

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)

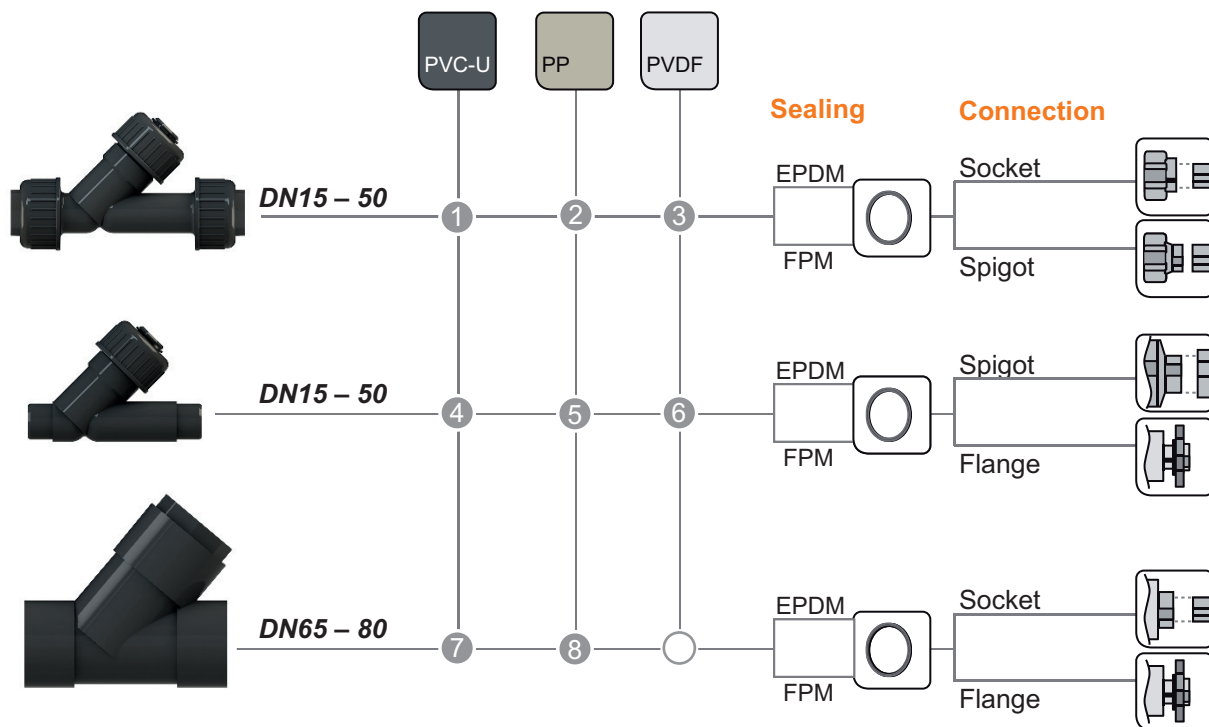
Additional options on request

- 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)

1 PVC-U socket DIN, ANSI, BS, JIS female thread Rp 1.4571 female thread Rp male thread R PE100 spigot 2 PP socket DIN spigot (IR) female thread Rp 3 PVDF socket DIN spigot (IR) 4 PVC-U spigot fix PP/St. flange DIN, ANSI GFK flange DIN	5 PP spigot fix* PP/St. flange DIN, ANSI GFK flange DIN 6 PVDF spigot fix* PP/St. flange DIN, ANSI 7 PVC-U socket DIN fix PP/St. flange DIN, ANSI GFK flange DIN 8 PP socket DIN fix PP/St. flange DIN, ANSI GFK flange DIN * Socket welding spigot
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Angle Seat Check Valve SRV 303

