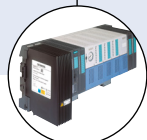


Sterile check valve



- Fully traceable wetted materials, also traceable seal available
- Suitable for CIP and SIP
- Flow direction selectable
- Self draining in vertical installation position

Type BBS-10 can be combined with...



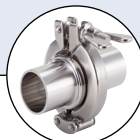
Type 8650
Automation system



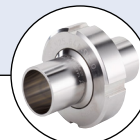
Type 2103
Diaphragm valve



Type BBS-07
Tank flange



Type BBS-05
Clamp connection



Type BBS-03
Welding union



Type 8221
Conductivity sensor

These sterile check valves are designed for fluids and steam. The design is such that the flow direction is selectable; that makes installation and simple and very cost effective. The latest standards in the biopharmaceutical markets are met. The construction provides a continuous flushing and the unique feature of the eccentric check valve is that it can be mounted in the vertical position and will self drain until empty providing the correct angle is achieved according to standard installation techniques. All BBS-10 check valves are suitable for a wide range of duties in many of the applications listed below.

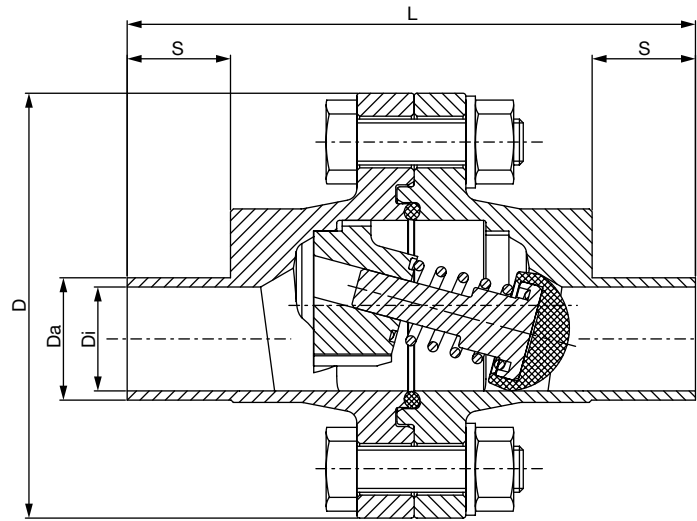
Applications

- Biotechnology
- Pharmaceutical
- Chemical industry
- Diary
- Food
- Cosmetic

Technical data

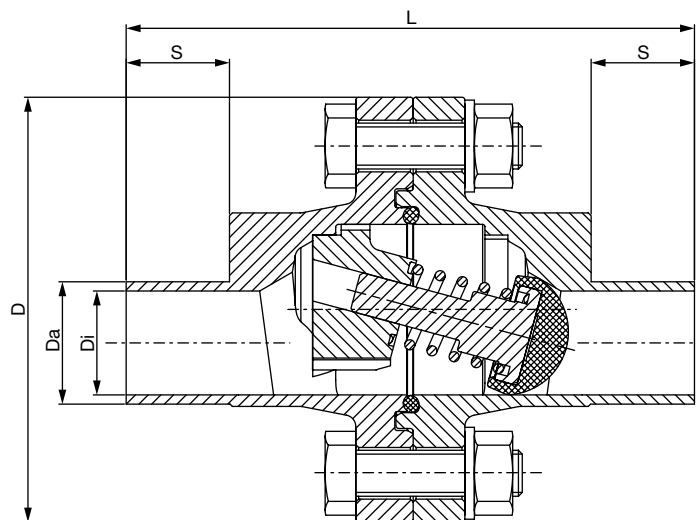
Available standard sizes	ISO DN08 to DN100 BS-OD DN1/4" to DN4" DIN DN08 to DN100 Customized on request
Material medium contact	Stainless steel 1.4435 BN2 (316L) Ball cap made of PTFE Spring: 1.4401 Special materials on request
Material medium separated	1.4305 or equivalent
Ball	1.4435 BN2 stainless steel with PTFE-Ball
Seals	O-Ring, EPDM, FEP, special sealing materials on request
Surface quality	Medium contacted surface < Ra 0.8 µm, electro polished, finer surface on request
Operating temperature	depending on the chosen seal material
Ambient temperature	-20 to +80 °C
Media	Liquids
Design, operating pressure	-1 to +16 bar (operating pressure -1 to +8 bar) Standard opening pressure 0.2 bar Higher or lower pressures on request
Applicable Standards	Pipe connection acc. to DIN 11866 ISO-Dimension Series B (ISO 4200) BS-OD-Dimension Series C (ASME BPE) DIN-Dimension Series A (DIN 11850) Conformity assessment acc. to DGRL 97-25-EG
Certifications	Material 3.1 FDA for all the stated seal materials USP VI for EPDM, FEP, PTFE

