

DN15 – DN150 resp. ½" – 6"

SBC Ball Check Valves are ideally suited as reliable non-return flow control for liquid process media.

Modular Design

Valves are available as DIN- or ANSI-types, with PTFE solid balls and sight glass window plates made of Borosilicate acc. to DIN 7080 as per standard.

The sturdy design bodies are made of cast steel 1.0619 (WCB), coating RAL 5005 signal-blue or stainless steel casting 1.4408 (CF-8M), with resistant linings such as PFA or PFA-AS (anti-static).



SBC

Body 1.0619 (WCB)/PFA, PTFE solid ball

Main Features

- Heavy-duty, proven construction - maintenance-free
- Horizontal or vertical installation, flange connection acc. to DIN PN10/16 resp. ANSI 150lbs
- No need of additional flange gaskets due to wide and chambered flange sealing surface
- PTFE solid or hollow balls, guides made of PTFE-R
- Standard drip ledge indicating even minute flows
- Large observation opening

CE Conformity according to European Pressure Equipment Directive 97/23/EC (PED)

Options

- Metal reinforced glass plates
- Quartz glasses
- FEP glass protection sheet

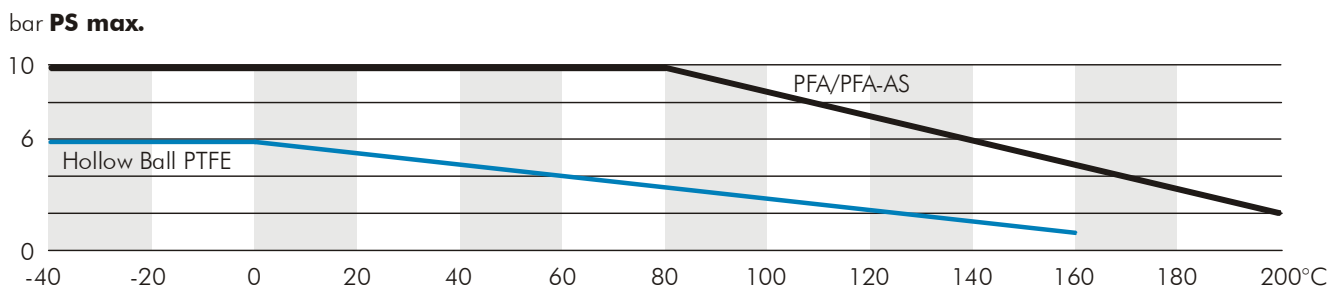
Operating Conditions

- Temperature range from -40°C (-40°F) up to $+200^{\circ}\text{C}$ ($+392^{\circ}\text{F}$), depending on lining material
- Pressure range from 1 mbar (0.01 psi) up to 10 bar (145 psi), depending on size/pressure/temperature

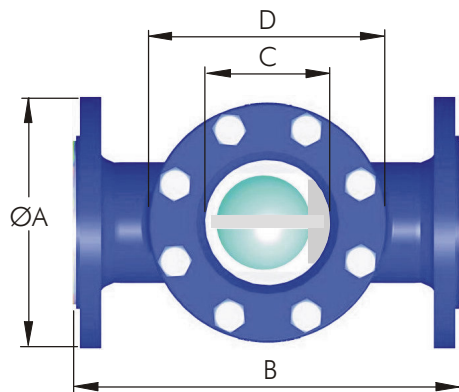
Testing / Marking

- Pressure- and tightness testing acc. to EN 12266-1, leakage rate A, resp. API 598.
- Marking of valves on body and name plate acc. to EN 19.
- Material- resp. test certificates acc. to EN 10204-3.1/2.2/2.1

Pressure-/Temperature Diagram



Technical Data



Standard Materials of Components

Body	Cast Steel 1.0619 (WCB) epoxy-coated
Flange	Cast Steel 1.0619 (WCB) epoxy-coated
Lining	PFA (opt. PFA-AS conductive)
Solid Ball	PTFE (opt. with hollow ball)
Ball Guide	PTFE-R (glassfibre-reinforced)
Glass Plate	Borosilicate 8488 acc. to DIN 7080
Gasket	C-4400 asbestos-free
Bolts	A2-70 1.4301

