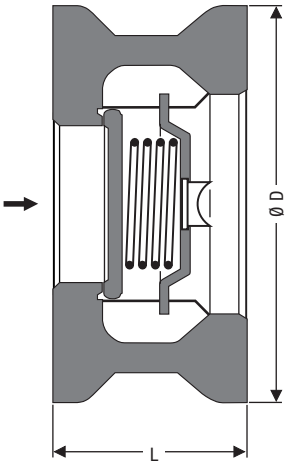
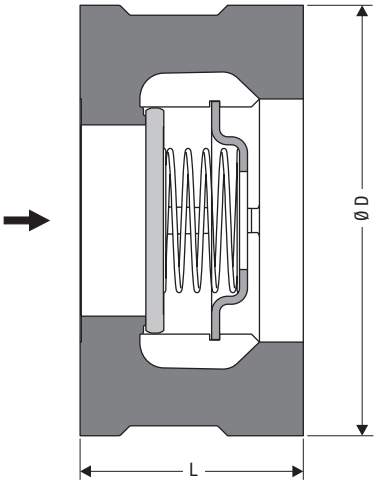


RK 16 A, RK 16 C
DN 15-100



RK 26 A
DN 15-100

Application and Features

Typr	PN	Application for liquids, gases and vapours	Features
RK 16C	PN 40 Class 300	for more aggressive fluids such as hydrochloric acid	short overall length to DIN 558-2, series 52, high-quality forged material (RK 16A / RK 16 C) materials suitable for petrochemical industry
RK 16A		particularly suitable for low temperatures, aggressive fluids, boiler feedwater lines and industrial applications	
RK 26A			

Body Material

Type		Nominal sizes DN	EN reference	ASTM equivalent [1])
RK 16A	**Body**	15 – 100 mm	1.4571	AISI 316 Ti
	Valve disk		1.4571	AISI 316 Ti
RK 16C	**Body**	15 – 100 mm	2.4610	Hastelloy C
	Valve disk		2.4610	Hastelloy C
RK 26A	**Body**	15 – 100 mm	1.4408	A351 CF8M
	Valve disk		1.4571	AISI 316 Ti

[1]) ASTM material similar to EN material.
Observe different physical and chemical properties!

Dimensions

	DN	[mm]	15	20	25	32	40	50	65	80	100
		[inch]	½	¾	1	1¼	1½	2	2½	3	4
	L	[mm]	25	31.5	35.5	40	45	56	63	71	80
RK 16 A	D	[mm]	52	63	72	81	93	108	128	143	163[2]) 169[3])
RK 16 C	D	[mm]	52	63	72	81	93	108	128	143	163[2]) 169[3])
RK 26 A	D	[mm]	52	63	72	81	93	108	128	143	163[2]) 169[3])

[2]) PN 10/16 [3]) PN 25/40

Pressure/Temperature Ratings with metal-to-metal seat

Type	PN/Class	Nominal sizes DN	p / T / [bar] / [°C]		
RK 16 A	PN 40/Class 300	15 – 100 mm	50.4 / -200	38.4 / 200	24.9 / 550[4])
RK 16 C	PN 40/Class 300	15 – 100 mm	40 / -200	36 / 200	32 / 400[4])
RK 26 A	PN 40/Class 300	15 – 100 mm	49.6 / -200	35.7 / 200	24.9 / 550[4])

[4]) If the operating temperatures exceed 300 °C intercrystalline corrosion may occur. Do not subject the equipment to operating temperatures higher than 300 °C unless intercrystalline corrosion can be ruled out.

Designs

Type	Seat				Spring			Earthing connection
	meta-to-metal	EPDM (–40 up to 150 °C)[5])	FPM (–25 up to 200 °C)[5])	PTFE (–190 up to 250 °C)[5])	without spring	special spring	Nimonic spring [6])	
RK 16 A	X	0	0	0	0	0	0	0
RK 16 C	X	–	–	–	0	–	–	0
RK 26 A	X	0	0	0	0	0	0	0

[5]) Observe pressure/temp. ratings of the equipment
[6]) Required for temperatures above 300 °C.

X : standard
0 : optional
– : not available

Pressure Drop Charts

The curves given in the chart are valid for water at 20 °C. To read the pressure drop for other fluids the equivalent water volume flowrate must be calculated and used in the graph $\dot{V}_W$.

The values indicated in the chart are applicable for spring-assisted valves with horizontal flow and to valves without spring installed in vertical pipes with upward flow.

$$\dot{V}_W = \dot{V} \cdot \sqrt{\frac{\rho}{1000}}$$

$\dot{V}_W$ = Equivalent water volume flow in [l/s] or [m³/h]

ρ = Density of fluid (operating condition) in [kg/m³]

$\dot{V}$ = Volume of fluid (operating condition) in [l/s] or [m³/h]

Opening Pressures

Differential pressures at zero volume flow.

