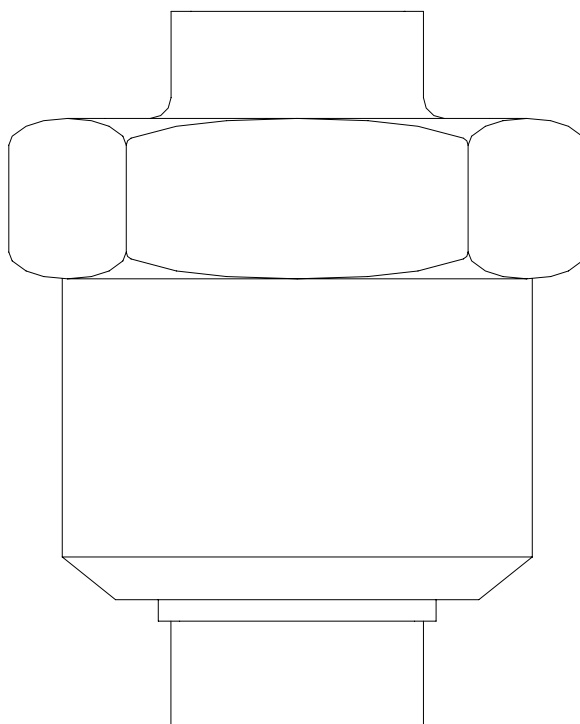


## CHECK VALVES

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**Application**

Check valves are designed to prevent backflow of product.

The valve opens as soon as the pressure below the head seal is greater than the counterpressure. When the pressure is balanced the valve closes. A higher counterpressure will press the head seal against the valve casing.

**Features**

They offer low flow resistance and minimum pressure drop.

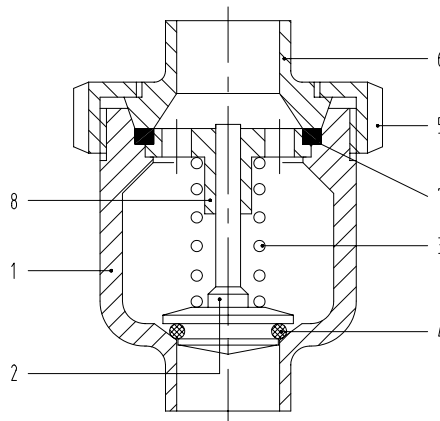
Valves can be cleaned inline.

The spring operating pressure can be customized thus allowing valves to open at any required pressure.

The wide openings in the diaphragms are designed to permit the passage of solid particles.

Valves are of heavy duty construction as they are machined from a solid stainless steel block.

**Components**



PARTS LIST		
1	Valve casing	Aisi 304L/Aisi 316L
2	Head seal	Aisi 316L
3	Spring	Aisi 304L
4	Seal	PTFE, EPDM, silicone, FTM
5	Nut	Aisi 304L
6	Union	Aisi 304L/Aisi 316L
7	Gasket	EPDM
8	Diaphragm	Aisi 316L

**Technical Data**

Max. product pressure: 1000 kPa (10 bar).

General temperature range: -10°C +95°C (+15°F +205°F).

Seals temperature range:

- PTFE: -10°C +150°C (+15°F +300°F);
- EPDM: -30°C +140°C (-20°F +280°F);
- silicone: -50°C +200°C (-60°F +390°F);
- FTM: -15°C +220°C (+5°F +430°F);

Locking test: 0.7 bar.

Casing test: 15 bar.

Finish: 120 grit (max  $R_a$  1.01-1.14  $\mu\text{m}$ , 40-45  $\mu\text{in}$ ).

Production range: from DN 10 to DN 100 and ½" to 4".

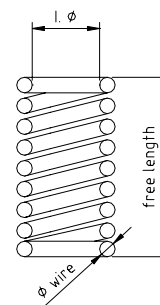
Connections: welding end, expanding end, threaded end, ferrule end.

Standards: DIN, SMS, RJT BS, IDF ISS, Clamp.

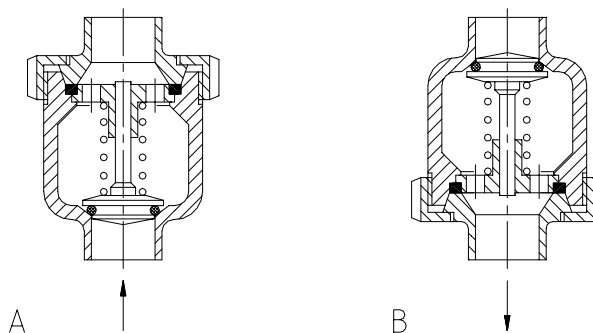
Steel grades: Aisi 304L, Aisi 316L.