Dimension [mm] Ball check valve eccentric with weld end



Orifice	D [mm]	Da [mm]	Di [mm]	L [mm]	S [mm]	Article no. EPDM	Article no. FEP
ISO Dimensions Ball check valve eccentric with weld end							
DN08	74.00	13.50	10.30	117.00	18.00	744339	745694
DN10	74.00	17.20	14.00	105.00	18.00	744351	745695
DN15	74.00	21.30	18.10	99.00	18.00	744352	743491
DN20	88.00	26.90	23.70	146.00	25.00	744353	742970
DN25	88.00	33.70	29.70	127.00	25.00	744354	736422
DN32	125.00	42.40	38.40	187.00	25.00	744355	745701
DN40	137.00	48.30	44.30	210.00	25.00	744356	736458
DN50	137.00	60.30	56.30	180.00	25.00	on request	on request
DN65	194.00	76.10	72.10	226.00	20.00	744358	745705
DN80	194.00	88.90	84.30	216.00	25.00	744359	745707
DN100	260.00	114.30	109.70	216.00	30.00	on request	on request

Dimension [mm] Ball check valve eccentric with weld end



Orifice	D [mm]	Da [mm]	Di [mm]	L [mm]	S [mm]	Article no. EPDM	Article no. FEP
BS-OD Dimensions Ball check valve eccentric with weld end							
DN1/4"	74.00	6.35	4.57	137.00	18.00	on request	on request
DN3/8"	74.00	9.53	7.75	127.00	18.00	on request	on request
DN1/2"	74.00	12.70	9.40	117.00	18.00	744140	on request
DN3/4"	74.00	19.05	15.75	117.00	18.00	744131	745715
DN1"	88.00	25.40	22.10	155.00	25.00	745717	745718
DN1 1/2"	125.00	38.10	34.80	197.00	25.00	on request	on request
DN2"	137.00	50.80	47.50	186.00	25.00	on request	on request
DN2 1/2"	168.00	63.50	60.20	209.00	25.00	on request	745724
DN3"	168.00	76.20	72.90	185.00	25.00	on request	on request
DN4"	260.00	101.60	97.38	256.00	30.00	on request	on request

Orifice	D [mm]	Da [mm]	Di [mm]	L [mm]	S [mm]	Article no. EPDM	Article no. FEP
DIN Dimensions Ball check valve eccentric with weld end							
DN08	74.00	10.00	8.00	124.00	18.00	on request	on request
DN10	74.00	12.00	10.00	117.00	18.00	on request	on request
DN10	74.00	13.00	10.00	117.00	18.00	on request	on request
DN15	74.00	19.00	16.00	99.00	18.00	on request	on request
DN20	88.00	23.00	20.00	155.00	25.00	on request	on request
DN25	88.00	29.00	26.00	142.00	25.00	745679	744088
DN32	135.00	35.00	32.00	203.00	25.00	on request	on request
DN40	125.00	41.00	38.00	187.00	25.00	on request	on request
DN50	137.00	53.00	50.00	180.00	25.00	745687	on request
DN65	168.00	70.00	66.00	199.00	25.00	on request	on request
DN80	194.00	85.00	81.00	216.00	25.00	on request	on request
DN100	260.00	104.00	100.00	246.00	30.00	on request	on request

