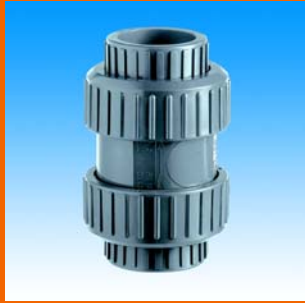


Ball Check Valve

KRV 360



Advantages

- hermetically sealed at low operating pressure
- corrosion resistant
- free of metal, no fluid oxidation
- maintenance-free

Application

- chemical plants
- industrial plants
- water treatment

Utilisation

- check valve permits fluids to flow in one direction only - the valve prevents back flow -

Flow media

- Neutral and aggressive fluids or gaseous media free of solids provided that the components coming into contact with the medium are resistant at operating temperature according to the ASV resistance guide.

Examinations

- requirements and examinations acc. to DIN 3441, 3442, 8063 and 16962.

Nominal pressure (H₂O, 20°C)

- | | | |
|---------|----------------|-------|
| • PVC-U | DN 10 - DN 50 | PN 10 |
| | DN 80 - DN 100 | PN 7 |
| • PVC-C | DN 10 - DN 50 | PN 16 |
| • PP | DN 15 - DN 50 | PN 10 |
| | DN 80 - DN 100 | PN 5 |
| • PVDF | DN 15 - DN 50 | PN 10 |
| | DN 80 - DN 100 | PN 7 |

Media temperature

- see pressure/temperature diagram

Operating pressure

- see pressure/temperature diagram

Size

- PVC-U DN 10 - DN 50, DN 80, DN 100
- PVC-C DN 10 - DN 50
- PP DN 15 - DN 25, DN 40, DN 50, DN 80, DN 100
- PVDF DN 15 - DN 25, DN 40, DN 50, DN 80, DN 100

Body and ball

- PVC-U, PVC-C, PP or PVDF

NOTE

Please consider the low density of the ball made of PP. The ball floats up, if media with a higher density than PP is used. If necessary, use a ball made of PVDF. ✓

Sealing

- EPDM
- FPM

Actuation

- fluid controlled

Connection

- socket ends for solvent welding acc. to DIN/ISO (PVC-U, PVC-C)
- socket ends for solvent fusion acc. to DIN/ISO (PP, PVDF)