Springs:

VALVE SIZE	SPRING CODE	I Ø	Ø WIRE	FREE LENGTH	NO. COILS
12	640 12 03	11 mm	0.8 mm	44 mm	20
19	640 19 03	12.2 mm	0.9 mm	60 mm	16
25/34	640 25/34 03	15.5 mm	1 mm	50 mm	13 ¾
38/40	640 38/40 03	15.5 mm	1 mm	70 mm	17 ¾
51/52	640 51/52 03	15.5 mm	1.3 mm	72 mm	15
63/70	640 63/70 03	15.5 mm	1.5 mm	72 mm	18 ½
76/85	640 76/80 03	20.4 mm	2 mm	70 mm	16
101	640 101 03	20.5 mm	2.3 mm	82 mm	16



Opening Pressure Range



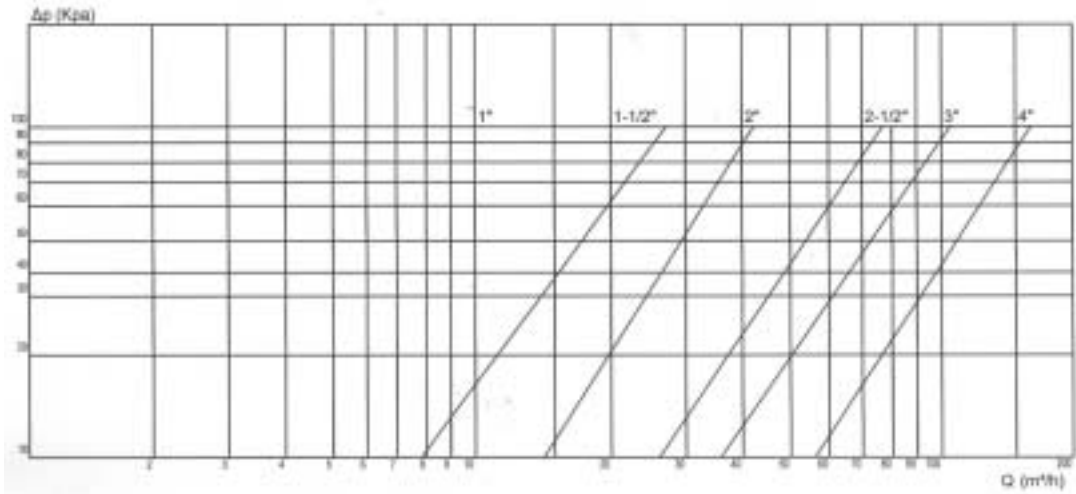
Check valves DIN standards:

VALVE SIZE	BAR	640 25/34 03	640 38/40 03	640 51/52 03	640 63/70 03	640 76/85 03
28	A	0.119	0.266	0.780	0.870	0.996
	B	0.089	0.236	0.750	0.840	0.966
40	A	0.055	0.115	0.219	0.361	0.418
	B	0.029	0.089	0.193	0.334	0.392
52	A	0.036	0.067	0.096	0.196	0.228
	B	0.008	0.035	0.069	0.168	0.200
70	A				0.073	0.089
	B				0.046	0.061
85	A					0.063
	B					0.036

Check valves SMS, RJT BS, IDF ISS, Clamp standards:

VALVE SIZE	BAR	640 25/34 03	640 38/40 03	640 51/52 03	640 63/70 03	640 76/85 03
1"	A	0.152	0.341	1.000	1.120	1.283
	B	0.116	0.305	0.968	1.084	1.247
1 1/2"	A	0.055	0.115	0.219	0.361	0.418
	B	0.029	0.089	0.193	0.334	0.392
2"	A	0.036	0.067	0.096	0.196	0.228
	B	0.008	0.035	0.069	0.168	0.200
2 1/2"	A				0.083	0.101
	B				0.057	0.075
3"	A					0.069
	B					0.040

## Pressure Drop



*For further technical information, section and dimensional drawings and range of models available please refer to our series of product brochures, technical catalogues and valve manuals.*