

## Wafer check valve RSK 500



### Advantage

- corrosion resistant
- simple installation as a wafer type flange fitting
- centring of the valve by the housing diameter
- body with O-ring, no additional flange sealings required
- space saving, maintenance-free design
- for vertical or horizontal mounting

### Version

- Wafer check valve without return spring for vertical pipes.
- Wafer check valve with return spring for horizontal pipes. Spring accessories. We also recommend this type for pulsating flow conditions.

### Utilisation

- for regulation of a prescribed flow direction - backflow preventer

### Flow Media

- Neutral and aggressive fluid or gaseous media, provided that the valve components coming into contact with the media are resistant at the operating temperature in accordance with the ASV resistance guide.
- Contaminated media may impair the sealing function.

### Nominal Pressure (H<sub>2</sub>O, 20°C)

- PN 5 - PN 8

### Closing Pressure

- hermetically sealed at 0,3 bar

### Opening Pressure

- see table

### Fluid Temperature

- see pressure/temperature diagram

### Operating Pressure

- see pressure/temperature diagram

### Size

- DN 40 - DN 200

### Body

- PVC-U
- PP
- PVDF

### Shut-Off Disc

- PVC-U
- PP
- PVDF

### Sealing

- FPM
- PTFE
- EPDM

### Connection

- easy-to-install ASV installation adaptors on the outlet side
- on the inlet side with flange adaptors or welding stubs according to DIN ISO with flat jointing faces

### Attention

- Ensure that the valve disc makes contact with the inner wall of the fitting before it reaches the max. opening angle, otherwise there is a risk of breakage.

### Mounting

- vertical or horizontal, please note the direction of the arrow on the valve housing

### Flow Direction

- always in the direction of the arrow

### Option

- installation adaptor

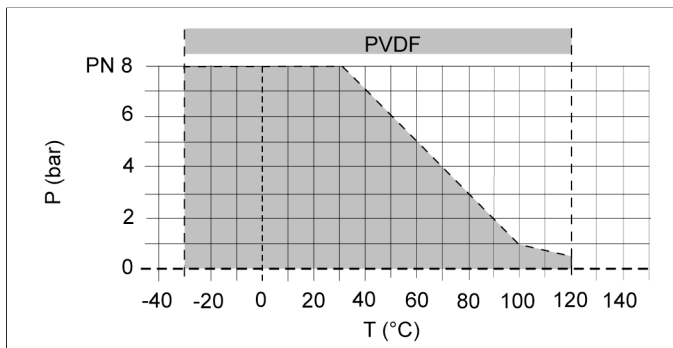
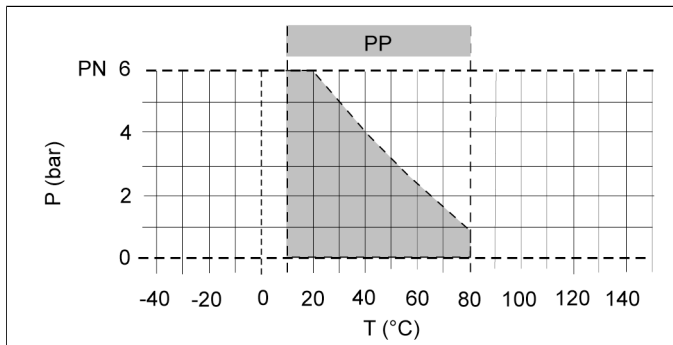
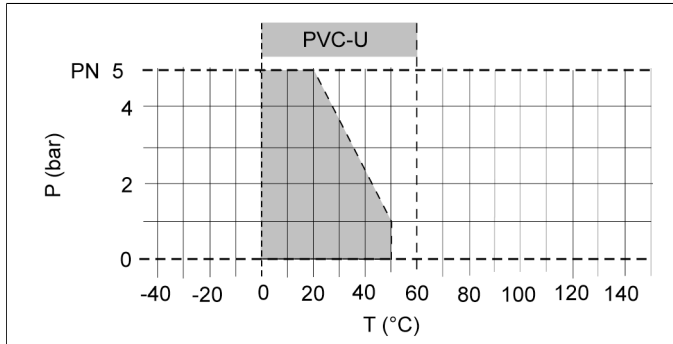
### Accessories