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

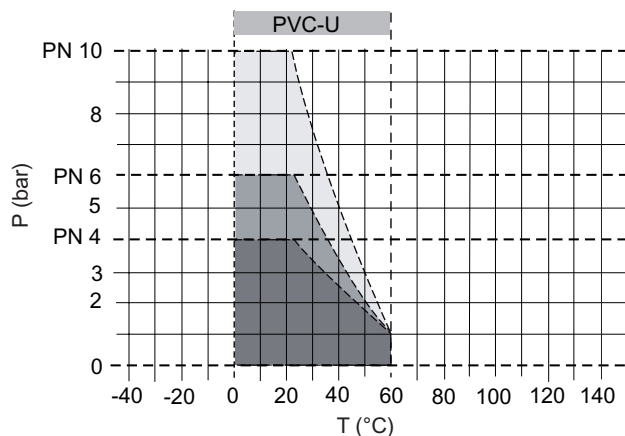
- Spring for PVC-U valves of DN 15–50

Note

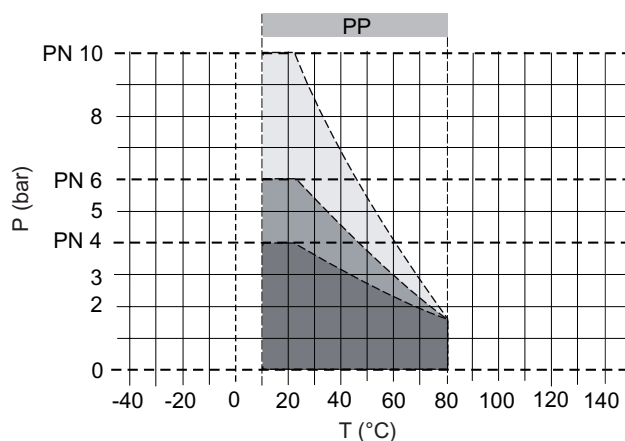
- Only operate PP valves with a spring
- ASV valve elements of the design „fixed nozzle“ should not be installed by butt-welding. This applies to both heating elements and IR butt welding processes.

Angle Seat Check Valve SRV 303

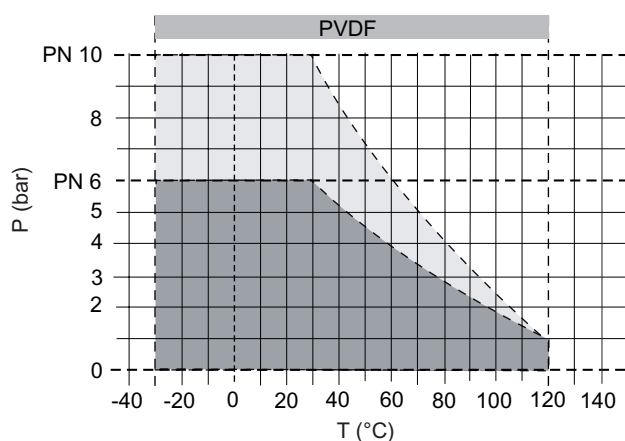
Pressure/temperature diagram



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	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	6	4



d (mm)	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	–	–

	Description
P	Operating pressure
T	Temperature

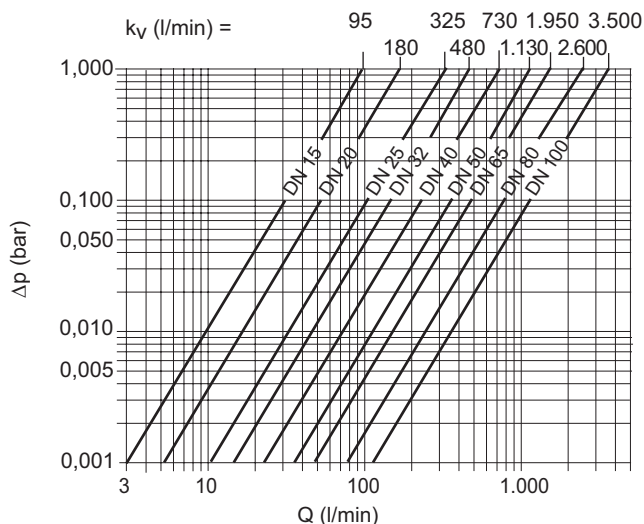
The pressure/temperature limits of the materials are valid for the stated nominal pressures and a service life of 25 years.

