

# Filters

## High-capacity Filters

### FH Series

#### Introduction

FH Series High-capacity Filters feature a large filtration area, more efficient filtration, stable flow, wide medium compatibility, etc., making them suitable for high-flow pipeline systems.

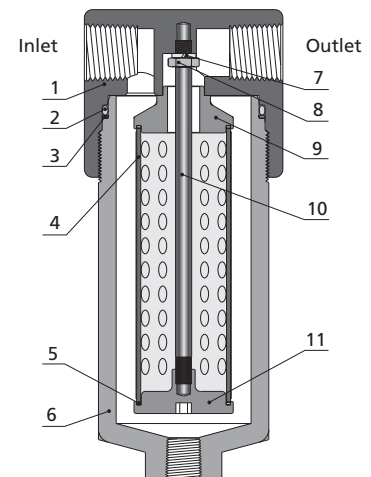


#### Features

- ⦿ Filtration area type: 4H and 8H
- ⦿ Bypass port at filter bottom optional for the ease of sampling or purging
- ⦿ Elements equipped with retention levers for easy disassembling, cleaning and replacement
- ⦿ Standard seal materials: FKM and PTFE
- ⦿ Working pressure up to 5000 psig
- ⦿ Variety of end connections optional

#### Standard Materials of Construction

Item	Component	Body Material
		316 SS Material Grade/ASTM Specification
1	Body	F316 SS/A182
2	O-ring	FKM/FFKM/NBR/EPDM
3	Backup Ring	PTFE
4	Element	Strainer type 306 SS
5	Gasket	PTFE
6	Bonnet	316 SS/A479
7	Standard Spring Washer	Stainless Steel
8	Hexagon Thin Nut	Stainless Steel
9	Upper Retainer	316 SS/A479
10	Lever	316 SS/A479
11	Lower Retainer	316 SS/A479

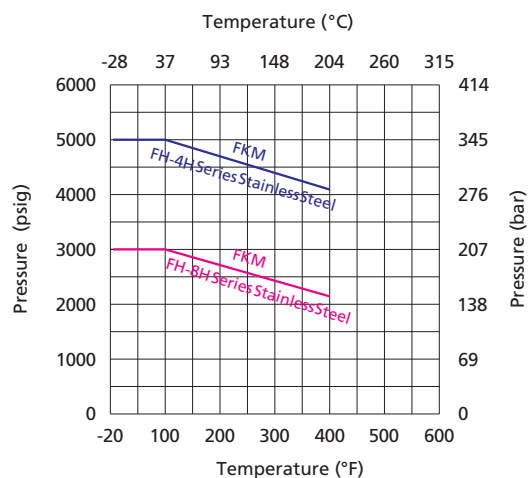


FH Series Strainer Filter Shown

## Temperature Range of Sealing Materials

O-ring Material	Temperature Range °F (°C)
NBR	-20 to 212 (-28 to 100)
EPDM	-50 to 250 (-45 to 121)
FFKM	30 to 600 (-1 to 315)
FKM	-4 to 400 (-20 to 204)

## Pressure vs. Temperature



Note: For Pressure vs. Temperature curves for other seal materials listed above, please contact FITOK or our authorized distributors.

## Filter Elements

strainer (25 µm)



strainer (150 µm)



- © 316 SS wire meshes and metal framework
- © Uniform mesh pores to provide larger filtration area and more stable flows

## Nominal Pore Size of Filter Elements

	Nominal Pore Size	Pore Size Range	Element Designator
Strainer	25 µm	500 mesh	25
	100 µm	140 mesh	100
	150 µm	100 mesh	150
	250 µm	60 mesh	250
	450 µm	40 mesh	450

Note: Filter elements remove 95% of particles larger than the nominal pore size.

## Filtration Area

Filtration Area Type	Filtration Area, in. <sup>2</sup> (mm <sup>2</sup> )
	Strainer
4H	10.70 (6908)
8H	17.02 (10980)

Note: Strainer element available for FH series, and sintered or non-metallic element optional upon customers' requests.

