



# F SERIES

Tee Filters (Flanged)  
(DN 25, DN 40)



**YOUR CREATIVE ENGINEERING PARTNER**

# F SERIES

## Tee Filters (Flanged)

The F Series are a range of high-pressure Tee Filters for gas applications. The range offers low pressure drop with high flow rates and through the 'Tee' configuration, are easily maintainable / serviceable.

The F Series utilises Filter Elements constructed from five layers of precision Stainless Steel Mesh, layered to provide a high collapse pressure and be physically robust to maintain an accurate pore size.

Differential sensing ports are available to monitor the filter condition.

## HIGHLIGHTS

- > Conforms to Pressure Equipment Directive 2014/68/EU (PED)
- > Connections via adaptors with either industry standard threaded ports, brazed or weld stub connections
- > Stainless Steel construction prolongs durability
- > Five Layer, Sintered Stainless Steel Mesh Elements.

## IDEAL USES

- > Pressure Reduction Systems
- > Combustion Testing & Test Bench Applications
- > High Pressure, High Flow Gas Systems.



TEE FILTER (FLANGED)

10,20  
and 40  
Micron filter  
options  
available



TEE FILTER (FLANGED)  
WITH THREADED PORTS

Maximum  
Working  
Pressure:  
420  
barg  
(6090 psig)

# Features and Specifications

## 1. Differential Sensing Options

Allows for the pressure drop across the element to be measured.

## 2. Connection Options

Inlet and Outlet available with ASME, EN, Weld Stub Connections via Flanged Adapters

## 3. Maintenance

'Tee' Configuration makes for ease of service and maintenance activities. The filter element can be replaced easily after their service life.

## 4. Materials

Housing materials are constructed from Stainless steel 316L.



# Product Specification Data

F Series - Tee Filters	
Sizes	F25 : 1" (DN25) F40 : 1-1/2" (DN40)
Connections	ASME Flange EN Flange Weld Stub
Filtration Levels	10 Microns 20 Microns 40 Microns
Maximum Working Pressure	420 barg
Filter Cv	F25: 7.5 F40: 18
Housing Material	Stainless Steel 316L
Filter Element Material	Sintered Stainless Steel Mesh
Seal Material	HNBR (Standard) EPDM & FKM Available
Service Temperature Range (HNBR)	-40°C to +80°C
Service Temperature Range (FKM)	-20°C to +150°C*
Service Temperature Range (EPDM)	-20°C to +150°C*
Helium Leak Testing, Seat / Outboard (Option at Extra Cost)	Helium leak testing available at additional costs. Please contact <a href="mailto:sales@halehamilton.com">sales@halehamilton.com</a> for additional information
Note*	Working pressure may be reduced at higher temperatures, please contact <a href="mailto:sales@halehamilton.com">sales@halehamilton.com</a> for further information

# Enquiries and Orders

Your F Series Filtration Assemblies can be selected in full using the ordering system set out below.

Alternatively, you can contact Hale Hamilton sales at ([sales@halehamilton.com](mailto:sales@halehamilton.com)) with information on materials, pressures, flow rates, connection types and the application.

Our Sales Team will be happy to help you.



Filter	Filter Type	Series (Nominal Size)	Port Type (Inlet)	Port Type (Outlet)	Micron Rating	Elastomer Type (O-Ring, Bonded Seal)	Special Feature
	Mandatory	Mandatory	Mandatory	Mandatory		Mandatory	Omit If Not Used
'F' Filter	'S' Sintered Mesh Stainless Steel Element	'25' (1" / DN25)	'1' ISO G	'1' ISO G	'10' 10 Micron	'H' HNBR	'XXX' - Special Features (Differential sensing, Alternative materials etc.) (New codes allocated on client request)
		'40' (1 1/2" / DN40)	'2' NPT	'2' NPT	'20' 20 Micron	'F' FKM (Viton)	'RTJ' RTJ Flange Facing
			'WXX' Weld Stub. Please refer to table on page 6 for code	'WXX' Weld Stub. Please refer to table on page 6 for code	'40' 40 Micron	'E' EPDM	'RF' Raised Face Facing
			'EXX' EN Flange. Please specify type required	'EXX' EN Flange. Please specify type required			
			'AXX' ASME Flange. Please specify type required	'AXX' ASME Flange. Please specify type required			

