Range 58
VALVES

Non-return check valves

ISO 7-1

Model 58743 High pressure spring-loaded check valve female/female BSP - 316 stainless steel

Specifications

Dimensions: DN8 to DN25 (1/4" to 1")
Connection: BSP female thread ISO 7-1
Pressure: 400 bar
Temperature: -20°C to +180°C
Material: 316 stainless steel
FKM gaskets

Minimum opening pressure: 3 bar

ISO 9001 BUREAU VERITAS Certification

CE

Béné Inox – 11 chemin de la Pierre Blanche – 69800 SAINT-PRIEST – S.A.S with 240 000 € share capital – SIREN N° 311 810 287
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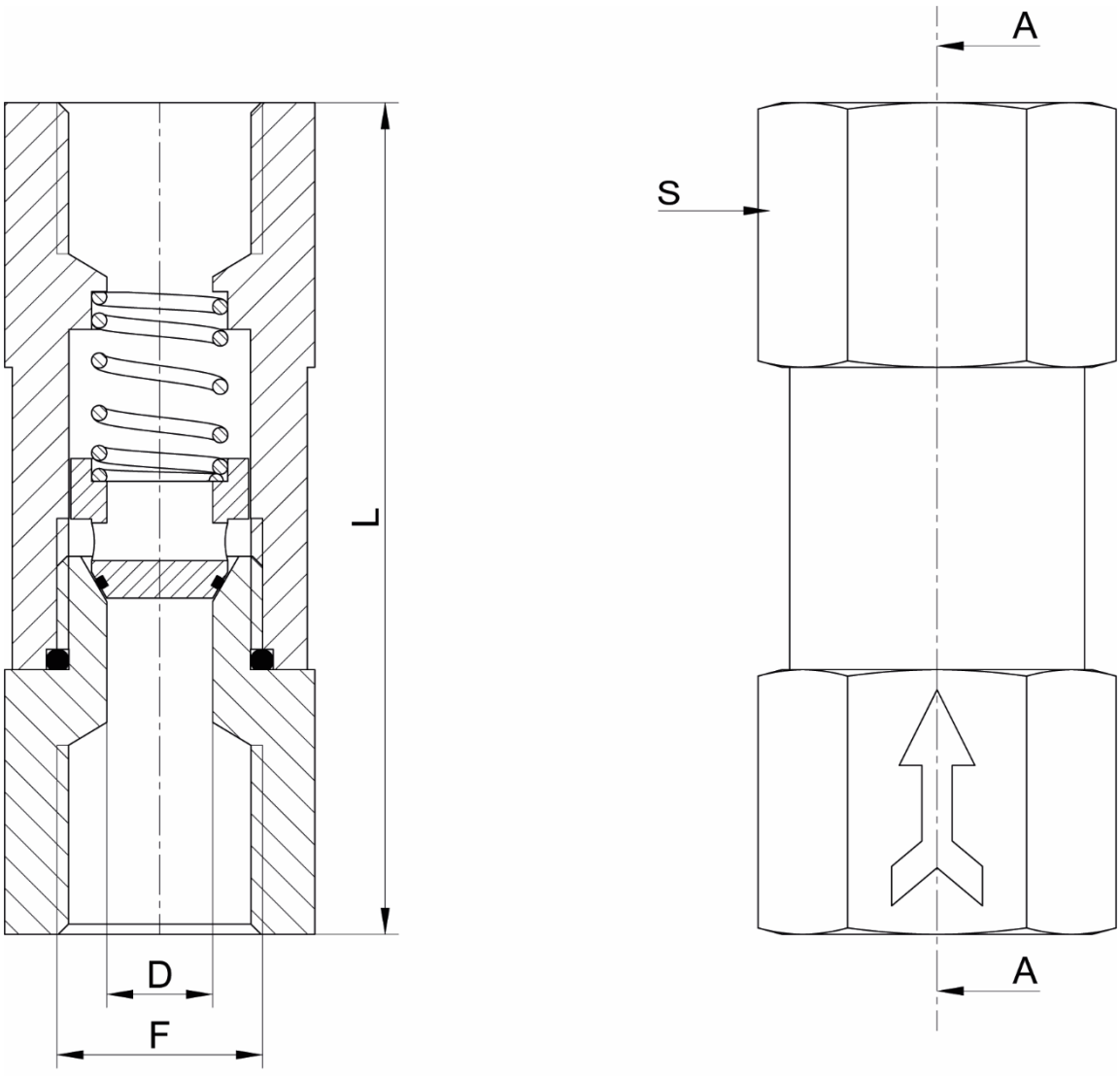

