

# Return Line Filters

## HF4RT Series

Flows to 454 L/min (120 USgpm)  
Pressures to 7 bar (100 PSI)



### Features and Benefits

- Designed to comply with ANSI specifications and ISO cleanliness standards.
- Conforms to HF4 specifications
- Gauge and electrical switch options available to monitor element loading
- In-tank configuration minimizes space requirements and potential system leakage points.
- Optional secondary port allows filtration of a second return line without additional fittings or filtered fill port.
- High efficiency replacement elements in standard configurations (C-Pak) to meet Target Cleanliness Levels. Optional extend tube allows smaller filtration unit to be used where needed

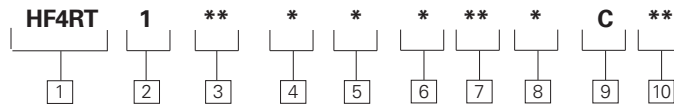
### DESIGN SPECIFICATIONS

<b>Rated flow:</b>	Length 3	189 L/min (50 USgpm)
	Length 6	379 L/min (100 USgpm)
	Length 7	454 L/min (120 USgpm)
<b>Fluid compatibility:</b>	Compatible with most petroleum oil, oil-in-water and water-in-oil fluids Optional seals available for phosphate esters.	
<b>Temp range:</b>	-30°C to 121°C (-22°F to 250°F)	
<b>Pressure rating:</b>	Operating	7 bar (100 PSI)
	Fatigue	7 bar (100 PSI)
<b>Material:</b>	Head	Aluminum
	Cover	Aluminum
	Bowl	Carbon Steel
<b>Dry weight:</b> (Approximate)	Length 3	4,5 kg. (10.0 lbs.)
	Length 6	6,6 kg. (14.5 lbs.)
	Length 7	8,4 kg. (18.6 lbs.)

### HF4RT Series Filter and Element Model Code

#### Sample model code:

HF4RT1SD313NBC05



#### 1 Filter Series - HF4RT

#### 2 Element Collapse Rating

1 - 150 PSI Low Collapse

#### 3 Port Options

BC - G1<sup>1</sup>/<sub>4</sub> to ISO 228  
ME - 1<sup>1</sup>/<sub>2</sub>" - SAE 4 bolt Flange  
Code 61 (M12 x 1.75)  
**SD** - 1.875 - 12 UN SAE-24  
str. Thd. (1<sup>1</sup>/<sub>2</sub>" tube)  
**FE** - 1<sup>1</sup>/<sub>2</sub>" - SAE 4 bolt Flange  
Code 61 (UNC)

#### 4 Valve Options

3 - Bypass set at 25 PSI  
cracking pressure  
4 - Bypass set at 43 PSI  
cracking pressure

#### 5 Indicator Options

1 - No indicator  
2 - Gauge 0-4 Bar (0-60 psi)  
Use with valve option "4"  
4 - Gauge 0-10 Bar (0-160 psi)  
Use with valve option "3"  
6 - Electrical switch, 15 PSI  
Brad Harrison connector  
7 - Electrical switch, 30 PSI  
Brad Harrison connector  
8 - Electrical switch, 15 PSI  
Hirshman connector  
9 - Electrical switch, 30 PSI  
Hirshman connector

#### 6 Assembly Length

mm (inch)  
3 - 378 (14.9)  
6 - 584 (23)  
7 - 787 (31)  
9 - 12" extend tube and  
Length 3 Filter

#### 7 Secondary Port

BC - G1<sup>1</sup>/<sub>4</sub> to ISO 228 - use  
with BC Inlet Port  
SD - 1.875 - 12 UN SAE-24  
str. Thd. (1<sup>1</sup>/<sub>2</sub>" tube) -  
use with SD Inlet Port  
SZ -2.50 - 12 UN SAE-32 str.  
Thd. (2" tube) - use with  
FE Inlet Port

**N** - No Secondary Port  
Note: No secondary port is available with the  
ME inlet port option.

#### 8 Seal Material

**B** - Buna-N  
**V** - Viton-A

#### 9 Element Construction

**C** - Standard Construction

#### 10 Fluid Cleanliness Rating Target fluid

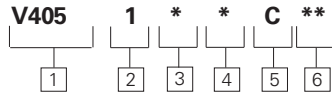
Code	cleanliness level
<b>03</b>	16/14/12 or better
<b>05</b>	18/16/14 or better
<b>10</b>	20/18/15 or better
<b>20</b>	22/19/16 or better

