



aerospace  
climate control  
electromechanical  
**filtration**  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding



# IL8 Series

Medium Pressure Filters



ENGINEERING YOUR SUCCESS.

# IL8 Series

## Applications

### Applications for IL8 series filters

- Lube oil systems
- Power generation plants
- Test stands
- Primary metal equipment
- Pulp & paper equipment
- Offshore drilling and oil patch
- Flushing skids

IL8 series filters are excellent choices for your demanding applications whether you require simplex, duplex or quadplex assemblies.

Wherever high flow or high capacity filters are required, the IL8 series can be applied with confidence.

Filter housings have a simple yet critical job... securely contain the filter element with positive internal sealing.

The IL8 series filter housings are the result of careful engineering. High grade materials are used to provide strength at critical stress points.

The cover and base are anodized aluminum, the handle is nickel plated ductile iron and the bowl is rugged carbon steel. The result is a reliable high performance filter for an array of applications.

#### Cover

- Handle protects indicators from damage
- Easy on, easy off, for fast service

#### Air Bleed

- Helps protect bearings and other sensitive components from trapped air

#### Fill Port

- Prefilter the fluid, before it gets into the machine's system
- Purge air while filling

#### Indicators

- You can tell element condition at a glance
- Both visual and electrical available

#### Bowl

- Rugged cold drawn steel—excellent fatigue resistance
- Three sizes for any application: Single (8"), Double (16"), and Triple (39")

#### Ports

- SAE straight thread or flange face

#### Drain Port (not visible)

- Clean and easy servicing
- Lets you drain bowl of fluid—before element changes

#### Bypass Valve (not visible)

- Soft seat design for zero internal leakage
- Located in cover assembly



# IL8 Series

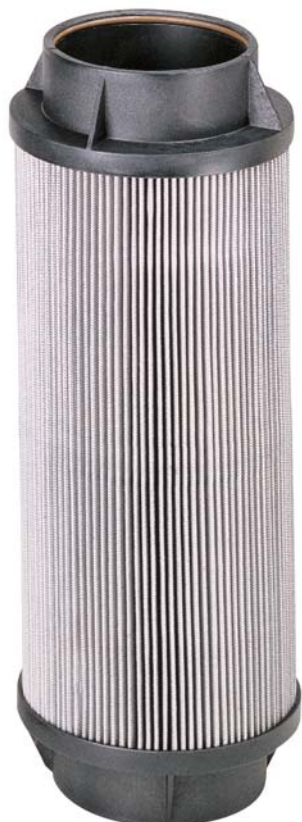
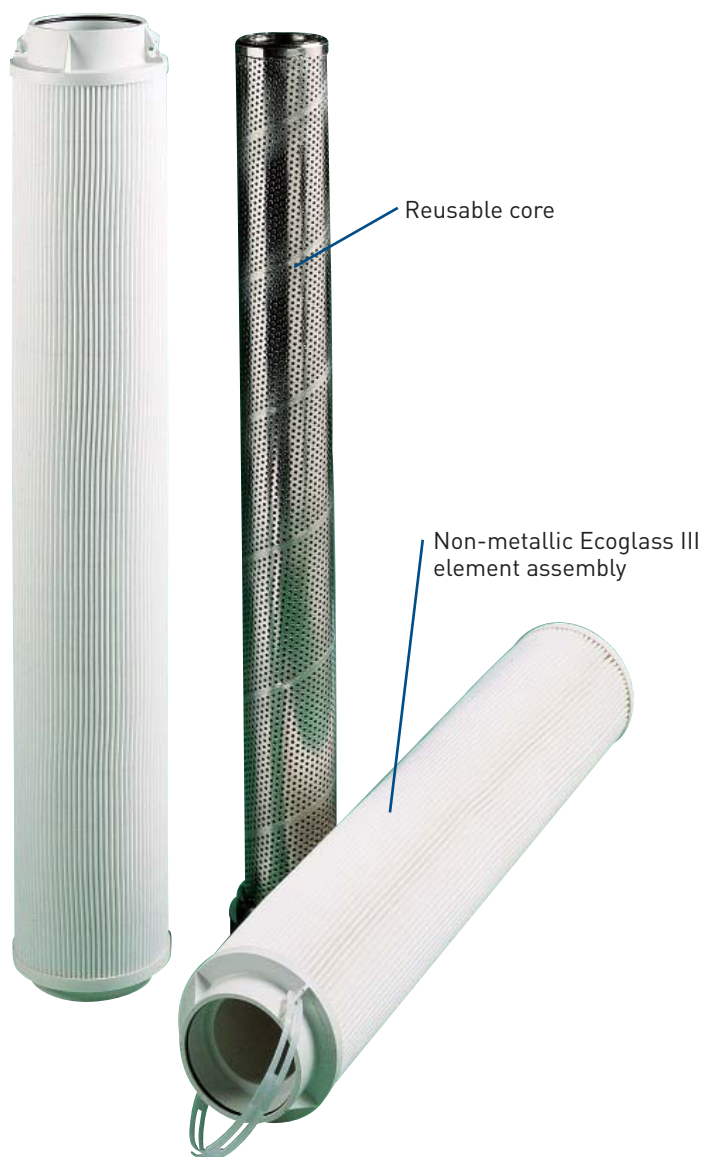
## Element Features

