



## Swing Check Valves SSC Series

Suited for safe non-return flow control of corrosive fluidic media to be handled in process piping systems. Valves can be mounted horizontally or vertically between flanges acc. to DIN PN10/16 or ANSI 150lbs.

### Testing / Marking

- Pressure- and tightness testing acc. to EN 12266-1, leakage rate A, and spark testing at 35 kV to assure lining integrity. Marking of valves on body and name plate acc. to EN 19.
- Material- resp. test certificate acc. to EN 10204-3.1



### Type **SSC** plastomer-lined

- 2- or 3-piece bodies made of carbon steel, RAL 5005 signal-blue epoxy-coating or compl. made of stainless steel SS316L
- Linings made of PFA, PFA-AS (conductive) or PVDF
- Discs SS316L PFA-encapsulated or solid made of SS316L, Titanium Gr.2 or Hastelloy®
- Easy installation into existing piping systems, for silent operation, maintenance-free
- DN40 – DN150 PN16, DN200 – DN600 PN10
- Op. pressure max. 10 bar, Temp. –40°C/+200°C
- Face to face acc. to EN 558-1, range 20

**CE** Conformity acc. to European Pressure Equipment Directive 97/23/EC (PED)



### Type **SSCP** fully plastic

- 1-piece plastic bodies and solid discs made of PVDF or PP
- Discs with inserted O-ring assuring tightness and silent operation
- Flange sealing by means of inserted O-rings, no need of additional gaskets
- Option: Valve disc with reset spring made of stainless steel SS316 or Hastelloy®
- Sizes DN32 – DN300 PN6
- Op. pressure max. 10 bar, Temp. 0°C/+130°C



## Swing Check Valves SSC Series

Ideally suited for safe non-return flow control of aggressive, fluidic media to be handled in process systems. Valves can be mounted horizontally or vertically between flanges acc. to DIN PN10/16 resp. ANSI 150lbs.

### Operating Conditions

- Temperature range from -20°C (-4°F) up to +200°C (+392°F)
- Pressure range from full vacuum up to 10 bar (145 psi)

