

Non-return check valves

Model 58734 Spring loaded non-return check valve
female/female **BSP** threaded - stamped
316 stainless steel body



Specifications

Dimensions: DN8 to DN100 (1/4" to 4")

Connection: BSP female thread according to ISO 228-1

Pressure: PN16

Temperature: - 20°C to +150°C

Opening pressure: between 0.025 and 0.035 bar

Material: 316 stainless steel

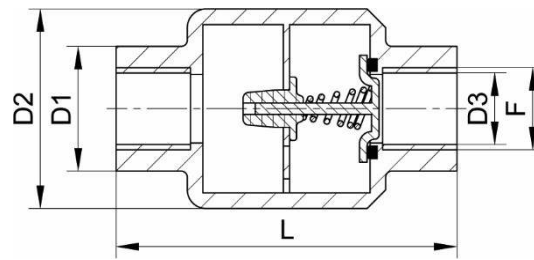
FKM gasket

Vertical or horizontal installation

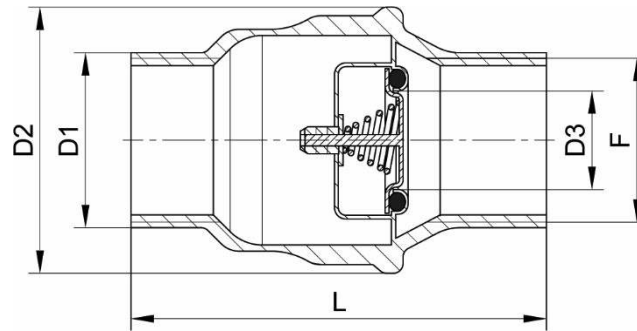


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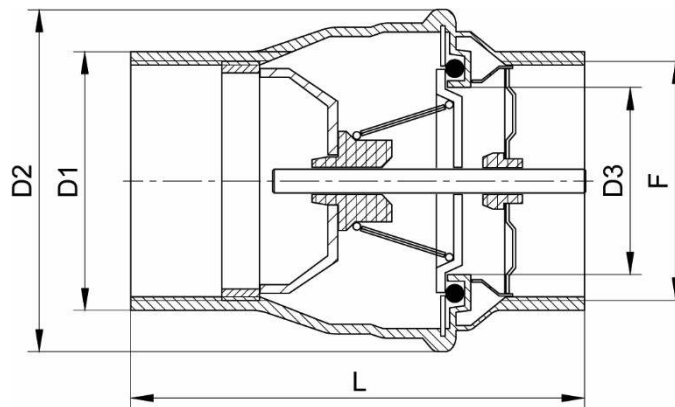
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DN8 to DN15



DN20 to DN65



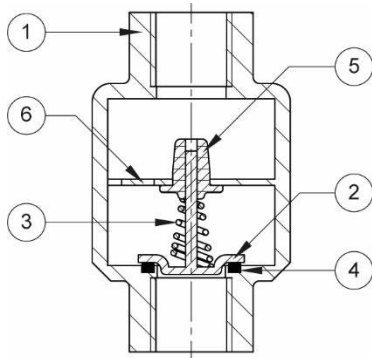
DN80 to DN100

DN (mm)	NB (inches)	D1 (mm)	D2 (mm)	D3 (mm)	F (inches)	L (mm)	Weight (kg)	Part number
8	1/4"	20	32	11.4	1/4"	56	0.10	458734-8
10	3/8"	20	32	15.5	3/8"	56	0.10	458734-10
15	1/2"	25	32	16	1/2"	56	0.10	458734-15
20	3/4"	30	44	18.3	3/4"	67	0.13	458734-20
25	1"	36	53	23.4	1"	83	0.20	458734-25
32	1"1/4"	45	66	31.4	1"1/4"	97	0.29	458734-32
40	1"1/2"	51	78	36.8	1"1/2"	115	0.39	458734-40
50	2"	63	89	42.9	2"	121	0.71	458734-50
65	2"1/2"	80	113	58.7	2"1/2"	142	1.43	458734-65
80	3"	93	132	70.3	3"	160	2.09	458734-80
100	4"	120	167	93.4	4"	191	3.42	458734-100