### Ecoglass III Replacement Elements

Ecoglass III represents the merging of high performance filtration technology with environmentally conscious engineering. The Ecoglass III line of replacement elements feature 100% non-metallic construction. The design reduces solid waste and minimizes disposal costs for industry. The non-metallic construction means lightweight elements (60% less weight) for easier servicing.

The Ecoglass III elements utilize the same proprietary media design as our Microglass III line of replacement elements.

With Ecoglass III, a reusable core is installed into the filter housing and remains in service throughout the life of the assembly.



### Microglass III Replacement Elements

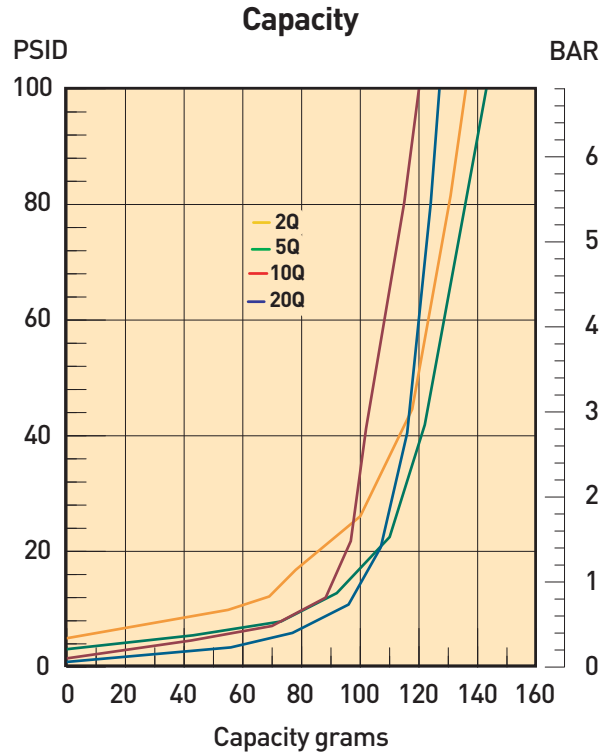
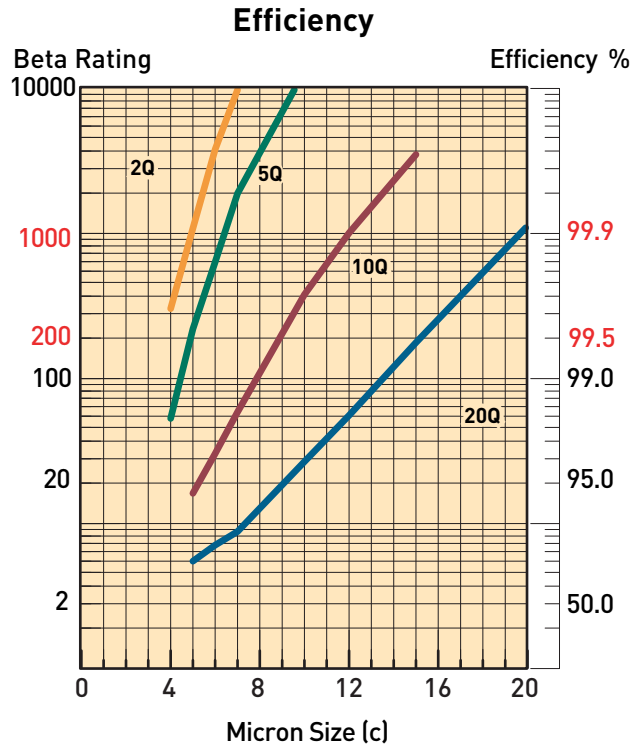
Microglass III represents a leap forward in the performance obtainable in hydraulic and lube filter elements.