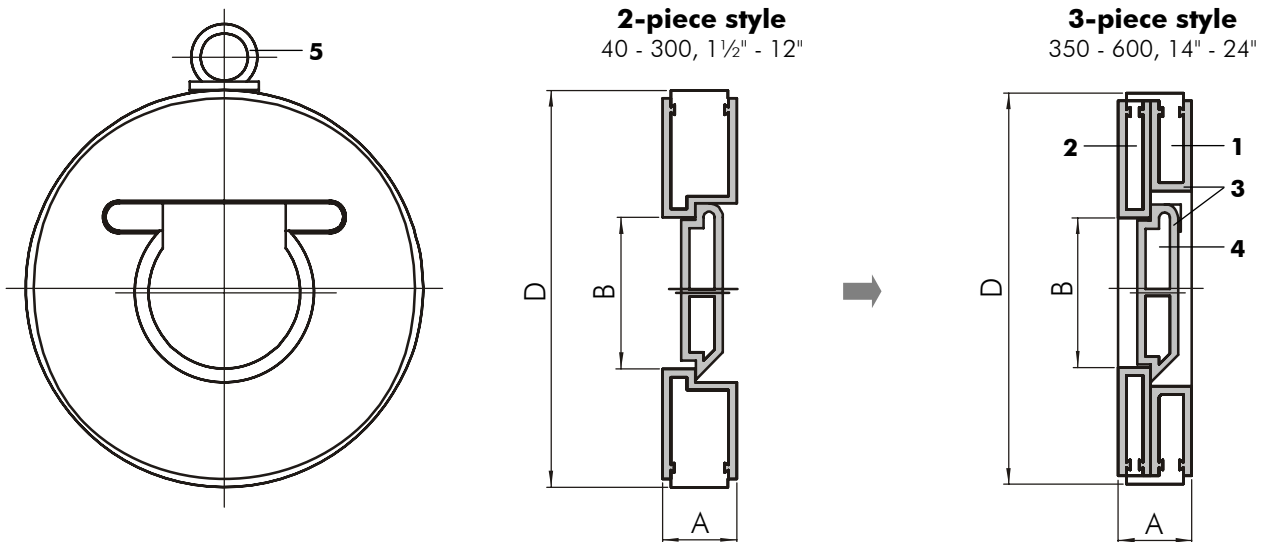
### Testing / Marking

- Pressure- and tightness testing acc. to EN 12266-1, leakage rate A, and spark testing at 35 kV to assure lining integrity. Marking of valves on body and name plate acc. to EN 19.
- Material- resp. test certificate acc. to EN 10204-3.1

### Standard Materials of Components

- |                        |                                       |
|------------------------|---------------------------------------|
| <b>1</b> Body          | Carbon steel, blue epoxy-coating      |
| <b>2</b> Retainer Ring | Carbon steel, blue epoxy-coating      |
| <b>3</b> Lining        | Virgin PFA acc. to ASTM D3307         |
| <b>4</b> Disc/Hinge    | SS316L, PFA-encapsulated              |
| <b>5</b> Eye Bolt      | Carbon steel, zinc-plated (10" – 24") |

### Technical Data



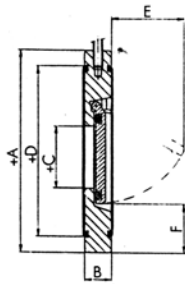
**Dimensions** in mm (Inch = mm / 25.4 lbs = kg x 2.2)

DN	DIN ANSI	40 1½"	50 2"	80 3"	100 4"	150 6"	200 8"	250 10"	300 12"	350 14"	400 16"	450 18"	500 20"	600 24"
<b>A</b>		33	43	46	52	56	60	68	78	92	102	114	114	114
<b>ØB</b>		22	30	55	72	115	155	190	240	275	305	355	405	450
<b>ØD</b> DIN		92	107	142	162	218	273	328	378	438	489	539	594	696
<b>ØD</b> ANSI 150#		82	102	133	172	219	276	337	407	447	511	546	603	717
<b>kg</b> (weight)		1.5	2.5	3	5.5	8.8	15	26	40	65	90	105	122	145

Face to face acc. to DIN EN 558-1 range 20 (up to DN400/18")



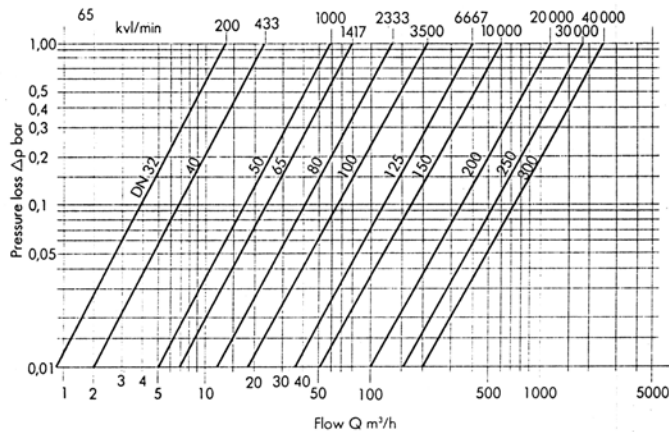
**Dimensions, opening pressure, tightness**



