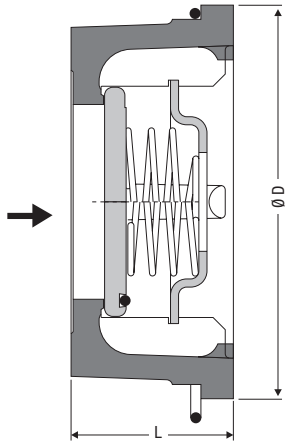
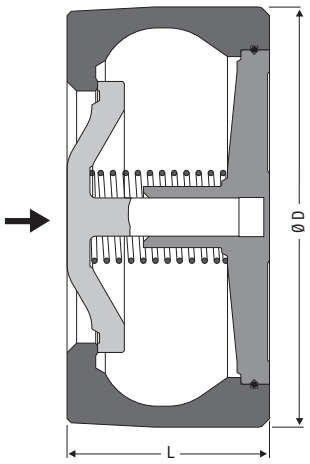
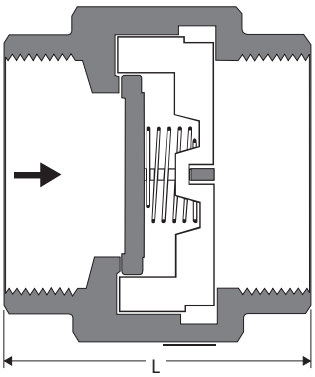


RK 70 (lower part) / RK 71 (upper part)
DN 15 – 100 mm



RK 70
DN 125 – 200 mm



MB 14

Application and Features

Type	PN	Application for liquids, gases and vapours	Features
RK 70	PN 6	suitable for heating and hot-water installations	Centric cone and spring guide, unaffected by dirt (DN 125-200)
RK 71	PN 16		Spiral centering ring for easy alignment between flanges
MB 14	PN 16		Screwed socket end connection

Body Material

Type		Nominal sizes DN	EN reference	ASTM equivalent[1])
RK 70	**Body**	15 – 100 mm	Brass (CW617N)	Brass
	Valve disk		Plastic PPE	–
	Body	125 – 200 mm	Grey cast iron (5.1301)	A126 Class A
	Plug		Plastic Polyamid 6	–
RK 71	**Body**	15 – 100 mm	Brass (CW617N)	Brass
	Valve disk		1.4571	AISI 316 Ti
MB 14	**Body**	15 – 50 mm	Brass (CW614N)	Brass
	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	125	150	200
		[in]	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8
	L	[mm]	16	19	22	28	31.5	40	46	50	60	90	106	140
RK 70	D	[mm]	40	47	56	72	82	95	115	132	152	184	209	264
RK 71	D	[mm]	40	47	56	72	82	95	115	132	152	–	–	–
	L	[mm]	49	49	61	61	72	72	–	–	–	–	–	–
MB 14	D	[mm]	42	42	62	62	83	83	–	–	–	–	–	–
	A.F.	[mm]	30	30	46	46	65	65	–	–	–	–	–	–

Pressure/Temperature Ratings

Type	PN	DN	p / T / [bar] / [°C]		
RK 70	PN 6	15 – 100	6 / -10	1.5 / 100	0.5 / 130
	PN 6	125 – 200	6 / -10	1.5 / 100	0.5 / 130
RK 71	PN 16	15 – 100	16 / -10	16 / 150	13.5 / 200
MB 14	PN 16	G 1/2 – G 2	16 / -60	14 / 200	13 / 250

RK Designs

Type	Seat				Spring			Earthing connection
	metal-to metal	EPDM	FPM	PTFE	without spring	special spring	Nimonic spring	
RK 70	(Plastic)	–	–	–	–	–	–	Use RK 86
RK 71	X	Use RK 41		Use RK 86	Use RK 41	–		
MB 14	X	–	–	–	–	–	–	–

X : standard
– : 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 71*)

