

Filters

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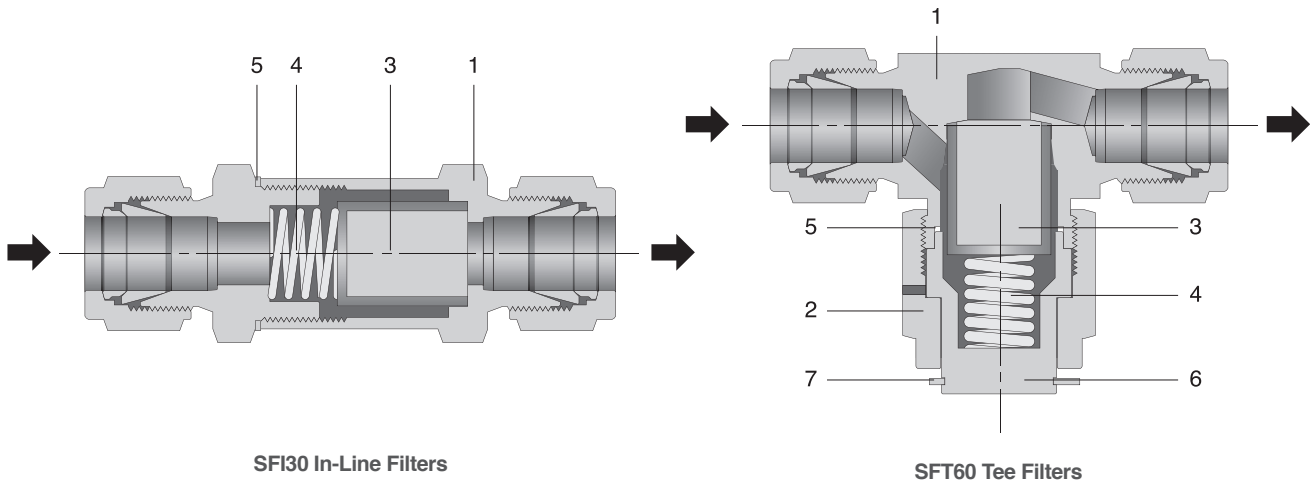
SFI30 & SFT60 Filters

Features

- Trapping fine contamination to maintain system purity
- Gas and liquid filtration
- Standard micron filtering ranges : 0.5, 2, 7, 15, 60 and 90 microns
- Replaceable S316 sintered elements
- S316 and Brass body construction
- Choice of reliable S-Lok, NPT & ISO pipe end connections
- Heat Code Traceability



SFI30 In-Line Filters	SFT60 Tee Filters
<ul style="list-style-type: none"> • In-line filters are applicable where space is limited and elements don't have to be replaced often. • Compact in-line design with large filtration area • Maximum working pressure 3,000 psig @ 100°F (206 bar @ 38°C) 	<ul style="list-style-type: none"> • Filter Element replaceable with the valve in-line. • Safety union bonnet design for high pressure rating • Optional Bypass for sampling or purging of process fluid. • Maximum working pressure 6,000 psig @ 100°F (413 bar @ 38°C)



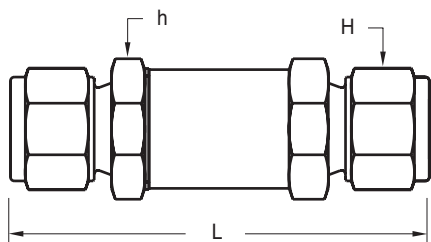
Materials of Construction

Component	SFI30		SFT60	
	Grade / ASTM / Specification			
1 Body	S316/A276	Brass/B16	S316/A276	Brass/B16
2 Nut	-	-	S316/A276	Brass/B16
3 Sintered Element	S316			
4 Spring	S302			
5 Gasket	S316/A240 silver plated			
6 Cap	-	-	S316/A276	Brass/B16
7 Retainer Ring	-	-	Stainless Steel	

Filtration & Terminology

- **Filter Element** : The component within the Filter which traps media contamination.
- **Filtration Area** : The actual surface area of the filter element available to trap contamination.
- **Micron** : A unit of measure to describe the mean pore diameter of the filter element or the mean particle diameter of media contamination.
 ※ One micron = 0.001mm or 0.00004 inch

SFI30 Series In-Line Filters



Basic Ordering Number	End Connections Inlet and Outlet	Orifice inch (mm)	Dimensions mm (in.)		
			L	H	h
SFI 1	S-2T- 1/8 in. S-LOK	0.09(2.4)	59.7(2.35)	7/16	9/16
	F-2N- 1/8 in. Female NPT		54.9(2.16)	-	
	S-3M- 3mm S-LOK		60.5(2.38)	12 mm	
SFI 2	S-4T- 1/4 in. S-LOK	0.19(4.7)	74.9(2.95)	9/16	3/4
	M-4N- 1/4 in. Male NPT		68.3(2.69)	-	
	F-4N- 1/4 in. Female NPT		72.9(2.87)	-	
	S-6M- 6mm S-LOK		75.2(2.96)	14mm	
SFI 3	M-8N- 1/2 in. Male NPT	0.28(7.1)	81.3(3.20)	1-1/16	1
	S-6T- 3/8 in. S-LOK		81.5(3.21)		
SFI 4	S-8T- 1/2 in. S-LOK	0.41(10.3)	88.6(3.49)	7/8	1

All dimensions shown are for reference only and are subject to change.
Dimensions with S-Lok nuts are in finger-tight position.

