



# Non-Return Valves RK – PN 40 to PN 160

Short overall length according to DIN EN 558-2, table 11, series 52 (Δ DIN 3202, part 3, series K5)



## 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.

The values indicated in the chart are applicable to spring-loaded valves with horizontal flow. With vertical flow insignificant deviations occur only within the range of partial opening.

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

$\dot{V}_w$  = Equivalent water volume flow in [l/s] or [m<sup>3</sup>/h]

$\rho$  = Density of fluid (operating condition) in [kg/m<sup>3</sup>]

$\dot{V}$  = Volume of fluid (operating condition) in [l/s] or [m<sup>3</sup>/h]

## Opening Pressures

Differential pressures at zero volume flow.

Differential pressures at zero volume flow.

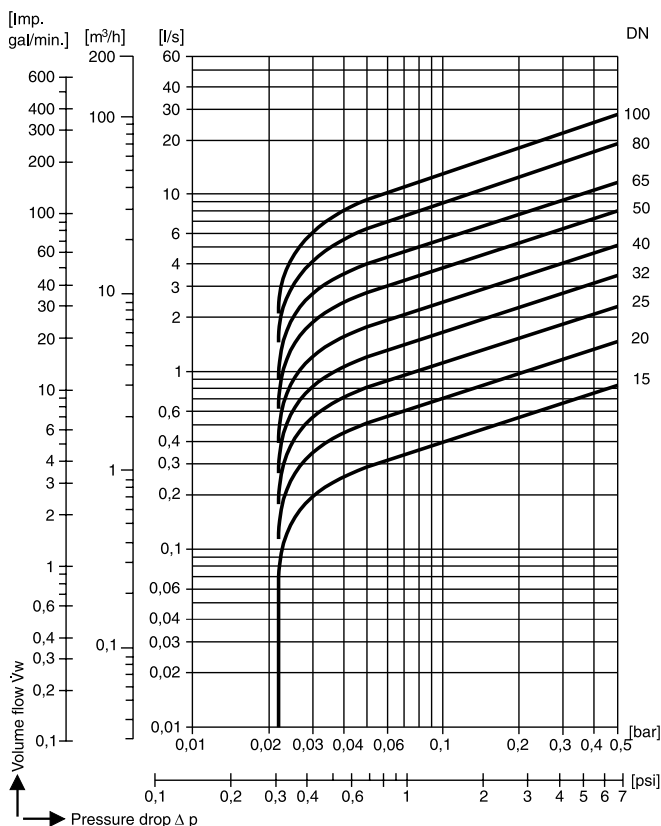
### RK 16 A

DN	Opening pressures [mbar]			
	Direction of flow			
	without 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

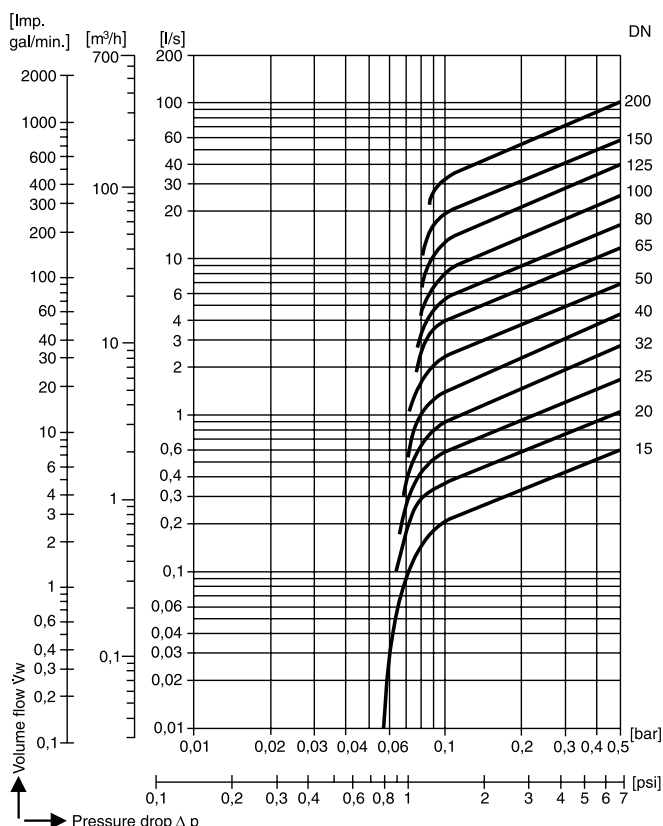
### RK 49

DN	Opening pressures [mbar]			
	Direction of flow			
	without spring ↑	↑	→	↓
15	16.5	73	56.5	40
20	17.5	74	57.0	40
25	18.0	76	58.0	40
32	18.0	76	58.0	40
40	19.5	79	59.5	40
50	22.0	84	62.0	40
65	23.0	87	63.0	40
80	17.5	75	57.5	40
100	20.0	80	60.0	40
125	23.0	86	63.0	40
150	24.0	88	64.0	40
200	29.0	98	69.0	40

### RK 16 A



### RK 49



# DISCO Non-Return Valves RK PN 40 to PN 160



## Stock Code

Type	PN	DN [mm]	Stock code
RK 16 A	10/16/25/40	15	1181201
	10/16/25/40	20	1181401
	10/16/25/40	25	1181501
	10/16/25/40	32	1181601
	10/16/25/40	40	1181701
	10/16/25/40	50	1181801
	10/16/25/40	65	1181901
	10/16/25/40	80	1182001
	10/16 25/40	100 100	1182103 1182106
RK 49*)	63/100/160	15	1071200
	63/100/160	20	1071400
	63/100/160	25	1071500
	63/100/160	32	1071600
	63/100/160	40	1071700
	63/100/160	50	1071800
	63/100/160	65	1071900
	63/100/160	80	1072000
	63/100/160	100	1072100
	63/100/160	125	1072200
	63/100/160	150	1072300
	63/100/160	200	1072500

\*) RK 49 not available with soft seat or special spring.  
Other materials available on request.

## Soft Seats

Material	Available for type	Stock code suffix
EPDM up to 150 °C for water and steam	RK 41, RK 44, RK 16 A RK 86, RK 86 A	...76
FPM up to 200 °C for oils, gases and air	RK 41, RK 44, RK 16 A RK 86, RK 86 A	...77
PTFE up to 200 °C for aggressive fluids	RK 16 A RK 86, RK 86 A	...78