

ANGLE SEAT CHECK VALVE SRV 303

Nominal size DN 15–80

Nominal size 1/2"–4"

Nominal pressure PN 4–10 bar

Features

- reliable check valve
- hermetically sealed even at low working pressures
- simple maintenance of the check element without the need to remove the valve
- horizontal and vertical mounting (valve piston always vertical)

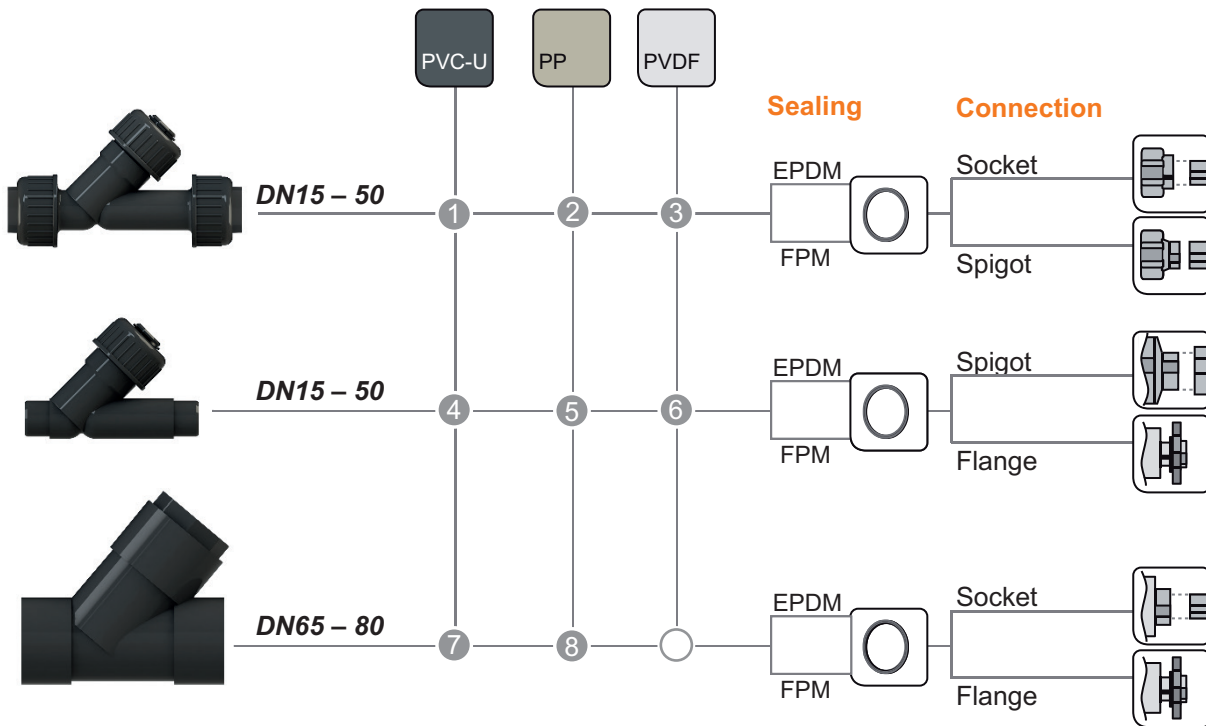
Additional options on request

- silicone free
- PVC-U with spring

www.asv-stuebbe.com/produkte/armaturen



Pictogram Angle Seat Check Valve SRV 303



PTFE-coated spring DN15–50



PVC-U: optionally available
PP: included
PVDF: included

● available
○ not available

Basic Nominal Sizes:

DN 8	DN 10	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200	DN 250	DN 300	DN 350	DN 400
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Connection Material (process connection)

<p>1 PVC-U socket DIN, ANSI, BS, JIS female thread Rp 1.4571 female thread Rp male thread R PE100 spigot</p>	<p>5 PP spigot fix* PP/St. flange DIN, ANSI GFK flange DIN</p>
<p>2 PP socket DIN spigot (IR) female thread Rp</p>	<p>6 PVDF spigot fix* PP/St. flange DIN, ANSI</p>
<p>3 PVDF socket DIN spigot (IR)</p>	<p>7 PVC-U socket DIN fix PP/St. flange DIN, ANSI GFK flange DIN</p>
<p>4 PVC-U spigot fix PP/St. flange DIN, ANSI GFK flange DIN</p>	<p>8 PP socket DIN fix PP/St. flange DIN, ANSI GFK flange DIN</p> <p>* Socket welding spigot</p>

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Use

- chemical plant engineering
- industrial plant engineering
- water treatment

Application

- for regulation of a prescribed flow direction - backflow preventer

Flow medium

- Neutral and aggressive fluid or gaseous medium types, provided that the valve components coming into contact with the medium are resistant at the operating temperature in accordance with the ASV resistance guide.