Mounting

- always vertical

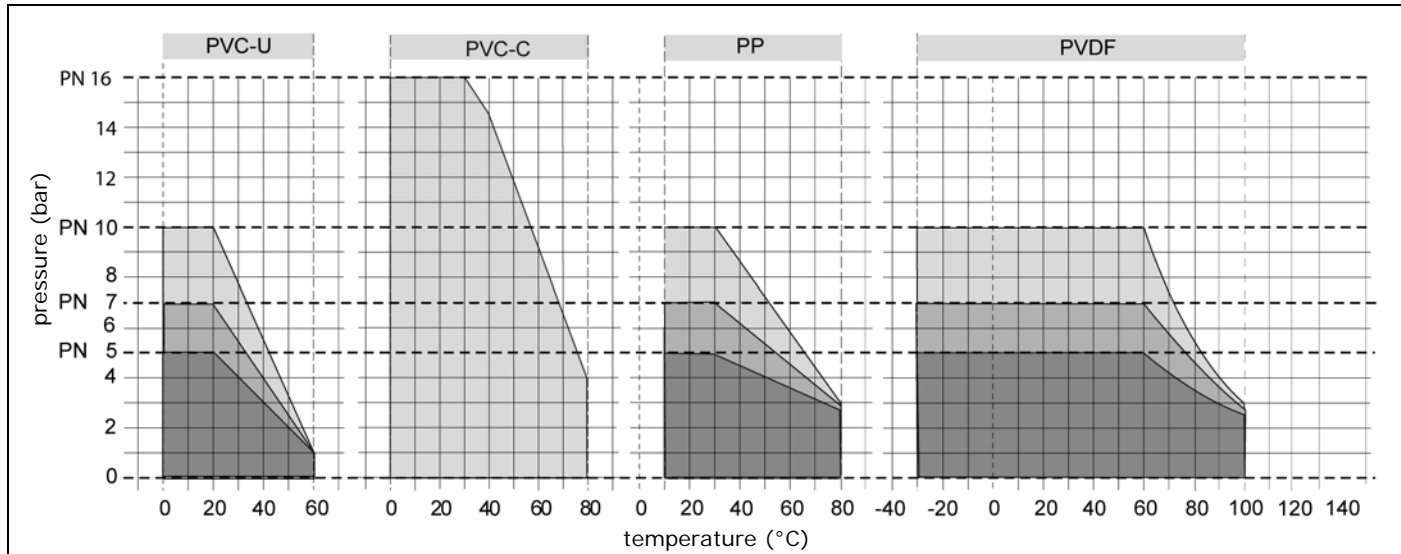
Direction of flow

- always in direction of arrow, always bottom-up

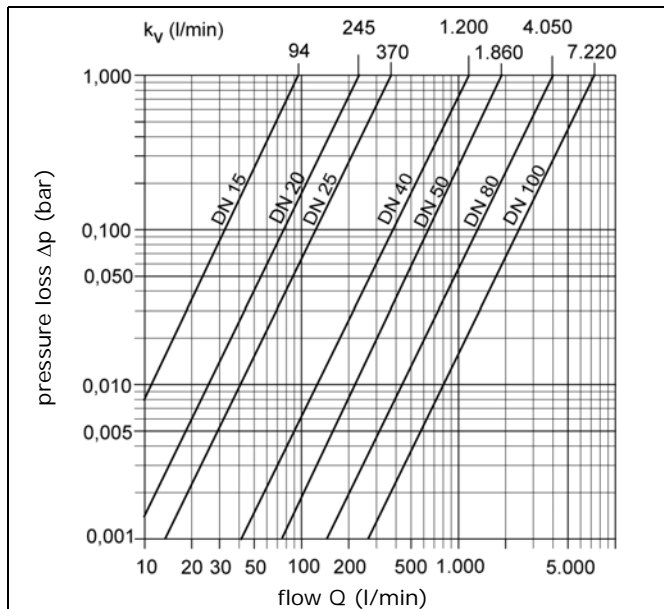
Colour

- | | | |
|-------|-------|-------------------------|
| body: | PVC-U | grey, RAL 7011 |
| | PVC-C | grey, RAL 7001 |
| | PP | grey, RAL 7032 |
| | PVDF | opaque, yellowish-white |

Pressure/temperature diagram



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



Pressure loss and K_v -value

The diagram shows pressure loss Δp over the flow Q .

For calculation:

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

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

Units:

$$k_v \text{ [l/min]}$$

$$c_v \text{ [gal/min] US}$$

$$f_v \text{ [gal/min] GB}$$

Pressure/temperature diagram

The pressure/temperature limits are applicable for the stated nominal pressures and a computed operating life factor of 25 years.

The values are a guide for harmless media (DIN 2403), to which the material of the valve is resistant.

For other media see the ASV resistance guide.

The durability of wear and tear parts depends on the operating conditions of the application.

For temperatures below 0°C (PP < +10°C) please specify the precise operating conditions of the application.

Operating instructions



Safe operation of the valve can only be ensured if it is properly installed, operated, serviced or repaired by qualified personnel according to its intended use while observing the accident prevention regulations, safety regulations, relevant standards and technical regulations or data sheets such as e.g. DIN, DIN EN, DIN ISO and DVS* for example.

*DVS = German Welding Society ✓

The intended use includes adhering to specified limit values for pressure and temperature as well as checking the chemical resistance with regard to the operating conditions.

For this purpose, ensure that all components coming into contact with the media are »resistant« in accordance with the ASV resistance guide.

