



# Alfa Laval LKC-2/LKC-H Non-return Valve

The Safe Choice

## 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: . . . . . 140°C (EPDM)

Min. temperature: . . . . . -10°C

### Pressure

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

### Mechanical

Required differential pressure for opening the valve when fitted in a vertical pipe, as shown in fig. 3, is approx. 6 kPa (0.06 bar)

### Options

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

## PHYSICAL DATA

### Materials

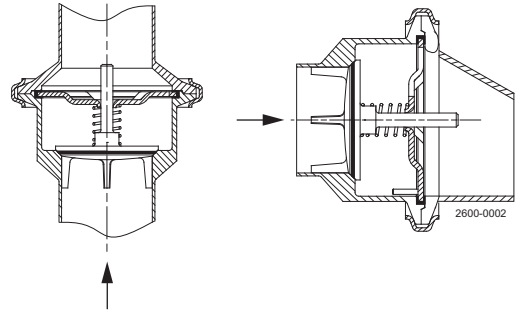
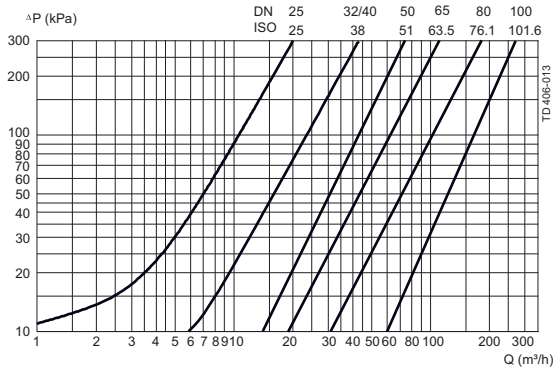
Product wetted steel parts: . . . . . 1.4301 (304) / 1.4404 (316L)

External surface finish . . . . . Bright (Machined Ra 1.6)

Internal surface finish . . . . . Bright (polished), Ra < 0.8 µm

Product wetted seals: . . . . . EPDM rubber

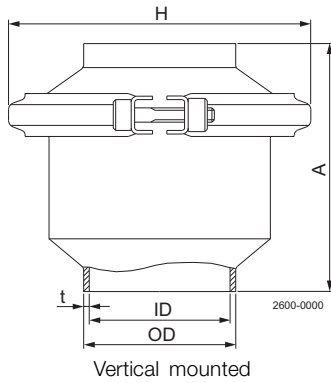
**Pressure drop/capacity diagram**



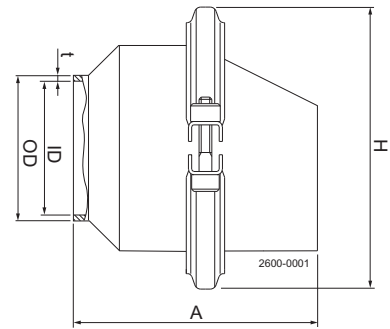
**Fig. 1. Note!**  
 For the diagram the following applies:  
 Medium: Water (20°C).  
 Measurement: In accordance with VDI 2173.

**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 (mm)**



Vertical mounted



Horizontal mounted

**Table 1. Dimensions - Vertical mounted**

Size	ISO						DIN						
	25 mm	38 mm	51 mm	63.5 mm	76.1 mm	101.6 mm	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100
A	62.5	75.0	87.5	95.0	115	155	62.5	75.0	75.0	87.5	95.0	115	155
OD	25.4	38.4	51.4	63.9	76.4	102	30.0	36.0	42.0	54.0	70.0	85.0	104
ID	22.5	35.5	48.5	60.5	72.0	97.6	26.0	32.0	38.0	50.0	66.0	81.0	100
t	1.45	1.45	1.45	1.7	2.2	2.2	2	2	2	2	2	2	2
H	72.0	85.5	99	127	138	164	72.0	85.5	85.5	99	127	138	164
Weight (kg)	0.5	0.7	1.0	1.7	2.4	4.3	0.5	0.7	0.7	1.0	1.7	2.4	4.3

**Table 2. Dimensions - Horizontal mounted**

Size	ISO				
	25 mm	38 mm	51 mm	63.5 mm	76.1 mm
A	95.5	86.4	104.1	119.4	139.7
OD	25.4	38.4	51.4	63.9	76.4
ID	22.5	35.5	48.5	60.5	72.0
t	1.45	1.45	1.45	1.7	2.2
H	72.0	85.5	99.0	127.0	138.0
Weight (kg)	0.5	0.7	1.0	1.7	2.4

Alfa Laval reserves the right to change specifications without prior notification.

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**How to contact Alfa Laval**

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