



Ensuring Process Integrity

LKC-2 Check Valve

Concept

Non-return valve LKC-2 is designed for use in stainless steel pipe installations to prevent reverse flow.

Working principle

LKC-2 opens when the pressure below the valve plug exceeds the pressure above the plug and the spring force.

The valve closes when pressure equalization has been achieved. A higher counter pressure will press the valve plug against the seat.

Standard Design

The valve body is in two parts, assembled by means of a clamp ring and hygienically sealed with a special seal ring. A guide disc and four legs guide the spring loaded valve plug with an O-ring seal.

The valve is available with welding ends for tubes according to ISO and DIN 11850.



TECHNICAL DATA

Temperature

Max. temperature: 284°F (EPDM)

Min. temperature: 14°F

Pressure

Max. product pressure: 0.69 PSI (10 bar)

Mechanical

Required differential pressure for opening the valve when fitted in a vertical pipe, as shown in fig. 3, is approx. 0.41 PSI (0.06 bar)

Options

Product wetted seal rings of Nitrile (NBR) or Fluorinated rubber (FPM).

PHYSICAL DATA

Materials

Product wetted steel parts: 1.4301 (304) / 1.4404 (316L)

External surface finish Semi-bright (blasted)

Internal surface finish Bright (polished), Ra < 32 µin

Product wetted seals: EPDM rubber

Pressure drop/capacity diagram

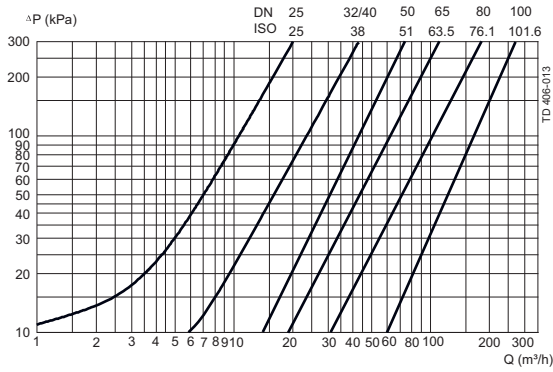


Fig. 1. **Note!**

For the diagram the following applies:

Medium: Water (68°F).

Measurement: In accordance with VDI 2173.

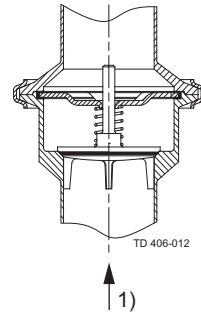


Fig. 2 = Flow direction.

Shows the optimal built-in situation. Other positions possible are e.g. horizontal. The four guide legs of the valve cone ensure good alignment. 90° rotation.

Dimensions (in)

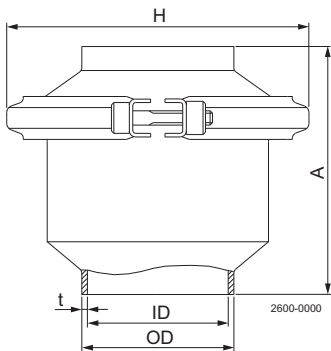


Fig. 3. Dimensions

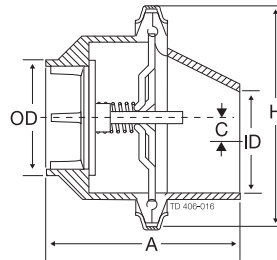


Fig. 4. Dimensions LKC-Drainable

Table 1. Dimensions.

Size	1"	1.5"	2"	2.5"	3"	4"
A	2.46	2.95	3.44	3.74	4.53	6.10
A Tri-Clamp®	4.12	4.61	5.10	5.40	6.19	7.76
OD	1.00	1.50	2.00	2.50	3.00	4.00
ID	0.89	1.40	1.91	2.38	2.83	3.84
t	0.06	0.06	0.06	0.07	0.09	0.09
H	3.23	3.75	4.29	5.39	5.83	6.46
Weight (lbs.)	1.1	1.5	2.2	3.8	5.3	9.5

Table 2. Dimensions.

Size	1"	1.5"	2"	2.5"	3"
A	3.76	3.41	4.17	4.81	5.69
Tri-Clamp®	5.38	5.13	5.80	6.30	7.31
C	0.34	0.40	0.41	0.53	0.65
OD	1.00	1.50	2.00	2.50	3.00
ID	0.89	1.40	1.91	2.38	2.83
t	0.06	0.06	0.06	0.07	0.09
H	3.23	3.75	4.29	5.39	5.83
Weight (lbs.)	1.1	1.5	2.2	3.8	5.3

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ESE00294ENUS 1505

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