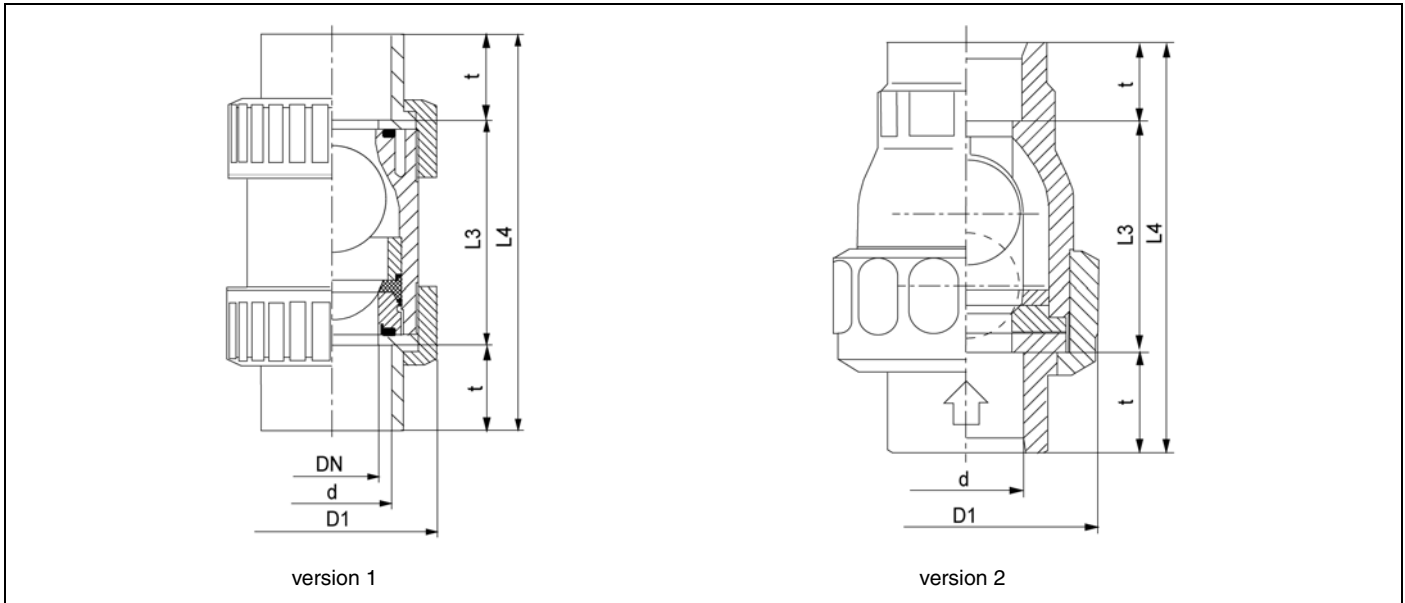
If no mounting and instruction manual is available to the authorized qualified personnel, please request a manual prior to installation, maintenance or repair.

Minimum opening and closing pressure (medium air)

size	d (mm)	16	20	25	32	40	50	63	90	110
closing pressure	(bar)	0,2	0,2	0,2	0,3	0,3	0,3	0,3	0,3	0,3
opening pressure	(bar)	0,05	0,05	0,05	0,05	0,1	0,05	0,1	0,1	0,1

Ball Check Valve KRV 360

Dimension



Dimension version 1

d (mm)		16	20	25	32	40	50	63	90	110
DN (mm)		10	15	20	25	32	40	50	80	100
DN (inch)		3/8	1/2	3/4	1	1 1/4	1 1/2	2	3	4
PVC-U	D1	50	50	60	68	80	96	116	-	-
PVC-C	D1	45	45	56	67	82	98	120	-	-
PVC-U	L3	48	48	58	60	74	84	100	-	-
PVC-C	L3	71	70	82	87	98	101	121	-	-
PVC-U	L4	78	78	94	104	126	146	176	-	-
PVC-C	L4	99	102	120	131	150	163	197	-	-
PVC-C/PVC-U	t	15	16	19	22	26	31	38	-	-

Dimension version 2

d (mm)		16	20	25	32	40	50	63	90	110
DN (mm)		10	15	20	25	32	40	50	80	100
DN (inch)		3/8	1/2	3/4	1	1 1/4	1 1/2	2	3	4
PVC-U	D1	-	-	-	-	-	-	-	152	210
PP/PVDF	D1	-	48	60	70	-	95	106	152	210
PVC-U	L3	-	-	-	-	-	-	-	150	209
PP/PVDF	L3	-	50	59	63	-	90	107	150	209
PVC-U	L4	-	-	-	-	-	-	-	252	331
PP/PVDF	L4	-	79	91	99	-	137	162	221	331
PVC-U	t	-	-	-	-	-	-	-	51	61
PP/PVDF	t	-	14,5	16,0	18,1	-	23,5	27,4	35,5	41,5