A-A cross section

DN (mm)	NB (inches)	D (mm)	F (inches)	L (mm)	S (mm)	D1 (mm)	Kv (m3/h)	Weight (kg)	Part number
8	**1/4"**	8	Rp 1/4"	90	32	32	2.81	0.50	**458743-8**
10	**3/8"**	8	Rp 3/8"	90	32	32	2.81	0.50	**458743-10**
15	**1/2"**	10	Rp 1/2"	90	32	32	2.81	0.50	**458743-15**
20	**3/4"**	14	Rp 3/4"	110	41	41	2.81	0.95	**458743-20**
25	**1"**	16	Rp 1"	127	50	50	2.81	1.90	**458743-25**

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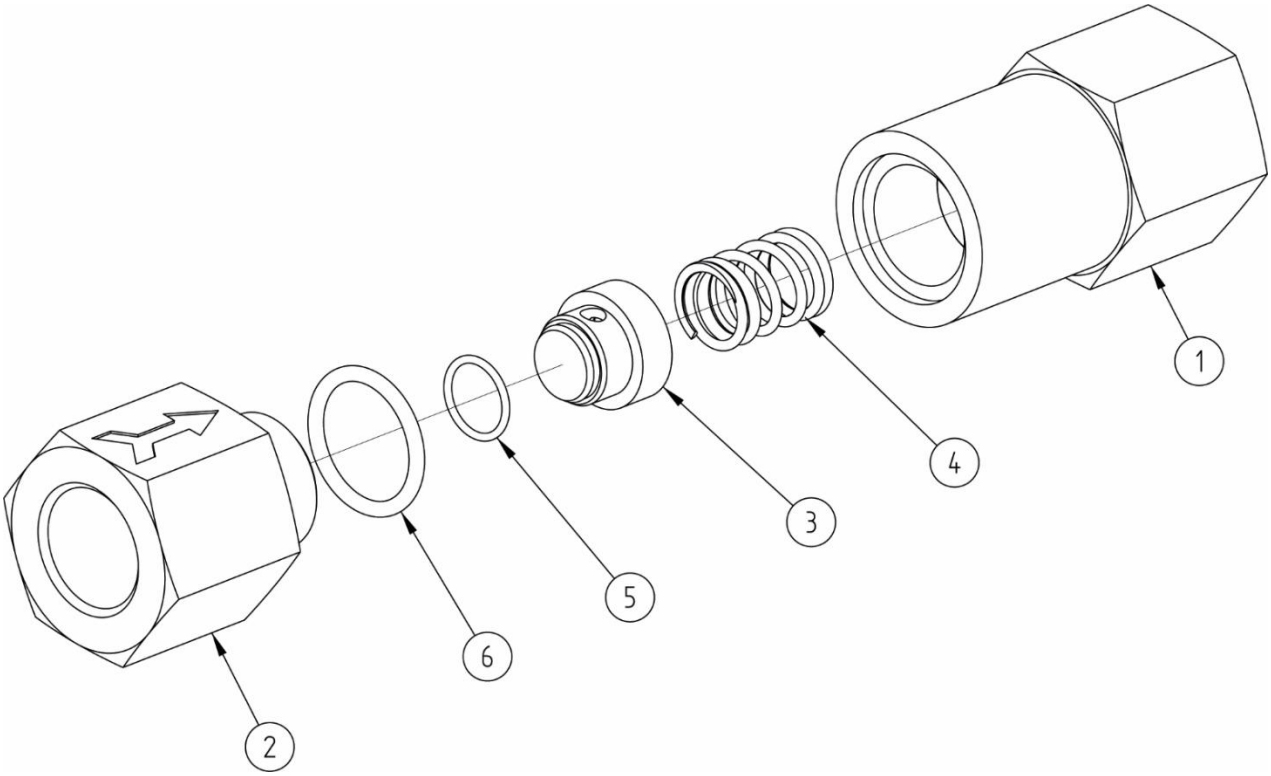
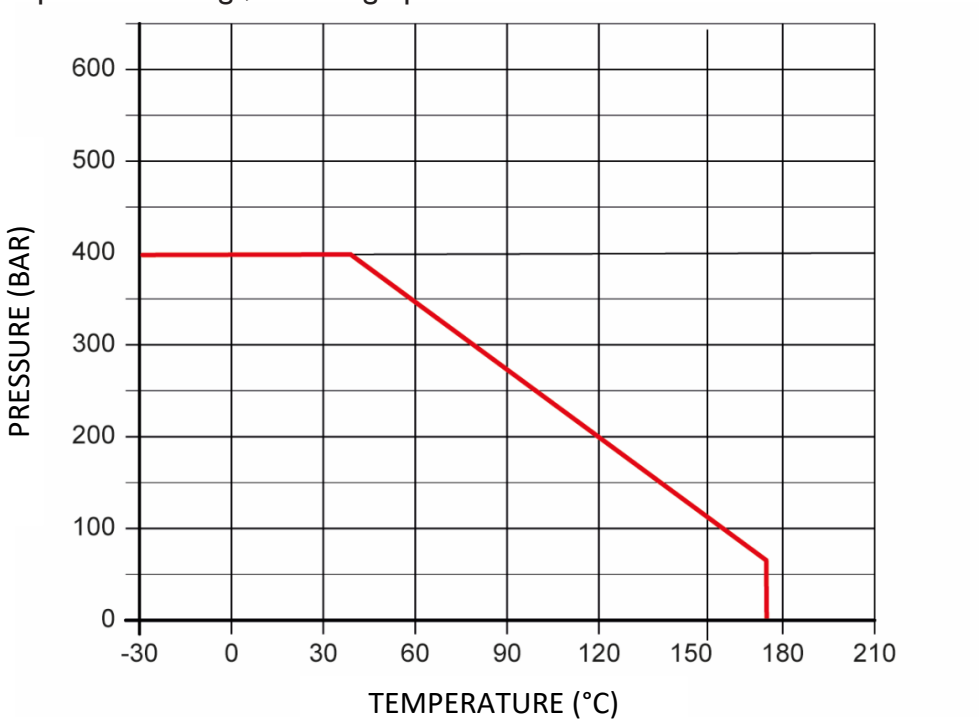