The unique multi-layer design combines high efficiencies with exceptional dirt holding capacities for performance that is unequalled in the industry today. This performance is further enhanced in the IL8 series with the introduction of the deep pleat design. The deep pleat element design increases the amount of media in the element and therefore capacity.

With Microglass III you do not have to make a compromise between efficiency and capacity, you can have both.

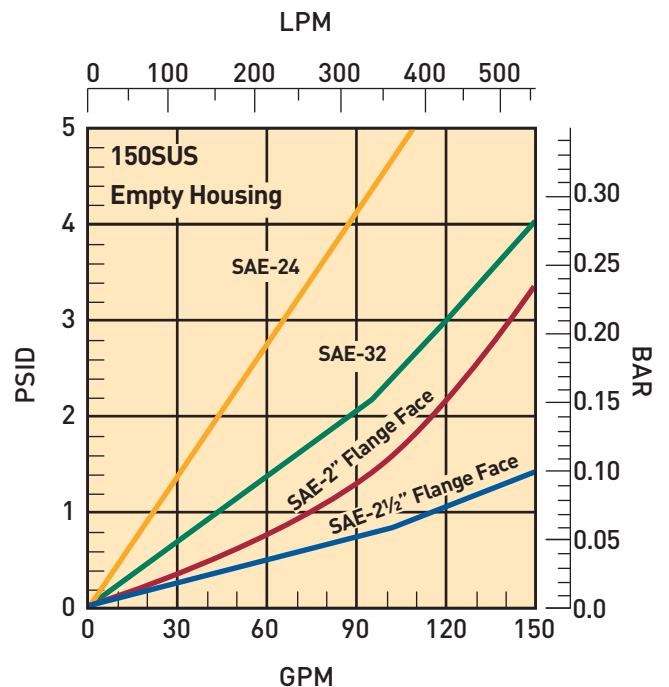
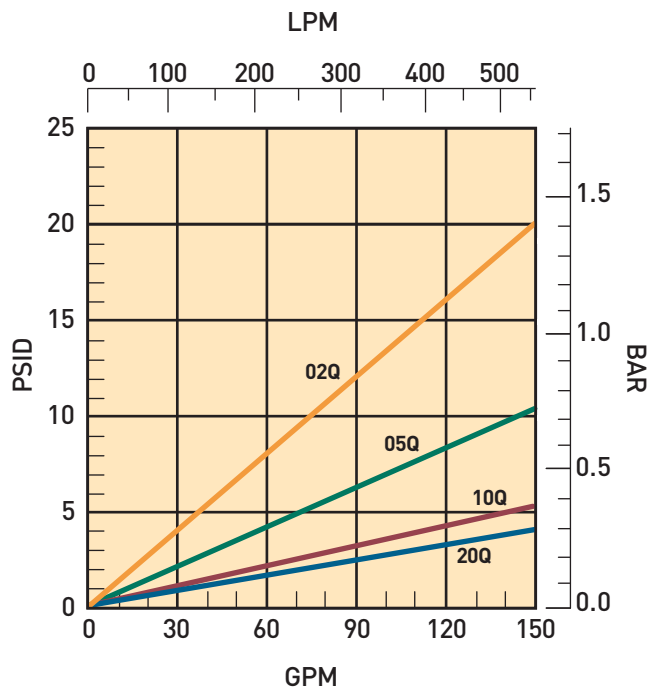
# IL8 Series