# Connections & Configurations

## Welded Interface Options for F25 Types

Code	Inlet Pipe	Code	Outlet Pipe
W01	DN25 (1") Sch5	W01	DN25 (1") Sch5
W02	DN25 (1") Sch10	W02	DN25 (1") Sch10
W03	DN25 (1") Sch40	W03	DN25 (1") Sch40
W04	DN25 (1") Sch80	W04	DN25 (1") Sch80
W05	DN25 (1") Sch160	W05	DN25 (1") Sch160
W11	DN25 (1") SchXXS	W11	DN25 (1") SchXXS

## Welded Interface Options for F40 Types

Code	Inlet Pipe	Code	Outlet Pipe
W07	DN40 (1 1/2") Sch5	W07	DN40 (1 1/2") Sch5
W08	DN40 (1 1/2") Sch10	W08	DN40 (1 1/2") Sch10
W09	DN40 (1 1/2") Sch40	W09	DN40 (1 1/2") Sch40
W10	DN40 (1 1/2") Sch80	W10	DN40 (1 1/2") Sch80
W11	DN40 (1 1/2") Sch160	W11	DN40 (1 1/2") Sch160
W12	DN40 (1 1/2") SchXXS	W12	DN40 (1 1/2") SchXXS



### F25 - Tee Filter

- > 1" (DN25)
- > 10/20/40 Micron Filtration
- > Weld Stub / EN Flange / ASME Flange
- > Cv: 7.5
- > 5.9 - 6.4 kg



### F40 - Tee Filter

- > 1 1/2" (DN40)
- > 10/20/40 Micron Filtration
- > Weld Stub / EN Flange / ASME Flange
- > Cv: 18.0
- > 18.5 kg

# ASME Flange Interface Options

Code	Outlet Flange Size & Rating
A01	DN15 (1/2") #150
A02	DN15 (1/2") #300
A03	DN15 (1/2") #600
A04	DN15 (1/2") #1500
A05	DN15 (1/2") #2500
A06	DN20 (3/4") #150
A07	DN20 (3/4") #300
A08	DN20 (3/4") #600
A09	DN20 (3/4") #1500
A10	DN20 (3/4") #2500
A11	DN25 (1") #150
A12	DN25 (1") #300
A13	DN25 (1") #600
A14	DN25 (1") #900
A15	DN25 (1") #1500
A16	DN25 (1") #2500
A17	DN32 (1 1/4") #150
A18	DN32 (1 1/4") #300
A19	DN32 (1 1/4") #600
A20	DN32 (1 1/4") #900
A21	DN32 (1 1/4") #1500
A22	DN32 (1 1/4") #2500
A23	DN40 (1 1/2") #150
A24	DN40 (1 1/2") #300
A25	DN40 (1 1/2") #600
A26	DN40 (1 1/2") #900
A27	DN40 (1 1/2") #1500
A28	DN40 (1 1/2") #2500
A29	DN50 (2") #150
A30	DN50 (2") #300
A31	DN50 (2") #600
A32	DN50 (2") #900
A33	DN50 (2") #1500
A34	DN50 (2") #2500

