

## 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 2014/68/EU (PED)**

### Options

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

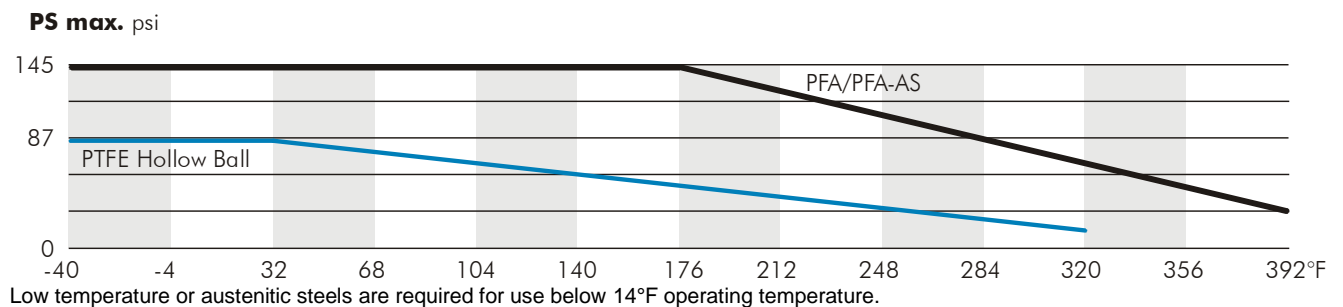
### Operating Conditions

- 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

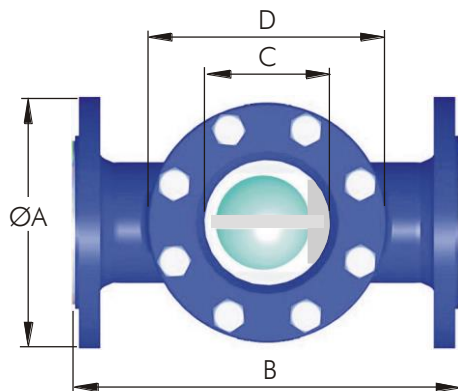
### Testing / Marking

- 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

<b>Body</b>	Cast Steel 1.0619 (WCB) epoxy-coated
<b>Flange</b>	Cast Steel 1.0619 (WCB) epoxy-coated
<b>Lining</b>	PFA (opt. PFA-AS conductive)
<b>Solid Ball</b>	PTFE (opt. with hollow ball)
<b>Ball Guide</b>	PTFE-R (glassfibre-reinforced)
<b>Glass Plate</b>	Borosilicate 8488 acc. to DIN 7080
<b>Gasket</b>	C-4400 asbestos-free
<b>Bolts</b>	SS304

#### Dimensions inch

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

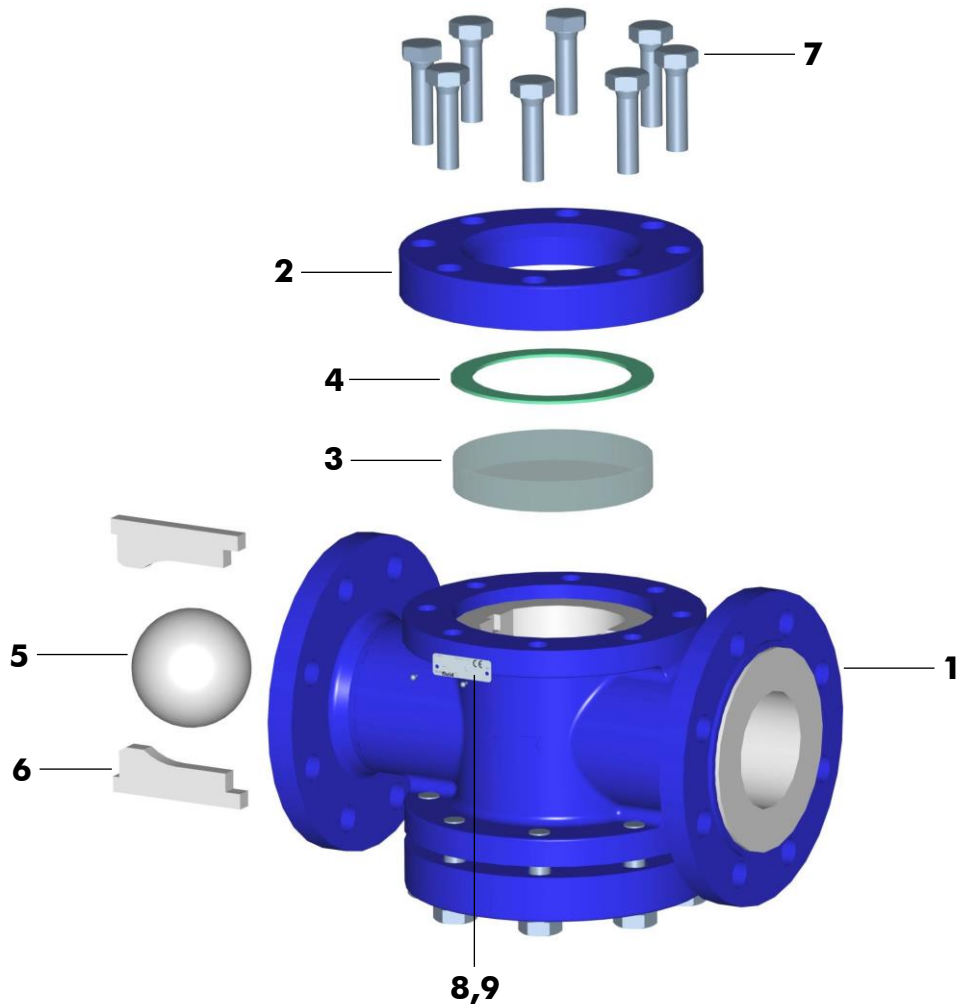
F/F acc. to ASME B16.10, other sizes and materials upon request

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

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

Parts List Valve compl.



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**

<b>Project-/Customer Data</b>		Inquiry/Date: _____	<b>Ref. SF</b> _____
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
<b>SBC</b>	<b>2"</b>	<b>150#</b>	<b>G10</b>	<b>A85</b>	<b>B80</b>	<b>Gb</b>	
	½" - 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