## IL8-1 Element Performance



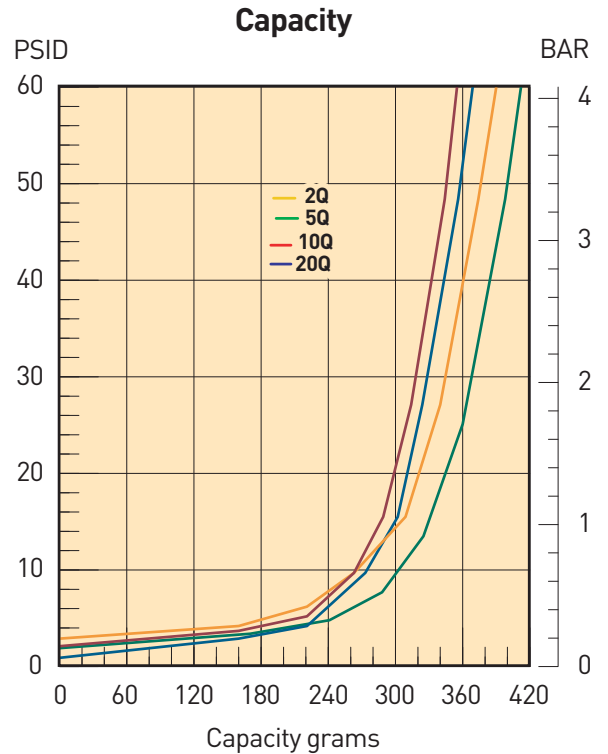
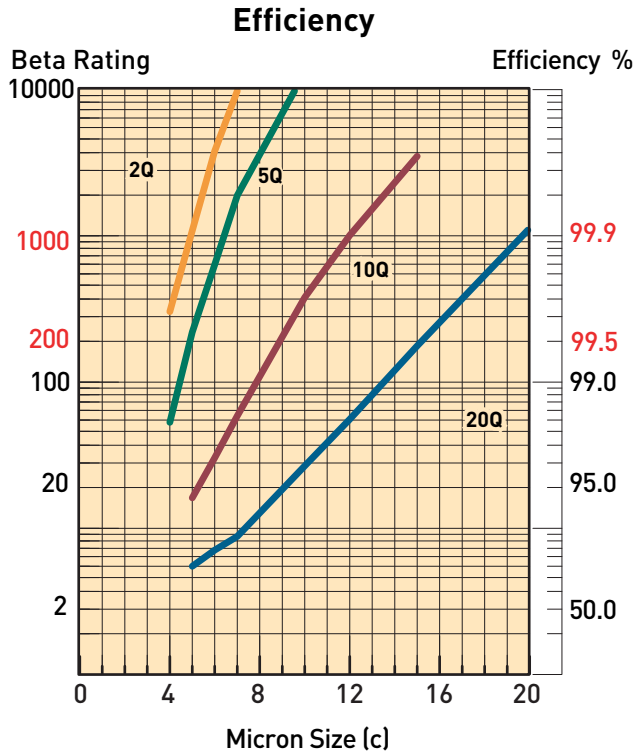
Results typical from Multi-pass tests run per test standard ISO 16889 @ 40 gpm to 60 psid terminal - 10 mg/L BUGL  
Refer to Appendix on pages 264-265 for relationship to test standard ISO 4572.