## Maximum Differential Pressure of Clean Filter at 70°F (20°C)

Maximum Differential Pressure psig (bar)				
25 µm	100 µm	150 µm	250 µm	450 µm
1000 (69.0)				

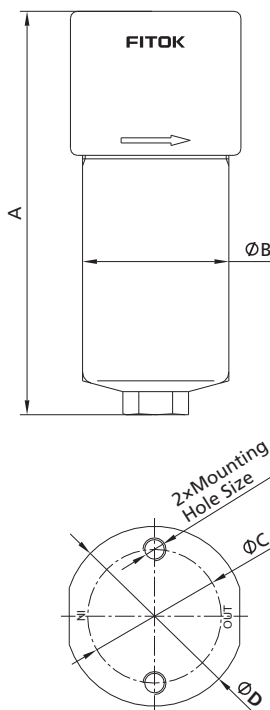
## Flow Data

Filtration Area Type	Element Nominal Pore Size µm	Element Type	Inlet Pressure, psig (bar)		
			0.14 (2)	0.34 (5)	0.55 (8)
			Air Flow, std m <sup>3</sup> /h		
4H	25, 100, 150, 250, 450	Strainer	5	8.3	10.4
8H	25, 100, 150, 250, 450	Strainer	8.4	14	18.9

Note: Outlet is discharged to the atmosphere.