⚡ Sintered Elements

- Stainless steel 316 sintered
- High heat resistance and thermal stability up to 1,500°F (815°C).
- High permeability with low-pressure drop.
- Shape-stability with self-supporting structural elements.
- Suitable for compression, vibration, and high impulse pressure.
- Precise filtration due to the exact and uniform pore size and distribution.
- Chemical resistance against acids and caustic solutions in various ranges of pH.

Element Designator	Nominal Pore Size, μm	Pore Size Range, μm	Element Porosity	Cv Factor	Max. Pressure Differential Across Clean Filters at 70°F (21°C)
05	0.5	0.5-2	17%	0.046	1160 psig (80 bar)
2	2	1-4	22%	0.056	
7	7	5-10	27%	0.12	
15	15	11-25	36%	0.13	
60	60	50-75	44%	0.38	
90	90	75-110	45%	0.50	

⚡ Technical Information

Filter Series	Pressure Rating @100°F (38°C) psig (bar)		Temperature Rating °F (°C)		Filtration Area with Sintered Element inch ² (mm ²)
	S316	Brass	S316	Brass	
SFI 1	3,000(206)	3,000(206)	-20 to 900 (-28 to 482)	-20 to 300 (-28 to 148)	0.55(350)
SFI 2					1.30(830)
SFI 3, SFI 4	2,500(172)	2,000(137)			1.98(1280)

⚡ Flow Capacities

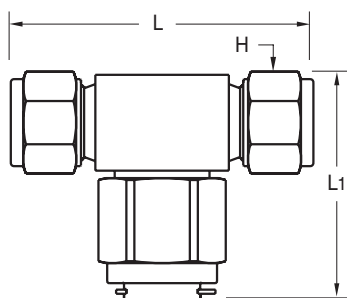
Filter Series	Nominal Pore Micron	P		
		20 psig	60 psig	120 psig
Water GPM @ 70°F (21°C)				
SFI 1 Series	05	0.01	0.44	0.13
	2	0.11	0.26	0.14
	7	0.14	0.33	0.53
	15	0.17	0.39	0.64
	60	0.21	0.55	0.77
	90	0.28	0.55	0.66
SFI 2 Series	05	0.06	0.19	0.32
	2	0.34	0.94	1.42
	7	0.57	1.42	2.19
	15	0.71	1.42	2.30
	60	1.27	3.61	5.04
	90	1.70	4.60	6.68
SFI 3 Series	05	0.13	0.44	0.83
	2	0.37	1.20	1.75
	7	0.91	2.41	3.83
SFI 4 Series	15	1.19	2.85	4.49
	60	2.83	7.34	10.95
	90	3.25	8.32	12.05

⚡ Element Replacement

- The sintered elements don't permit the contaminants in the gas and liquid to pass through the elements when they are bigger than the pore size of micron.
 - Contaminants are trapped by element pores and it results in pressure buildup.
 - Contamination comes earlier when flow volume is high and media is not clean.
 - The filtering elements need to be replaced for the pressure drop as well as its system purity.
- ※Note : Clean filter valve components whenever the element is replaced.

SFT60 Series Tee Filters

Ordering Information and Dimensions



Basic Ordering Number	End Connections Inlet and Outlet	Orifice inch (mm)	Dimensions mm (in.)		
			L	L ₁	H
SFT 1	F-2N	1/8 in. Female NPT	50.8(2.00)	47.5 (1.87)	-
	S-2T	1/8 in. S-LOK	27.7(2.27)		7/16
	S-4T	1/4 S-LOK	62.7(2.47)		9/16
	M-4N	1/4 Male NPT	54.1(2.13)		-
	F-4N	1/4 Female NPT	54.1(2.13)		-
	S-6M	6mm S-LOK	62.5(2.46)		14mm
SFT 2	S-6T	3/8 S-LOK	72.1(2.84)	56 (2.20)	11/16
	S-8M	8mm S-LOK	72.1(2.84)	56 (2.20)	16mm
SFT 3	M-6N	3/8 Male NPT	60.5(2.38)	56 (2.20)	-
	S-10M	10mm S-LOK	72.6(2.86)		19mm
	S-12M	12mm s-lok	77.2(3.04)		22mm
	S-8T	1/2 S-LOK	77.2(3.04)		7/8
	M-8N	1/2in. Male NPT	68.9(2.75)		-

All dimensions shown are for reference only and are subject to change. Dimensions with S-Lok nuts are in finger-tight position.