- Spring made of stainless steel (1.4571) or Hastelloy (C4)

### Colour

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

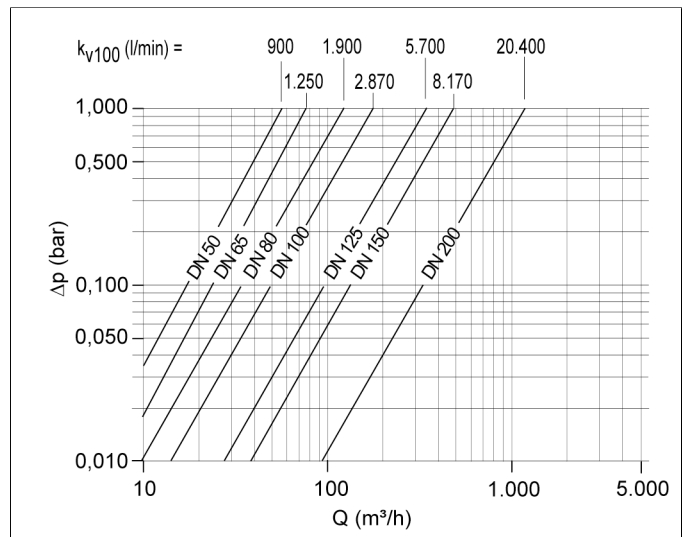
## Pressure/temperature diagram



$P$  = operating pressure  
 $T$  = temperature

The pressure/temperature limits are applicable for the stated nominal pressures and a computed operating life factor of 25 years. These are standard values for harmless media (DIN 2403), to which the valve material is resistant. For other media please refer to the ASV resistance guide. The durability of wear 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. The rated pressure depends on the valve size and material. For the corresponding rated pressure value of the valve, please refer to the »Order table«.

## Pressure loss curve (standard values for H<sub>2</sub>O, 20°C)



$\Delta P$  = pressure loss  
 $Q$  = flow

### pressure loss and $k_v$ value

The diagram shows the pressure loss  $\Delta P$  in relation to the flow  $Q$ .

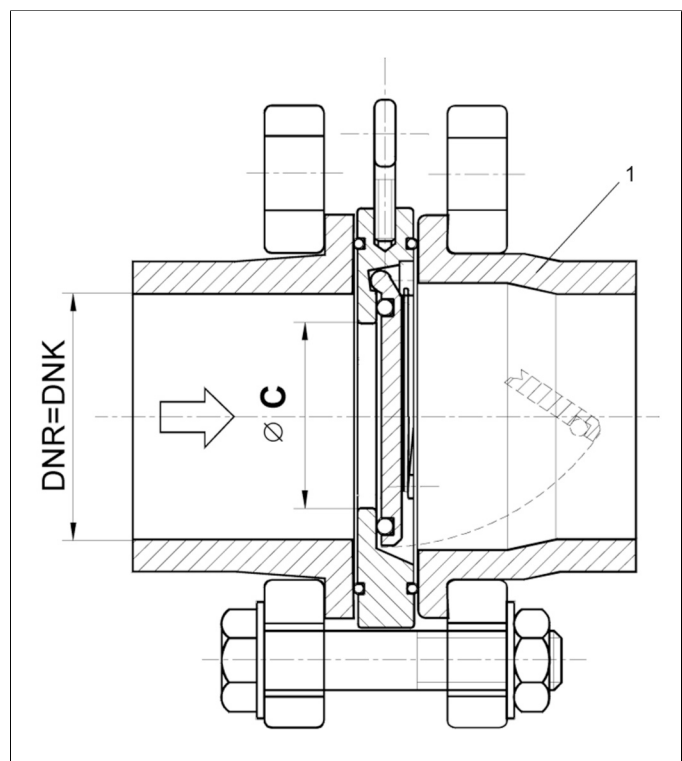
### Conversion aid:

$$c_v = k_v \times 0.07; f_v = k_v \times 0.0585$$

### Units:

$k_v$  [l/min];  $c_v$  [gal/min] US;  $f_v$  [gal/min] GB

### Installation note



1 = ASV installation adaptor

## Wafer check valve RSK 500

### RSK: Opening pressure pressure (mbar) without spring

Flow direction: from bottom to top

d (mm)	50	63	75	90	110	140	160
PVC-U	2	2	2	2	2	2	2
PP	1	1	1	1	1	1	1
PVDF	2	2	2	2	2	2	3
<b>d (mm)</b>							<b>225</b>
PVC-U							2
PP							2
PVDF							3

### FRSK: Opening pressure (mbar) with spring

Flow direction: from bottom to top

d (mm)	50	63	75	90	110	140	160
PVC-U	22	22	22	22	22	22	22
PP	21	21	21	21	21	21	21
PVDF	22	22	22	22	22	22	23
<b>d (mm)</b>							<b>225</b>
PVC-U							22
PP							22
PVDF							23

### Operating note

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, directives/technical regulations or codes of practice such as e.g. DIN, DIN EN, DIN ISO and DVS\*. \*DVS = German Welding Society  
The intended use includes adhering to specified limit values for pressure and temperature, as well as checking the resistance. This requires all components coming into contact with the medium to be "resistant" in accordance with the ASV resistance guide.

## Wafer check valve RSK 500, [d50 - d160]



### body PVC-U

<i>size</i>	d(mm)	50	63	75	90	110	140	160
	<i>pressure range</i>	40	50	65	80	100	125	150
	DN(mm)	1 1/2	2	2 1/2	3	4	5	6
	PN(bar)	5	5	5	5	5	5	5
<i>Connection</i>	<i>sealing</i>	<i>ident No.</i>						
	<i>weight</i>							
PVC-U wafer type flange DIN 2501	EPDM	41460	41461	41462	41463	67940	67941	67942
	FPM	41039	41040	41041	41042	41043	41044	41045
	<i>weight</i>	0.16 kg	0.25 kg	0.32 kg	0.39 kg	0.55 kg	0.75 kg	1.10 kg

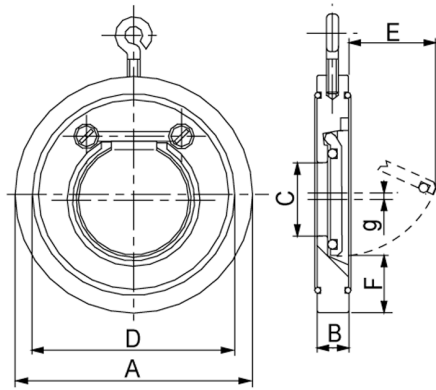
### body PP

<i>size</i>	d(mm)	50	63	75	90	110	140	160
	<i>pressure range</i>	40	50	65	80	100	125	150
	DN(mm)	1 1/2	2	2 1/2	3	4	5	6
	PN(bar)	6	6	6	6	6	6	6
<i>Connection</i>	<i>sealing</i>	<i>ident No.</i>						
	<i>weight</i>							
PP wafer type flange DIN 2501	EPDM	64349	67195	41086	41087	41088	41089	41090
	FPM	41062	41063	41064	41065	41066	41067	41068
	<i>weight</i>	0.10 kg	0.17 kg	0.22 kg	0.26 kg	0.37 kg	0.50 kg	0.74 kg

### body PVDF

<i>size</i>	d(mm)	50	63	75	90	110	140	160
	<i>pressure range</i>	40	50	65	80	100	125	150
	DN(mm)	1 1/2	2	2 1/2	3	4	5	6
	PN(bar)	8	8	8	8	8	8	8
<i>Connection</i>	<i>sealing</i>	<i>ident No.</i>						
	<i>weight</i>							
PVDF wafer type flange DIN 2501	FPM	41543	41544	41545	41546	41547	41548	41549
	PTFE	41531	41532	41533	41534	41535	41536	41537
	<i>weight</i>	0.21 kg	0.33 kg	0.42 kg	0.51 kg	0.71 kg	0.97 kg	1.42 kg