Flow direction

- Always in the direction of the arrow

ASV resistance guide

- www.asv-stuebbe.de/pdf_resistance/300051.pdf

Nominal pressure (H₂O, 20 °C)

- PN 4–10 bar

Medium temperature

- See graphics „Pressure/temperature diagram“

Operating pressure

- See graphics „Pressure/temperature diagram“

Size

- DN 15–80

Housing

- PVC-U, PP, PVDF

Piston

- PVC-U, PP, PVDF

Spring

- Standard for PP and PVDF valves (DN 15–50)
- Spring steel, PTFE-coated

Sealing

- FPM
- EPDM

Actuation

- medium controlled

Mounting position

- vertical or horizontal, piston always upright

Color

- Housing: PVC-U, gray, RAL 7011
- Housing: PP, gray, RAL 7032
- Housing: PVDF, opaque, yellowish-white

Device connection

- see pictograph
„Angle seat check valve SRV 303“

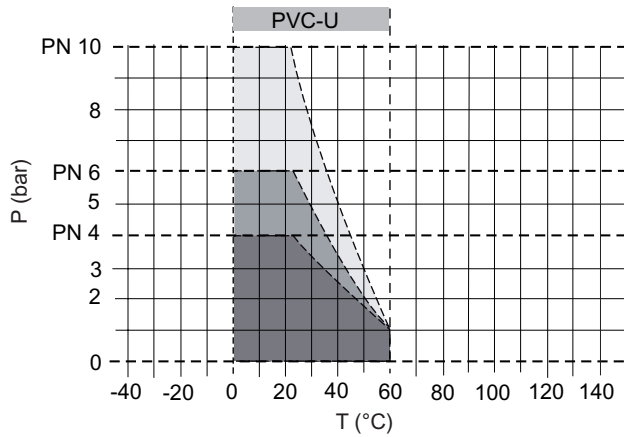
Option

- Spring for PVC-U valves of DN 15–50

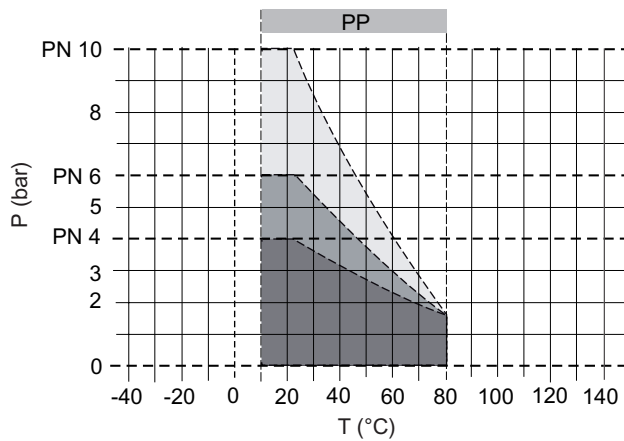
Note

- Only operate PP valves with a spring
- ASV valve elements of the design „fixed nozzle“ should not be installed by butt-welding. This applies to both heating elements and IR butt welding processes.

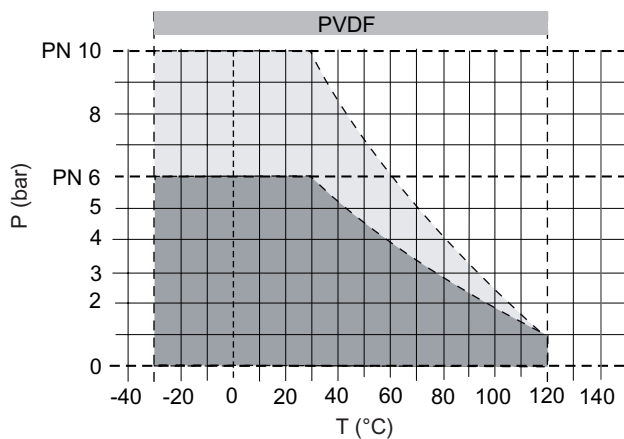
Pressure/temperature diagram



d (mm)	20	25	32	40	50	63	75	90
DN (mm)	15	20	25	32	40	50	65	80
PVC-U PN (bar)	10	10	10	10	10	10	10	6



d (mm)	20	25	32	40	50	63	75	90
DN (mm)	15	20	25	32	40	50	65	80
PP PN (bar)	10	10	10	10	10	10	6	4



d (mm)	PVDF	20	25	32	40	50	63	75	90
DN (mm)		15	20	25	32	40	50	65	80
PVDF PN (bar)		10	10	10	10	10	10	-	-

