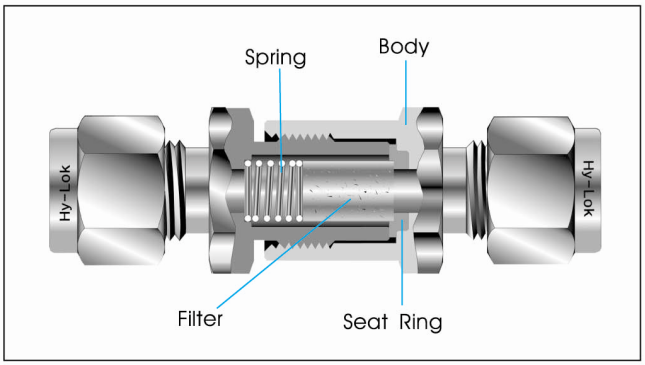
Hy-PRO® FI Series

Micron Inline Filters

Catalog No. H-F200
Jul. 2000



Technical Data

- **Maximum Operating Pressure :** 3000 psig @ 70°F (21°C)
- **Operating Temperature :** -15°F to 400°F (-26°C to 204°C)
- **Effective Filtration Area**

Series	Effective Filtration Area
FI 1	0.46 sq. in. (0.00030 sq. meter)
FI 2	0.61 sq. in. (0.00039 sq. meter)
FI 3	1.07 sq. in. (0.00069 sq. meter)
FI 4	1.71 sq. in. (0.00110 sq. meter)

Features

- **Compact in-line design**
- **Replaceable filter element**
- **Particle trapping for clean fluid**

Filter Element and Cv

Element Micron Rating	Filtered Particle Size	Cv
1	1 micron	0.01
10	10 micron	0.02
50	50 micron	0.11
100	100 micron	0.30
150	150 mrcion	0.42

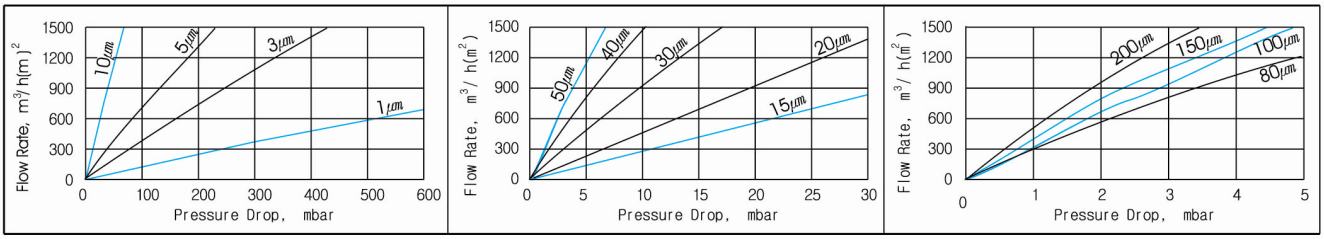
Materials of Construction

Description	Materials / ASTM Specification	
Body	SS 316 / A182	Brass / B16
Spring	SS 302	
Seat-Ring	PEEK	
Filter Element	SS 316 Sintered	

Operation and Filter Replacement

The filter element, which is made of sintered stainless steel, is porous and has lots of tiny holes. The particles bigger than holes are not allowed to pass through, hence clean fluid. After certain period, the holes may be blocked by particles and pressure drop will increase. This depends upon the total flow through elements and cleanliness of upstream flow. The element needs be replaced for clean fluid with minimum pressure drop.

Pressure Drop vs Flow Rate for Air



Please note the above Flow Rate is elements' co-efficient in cubic meters per hour per square meter. To get the flow rate of FI series filter, find the flow rate in the graph and then multiply it with effective filtration area shown above.