Items not in bold are non-standard and may have a longer lead time

# Return Line Filters

## HF4RT Series

Flows to 280 L/min (75 USgpm)  
Pressures to 50 bar (725 PSI)



### V405 Element Model Code

Sample model code:  
V4051B3C05

#### 1 Filter Element

**V405** - For use with HF4RT, HF4P & OFR60

#### 2 Element Collapse Rating

**1** - 150 PSI Low Collapse

#### 3 Seal Material

**B** - Buna-N  
**V** - Viton-A

#### 4 Element Length

mm (inch)  
**3** - 229 (9)  
**6** - 457 (18)  
**7** - 686 (27)

#### 5 Element Construction

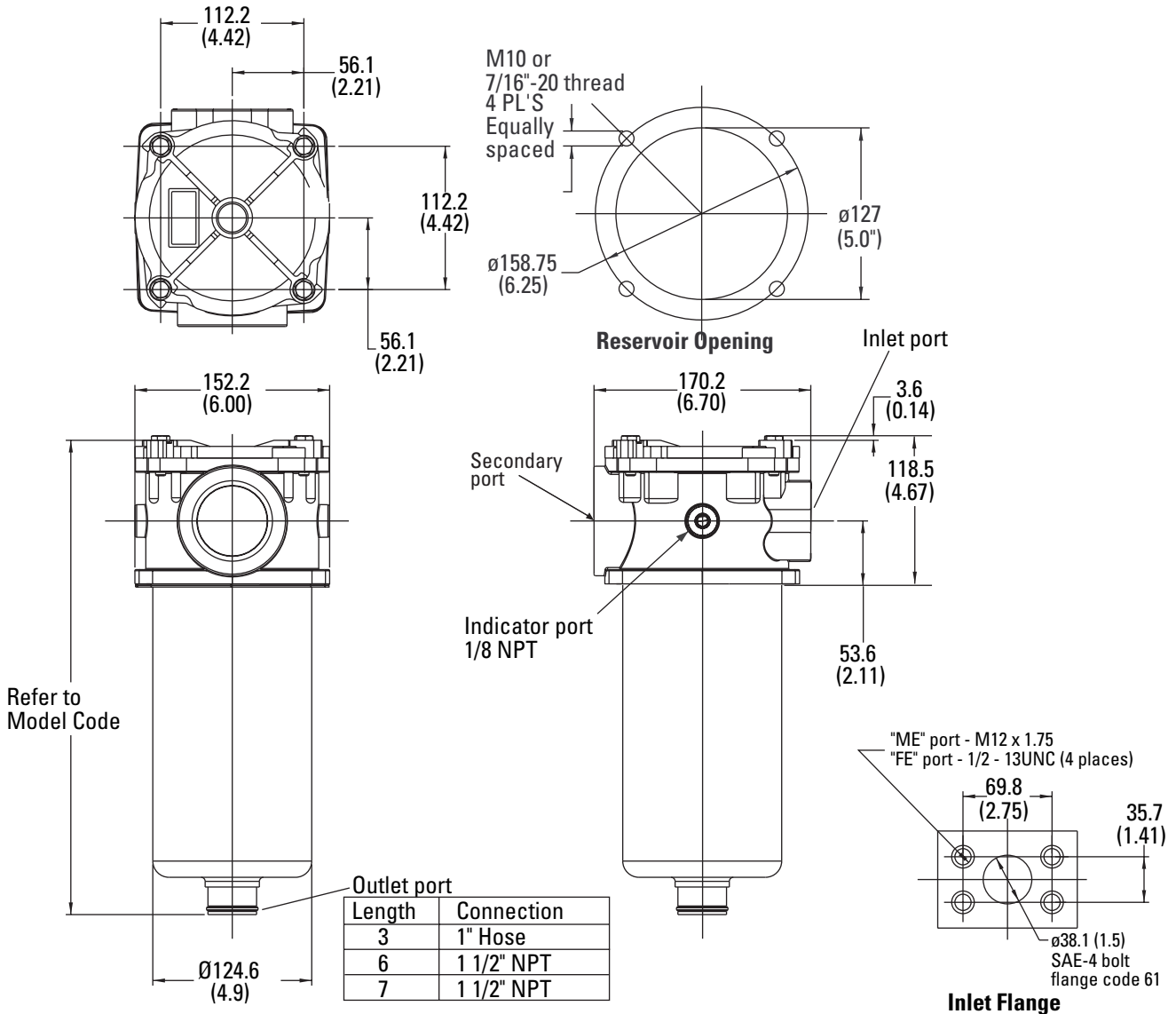
**C** - C-Pak (grade 3, 5, 10, 20)