Weight (kg) (standard value)

d (mm)		16	20	25	32	40	50	63	90	110
PVC-U		0,14	0,14	0,23	0,36	0,59	0,95	1,68	2,80	7,20
PVC-C		0,14	0,14	0,23	0,36	0,59	0,95	1,68		
PP		-	0,06	0,10	0,15	-	0,35	0,50	1,60	4,00
PVDF		-	0,12	0,20	0,30	-	0,75	1,00	2,80	7,20

Ball Check Valve KRV 360

Ident number version 1

Body: PVC-U

d (mm)		16	20	25	32	40	50	63	90	110
connection	sealing									
socket ends	EPDM	60550	60551	60552	60553	60554	60555	60556	-	-
socket ends	FPM	60557	60558	60559	60560	60561	60562	60563	-	-

Body: PVC-C

d (mm)		16	20	25	32	40	50	63	90	110
connection	sealing									
socket ends	EPDM	131627	131628	131629	131630	131631	131632	131633	-	-
socket ends	FPM	131620	131621	131622	131623	131624	131625	131626	-	-

Ident number version 2

Body: PVC-U

d (mm)		16	20	25	32	40	50	63	90	110
connection	sealing									
socket ends	EPDM	-	-	-	-	-	-	-	43932	120986
socket ends	FPM	-	-	-	-	-	-	-	59034	128756

Body: PP

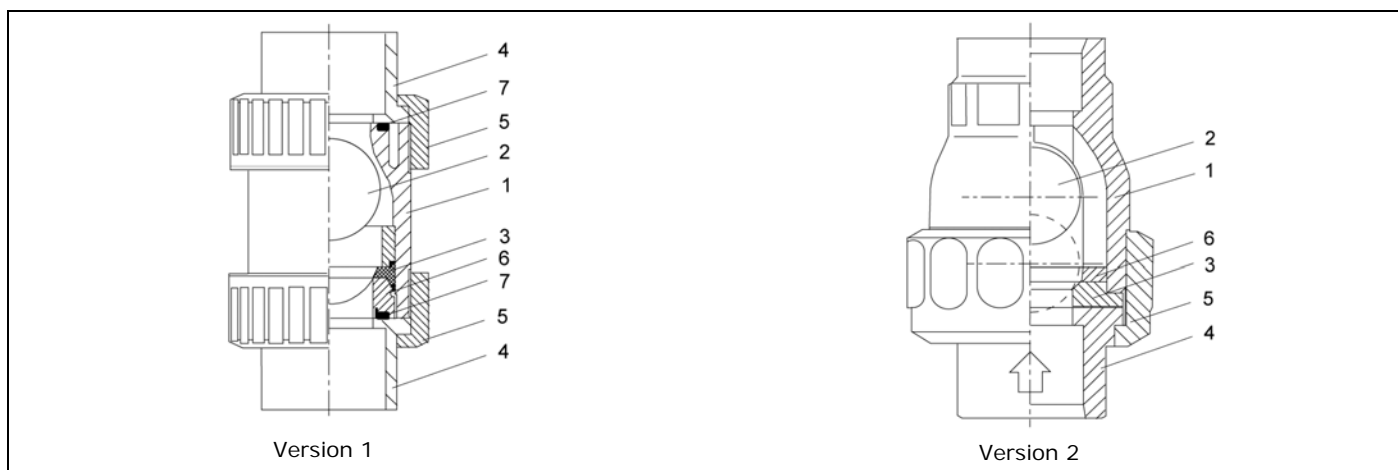
d (mm)		16	20	25	32	40	50	63	90	110
connection	sealing									
socket ends	EPDM	-	48070	48046	48071	-	48072	48073	48074	114725
socket ends	FPM	-	41149	41150	41151	-	48075	41499	41505	128757

Gehäuse: PVDF

d (mm)		16	20	25	32	40	50	63	90	110
connection	sealing									
socket ends	FPM	-	64865	62343	61345	-	62344	61346	62345	*

* on request

Parts list and designation



item	qty.	designation
1	1	body
2	1	ball
3	1	ball sealing
4	1	insert

item	qty.	designation
5	1	union
6	1	pressure disc
7	1	O-ring

Subject to technical modifications