CONICAL STRAINERS

CLEANABLE FILTER ELEMENTS

DESCRIPTION

Cleanable in-line strainer, plain screen

APPLICATION

Pipeline strainers positioned within
the flow cross-section of pipelines.

MATERIALS

AISI 316L, 1.4571 - Other materials available on request

TECHNICAL DETAILS

PN: 2,5 ... 400, 150 lbs ... 1500 lbs
DN: 25 ... 1500, 1" ... 36"
Other specification available on request
Media: Liquids or gases (non-corrosive)
Flow: no pulsations
Max. occurring differential pressure < 1000 mbar

FILTER MEDIA

Optimesh® wire mesh (10 - 100 µm) made of 1.4401
Precimesh® wire mesh (< 10 µm; > 100 µm) made of 1.4401
Optional: Other materials available on request

WORKING TEMPERATURE

From -200 ° to 200°C

Is this datasheet the latest release? Please check on our website.

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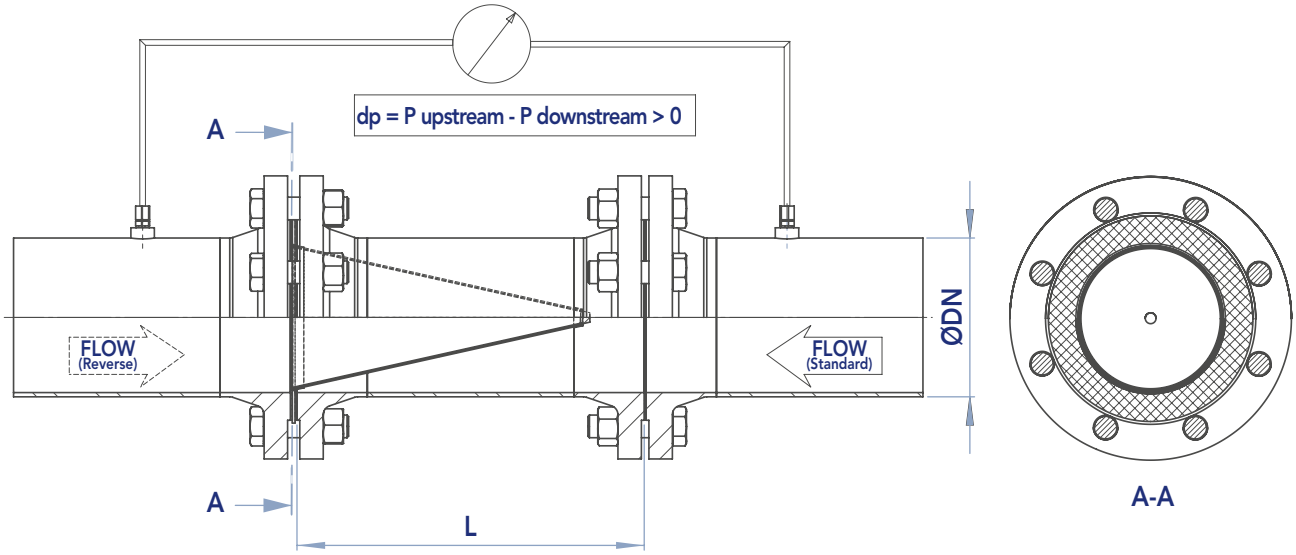
DIRECTION OF FLOW



STANDARD FLOW

fluidtech® inline strainers are normally designed for flow from the outside to the inside. As a result, the strainer surface is on the outside and easily accessible for inspection and, in the case of sticky fouling, cleaning. With this design, non-adhesive particles settle in the dead space between the strainer base and the pipework, leaving the strainer surface unaffected.

REVERSE FLOW

At the customer's request, the screen surface can be located on the inside of the body. The flow then enters at the flange side and is directed towards the tip. This design can withstand particularly high differential pressures and provides additional safety in applications where the filter surface may be blocked by separated contaminants.

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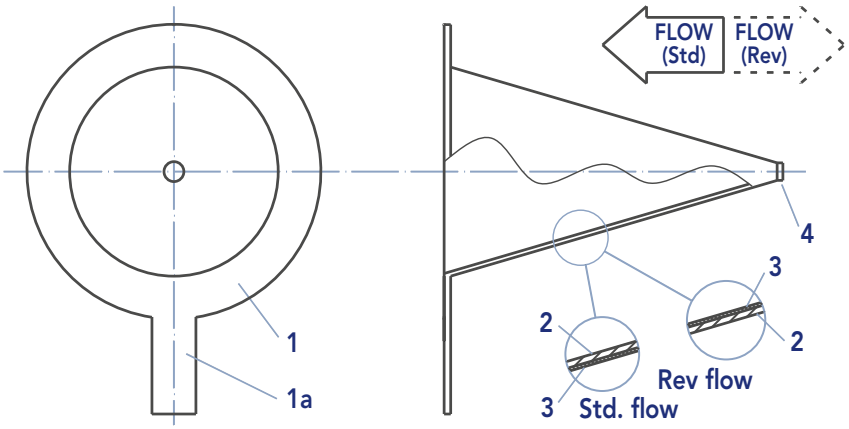
DESIGN

Inline strainers have a flange with a double sealing surface which is clamped between the welding neck flanges of the pipe. A section of pipe (elbow or straight coil) must be removed for installation and removal. An optional identification tab attached to the flange allows the strainer to be identified when installed. Versions with a longer overall length (L/D ratio) have a larger filter area and therefore a lower pressure drop. fluidtech® inline strainers are normally designed for flow from the tip: this facilitates cleaning of the filter fabric, which is supported against the differential pressure by a perforated plate. The load on inline strainers does not depend on the nominal pressure (PN) of the system, but only on the maximum pressure drop (Δp) that occurs. The resulting flow forces require support of the filter media (wire mesh). This is achieved by using a perforated plate support structure on the downstream side and, if necessary, an additional intermediate layer of coarse wire mesh. Very fine filter media can be protected from damage by the impact of high-energy foreign bodies by means of a reinforcement on the upstream side.



Main components of inline strainers:
1: Clamping Flance
1a: Identification Tab
2: Support Structure
3: Filter Wire Mesh
4: Tip

Admissible Loads (minimum ratings across all sizes and designs)
The permissible loads vary considerably between the designs.
Therefore, in this general data sheet we give the minimum ratings that are achieved by all of our standard pipe strainers.
In most cases this will be sufficient to ensure that occurring operating loads are within the permissible range.
fluidtech® standard in-line strainers can be used within the limits shown here without further verification.
Because of their installation within the flow cross-section, the filter surface is limited, causing a higher pressure loss in comparison with large-volume filter housings.
For this reason, inline strainers are normally just usedtemporarily, e.g. to flush the system after welding work-hence the common term “start-up strainer”.