMO - Maximum operating temperature	@ 9,6 bar 300°C
Minimum operating temperature, danger of freezing considered	-10°C

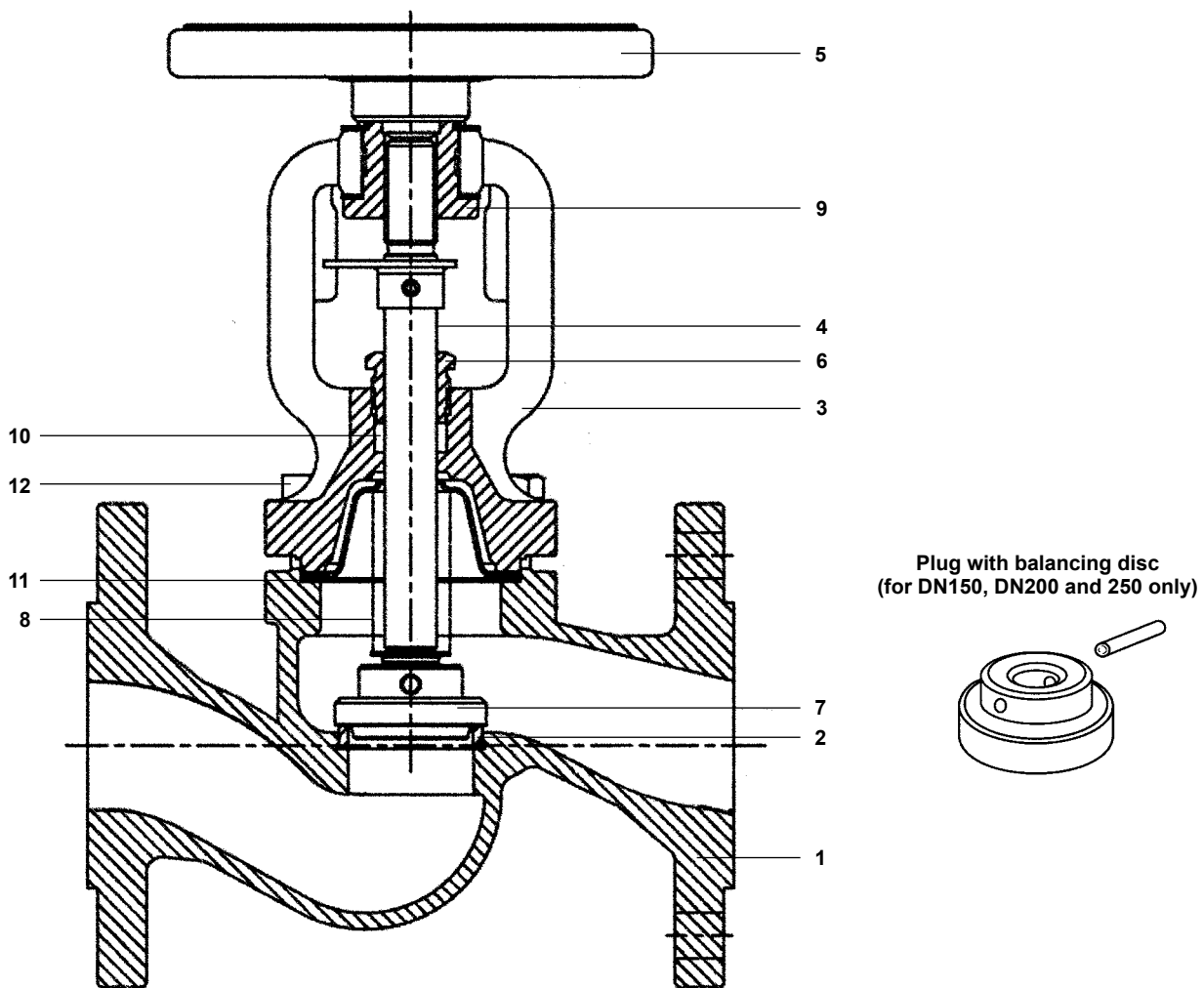
Note: For lower temperatures, contact Spirax Sarco

ΔPMX - Maximum differential pressure limit at PMO (on-off mode)	
Designed for a maximum cold hydraulic pressure test of	24 bar



