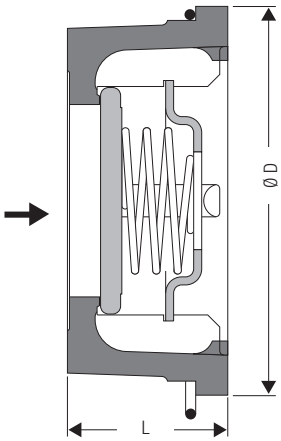


DN 15-100



DN 15-100

Non-Return Valve

RK 71 for Flanges PN 6/10/16, DN 15-100

Description

Wafer-type non-return (check) valve for sandwiching between flanges. Valve designed with spring for installation in any position. Without spring only for vertical lines with upward flow. For use with liquids, gases and vapours of fluid group 2 (non-hazardous fluids) in accordance with the Pressure Equipment Directive (PED) 97/23/EC.

Pressure & temperature ratings

RK 71, PN 16	CW617N			
Design temperature [°C]	20	120	200	250
DN 15 – 100 [barg]	16	16	14	13

Minimum temperature: -60°C (lowest service temperature at nominal pressure)

For additional information on chemical resistance go to www.gestra.com and click on “Technical Support” and then on “Chemical Resistance”.

End connection

DIN / EN	BS
EN 1092-1 (2007), form B1 PN 6/10/16	BS 10 Table D, E, F

Dimensions

Nominal size	[mm]	15	20	25	32	40	50	65	80	100
	[inch]	½	¾	1	1¼	1½	2	2½	3	4
L[2])	[mm]	16	19	22	28	31.5	40	46	50	60
D	[mm]	40	47	56	72	82	95	115	132	152
Weight	[kg]	0.09	0.13	0.21	0.48	0.63	1.05	1.45	2.0	3.2

[2]) Wafer design with extremely short overall length to EN 558-1, series 49.

Materials

DN 15-100	DIN / EN	ASTM equivalent	Category
Body, seat, guide ribs and insert	CW617N	C38000	Copper base alloy (hot-pressed brass)
Valve disc	1.4571	AISI 316 Ti	austenitic, corrosion-resistant steels
Spring to close	1.4571	AISI 316 Ti	austenitic, corrosion-resistant steels
Spring retainer	1.4571	AISI 316 Ti	austenitic, corrosion-resistant steels
Centering ring	1.4310	A 313 type 302	austenitic, corrosion-resistant steels

Non-Return Valve

RK 71 for Flanges PN 6/10/16, DN 15-100

Opening pressures

Differential pressures at zero volume flow.

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	9.0	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

Specification Text

GESTRA DISCO Non-return valve type RK 71 for flanges PN 6/10/16.

Wafer design with extremely short overall length to EN 558-1, series 49.

Suitable for fitting between pipe flanges to DIN / EN, and BS. Metal-to-metal seat. Designed in accordance with PED 97/23/CE, with CE marking. Specification of nominal pressure, size and body material according to EN 19.

Inspection & Certification

Documentation regarding material tests and in-house examination with test report EN10204-2.2 available at extra cost. All inspection requirements have to be stated with the enquiry or order. After supply of the equipment certification cannot be established. Charges and extent of the above mentioned test certificates as well as the different tests confirmed therein are listed in our Price List "Test and Inspection Charges for Standard Equipment". For other tests and inspections than those listed above, please consult us.

Please note:

The selected non-return valve must ensure that the minimum volume flowrate keeps the valve disk in the open position (see Pressure Drop Chart, "Full opening / stable range").

Supply in accordance with our general terms of business.

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 $\dot{V}_w$ must be calculated and used in the graph.

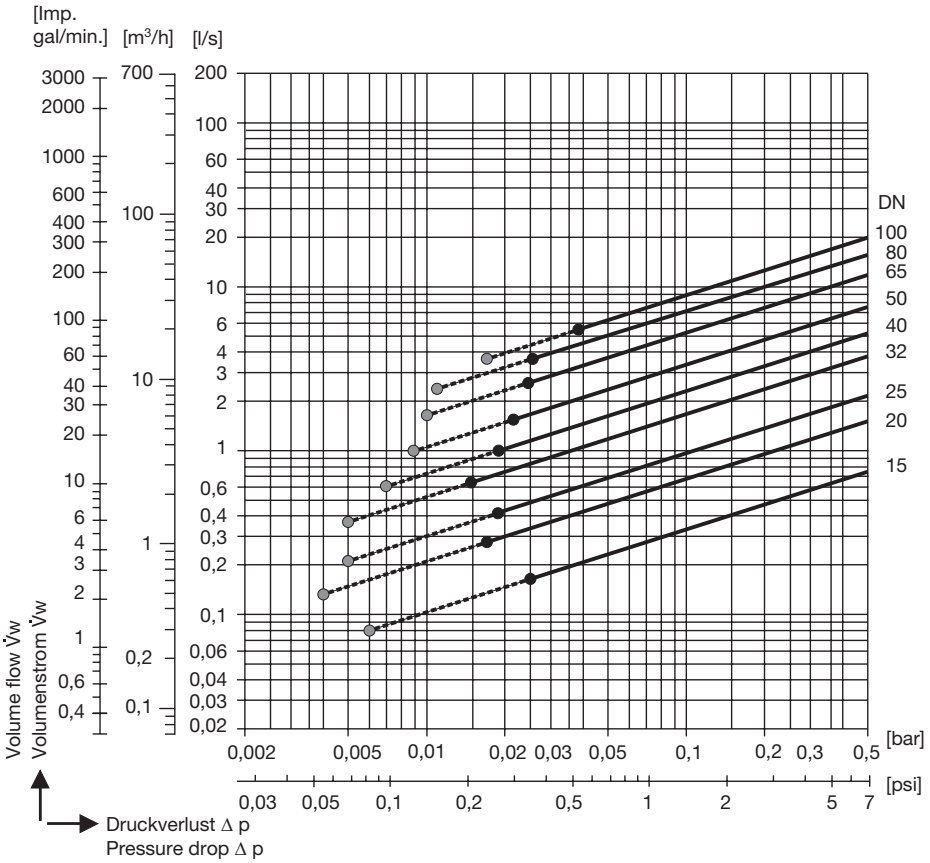
The values indicated in the chart are applicable for spring-assisted valves with horizontal flow and to valves without spring installed in vertical pipes with upward flow.

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

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

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

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



- 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.

PED (Pressure Equipment Directive)

The equipment fulfills the requirements of the Pressure Equipment Directive PED 97/23/EC. For use with fluids of group 2. With CE marking (apart from equipment that is excluded from the scope of the PED as specified in section 3.3). For more information please refer to our PED Declaration of Conformity.

ATEX (Atmosphère Explosible)

The equipment does not have its own potential source of ignition and is therefore not subject to the ATEX Directive 94/9/EC. Applicable in Ex zones (surrounding atmosphere) 0, 1, 2, 20, 21, 22 (1999/92/EC). The equipment is not Ex marked. For more information refer to our ATEX Declaration of Manufacturer.

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