

1/2" – 6"

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

Modular Design

Valves are available 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 (conductive).



SBC

Body 1.0619 (WCB)/PFA, PTFE solid ball

Main Features

- Heavy-duty, proven construction - maintenance-free
- Horizontal or vertical installation, flange connections acc. to ANSI 150lbs (DIN optional)
- 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

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

Options

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

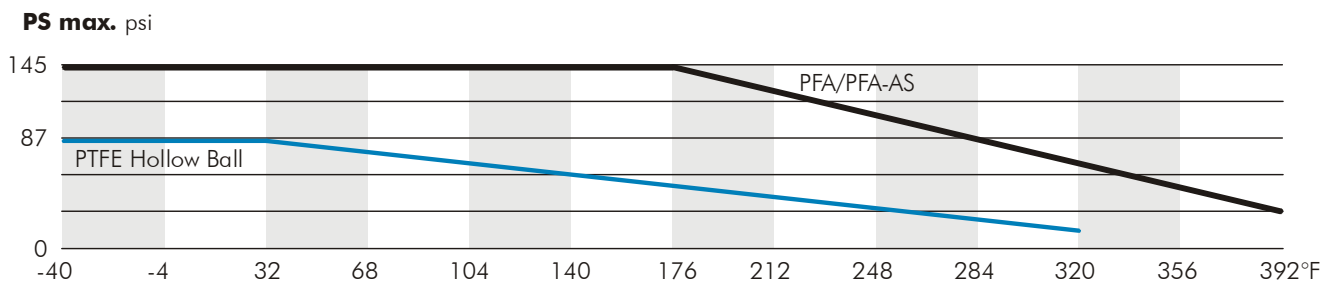
Operating Conditions

- Temperature range from -40°F up to +400°F, depending on lining material
- Pressure range from 0.01 psia up to 145 psi, depending on size/pressure/temperature

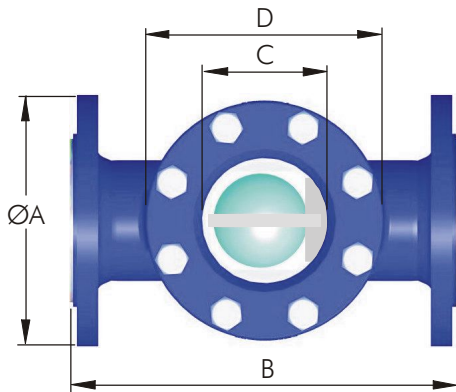
Testing / Marking

- 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	SS304

Dimensions inch

Size nom.	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	6"
ØA	3.74	4.13	4.25	5.00	6.00	7.00	7.50	9.00	11.00
B	5.12	5.91	6.00	7.00	8.00	8.50	9.50	11.50	14.00
ØC	1.30	1.30	1.89	2.56	3.15	3.15	3.94	4.92	7.87
D	□2.76	□2.76	□3.35	□4.33	□4.72	Ø6.89	Ø7.48	Ø8.27	Ø11.42
ØGlass	1.77x0.39	1.77x0.39	2.48x0.39	3.15x0.47	3.94x0.59	3.94x0.59	4.92x0.79	5.91x0.98	8.86x1.18
Weight lbs	8.14	9.46	11.22	17.16	26.62	41.14	56.32	102.52	131.56

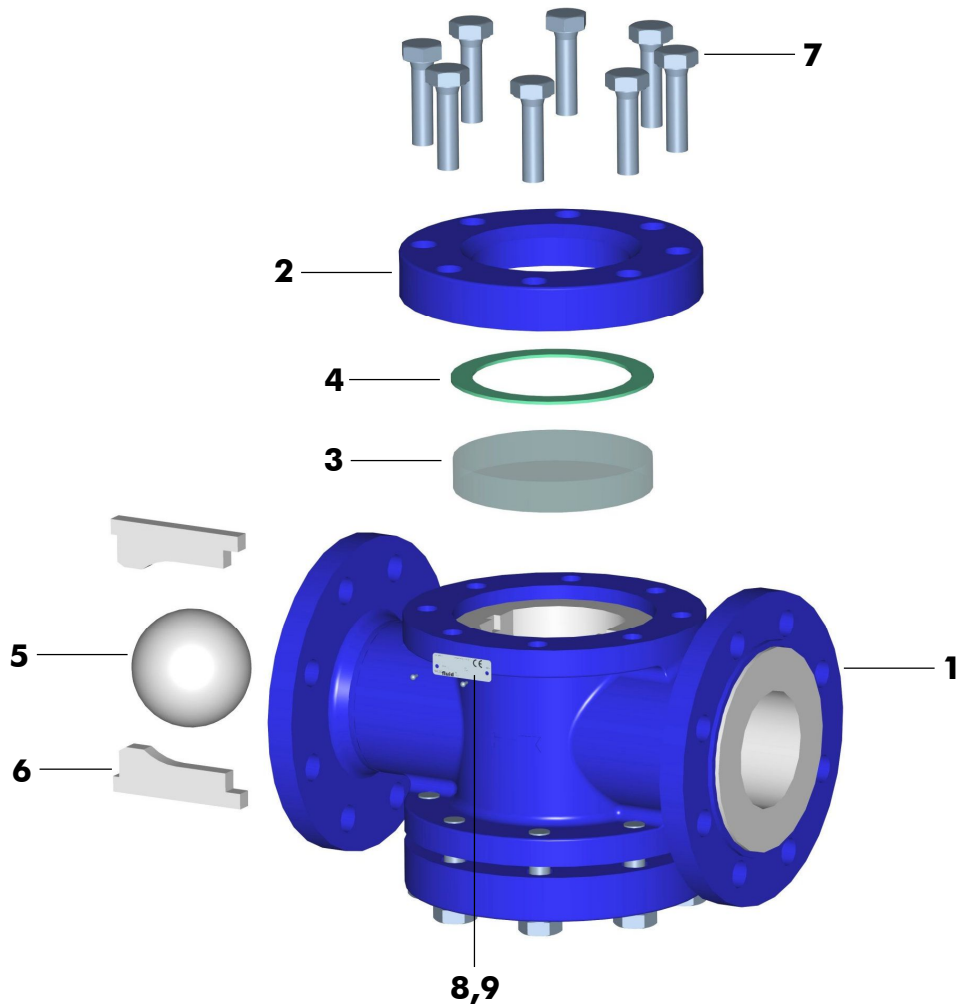
F/F acc. to ASME B16.10, other sizes and materials upon request

Body flanges: 2 1/2" and 3" ANSI with tapped holes 5/8" UNC, 6" ANSI with threaded holes 3/4" UNC

F/F options: 2 1/2", 3" and 6" available with DIN lengths

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 ____ ft/sec	
<input type="checkbox"/> abrasive	<input type="checkbox"/> Particle ____ mm	<input type="checkbox"/> Visc. ____ cp	<input type="checkbox"/> Flow Rate ____ usg/min	

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	2"	150#	G10	A85	B80	Gb	
	1/2" - 6" DN15 - 150	ANSI150# PN16 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