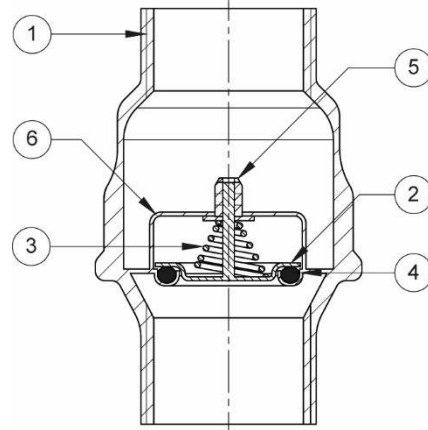
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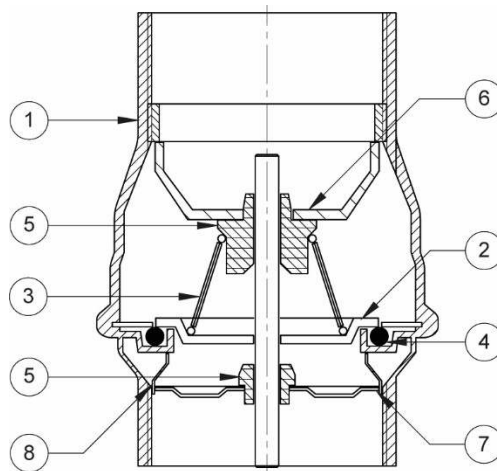
DN8 to DN15



DN20 to DN65



DN80 to DN100



N°	Part Name	Material
1	BODY (FEMALE END PARTS)	1.4401/1.4404
2	CHECK VALVE	1.4401/1.4404
3	SPRING	1.4401/1.4404
4	GASKET	FKM
5	GUIDE RING	PTFE
6	UPPER GUIDE	1.4401/1.4404
7	LOWER GUIDE	1.4401/1.4404
8	GASKET SUPPORT	1.4401/1.4404