N°	Part Name	Material
1	BODY (REAR)	AISI 316
2	BODY (FRONT)	AISI 316
3	CHECK VALVE DISC	AISI 316
4	SPRING	AISI 316
5	CHECK VALVE DISC O-RING	FKM
6	BODY O-RING	FKM

Use

Pressure and temperature

For pressure/temperature ratings, see the graph below.



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

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.

Flow coefficient and pressure loss

Dimensions	DN8	DN10	DN15	DN20	DN25
	1/4"	3/8"	1/2"	3/4"	1"
Kv (m³/h)	0.2	0.2	1.1	2.8	3.2

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

$\Delta P = \frac{Q^2}{Kv^2}$ so: $Kv = \frac{Q}{\sqrt{\Delta P}}$

Q in m³/h — Kv in m³/h — Cv = 1.16 x Kv

ΔP in bar — Cv in GPM (Gallons per minute - US)

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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 the check valve:
Use a product that is suitable for the working conditions (e.g. PTFE tape) to make sure the valve's threaded connections are sealed correctly.

Clean the installation so that there are no foreign bodies in the piping.
Check that the check valve's disc 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 normal wear and tear, or if a fluid has damaged the valve and caused a leak or malfunction.

Spare parts

Repair kit
A repair kit contains:
- 1 body o-ring **6**
- 1 check valve disc o-ring **5**
- 1 spring **4**

DN (mm)	NB (inches)	Part number
8	1/4"	D5041-8
10	3/8"	D5041-10
15	1/2"	D5041-15
20	3/4"	D5041-20
25	1"	D5041-25

Standards and compliance

- Connection: BSP female thread in accordance with the standard EN ISO 7-1(Rp).
- Leak testing according to EN 12266/API 598.
- This valve complies with European Pressure Equipment Directive (PED) 2014/68/EU (formerly 97/23/EC).