## Flow vs. Pressure Loss



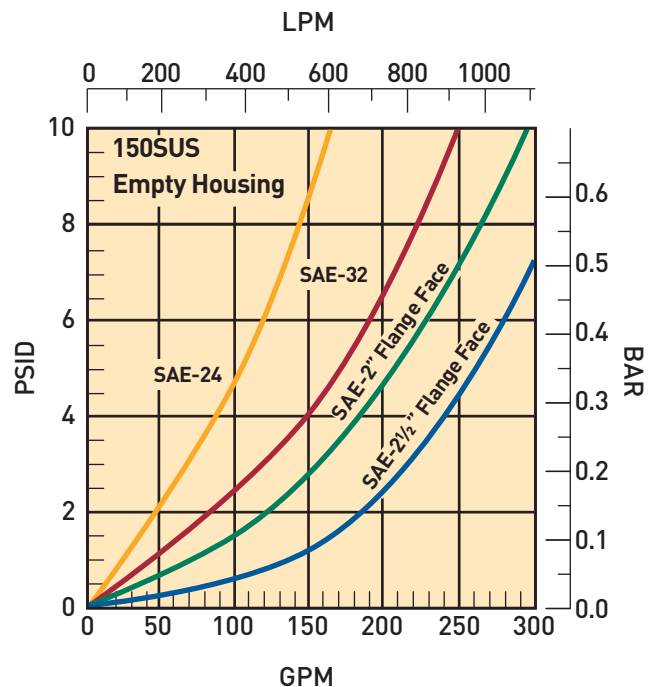
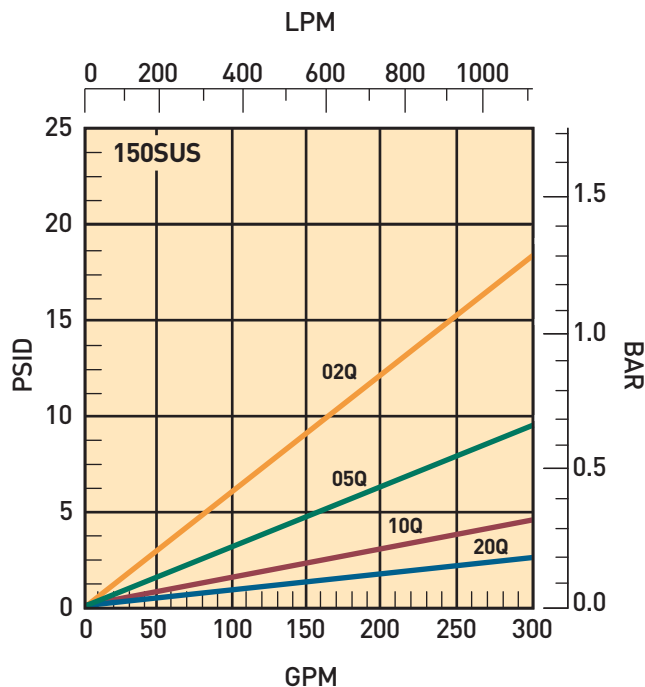
# IL8 Series

## IL8-2 Element Performance



Results typical from Multi-pass tests run per test standard ISO 16889 @ 50 gpm to 60 psid terminal - 10 mg/L BUGL  
Refer to Appendix on pages 264-265 for relationship to test standard ISO 4572.

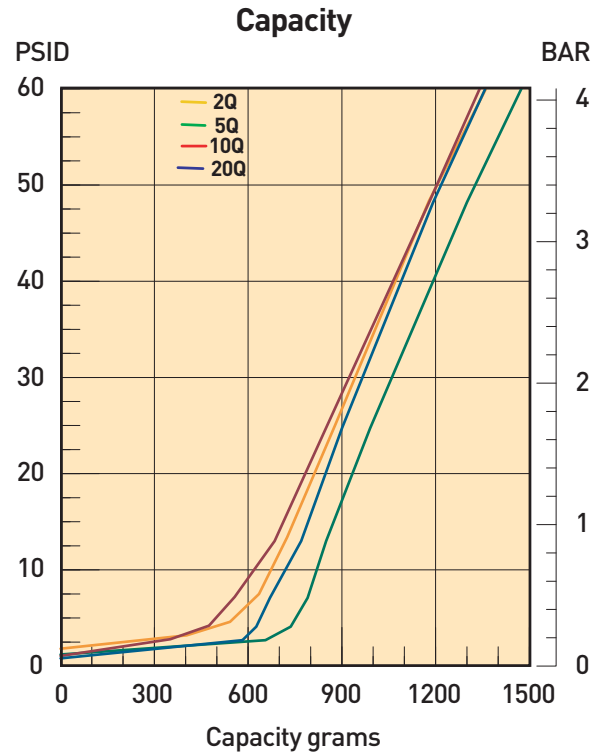
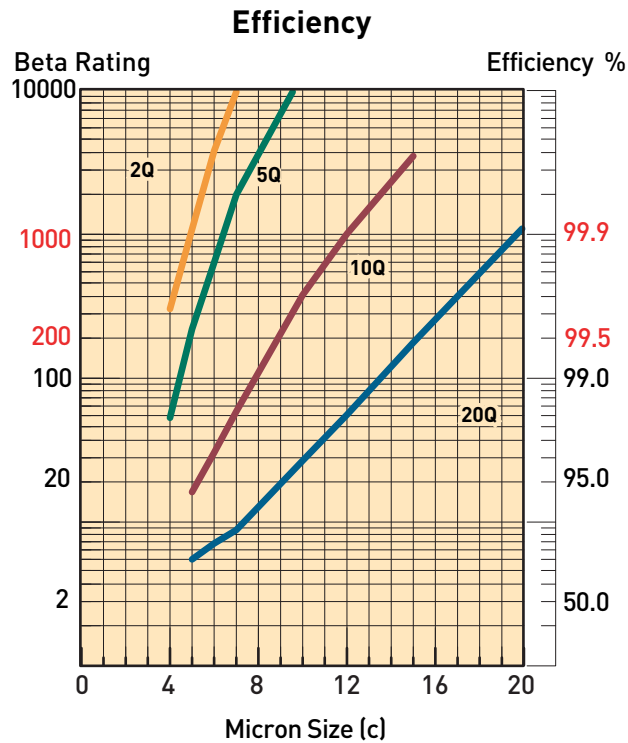
## Flow vs. Pressure Loss