Technical Information

Filter Series	Pressure Rating @100°F (38°C) psig (bar)		Temperature Rating °F (°C)		Filtration Area with Sintered Element inch ² (mm ²)
	S316	Brass	S316	Brass	
SFT 1, SFT 2	6,000(413)	2,000(137)	-20 to 900 (-28 to 482)	-20 to 300 (-28 to 148)	1.3(830)
SFT 3	6,000(413)	2,000(137)	-20 to 900 (-28 to 482)	-20 to 300 (-28 to 148)	1.98(1280)

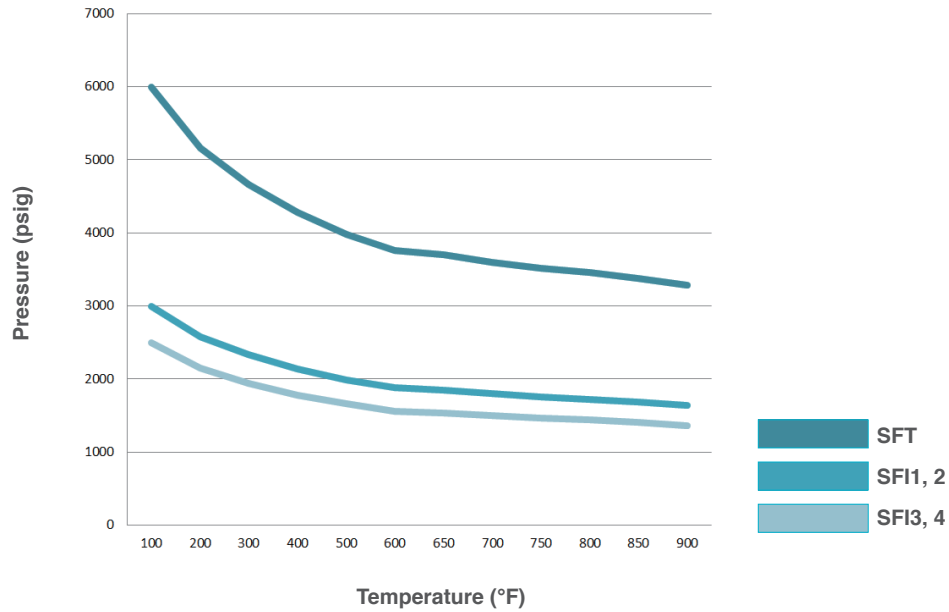
SFT Series Tee Filter CNG / NGV Certifications

Certificates	ECE R110	ANSI NGV 3.1 - 2012	ISO 15500
Certificate No.	110R-010334	126841AUT15	126841MECH104
Classification	Class 0	Manual valve	Manual valve
Temperature	-40 to 120°C (-40 to 248°F)	-40 to 120°C (-40 to 248°F)	-40 to 120°C (-40 to 248°F)
Working Pressure	260 bar @ 120°C	248 bar @ 120°C	260 bar @ 120°C

Flow Capacities

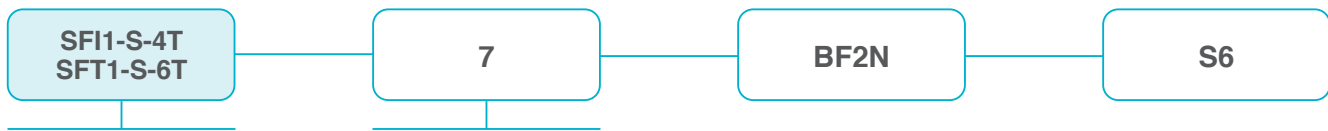
Filter Series	Nominal Pore Micron	P		
		20 psig	60 psig	120 psig
Water GPM @ 70°F (21°C)				
SFT1-F-2N SFT1-S-2T	05	0.01	0.44	0.13
	2	0.11	0.26	0.14
	7	0.14	0.33	0.53
	15	0.17	0.39	0.64
	60	0.21	0.55	0.77
	90	0.28	0.55	0.66
SFT1-S-4T SFT1-M-4N SFT1-F-4N	05	0.06	0.19	0.32
	2	0.34	0.94	1.42
	7	0.57	1.42	2.19
	15	0.71	1.42	2.30
	60	1.27	3.61	5.04
	90	1.70	4.60	6.68
SFT1-S-6M SFT2-S-6T SFT2 Series SFT3 Series	05	0.13	0.44	0.83
	2	0.37	1.20	1.75
	7	0.91	2.41	3.83
	15	1.19	2.85	4.49
	60	2.83	7.34	10.95
	90	3.25	8.32	12.05

Pressure-Temperature Ratings



Ordering Information

Select desired basic ordering number, element designator, option and body material listed below.



Series Designator	Sintered Element		By-pass	Body Material
	Element Designator	Nominal Micron		
Basic Ordering Number	05	0.5	<ul style="list-style-type: none"> • Nil : No By-pass option • BF2N : 1/8 in. Female NPT • BF4N : 1/4 in. Female NPT 	<ul style="list-style-type: none"> • S6 : S316 • BS : Brass
	2	2		
	7	7		
	15	15		
	60	60		
	90	90		
	NE	Filter with no element		

S-LOK[®]