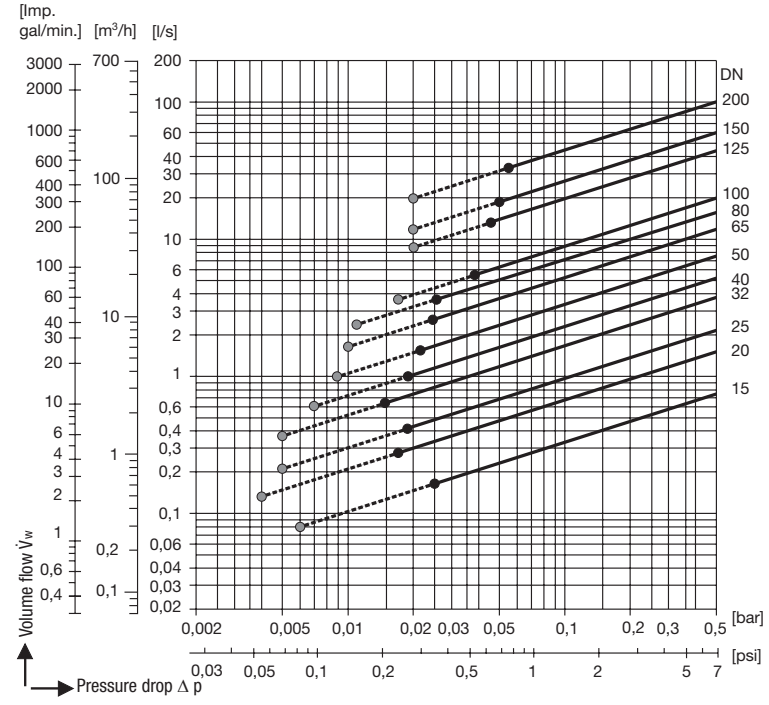
DN	Opening pressures [mbar]			
	Direction of flow			
	without spring	with spring		
	↑	↑	→	↓
15	2.5	10	7.5	5
20	2.5	10	7.5	5
25	2.5	10	7.5	5
32	3.5	12	8.5	5
40	4.0	13	9	5
50	4.5	14	9.5	5
65	5.0	15	10	5
80	5.5	16	10.5	5
100	6.5	18	11.5	5

***) RK 70, 71 are not available with special spring or without spring**

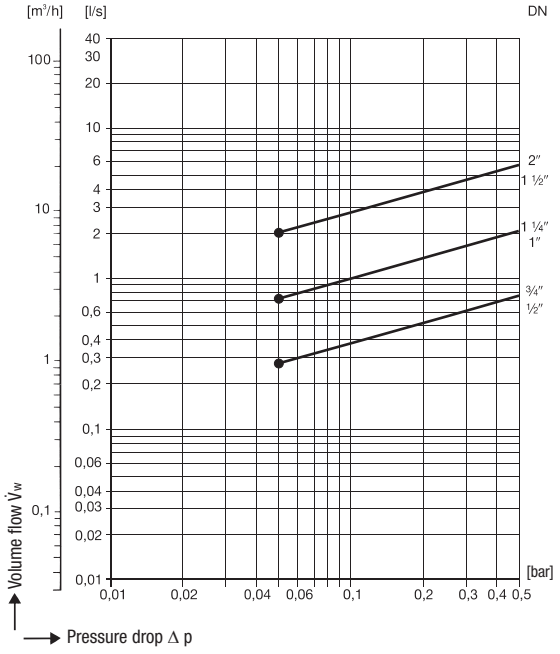
RK 70*)

DN	Opening pressures [mbar]			
	Direction of flow			
	without spring	with spring		
	↑	↑	→	↓
15	0.4	5.8	5.4	5
20	0.4	5.8	5.4	5
25	0.4	5.8	5.4	5
32	0.5	6.0	5.5	5
40	0.5	6.0	5.5	5
50	0.6	6.2	5.6	5
65	0.7	6.4	5.7	5
80	0.8	6.6	5.8	5
100	0.9	6.8	5.9	5
125	2.0	9.0	7.0	5
150	2.5	10.0	7.5	5
200	2.5	10.0	7.5	5

RK 70, RK 71



MB 14



- Required minimum volume flow $\dot{V}_W$ for equipment without spring installed in vertical pipes with upward flow (only RK 70, RK 71).
- Required minimum volume flow $\dot{V}_W$ for equipment with standard spring and horizontal flow.