Hy-Lok 하이록코리아주식회사
HY-LOK CORPORATION

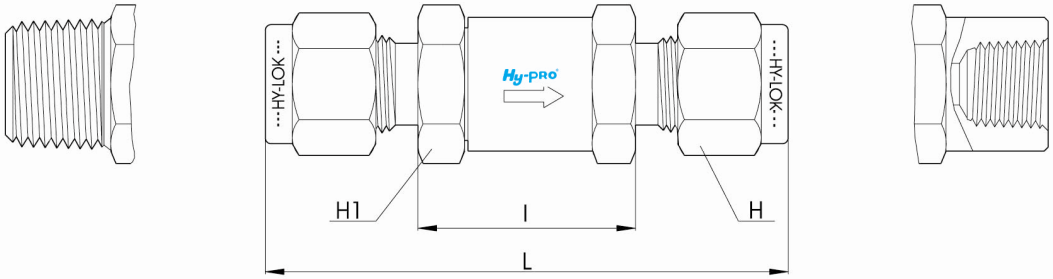


Table of Dimensions

Basic Part No.			Orifice	End Connection		Dimensions			
				Inlet	Outlet	L	I	H	H1
FI 1	H	- 2T -	4.8	1/8" Hy-Lok	1/8" Hy-Lok	55.60	25.00	11.11	15.88
	M	- 2N -		1/8" Male NPT	1/8" Male NPT	44.40		-	
	F	- 2N -		1/8" Female NPT	1/8" Female NPT	46.60	-	-	
	H	- 4T -		1/4" Hy-Lok	1/4" Hy-Lok	60.00	25.00	14.29	
	M	- 4N -		1/4" Male NPT	1/4" Male NPT	53.40		-	
FI 2	F	- 4N -	7.1	1/4" Female NPT	1/4" Female NPT	56.80	-	-	19.05
	H	- 6T -		3/8" Hy-Lok	3/8" Hy-Lok	65.50	27.10	17.46	
	M	- 6N -		3/8" Male NPT	3/8" Male NPT	55.50		-	
FI 3	F	- 6N -	9.8	3/8" Female NPT	3/8" Female NPT	63.80	-	-	22.22
	H	- 8T -		1/2" Hy-Lok	1/2" Hy-Lok	80.20	36.20	22.22	
	M	- 8N -		1/2" Male NPT	1/2" Male NPT	74.40		-	
FI 4	F	- 8N -	13.5	1/2" Female NPT	1/2" Female NPT	84.70	-	-	28.58

All dimensions in millimeters. Dimensions shown with Hy-Lok nuts in finger-tight position, where applicable.

Ordering Information

FI 1 — F — 4N — 10 — S316

Series Designator
- FI 1 : 4.8mm Orifice
- FI 2 : 7.1mm Orifice
- FI 3 : 9.8mm Orifice
- FI 4 : 13.5mm Orifice

End Connection Designator
- H : Hy-Lok Tube Fitting
- M : Male Pipe Thread
- F : Female Pipe Thread

Size Designator

- NPT (ISO/BSP)

Thread(in.)	1/8	1/4	3/8	1/2
Designator	2N(R)	4N(R)	6N(R)	8N(R)

- Tube

Fractional Tube	O.D.(in.)	1/8	1/4	3/8	1/2
	Designator	2T	4T	6T	8T
Metric Tube	O.D.(mm)	3	6	10	12
	Designator	3M	6M	10M	12M

Filter Element Designator
- 1 : 1 micron
- 10 : 10 micron
- 50 : 50 micron
- 100 : 100 micron
- 150 : 150 micron

Body Material Designator
- S316 : 316 Stainless Steel
- BRAS : Brass

SAFETY in FILTER SELECTION

For proper, safe, trouble-free installation, operation and maintenance of fluid systems, material compatibility, pressure / temperature ratings, and application details must be considered in the selection of filter. Improper selection or employment of products described in this catalogue can cause personal injury or property losses, It is the responsibility of system designer and user to select and use the products for their specific applications.

■ QUALITY SYSTEM CERTIFICATES

ISO 9001
CERTIFICATE NO.GQC 212

ASME SECT Ⅲ (MO)
CERTIFICATE NO. QSC 584

■ TYPE APPROVALS (For Hy-Lok Tube Fittings)

GERMANISCHER LLOYD
CERTIFICATE NO.57798-91 HH

DET NORSKE VERITAS
CERTIFICATE NO.P-9100

Hy-Lok Tube Fittings
Hy-PRO Valves
Hope Fittings

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