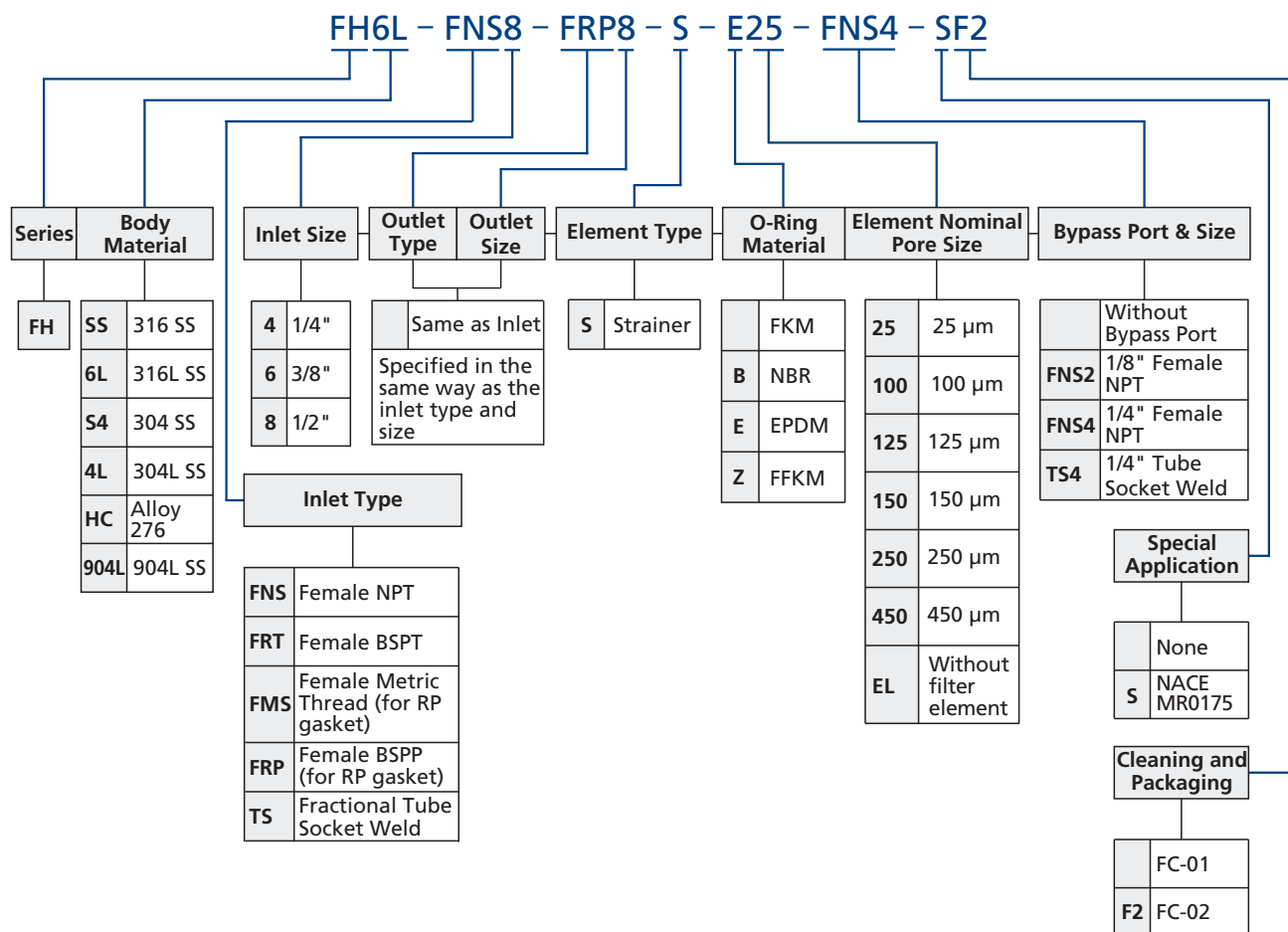
## Dimensions and Ordering Information

Dimensions, in inches (millimeters), are for reference only.



Basic Ordering Number	Connection Type and Size		Filtration Area Type	Dimensions in. (mm)				
	Inlet	Outlet		A	ØB	ØC	ØD	Mounting Hole Size
FH□□-FNS4-S-□□	1/4 Female NPT	1/4 Female NPT	4H	2.29 (158.2)	1.61 (41)	1.95 (49.5)	1.94 (49.4)	M8 × 1 - 6H threads 0.47" (12 mm) deep, pores 0.63" (16 mm) deep
FH□□-FRT4-S-□□	1/4 Female BSPT	1/4 Female BSPT						
FH□□-FRP4-S-□□	1/4 Female BSPP	1/4 Female BSPP						
FH□□-FNS6-S-□□	3/8 Female NPT	3/8 Female NPT	8H	6.89 (175)	2.5 (63.5)	2.28 (58)	3.07 (78)	M10 × 1.5 - 6H threads 0.59" (15 mm) deep, pores 0.71" (18 mm) deep
FH□□-FRT6-S-□□	3/8 Female BSPT	3/8 Female BSPT						
FH□□-FRP6-S-□□	3/8 Female BSPP	3/8 Female BSPP						
FH□□-FNS8-S-□□	1/2 Female NPT	1/2 Female NPT						
FH□□-FRT8-S-□□	1/2 Female BSPT	1/2 Female BSPT						
FH□□-FRP8-S-□□	1/2 Female BSPP	1/2 Female BSPP						

# Filters Ordering Number Description

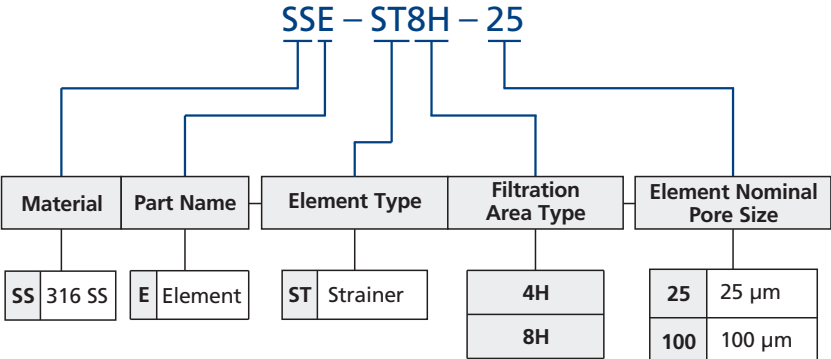


Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

1. Cleaning and Packaging:

- FC-01: Standard cleaning and packaging for basic industrial procedures.
- FC-02: Special cleaning and packaging for wetted system components to ensure compliance requirement as stated in ASTM G93 Level C.

# Elements Ordering Number Description



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