



FSI

SUCTION FILTER FOR SUBMERGED MOUNTING

SERIES 10

Q max (see performance ratings table)

OPERATING PRINCIPLE

- FSI filters are filter elements which function being completely submerged in the tank. They are installed directly at the end of the pump suction line.
- They are aimed at protecting the pump from any possible gross contamination present inside the tank.
- The filter element is a metallic strainer with a 90 µm filtration degree, which grants a good pump protection without compromising the correct fluid supply.
- The filters are designed with a threaded BSP connection, available in the sizes from 3/8" to 3". They are supplied with a hexagonal shank, which allows the filter element to be connected by spanner to the pump suction line.

TECHNICAL SPECIFICATIONS

| Filter code | BSP port dimensions | Rated flow [l/min] (NOTE 1) | Rated filtration degree [µm] |
|-------------|---------------------|-----------------------------|------------------------------|
| FSI-TB038 | 3/8" | 9 | 90 |
| FSI-TB012 | 1/2" | 14 | |
| FSI-TB034 | 3/4" | 25 | |
| FSI-TB100 | 1" | 45 | |
| FSI-TB114 | 1 1/4" | 75 | |
| FSI-TB112 | 1 1/2" | 100 | |
| FSI-TB200 | 2" | 160 | |
| FSI-TB212 | 2 1/2" | 250 | |
| FSI-TB300 | 3" | 350 | |

NOTE 1: The flow rates stated in the table correspond to a 0.02 bar pressure drop measured with mineral oil of viscosity 36 cSt at 50°C

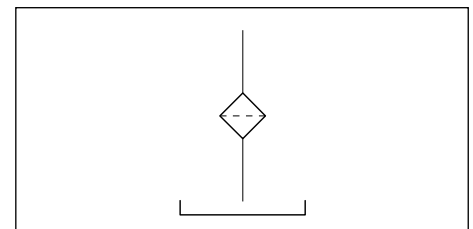
As for fluids whose viscosity degree at a specific operating pressure is different from 36 cSt, the real pressure drop has to be changed according to the following ratio:

$$\text{real } \Delta p \text{ value} = 0.02 \cdot \frac{\text{real } Q}{\text{table } Q} \cdot \frac{\text{real viscosity degree (cSt)}}{36}$$

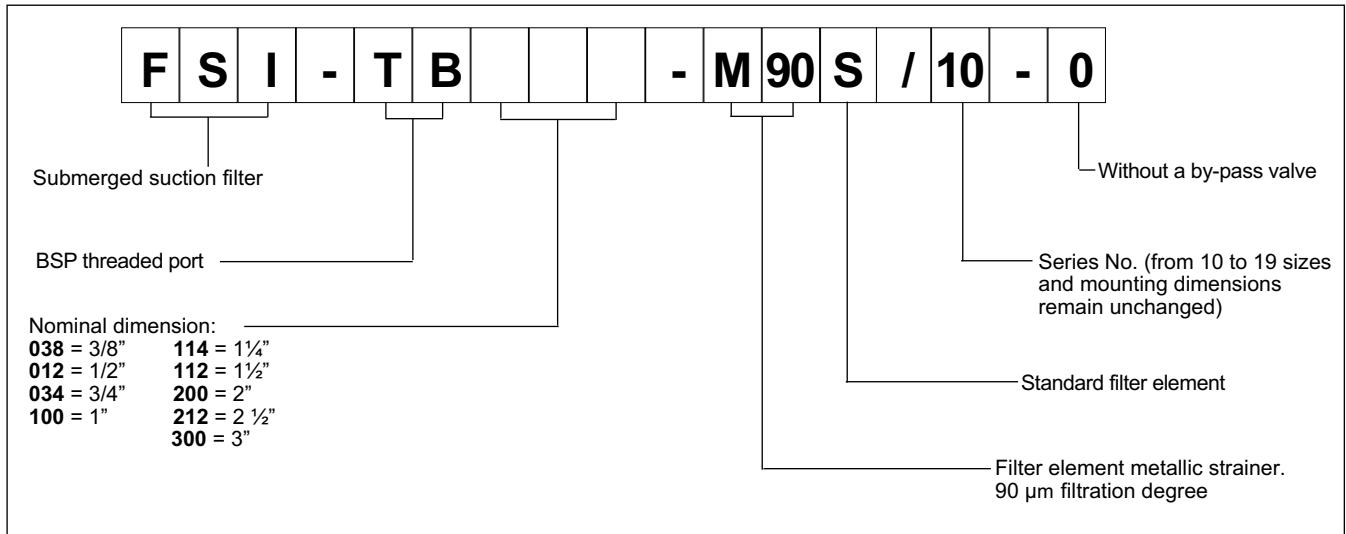
The filter size has to be selected so that with the nominal flow rate the pressure drop is lower than 0.02 bar.

| | | |
|--|-----|------------|
| Collapsing differential pressure of the filter element | bar | 1.0 |
| Ambient temperature range | °C | -25 / +50 |
| Fluid temperature range | °C | -25 / +110 |
| Fluid viscosity range | cSt | 10 ÷ 400 |

HYDRAULIC SYMBOL



1 - IDENTIFICATION CODE



2 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. Using fluids at temperatures higher than 80 °C causes a faster degradation of the fluid and of the seals characteristics. The fluid must be preserved in its physical and chemical characteristics.

3 - OVERALL AND MOUNTING DIMENSIONS

