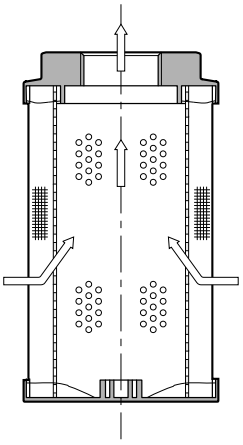
FSI

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 (**NOTE 1**) [l/min]	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 ¼”	75	
FSI-TB112	1 ½”	100	
FSI-TB200	2 ”	160	
FSI-TB212	2 ½”	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.

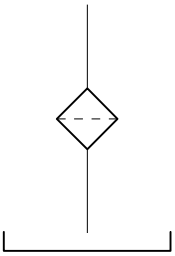
As for fluids whose viscosity degree at a specific operating pressure is different from 36 cSt, the real pressure drop has to be changed according to the following ratio:

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

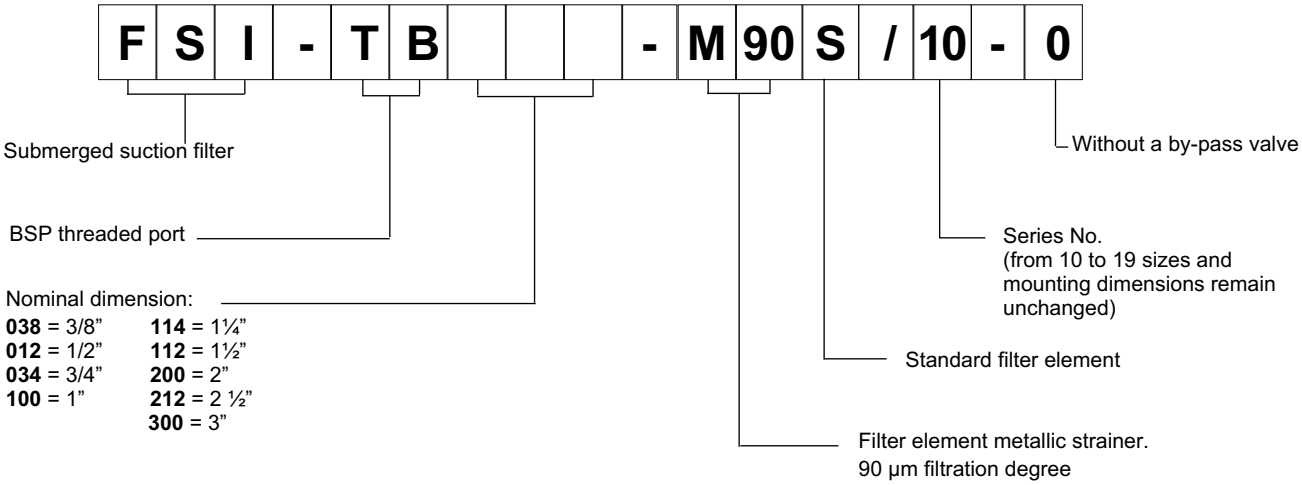
The filter size has to be selected so that with the nominal flow rate the pressure drop is lower than 0.02 bar.

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



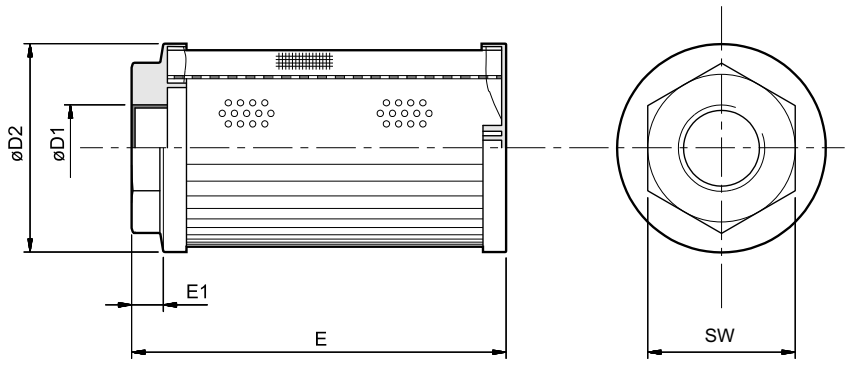
2 - HYDRAULIC FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals. For the use of other kinds of fluid such as HFA, HFB, HFC, please consult our technical department.

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

dimensions in mm



D1	D2	E	E1	SW
3/8"	52	73	12	30
1/2"	70	92	13	42
3/4"	70	137	13	42
1"	70	137	13	42
1 1/4"	99	135	15	70
1 1/2"	99	218	15	70
2"	130	201	15	70
2 1/2"	130	253	15	101
3"	130	253	15	101

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