



Application for liquids, gases and vapours.

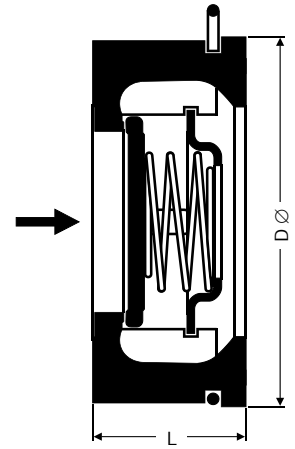
Pressure/Temperature Rating

Nominal sizes DN	[mm] [in]	15-100 1/2-4"			
Nominal pressure	PN	40 ¹⁾			
Max. service pressure [barg] for RK 76	[psig]	40 580	35 508	32 464	28 406
Related temperature	[°C] [°F]	20 68	100 212	200 392	300 572
Minimum temperature ²⁾		- 10 °C (14 °F)			

¹⁾ Also rated for ANSI class 300, but see flange details below.

²⁾ Minimum temperature at nominal pressure rating.

Tight shut-off in accordance with DIN 3230, part 3, leakrate BN2/BO3.



Connections of wafer-type valves ³⁾

DIN	Valves for universal fitting between flanges to	
	BS	ASME
DIN 2501 (BS 4504) PN 6/10/16/25/40	BS 10 tables D, E, F, H, J ⁴⁾ BS 4504	ASME B 16.1 class 125 FF ASME B 16.5 class 150/300 RF

³⁾ With universal centering ring.

⁴⁾ Tables D/E, DN 65 mm and DN 80 mm (2 1/2 and 3"): Choose nominal size one size smaller each.

Dimensions

DN	[mm] [in]	15 1/2	20 3/4	25 1	32 1 1/4	40 1 1/2	50 2	65 2 1/2	80 3	100 4
Dimensions L ⁵⁾		16	19	22	28	31.5	40	46	50	60
Dimensions in mm D		45	55	65	75	85	98	118	134	159
Weight	[kg]	0.18	0.3	0.45	0.7	0.9	1.5	2.1	3.4	5.2

⁵⁾ Overall length according to DIN EN 558-1, series 49 (≅ DIN 3202, part 3, series K4)

Materials

DN 15-100 mm (1/2 - 4")	DIN reference		ASTM equivalent
Body, seat and guide ribs	G-X 8 CrNi 13	1.4008	A 217-CA 15
Valve disc, spring retainer	X 6 CrNiMoTi 17 12 2	1.4571	A 182 F 316
Spring			A 313 Type 316
Centering ring	X 12 CrNi 17 7	1.4310	Type 302

A₂

Non-Return Valves
PN 6/10/16/25/40
DN 15-100 mm
(1/2-4")

RK 76



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Flow Control Division

Opening pressures

Differential pressures at zero volume flow

DN		Opening pressures in mbar		
		Direction of flow with springs		
[mm]	[in]	↑	→	↓
15	1/2	25	22.5	20
20	3/4	25	22.5	20
25	1	25	22.5	20
32	1 1/4	27	23.5	20
40	1 1/2	28	24.0	20
50	2	29	24.5	20
65	2 1/2	30	25.0	20
80	3	31	25.5	20
100	4	33	26.5	20

1 mbar ≙ 0.0145 psi ≙ 10 mm w.g. ≙ 0.4 in w.g.

Enquiry Specification

GESTRA DISCO non-return valves RK76.
Wafer design with extremely short overall length to DIN EN 558-1, table 11, series 49 ≙ DIN 3202, part 3, series K4)

Suitable for fitting between flanges to DIN, BS or ASME FF.

Indications on pressure, nominal size (DN), body material.

Order Specifications

Type RK 76, DN..
Metal-to-metal

Fluid, flowrate, pressure and temperature.
Type of pipe flanges.

Note

The valves should not be used on compressors or where pulsating flow exists.

For these applications please consult us.

Supply in accordance with our general terms of business.

Technical modifications reserved.

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Pressure Drop Chart

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 etc.

ρ = Density of fluid (operating condition) in kg/m³ etc.

\dot{V} = Volume of fluid (operating condition) in l/s etc.