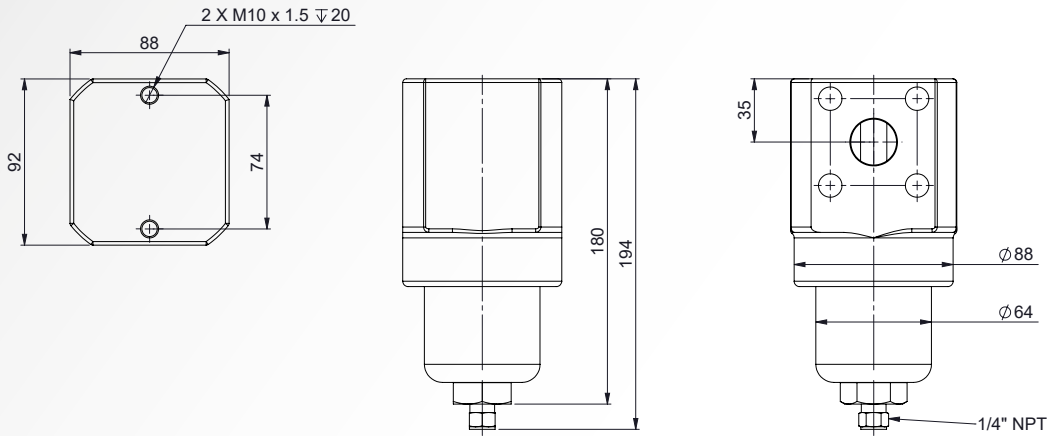
# EN Flange Interface Options

Code	Flange Size & Rating
E01	DN15 (1/2") PN16
E02	DN15 (1/2") PN40
E03	DN15 (1/2") PN100
E04	DN15 (1/2") PN250
E05	DN15 (1/2") PN400
E06	DN20 (3/4") PN16
E07	DN20 (3/4") PN40
E08	DN20 (3/4") PN100
E09	DN20 (3/4") PN250
E10	DN20 (3/4") PN400
E11	DN25 (1") PN16
E12	DN25 (1") PN40
E13	DN25 (1") PN100
E14	DN25 (1") PN160
E15	DN25 (1") PN250
E16	DN25 (1") PN400
E17	DN32 (1 1/4") PN16
E18	DN32 (1 1/4") PN40
E19	DN32 (1 1/4") PN100
E20	DN32 (1 1/4") PN160
E21	DN32 (1 1/4") PN250
E22	DN32 (1 1/4") PN400
E23	DN40 (1 1/2") PN16
E24	DN40 (1 1/2") PN40
E25	DN40 (1 1/2") PN100
E26	DN40 (1 1/2") PN160
E27	DN40 (1 1/2") PN250
E28	DN40 (1 1/2") PN400
E29	DN50 (2") PN16
E30	DN50 (2") PN40
E31	DN50 (2") PN100
E32	DN50 (2") PN160
E33	DN50 (2") PN250
E34	DN50 (2") PN400

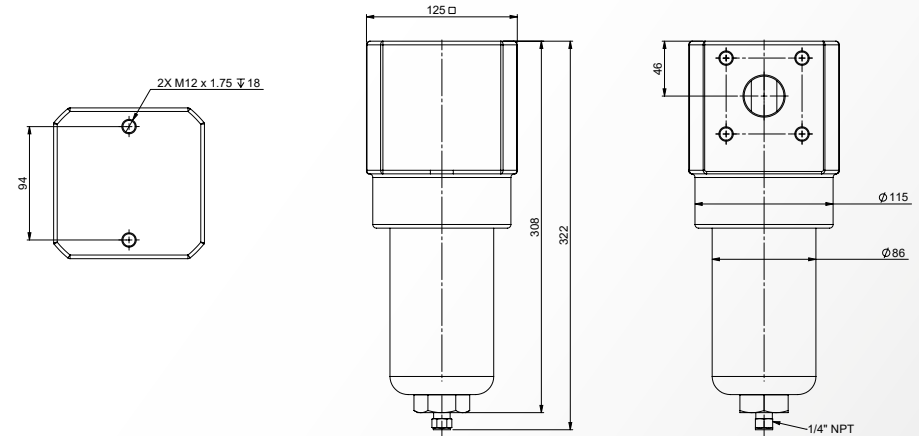
# Installation Dimensions

All Dimensions in mm.

**F25 1" (DN25) Tee Filter**



**F40 1 1/2" (DN40) Tee Filter**



F Series	Dimensions									Z - Port Size		
	A	B	C	D	E	F	G	H	Y	Weight (kg)	Inlet G/NPT	Outlet G/NPT
<b>F25</b>	192	92	180	168	100	35	70	90	M10 x 1.5 ↓20	5.9 - 6.4	1"	1"
<b>F40</b>	322	115	308	215	100	45	90	190	M12 x 1.75 ↓18	18.5	1-1/2"	1-1/2"

**Note:**

- > Final product weight and 'D' dimension will vary depending on the flange type configuration
- > ASME & EN Flange dimensions available on request. Please contact '[sales@halehamilton.com](mailto:sales@halehamilton.com)'.