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

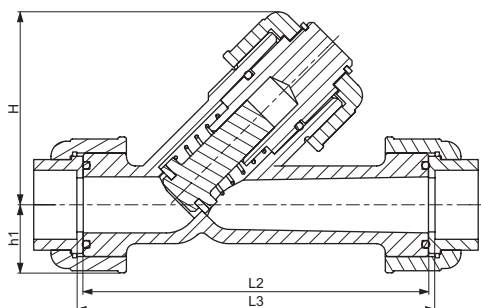
Opening and closing pressure (mbar) with spring

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	–	–

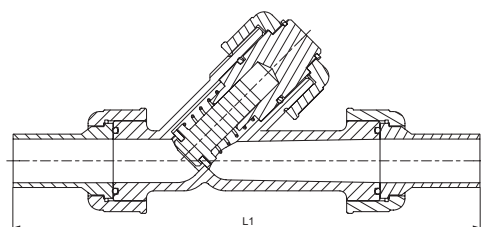
	Description
pS	Closing pressure
pÖ	Opening pressure

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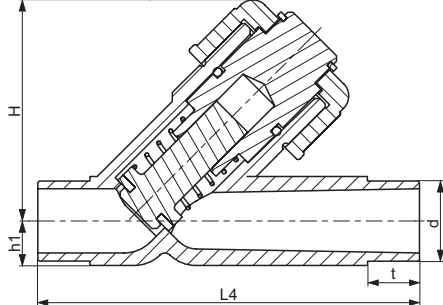
Connection socket



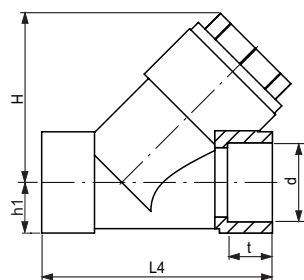
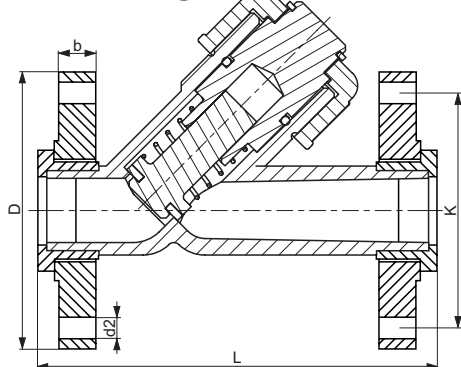
Connection socket/spigot end



Connection spigot end



Connection flange



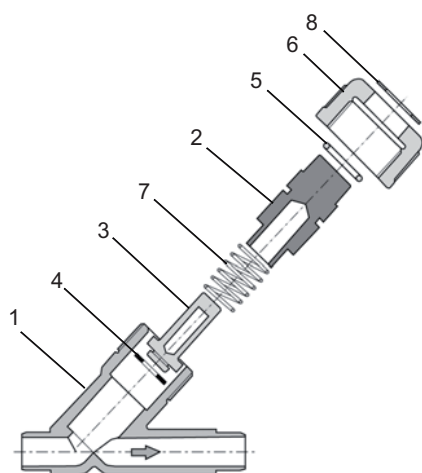
d (mm)	20	25	32	40	50	63	70	90
DN (mm)	15	20	25	32	40	50	65	80
DN (inch)	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Valve body	Insert/flange							
b	GFK flange DIN	12.2	14	15	17	17	18	20
	PP-st. flange DIN	13	14.5	15.5	17.5	17.5	19	21
	PP-st. flange ANSI	12	12	16	16	18	18.5	18
d2	GFK flange DIN	14	14	14	18	18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

all dimensions in mm / * dimensions in inch

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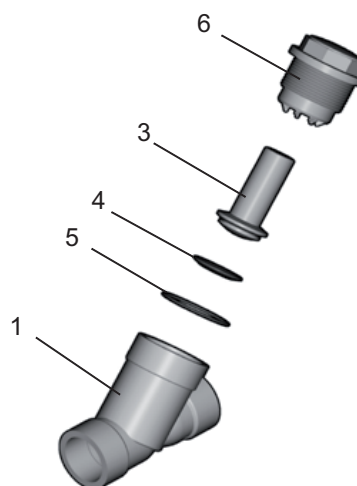
Components

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