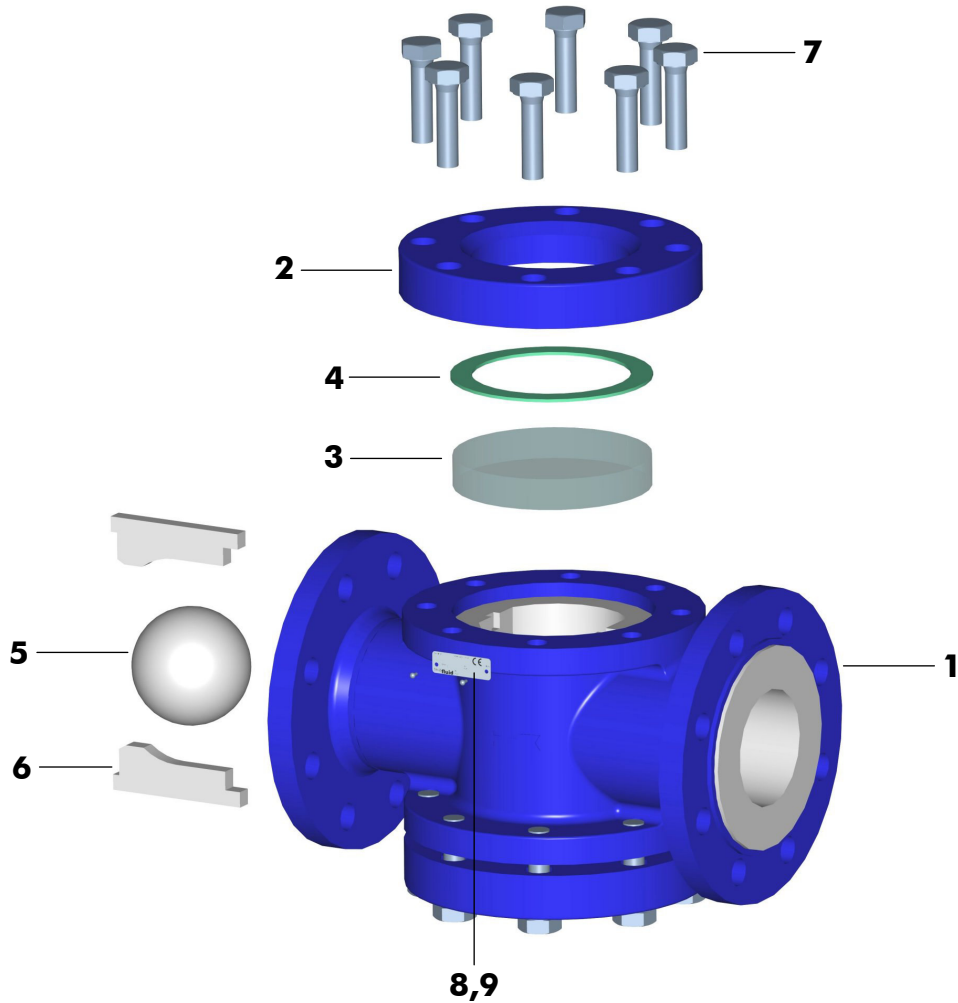
Dimensions in mm (lbs = kg x 2.2)

DN Size	15/1/2"	20/3/4"	25/1"	40/1/2"	50/2"	65/2/2"	80/3"	100/4"	150/6"
ØA DIN	95	105	115	150	165	185	200	220	285
ØA ANSI	95	105	108	127	152	178	190	229	279
B DIN	130	150	160	200	230	290	310	350	480
B ANSI	130	150	152	178	203	216	241	292	356
ØC	33	33	48	65	80	80	100	125	200
D	□70	□70	□85	□110	□120	Ø175	Ø190	Ø210	Ø290
ØGlass	45x10	45x10	63x10	80x12	100x15	100x15	125x20	150x25	225x30
kg DIN	3.7	4.3	5.3	9.0	13.3	19.6	27.4	47.7	66.0
kg ANSI	3.7	4.3	5.1	7.8	12.1	18.7	25.6	46.6	59.8

F/F acc. to DIN EN 558-1 Range 1 resp. ASME B16.10, other sizes and materials upon request
 Body flanges: 2 1/2" and 3" ANSI with threaded holes 5/8" UNC, 6" ANSI with threaded holes 3/4" UNC

Parts List
Valve compl.

Standard Version (Picture showing DN 80 PN16, PFA-lined)



Item	Qty.	Description	Material	No.
1	1	Body PFA-lined, RAL 5005	WCB	1.0619
2	2	Flange, RAL 5005	WCB	1.0619
3	2	Glass Plate DIN 7080	Borosilicate	8488
4	2	Gasket	C-4400	
5	1	Solid Ball	PTFE	
6	2	Ball Guide	PTFE-R	
7	16	Hex. Head Screw	A2-70	1.4310
8	1	Name Plate 42 x 14 CE	A2	1.4301
9	2	Hammer Screw 2.49 x 4.76	A2	1.4310

Specification

Project-/Customer Data		Inquiry/Date: _____		Ref. SF _____	
Company:		Contact Person:		Phone:	
Address:		Function:		Fax:	
ZIP/Place:		Department:		E-mail:	
Project:		Phone direct:		Mobile:	

Operating Conditions
Media / Chemical Composition:

<input type="checkbox"/> liquid	<input type="checkbox"/> powdery	<input type="checkbox"/> crystallizing	<input type="checkbox"/> sticky	<input type="checkbox"/> Spec. Grav. ____
<input type="checkbox"/> gaseous	<input type="checkbox"/> Solids ____ %	<input type="checkbox"/> viscous	<input type="checkbox"/> Flow Velocity ____ m/s	
<input type="checkbox"/> abrasive	<input type="checkbox"/> Particle ____ mm	<input type="checkbox"/> Visc. ____ cp	<input type="checkbox"/> Flow Rate ____ m ³ /hr	

Pressure

max. ____ bar

min. ____ bar

Temperature

max. ____ °C

min. ____ °C

Mode
 On/Off

 Flow Control

____ cycles/ ____

Installation / Environment
 horizontal

 vertical

 Room dry

 Room humid

 outdoor

Remarks:

SBC Product Code

Specification of a complete Ball Check Valve SBC Series

Product code	Nom. size	Flange conn.	Body	Lining body	Ball	Glass plate	Options
SBC	DN50	PN16	G10	A85	B80	Gb	
	DN15 - 150 ½" - 6"	PN16 ANSI150# JIS 10K	G10 1.0619 G15 1.4408	A85 PFA A86 PFA-AS	B80 PTFE B82 PTFE-AS B89 PP B90 UHMWPE	Gb Glass plate PN16 Gb40 Glass plate PN40 Gr reinforced glass Gq Quartz glass	B7 B7 body bolts Hb PTFE hollow ball RAL... Special paint