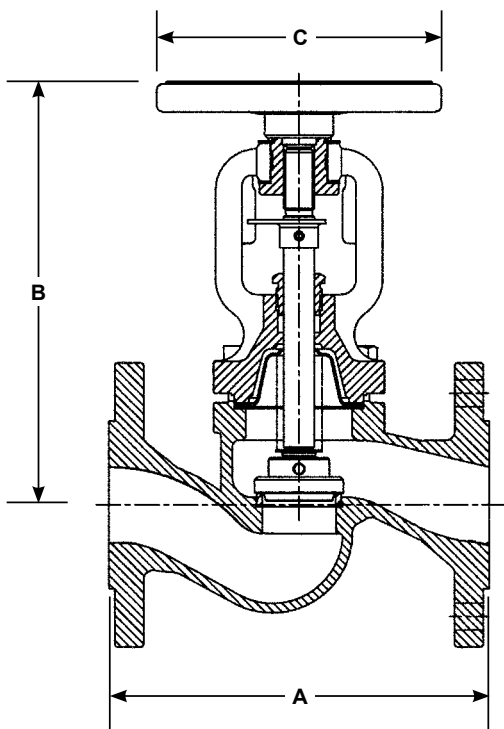
Technical data

Seat/plug gasket	according to EN 12266 - 1 Class A standards
Face-to-face dimensions	according to EN 558 - 1 Series A standards
Sized and pre-bored flanges	according to EN 1092 - 2 PN 16 standards



Materiali

N°	Part number	Material	Designation
1	Body	Cast iron	EN-GJL-250 (JL 1040)
2	Seat	Stainless steel	X12Cr13 (1.4006)
3	Cover (bridged)	Spheroidal cast iron	EN-GJL-400-18-LT (JL 1025)
4	Spindle	Stainless steel	X20Cr13 (1.4021)
5	Handwheel	Steel	
6	Stuffing box	Steel	11SMnPb30 (1.0718)
7	Plug	Stainless steel	X20Cr13 (1.4021)
8	Bellows	Stainless steel	X6CrNiMoTi 17-12-2 (1.4571)
9	Bush	Steel	11SMnPb30 (1.0718)
10	Stuffing box gasket	Graphite	
11	Valve body/cover gasket	Graphite with CrNiSt inserts	
12	Body/cover assembly bolts	Steel	Class 8.8



Dimensions / weights (approximate) in mm and kg

DN	A	B	C	Weight
15	130	178	125	3,2
20	150	178	125	3,9
25	160	193	125	4,6
32	180	201	125	6,5
40	200	224	150	9
50	230	228	150	11
65	290	270	175	15,8
80	310	295	200	20,5
100	350	321	250	35
125	400	388	300	49
150	480	448	400	76
200	600	575	500	130,5
250	730	645	500	210

Flowrate

To calculate flow rate, use the KV coefficients shown below.

Kv flow rate coefficients

DN	15	20	25	32	40	50	65	80	100	125	150	200	250
Kv	5,9	7,4	13	18	30	41	79	115	181	225	364	725	-

Conversion factor: C_v (US) = K_v / 0,865

How to order

Example: N°1 Spirax Sarco BSK1 on/off bellows valve having bellows gasket spindle and PN 16 flanged connections.

Safety, installation and maintenance Information

For detailed instructions, refer to the Installation and Maintenance Instructions 3.530.5275.150 supplied with the product.

Installation note

Valve must always be fitted respecting the flow direction indicated by the arrow imprinted on the valve body and preferably with the spindle and the handwheel vertically placed over the valve body. Vertical mounting (with spindle and handwheel installed below the valve body) is not recommended. In addition to the vertical position and the horizontal plane, alternative locations are however possible.

Disposal

These products are recyclable: No ecological hazard is anticipated with disposal of this product providing due care is taken.

Spare parts

Spare parts are available according to the groups in the following table.

Available spares

Stuffing box and body/cover gaskets assembly	10 and 11
Spindle and bellows gaskets assembly	4 and 8
Plug (with balancing disc - DN150, DN200 - 250 only)	7

Note: handle the valve body/cover gaskets with care as it has a metal core that can be sharp.

How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state type and size of valve and its nominal diameter.

Example: N° 1 stuffing box and body/cover gasket assembly for a Spirax Sarco BSK1 PN16 DN50 bellows sealed globe valve.