Description	
P	Operating pressure
T	Temperature

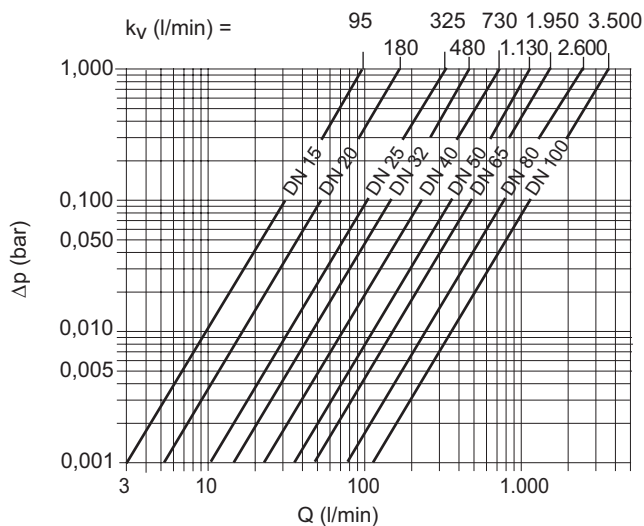
The pressure/temperature limits of the materials are valid for the stated nominal pressures and a service life of 25 years.

These values are guide values for flow medium types which do not negatively impact the physical and chemical characteristics of the valve material. It may be necessary to take diminution factors into consideration.

The operating life of the wear parts depends on the conditions of use.

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Pressure loss curve (standard values for H₂O, 20 °C)



Description	
Δp	Pressure loss
Q	Flow

Pressure loss and k_v value

The diagram shows the pressure loss Δp in relation to the flow Q.

Conversion formulas

$$c_v = k_v \times 0,07$$

$$f_v = k_v \times 0,0585$$

Units:

k_v [l/min]

c_v [gal/min] US

f_v [gal/min] GB

Opening and closing pressure (mbar) without spring

d (mm)		20	25	32	40	50	63	75	90
pS	EPDM	200	200	200	200	200	200	35	35
	FPM	300	300	300	300	300	300	35	35
pÖ		100	100	100	100	100	100	150	200

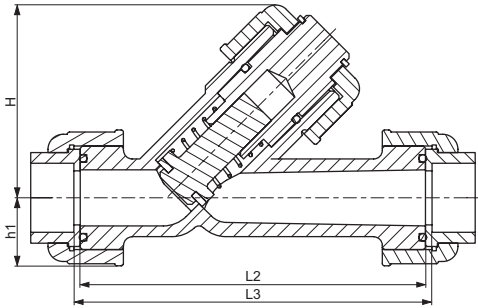
Opening and closing pressure (mbar) with spring

d (mm)		20	25	32	40	50	63	75	90
pS	EPDM	50	50	50	50	50	50	-	-
	FPM	100	100	100	100	100	100	-	-
pÖ		200	300	200	300	400	200	-	-

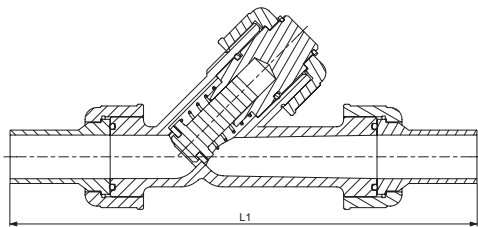
Description	
pS	Closing pressure
pÖ	Opening pressure

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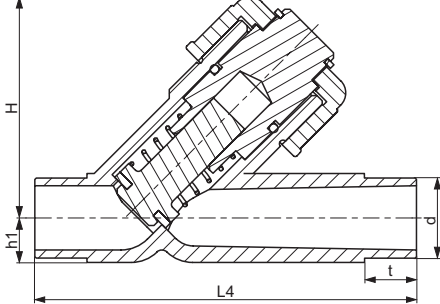
Connection socket



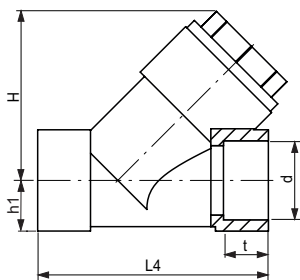
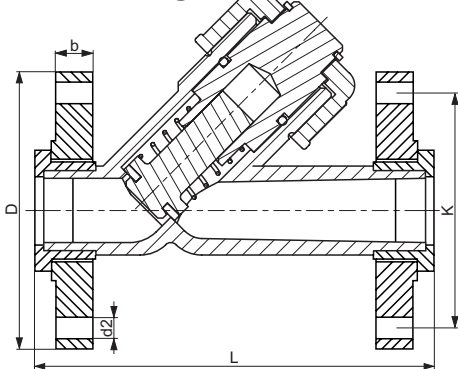
Connection socket/spigot end



