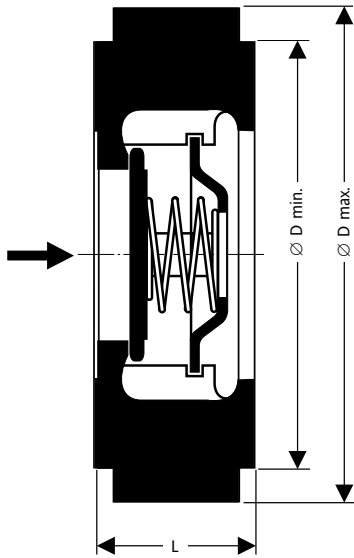


Non-Return Valves RK – PN 6 to PN 40

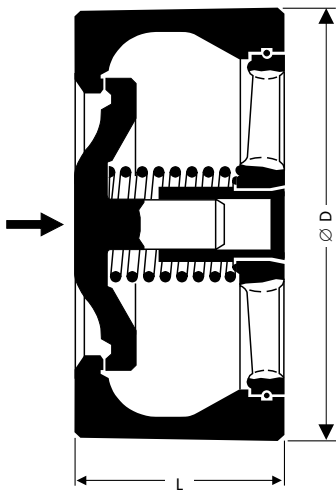
Short overall length according to DIN EN 558-1, table 11, series 49 (≙ DIN 3202, part 3, series K4)



A2



RK 86 / RK 86 A
DN 15 – 100 mm
PN 6/10/16/25/40
ANSI Class 125/150/300



RK 86 / RK 86 A
DN 125 – 200 mm; PN 10/16/25/40
ANSI CLASS 125/150/300

RK 86 and RK 86 A – Our Robust All-Rounder

Application

Type	PN	
RK 86	40	For liquids, gases, vapours. Application as gravity circulations check, vacuum breaker, breather, foot valve, pressure-maintaining valve, check valve. RK 86 A especially suited for low temperatures, aggressive fluids, boiler feedwater lines, and other industrial applications.
RK 86 A	40	

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 86 (max)	D [mm]	70	82	82	87	100	115	134	154	185	194	220	275
RK 86 A (max)	D [mm]	70	82	82	87	100	115	134	154	185	194	220	275
RK 86 (min)	D [mm]	39	50	59	68	80	92	108	128	150	194	220	275
RK 86 A (min)	D [mm]	39	50	59	68	80	92	108	128	150	194	220	275

Body Material

Type	Nominal sizes (DN)	DIN reference	ASTM equivalent
RK 86	15 – 100 mm	1.4317	A 743-CA 6-NM
	125 – 150 mm	1.0460	A 105
	125 – 200 mm	1.0619	A 216 WCB
RK 86 A	15 – 100 mm	1.4408	A 351 CF 8 M
	125 – 150 mm	1.4571*)	A 182 F 316
	200 mm	1.4581*)	A 351 CF 8

Physical and chemical properties comply with DIN grade.
ASTM nearest equivalent is stated for guidance only.

Pressure/Temperature Ratings

Type	PN	Nominal sizes (DN)	PMA / TMA / [bar] / [°C]		
RK 86	40	15 – 100 mm	40 / -10	40 / 200	35 / 350
	40	125 – 250 mm	40 / -10	40 / 200	38 / 400
	40	200 mm	40 / -10	35 / 200	21 / 400
RK 86 A	40	15 – 100 mm	40 / -105	39 / 200	24 / 550
	40	125 – 150*) mm	40 / -200	30 / 200	22 / 550
	40	200*) mm	40 / -10	30 / 200	22 / 550

*) Soon made of the same material as DN 15 – 100 mm.

Non-Return Valves RK PN 6 to PN 40



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 [m³/h]

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

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

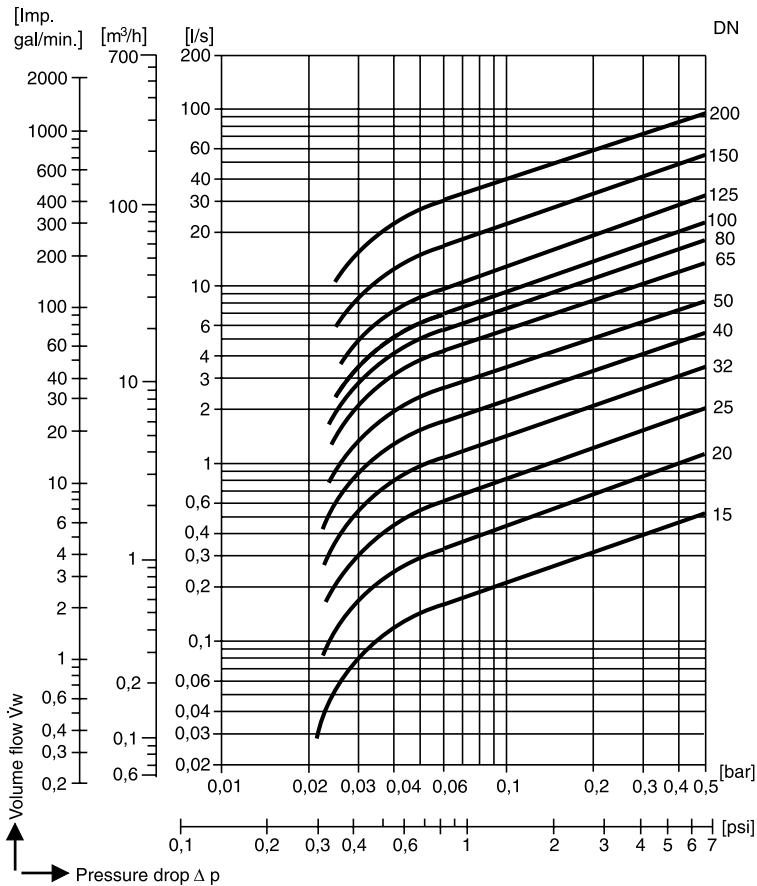
Opening Pressures

Differential pressures at zero volume flow.

RK 86/86 A

DN [mm]	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
125	12.0	↑ 34	→ 22.0	↓ 10
150	13.5	↑ 37	→ 23.5	↓ 10
200	16.0	↑ 42	→ 26.0	↓ 10

RK 86/86 A



Non-Return Valves RK PN 6 to PN 40



Stock Code

RK 86/86 A – Our Robust All-Rounder

Type	PN	DN [mm]	Stock code
RK 86	6/10/16/25/40	15	1011201
	6/10/16/25/40	20	1011401
	6/10/16/25/40	25	1011501
	6/10/16/25/40	32	1011601
	6/10/16/25/40	40	1011701
	6/10/16/25/40	50	1011801
	6/10/16/25/40	65	1011901
	6/10/16/25/40	80	1012001
	6/10/16/25/40	100	1012101
	10/16/40	125	1012201
	10/16/40	150	1012301
	10/16/40	200	1012501
	RK 86 A	6/10/16/25/40	15
6/10/16/25/40		20	1211401
6/10/16/25/40		25	1211501
6/10/16/25/40		32	1211601
6/10/16/25/40		40	1211701
6/10/16/25/40		50	1211801
6/10/16/25/40		65	1211901
6/10/16/25/40		80	1212001
6/10/16/25/40		100	1212101
10/16/25/40		125	1212201
10/16/25/40		150	1212301
10/16/25/40		200	1212501