RK 16 A, RK 26 A

DN	Opening pressures [mbar]				
		Direction of flow			
	without spring	with spring			
	↑	↑	→	↓	
15	2.5	10	7.5	5	
20	2.5	10	7.5	5	
25	2.5	10	7.5	5	
32	3.5	12	8.5	5	
40	4.0	13	9	5	
50	4.5	14	9.5	5	
65	5.0	15	10	5	
80	5.5	16	10.5	5	
100	6.5	18	11.5	5	

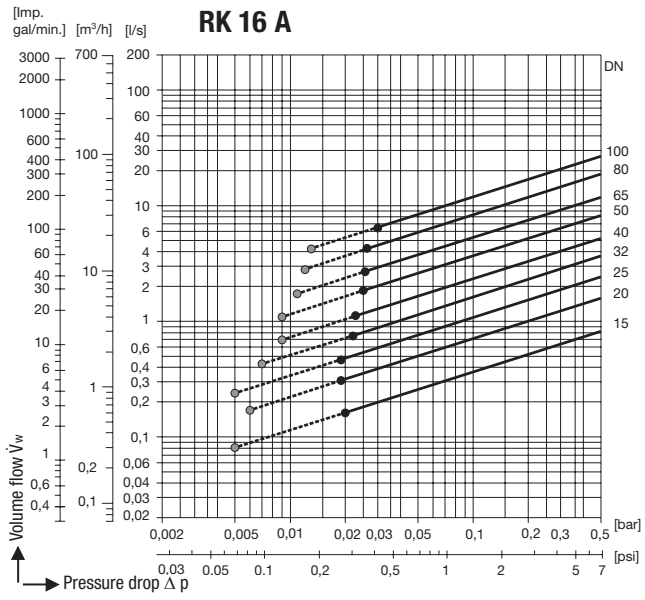
Opening Pressures

Differential pressures at zero volume flow.

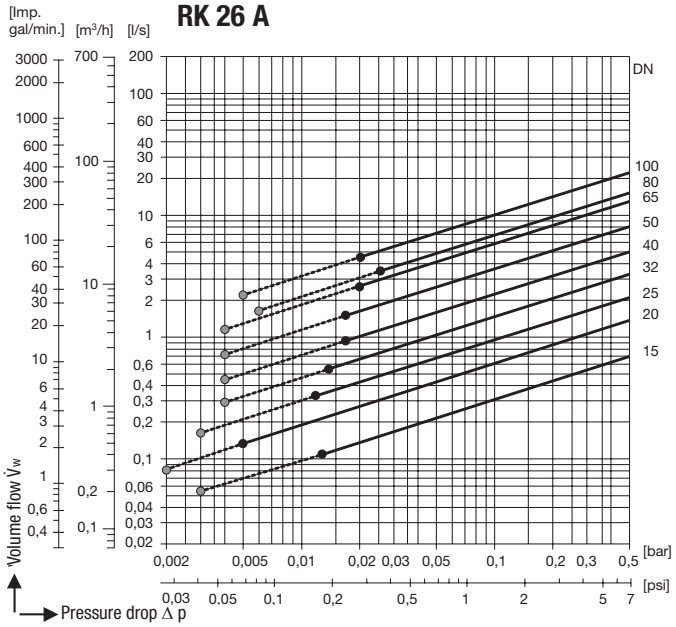
RK 16 C

DN	Opening pressures [mbar]				
		Direction of flow			
	without spring	with spring			
	↑	↑	→	↓	
15	2.5	25	22.5	20	
20	2.5	25	22.5	20	
25	2.5	25	22.5	20	
32	3.5	27	23.5	20	
40	4.0	28	24.0	20	
50	4.5	29	24.5	20	
65	5.0	30	25.0	20	
80	5.5	31	25.5	20	
100	6.5	33	26.5	20	

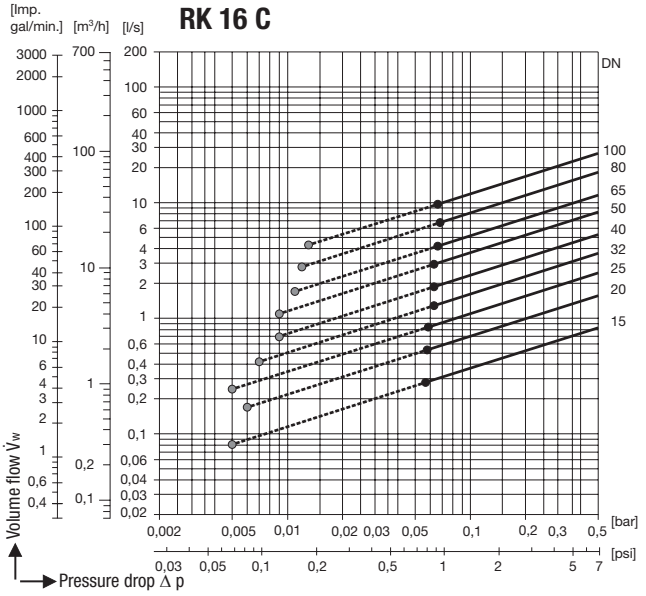
RK 16 A



RK 26 A



RK 16 C



- Required minimum volume flow $\dot{V}_W$ for equipment without spring installed in vertical pipes with upward flow.
- Required minimum volume flow $\dot{V}_W$ for equipment with standard spring and horizontal flow.