# Wafer check valve RSK 500, [d50 - d160]



## dimensions

d(mm)	50	63	75	90	110	140	160
DN(mm)	40	50	65	80	100	125	150
DN(inch)	1 1/2	2	2 1/2	3	4	5	6
dimensions(mm)							
A	95	109	129	144	164	195	220
B	16	18	20	20	23	23	26
C	22	32	40	54	70	92	105
D	72	86	105	119	146	173	197
E	25	37	50	61	77	94	100
F	28	29	31	32	31	35	40
g	1,5	3,2	3,5	3,5	6	7,5	8

## Wafer check valve RSK 500, [d225]



### body PVC-U

<i>size</i> <i>pressure range</i>	d(mm)		225
	DN(mm)		200
	DN(inch)		8
	PN(bar)		5
<i>Connection</i>	<i>sealing</i>	<i>ident No.</i>	
PVC-U wafer type flange DIN 2501	EPDM		41464
	FPM		41046
	<i>weight</i>		2.10 kg

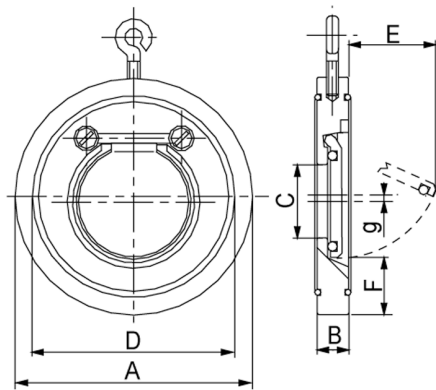
### body PP

<i>size</i> <i>pressure range</i>	d(mm)		225
	DN(mm)		200
	DN(inch)		8
	PN(bar)		6
<i>Connection</i>	<i>sealing</i>	<i>ident No.</i>	
PP wafer type flange DIN 2501	EPDM		41091
	FPM		41069
	<i>weight</i>		1.40 kg

### body PVDF

<i>size</i> <i>pressure range</i>	d(mm)		225
	DN(mm)		200
	DN(inch)		8
	PN(bar)		8
<i>Connection</i>	<i>sealing</i>	<i>ident No.</i>	
PVDF wafer type flange DIN 2501	FPM		41550
	PTFE		41538
	<i>weight</i>		2.71 kg

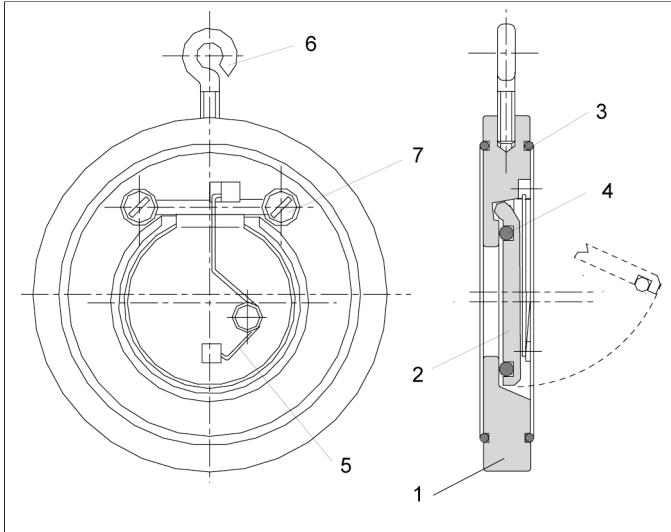
## Wafer check valve RSK 500, [d225]



### dimensions

d(mm)		225
DN(mm)		200
DN(inch)		8
dimensions(mm)		
	A	275
	B	34
	C	154
	D	255
	E	152
	F	38
	g	11

## parts lists



position	quantity	designation
1	1	housing/body
2	1	shut-off disc
3	2	O-ring
4	1	O-ring
5	1	spring
6	1	eyelet screw
7	2	screw