

Alfa Laval LKIF Inline Strainer

Filters and strainers

Introduction

The Alfa Laval LKIF Inline Strainer is an inline strainer intended for process lines in hygienic applications. It provides a safe and economic method to remove particles from liquids in process flows. The filter can easily be removed for cleaning.

Application

The LKIF Inline Strainer is designed to remove particles and other impurities from product flows and to protect pumps and other sensitive equipment across the dairy, food, beverage, brewery, chemical and pharmaceutical industries.

Benefits

- Hygienic filtration
- Safe and economic method for removal of impurities
- Helps extend product shelf life
- Easy to clean

Standard design

The LKIF Inline Strainer consists of a perforated filter element with filter ring and seal rings. Optional clamp rings, clamp seal rings, and clamp liner, or DS and SMS unions are available.

Working principle

The Alfa Laval LKIF Inline Strainer is installed in process lines and removes particles and impurities as the product flows through the lines. Particles accumulate inside the filter, which can easily be removed for cleaning. If required, the liquid can flow in the opposite direction.



TECHNICAL DATA

Temperature

Min. temperature: 14 °F to 284 °F (EPDM)

Pressure

Max. product pressure: 145 psi (10 bar)

Min. product pressure: Full vacuum

Sizes

25 mm (1"), 38 mm (1 1/2"), 51 mm (2"), 63.5 mm (2 1/2"), 76.1 mm (3"), and 101.6 mm (4"). 1000 kPa (10 bar)

PHYSICAL DATA

Materials

All wetted parts: Acid-resistant steel AISI 316

Other steel parts: Stainless steel AISI 304

Seals: EPDM rubber

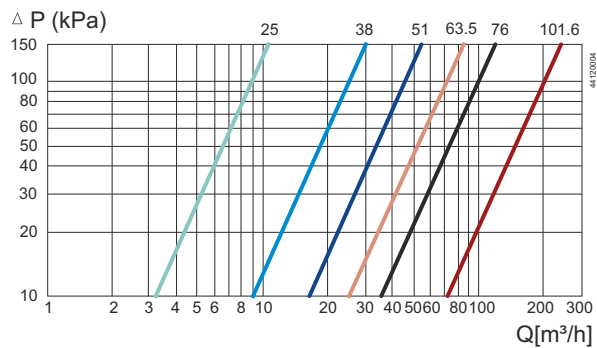
Other seals: Nitrile (NBR) and PTFE, if clamps

Finish: Semi bright

Ordering

Please state the following when ordering: - Size. - Male type.

Pressure drop/capacity diagram



Note!

For the diagram the following applies: Medium: Water (68 °F). Measurement: In accordance with VDI 2173.

Strainer element perforation

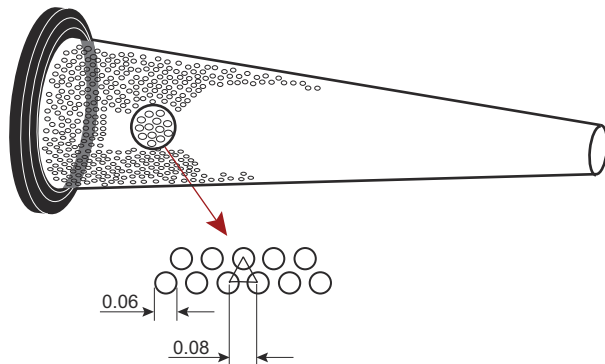


Figure 1. Filter element.

Perforation: 40.2 %

(inch)

Dimensions (inch)

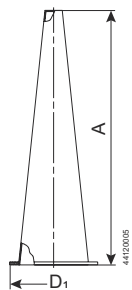


Figure 2. Clamp ends.

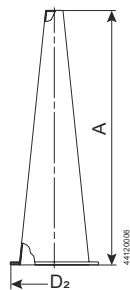


Figure 3. DS and SMS unions.

Size	1"	1½"	2"	2½"	3"	4"
A	2.95	4.49	6.65	8.46	8.86	9.84
D1	1.22	1.57	2.09	2.64	3.15	4.19
D2	1.32	2.05	2.48	3.07	3.58	4.80
» Strainer area	6.82	13.02	25.11	40.46	51.61	78.43
aprx. (inch ²)						
M/DS male	0.73	0.79	0.79	0.94	0.94	0.94
M/SMS male	0.59	0.79	0.79	0.94	0.94	1.38
M/ISO clamp	0.85	0.85	0.85	0.85	0.85	0.85
Weight (lb)	0.06	0.13	0.22	0.33	0.43	0.66

Parts List

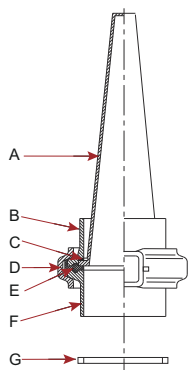


Figure 4. Clamp ends.

- A. Filter with ring.
- B. Clamp-liner welded.
- C. Seal ring.
- D. Clamp ring.
- E. Clamp seal ring.
- F. Clamp-liner welded.
- G. Replacement ring.

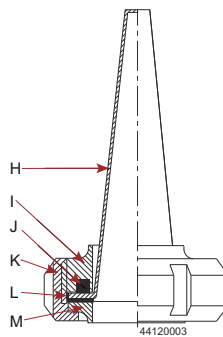


Figure 5. DS and SMS unions.

- H. Filter with ring.
- I. Male part welded.
- J. Seal ring.
- K. Union nut.
- L. Special seal ring.
- M. Liner welded.

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