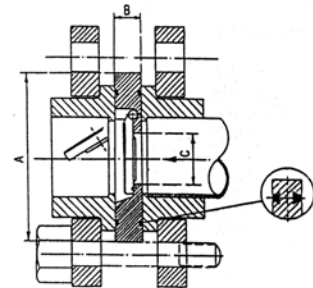
Dimensions									Opening pressure in mbar			Tightness from water column in m	
d	DN	G	A	B	C	D	E	F	vertical without spring	horizontal without spring	horizontal with spring	PVC PVDF	PP
mm	mm	inch											
40	32	1 1/4	85	15	18	59	22	25	10	1	20	2	3
50	40	1 1/2	95	16	22	72	25	28	10	1	20	2	3
63	50	2	109	18	32	86	37	29	10	1	20	2	3
75	65	2 1/2	129	20	40	105	50	31	10	1	20	2	3
90	80	3	144	20	54	119	61	32	10	1	20	2	3
110	100	4	164	23	70	146	77	31	10	1	20	2	3
140	125	5	195	23	92	173	94	35	10	1	20	2	3
160	150	6	220	26	112	197	115	35	10	1	20	2	3
225	200	8	275	35	154	255	152	38	18	1	20	2	3
280	250	10	330	40	192	312	180	41	18	1	20	2	3
315	300	12	380	45	227	363	215	41	18	1	20	2	3

Water at 20 °C, measurements on valves in horizontal pipes.

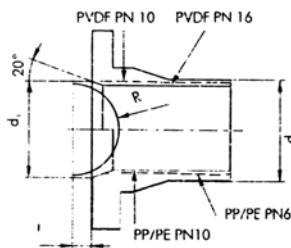
**Pressure loss characteristic**



**Installation**



**Warning:** Fusion necks of PP, PE and PVDF on outlet side must be machined according to the table below.



**Machining of fusion necks PE, PP and PVDF when used as outlet opening on outlet side**

d	DN	d <sub>1</sub>	d <sub>1</sub>	R	l	
mm	mm	inch	PP and PE ISO S 5 (PN6) and S 8.3 (PN10)	PVDF PN 10 and 16		
40	32	1 1/4	38	38	18	7,5
50	40	1 1/2	40,2	43,4	20	8,0
63	50	2	56	56,4	26	9,0
75	65	2 1/2	70	90	34	10,0
90	80	3	86	86	41	10,0
110	100	4	108	108	52	11,5
140	125	5	132	130,6	63	11,5
160	150	6	156	156	76	13,0
225	200	8	208	210,2	100	17,5
280	250	10	258	258	125	20,0
315	300	12	308	308	150	22,5

**Nominal values for screw fixing of flange connections sealed with O-ring**

d	DN	Number of screws with washers	Torque in Nm	Number of nut rotations after tightening by hand	
mm	mm	inch			
40	32	1 1/4	4 x M16/90	10	1
50	40	1 1/2	4 x M16/95	12	1
63	50	2	4 x M16/110	15	1
75	65	2 1/2	4 x M16/140	18	1
90	80	3	8 x M16/150	20	1
110	100	4	8 x M16/160	22	1
140	125	5	8 x M16/180	25	1
160	150	6	8 x M20/200	30	1
225	200	8	8 x M20/220	60	1
280	250	10	12 x M20/240	60	1
315	300	12	12 x M20/260	60	1

The technical data given in this publication are for general information purposes only. They imply no warranty of whatever kind. Please consult our General Conditions of Supply.



<b>Project-/Customer Data</b>		Inquiry/Date:	<b>Ref. Swissfluid</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"/> Spez. 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"/> Paricle ____ mm	<input type="checkbox"/> Visc. ____ cp	<input type="checkbox"/> Flow Rate ____ m <sup>3</sup> /h	

Pressure	Temperature	Mode	Installation / Environment	
max. ____ bar	max. ____ °C	<input type="checkbox"/> continuous	<input type="checkbox"/> horizontal	<input type="checkbox"/> Room dry
min. ____ bar	min. ____ °C	<input type="checkbox"/>	<input type="checkbox"/> vertical	<input type="checkbox"/> Room humid
			<input type="checkbox"/> _____	<input type="checkbox"/> outdoor

Remarks:

**Specification of a compl. Swing Check Valve SSC/SSC-P Series**

