



"A leading worldwide supplier of high efficiency filters for a variety of industries and applications."

## FAST LOOP FILTER HOUSINGS

Our standard Fast Loop filters are constructed from 316L stainless steel. A straight through flow design continuously flushes the filter element carrying the contaminates back out to the process stream, thus maximizing the filter element life. The low flow sample stream pulled into the analyzer is filtered to ranges of 200 micron to 0.5 micron (depending on the filtration efficiency required). Traditional T-type by-pass filters are detailed under Analyzer Filters.

The Fast Loop filters use axial velocity to flush heavy contaminates downstream while passing the sample through the element wall with low flow radial velocity. The annular cavity is filled and the sample passes into the sample line. **Our 127IL-3 has an offset sample port for even more sweeping action and is available with (standard) 1/4" or 1/2" ports.** The annular cavity has very low volume to minimize lag time and keep the samples clean. For best results, a minimum of a 4 to 1 flow rate should be maintained for continuous flushing.



## Features:

- 316L Stainless Steel Or PTFE Construction
- Compact Design For Fast Response Time
- Choose From Four Housing Sizes
- Accepts Stainless Steel, PTFE And PEL Elements
- Available In Hastelloy, Monel, Etc.

## Applications:

- Sample Process
- Cooling Water Analysis
- Stack Gas Analyzer Protection

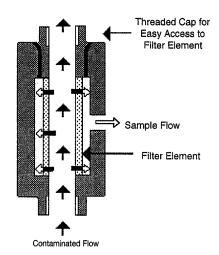
Housing Model	126IL-3	127IL-3*	136IL-3	146IL-3
Inline Port Size (NPT)	1/4″	1/4″	1/2"	1/2"
Sample Port Size (NPT)	1/4″	1/4″	1/4"	1/4"
Maximum Pressure (psig)	5000	5000	1500	1500
Internal Volume (cc)	28	58	94	240
Annular Volume (cc)	15	30	32	90
Maximum TempBuna-N (250°F)	BN126IL-3	BN127IL-3	BN136IL-3	BN136IL-3
Maximum TempEPDM (300°F)	GE126IL-3	GE127IL-3	GE136IL-3	GE136IL-3
Maximum TempViton (400°F) Standard	GV126IL-3	GV127IL-3	GV136IL-3	GV136IL-3
Maximum TempSilicone (450°F)	GS126IL-3	GS127IL-3	GS136IL-3	GS136IL-3
Maximum TempKalrez (600°F)	KZ126IL-3	KZ127IL-3	KZ136IL-3	KZ136IL-3
Estimated Weight of Housing (lbs)	2.5	4.0	4.0	7.5
Principle Dimensions: (inches)				
Center Of Port To Inlet Port	1.89	1.77	2.24	4.50
Body Diameter	1.97	1.85	2.50	2.50
Overall Length	3.78	6.69	4.50	9.00
Element Removal Clearance	2.95	5.70	3.35	7.87
Filter Element Codes: (1)				
Stainless Steel Element	SS-12-57-□	SS-12-127-□	SS-25-64-□	SS-25-178-□
PEL Element	PEL-12-57-□	PEL-12-127-□	PEL-25-64-□	PEL-25-178-
PTFE Element	PT-12-57-□	PT-12-127-□	PT-25-64-□	PT-25-178-□
Materials Of Construction: (2)				
Body & Internals	316LSS	316LSS	316LSS	316LSS
O-Rings (Standard)	Viton	Viton	Viton	Viton
PTFE Housing Model	126PIL-3	127PIL-3	136PIL-3	146PIL-3

Notes: (1) Replace 'a' with micron required, e.g. SS-25-178-03T

- (2) Material abbreviations, 316LSS = 316L Stainless Steel
- (\*) 127IL-3 standard with all 1/4" ports. 127IL-3-1/2"-1/4" has 1/2" inlet/outlet ports, and 1/4" sample

## FAST LOOP FILTER HOUSINGS

**Stainless Steel** elements consists of five layers of precision-woven 316L stainless steel mesh formed into cylinders and sintered together; the filter layer being supported, protected and pre-filtered by two inner and two outer layers. Five layers offer surface area and depth area for removing solids and dropping out liquids. UFS offers seven standard grades of filtration with a 98% efficiency in the following microns: 01, 03, 10, 25, 50, 100 and 200. Grade 25 (25 micron) is widely used to protect sample flows from visible particulate while grade –03 is recommended for the removal of pipe scale from steam. Non-standard micron sizes are typically sintered elements, such as the 005, (0.5 micron).



**PTFE** sintered elements are used where sample compatibility is of concern. Three grades of filtration are available with a 98% efficiency: 3, 10 and 25 micron.

For best results use Five-Layer Mesh Stainless Steel elements or Sintered PTFE elements. We do not recommend using disposable microfiber elements with Fast Loop assemblies.

SAMPLE ST Stainless Steel Micron Size	REAM WA PTFE Micron Size	TER FLOW R PEL Micron Size	RATES IN GPH (LPM) AT 1.5 PSI DROP  Housing Model Series				
			126IL-3 126PIL-3 120 Series	127IL-3 127PIL-3	136IL-3 136PIL-3 130 Series	146IL-3 146PIL-3 140 Series	
005 (0.5 Micron)			2 (0.2)	4 (0.25)	5 (0.3)	13 (0.9)	
01 (1 Micron)			5 (0.3)	10 (0.6)	13 (0.9)	32 (2.0)	
03 (3 Micron)	3		11 (0.7)	20 (1.2)	26 (1.6)	61 (3.8)	
10 (10 Micron)	10	10	26 (1.6)	45 (2.9)	62 (3.9)	111 (7.0)	
25 (25 Micron)	25	25	27 (1.7)	57 (3.6)	84 (5.3)	132 (8.3)	
50 (50 Micron)		75	29 (1.8)	63 (4.0)	90 (5.6)	140 (8.8)	
100 (100 Micron)			33 (2.1)	65 (4.1)	95 (5.9)	158 (9.9)	
200 (200 Micron)		250	41 (2.6)	81 (5.1)	118 (7.4)	185 (11.7)	

Above flow rates are gallons per hour (liter per minute).

Note: Support cores should not be used with Fast Loop housings 126IL-3, 127IL-3, 136IL-3 and 146IL-3. They should only be used with traditional T-type housings.

Flow rates are generally proportional to pressure drop. If initial pressure drop of 3 psi can be tolerated, then the above flow rate can be doubled. Flow rates are generally inversely proportional to liquid viscosity.

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