

## FAST LOOP FILTERS

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



FAST LOOP FILTERS

Our standard Fast Loop filters are constructed from 316L stainless steel. A straight through flow design continuously flushes the filter element carrying the contaminants 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 contaminants down stream 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.

### PRINCIPLE SPECIFICATIONS

Housing Model	126IL-3	127IL-3*	136IL-3	146IL-3
Inline Port Size	1/4"	1/4"	1/2"	1/2"
Sample Port Size	1/4"	1/4"	1/4"	1/4"
Maximum Temperature (°F)	400	400	400	400
Maximum Pressure (PSIG)	5000	5000	1500	1500
<b>PTFE Model (1)</b>	<b>126PIL-3</b>	<b>127PIL-3</b>	<b>136PIL-3</b>	<b>146PIL-3</b>
Standard Viton O-Ring	GV126IL-3	GV127IL-3	GV136IL-3	GV136IL-3
Optional Kalrez O-Ring	KZ126IL-3	KZ127IL-3	KZ136IL-3	KZ136IL-3
Principal Dimensions: (inches)				
Center of Port to Head	1.89"	1.77"	2.24"	4.49"
Head Diameter	1.97"	1.81"	2.50"	2.50"
Overall length	3.78"	6.89"	4.49"	9.13"
Element Removal Clearance	2.95"	"	3.35"	7.87"
Element size	1/2" x 2 1/4"	1/2" x 5"	1" x 2 1/2"	1" x 7"

Filter Element Codes: (2)				
Stainless Steel Element	SS-12-57-□	SS-127-□	SS-25-64-□	SS-25-178-□
PTFE Element	PT-12-57-□	N/A	PT-25-64-□	PT-25-178-□
PEL Element	PEL-12-57-□	N/A	PEL-25-64-□	PEL-25-178-□
Materials of Construction: (3)				
Head, Bowl & Internals	316L	316L	316L	316L
O-Rings (Standard)	Viton	Viton	Viton	Viton
Internal Volume (cc)	28	58	94	240
Annular Volume (cc)	15	30	32	90

Note: (1) Maximum temperature on PIL-3 Models 300°F, maximum pressure is 100 psig, Viton seal standard.

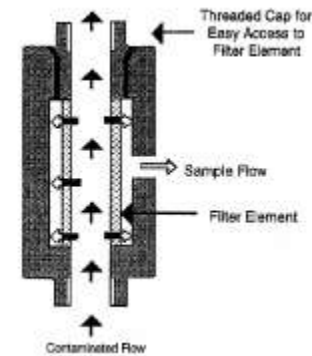
(2) Replace "□" with micron required, e.g. SS-25-64-10T

(3) Material Abbreviation, 316L = 316L Stainless Steel

(\*) 127IL-3 comes standard with all 1/4" ports. 127IL-3-1/2"-1/4" has 1/2" inlet/outlet ports, and 1/4" sample.

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 prefiltered by two inner and two outer layers. Five layers offer surface area and depth area for removing solids and dropping out liquids. Headline 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: 2, 10 and 25 micron.



**SAMPLE STREAM WATER FLOW RATES IN GPH (LPM) AT 1.5 PSI DROP**

Stainless Steel Micron Size	PTFE Micron Size	PEL Micron Size	Housing Model Series			
			126IL-3 126PIL-3 120 Series	127IL-3	136IL-3 136PIL-3 130 Series	146IL-3 146PIL-3 140 Series
005 (0.5 micron)	--	--	2 (.2)	4 (0.25)	5 (.3)	13 (.9)
01 (1 micron)	--	--	5 (.3)	10 (.6)	13 (.8)	32 (2)
3	2	--	11 (.7)	20 (1.2)	26 (1.6)	61 (3.8)
10	10	10	26 (1.6)	45 (2.9)	62 (3.9)	111 (7)
25	25	25	27 (1.7)	57 (3.6)	84 (5.3)	132 (8.3)
50	--	75	29 (1.8)	63 (4)	90 (5.6)	140 (8.8)
100	--	--	33 (2.1)	65 (4.1)	95 (5.9)	158 (9.9)
200	--	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.

We do not recommend using disposable micro fiber elements with Fast Loop assemblies.