#### 6 Fluid Cleanliness Rating

Code	Target fluid cleanliness level
<b>03</b>	16/14/12 or better
<b>05</b>	18/16/14 or better
<b>10</b>	20/18/15 or better
<b>20</b>	22/19/16 or better

### Housing Dimensions

mm (inch)



Items not in bold are non-standard and may have a longer lead time

# Return Line Filters

## HF4RT Series

### Flow Data

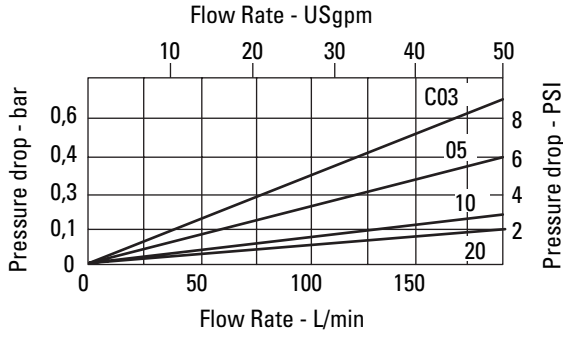
Flows to 280 L/min (75 USgpm)  
Pressures to 50 bar (725 PSI)

### Flow versus pressure drop:

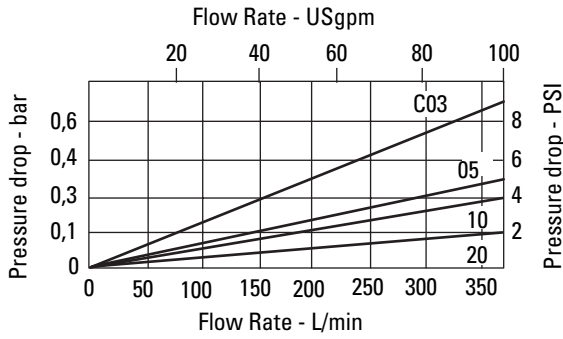
150 SUS (32 cSt) oil with specific gravity of  $\leq 0.9$

### Element Flow Data

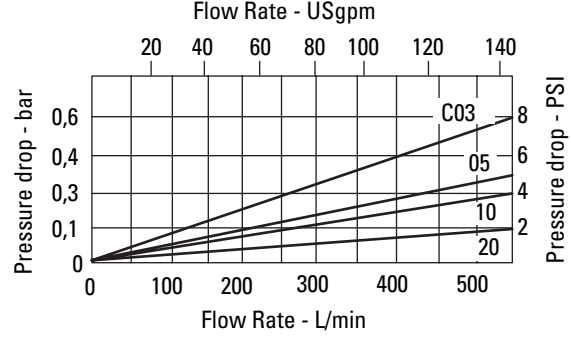
#### HF4RT C-Pak Length 3



#### HF4RT C-Pak Length 6

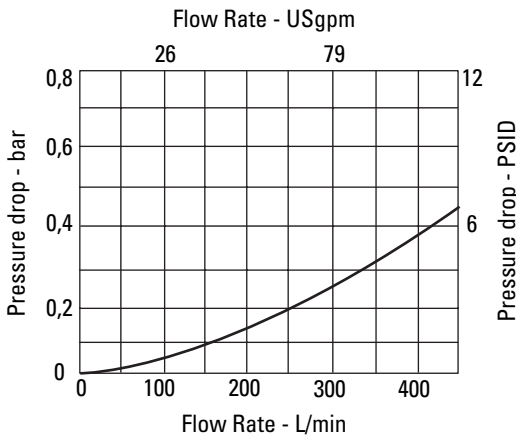


#### HF4RT C-Pak Length 7



### Housing/Bypass Valve Flow Data

#### Housing



#### Bypass Valve