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www.burkert.comIn case of special application conditions,
please consult for advice.Subject to alterations
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Specification key (other versions on request)

Example

BBS-10 - ZX - WA - 25.0 - FE - VI - SD44 - T09 - ZUB - AE - NK52 + NO10

Specification key

Delivery (LIUM)

ZX	Centric check valve complete
ZA	Spare part set for centric check valve
EX	Eccentric check valve complete
EA	Spare part set for eccentric check valve

Connection Type (VRBT)

WA	Weld fitting acc. to DIN 11850 series 2 / DIN 11866 series A
WB	Weld fitting acc. to DIN EN ISO 1127 / ISO 4200 / DIN 11866 series B
WC	Weld fitting acc. to ASME BPE / DIN 11866 series C
00	Without connection (spare part set)

Seal Material (DWST)

AB	EPDM
FE	FEP

Material (WKST)

HA	Hastelloy C2
VI	1.4435 acc. BN2 and 316L acc. to ASME BPE chart DT3
VU	1.4539
VN	1.4410
VV	1.4547

Orifice (DN)

08.0
10.0
20.0
25.0
32.0
40.0
50.0
65.0
80.0
0100

fix

fix

Internal polishing

NO10	int. electro polished (Standard) Ra = 0.8 µm
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Certificate

NK52	3.1 Certificate (Standard)
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Characteristic of functional part (KGFT)

AE	opening pressure 0.2 bar
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Weld connection (LTA1)

Port connection [mm]	EN ISO 1127/ISO 4200	DIN 11850 Row 0	Row 1	Row 2	Row 3	BS 4825	ASME BPE
4		SC40=6 × 1.0					
6		SC41=8 × 1.0					
8	SA40=13.5 × 1.6	SC42=10 × 1.0				SODB=6.35 × 1.2	SA90=6.35 × 0.89
10	SA41=17.2 × 1.6		SF40=12 × 1.0	SD40=13 × 1.5	SE40=14 × 2.0	SODC=9.53 × 1.2	SA91=9.53 × 0.89
15	SA42=21.3 × 1.6	SC43=18 × 1.5	SF41=18 × 1.0	SD42=19 × 1.5	SE42=20 × 2.0	SODD=12.7 × 1.2	SA92=12.7 × 1.65
20	SA43=26.9 × 1.6	SC44=22 × 1.5	SF42=22 × 1.0	SD43=23 × 1.5	SE43=24 × 2.0	SODE=19.05 × 1.2	SA93=19.05 × 1.65
25	SA44=33.7 × 2.0	SC45=28 × 1.5	SF43=28 × 1.0	SD44=29 × 1.5	SE44=30 × 2.0		SODF=25.4 × 1.65
32	SA45=42.4 × 2.0	SC46=34 × 1.5	SF44=34 × 1.0	SD45=35 × 1.5	SE45=36 × 2.0		
40	SA46=48.3 × 2.0	SC47=40 × 1.5	SF45=40 × 1.0	SD46=41 × 1.5	SE46=42 × 2.0		SODH=38.1 × 1.65
50	SA47=60.3 × 2.0	SC48=52 × 1.5	SF46=52 × 1.0	SD47=53 × 1.5	SE47=54 × 2.0		SODI=50.8 × 1.65
65	SA48=76.1 × 2.0			SD48=70 × 2.0			SODJ=63.5 × 1.65
80	SA49=88.9 × 2.3			SD49=85 × 2.0			SODK=76.2 × 1.65
100	SA39=114.3 × 2.3			SD50=104 × 2.0			SODL=101.6 × 2.11