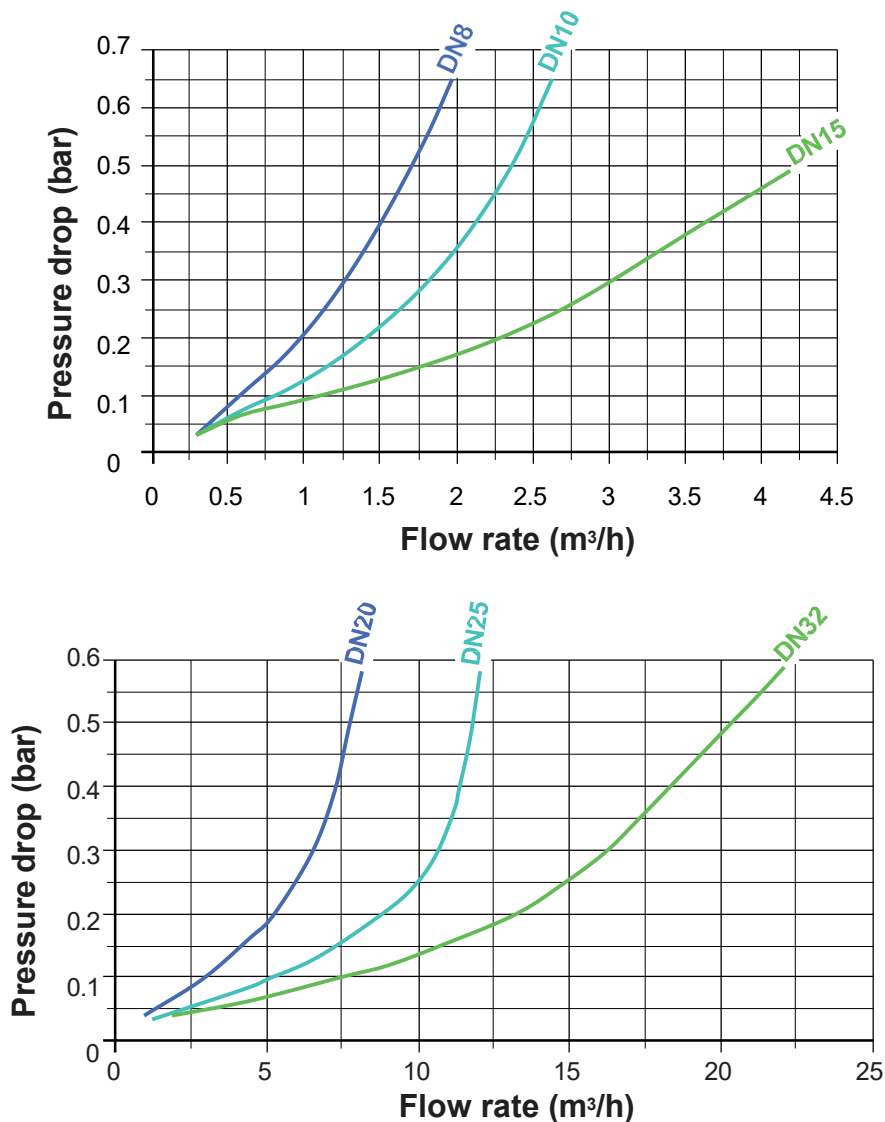
Flow coefficient and pressure loss

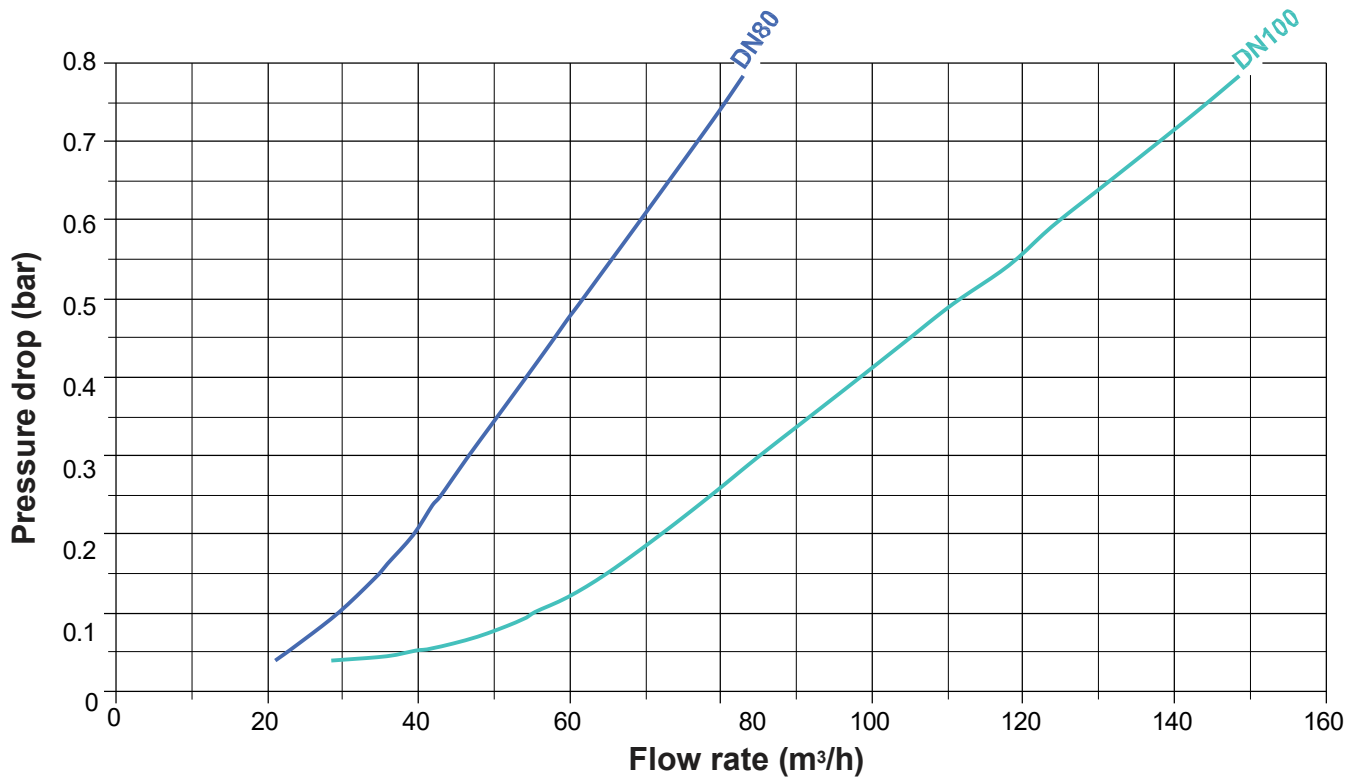
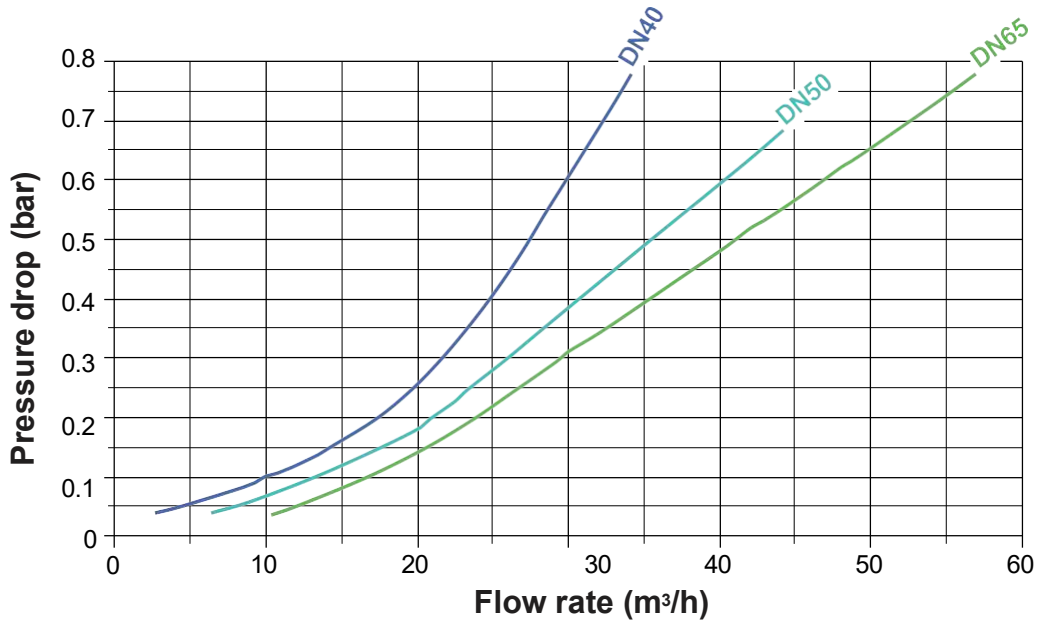
Dimensions	DN8	DN10	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100
	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"
Kv (m³/h)	2.5	3.2	6.0	10.8	18.7	31.5	40.5	56.0	69.0	99.0	181.0

The flow coefficient Kv defines water flow rate through a device (valve, check valve etc.) for a pressure loss (ΔP) of 1 bar. Kv is expressed mathematically as:

$$\Delta P = \frac{Q^2}{Kv^2} \quad \text{so:} \quad Kv = \frac{Q}{\sqrt{\Delta P}} \quad \begin{array}{l} Q \text{ in m}^3/\text{h} \\ \Delta P \text{ in bar} \end{array}$$