Connection spigot end



Connection flange



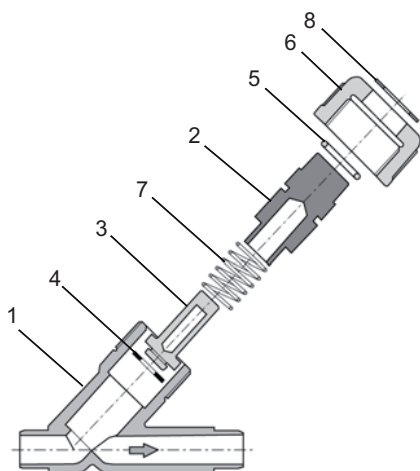
d (mm)	20	25	32	40	50	63	70	90		
DN (mm)	15	20	25	32	40	50	65	80		
DN (inch)	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3		
	Valve body		Insert/flange							
b	GFK flange DIN		12.2	14	15	17	17	18	18	20
	PP-st. flange DIN		13	14.5	15.5	17.5	17.5	19	19	21
	PP-st. flange ANSI		12	12	16	16	18	18	18.5	18
d2	GFK flange DIN		14	14	14	18	18	18	18	18
	PP-st. flange DIN		14	14	14	18	18	18	18	18
	PP-st. flange ANSI		16	16	16	16	16	20	19	20
D	GFK flange DIN		96.5	106	115	142	152	168	185	200
	PP-st. flange DIN		96	106	116	141	151	166	186	201
	PP-st. flange ANSI		95	105	113	130	133	160	180	190
h			21	24	34	43	43	51	-	-
h1			12.65	15	18	22	27	33.5	52	57.5
H	PVC-U		75	80	90	110	128	150	179	192
	PP		75	80	90	110	128	150	176	193
	PVDF		75	80	90	110	128	150	-	-
K	GFK flange DIN		65	75	85	100	110	125	145	160
	PP-st. flange DIN		65	75	85	100	110	125	140	152
	PP-st. flange ANSI		60	70	80	89	98	121	145	160
L			146	162	172	194	215	248	350	400
L1	PVC-U	PE100 spigot end DIN	320	340	350	380	428	478	-	-
		1.4571 male thread R	198	222	240	272	296	340	-	-
	PP	PP spigot end	238	264	280	306	333	368	-	-
	PVDF	PVDF spigot end	234	261	277	302	327	362	-	-
L2	PVC-U/PP		130	150	160	180	200	230	-	-
	PVDF		129	149	159	178	197	226	-	-
L3	PVC-U	PVC-U socket DIN	136	156	166	186	206	236	-	-
		PVC socket ANSI	136	156	166	186	206	236	-	-
		PVC socket BS	136	156	166	186	206	236	-	-
		PVC socket JIS	138	160	169	186	206	238	-	-
		PVC-U female thread Rp	138	158	173	196	226	261	-	-
		1.4571 female thread Rp	140	161	174	196	218	248	-	-
	PP	PP socket DIN	136	156	166	186	206	236	-	-
		PP female thread Rp	136	156	166	186	208	240	-	-
	PVDF	PVDF socket DIN	134	155	165	184	203	232	-	-
L4	PVC-U		124	144	154	174	194	224	243	262
	PP		124	144	154	174	194	224	241	260
	PVDF		124	144	154	174	194	224	-	-
Rp*			1/2	3/4	1	1 1/4	1 1/2	2	-	-
t	PVC-U		16	19	22	26	31	38	44	51
	PP		14.5	16	18	20.5	23.5	27.5	31	35.5
	PVDF		14.5	16	18	20.5	23.5	27.5	-	-

all dimensions in mm / * dimensions in inch

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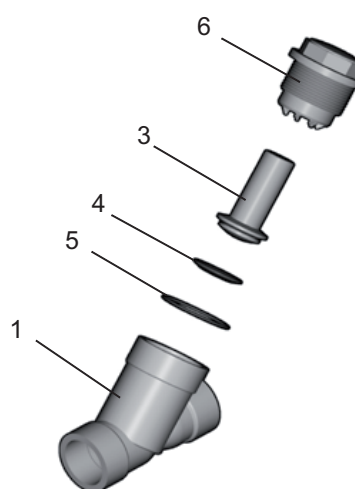
Components

DN 15–50



Position	Quantity	Designation
1	1	Housing
2	1	Piston guidance
3	1	Piston
4	1	Flat sealing ring
5	1	O-ring
6	1	Cap
7	1	Spring
8	1	Circlip

DN 65–80



Position	Quantity	Designation
1	1	Housing
3	1	Piston
4	1	Flat sealing ring
5	1	O-ring
6	1	Cap