Pressure drop diagram





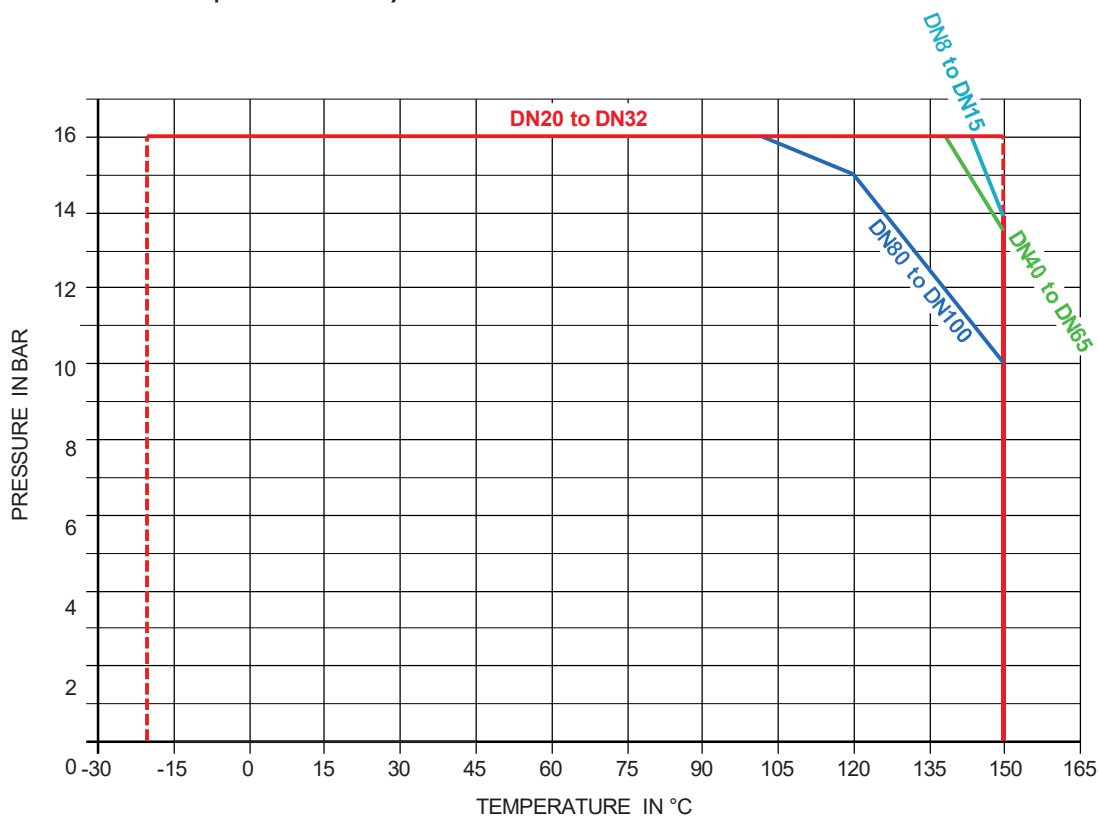
Use



Warning: If the check valve is used with fluids that have a temperature above 60°C then people could burn themselves if they touch the valve.

Fluids

This check valve is suitable for non-abrasive and non-coagulable fluids, as long as the fluids are chemically compatible with the valve parts that they can come into contact with.



You must take into account that the check valve requires a minimum pressure to open and allow fluid to flow through it. The opening pressure for the check valve is between 0.025 and 0.035 bar (for all valve dimensions).

Assembly and maintenance instructions

Installation

When you install the check valve make sure that the arrow on it is pointing in the direction in which fluids will pass through it.

Check that there is enough space and there are enough valves to isolate this section so that you can carry out maintenance operations where you are planning to install the check valve.

Check that the installation is clean and free from foreign bodies that could damage the check valve.

Check that all piping is perfectly aligned and that the piping support structure is dimensioned so that the check valve is not subject to any external stresses. The piping support structure must only support the pipes, not the check valve.

How to install a check valve:

You must use a flat or o-ring gasket that is suitable for the working conditions (e.g. flat gasket external mounting model **5296**) to make sure the threaded connections are sealed correctly.

Clean the installation so that there are no foreign bodies in the piping.

Check that the check valve can move smoothly.

Pressure test the installation according to the relevant standards, but do not exceed the check valve's specifications.

Maintenance

The check valve does not require any specific maintenance if it is used in normal operating conditions.

You may need to change the check valve due to unusual wear and tear, or if a fluid has damaged the valve and caused a leak or malfunction.

Standards and compliance

- Connection: BSP female thread in accordance with EN ISO 228-1
- Leak testing according to EN 12266 / API 598
- This valve complies with European Pressure Equipment Directive (PED) 2014/68/EU (formerly 97/23/EC)