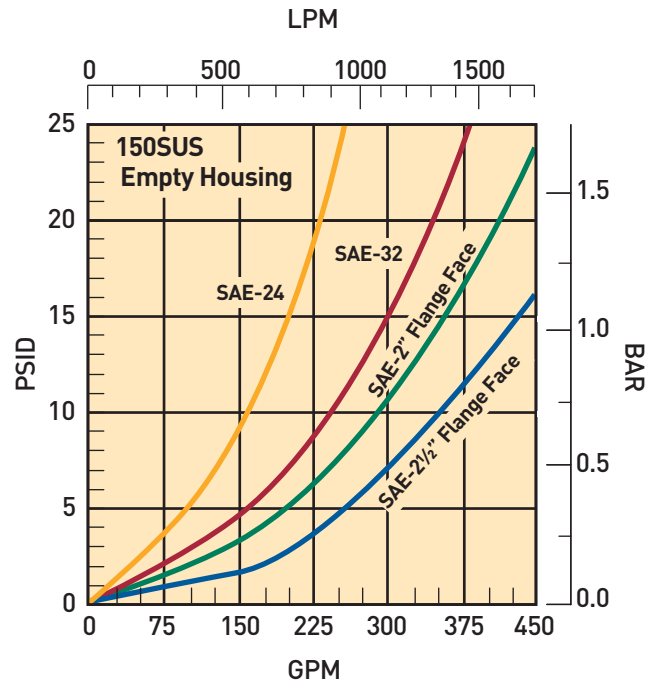
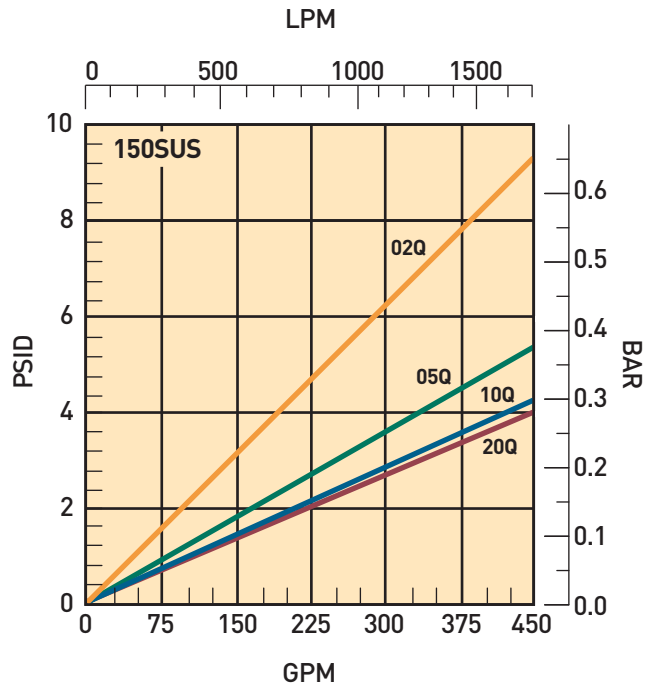
# IL8 Series

## IL8-3 Element Performance



Results typical from Multi-pass tests run per test standard ISO 16889 @ 50 gpm to 60 psid terminal - 10 mg/L BUGL  
Refer to Appendix on pages 264-265 for relationship to test standard ISO 4572.

## Flow vs. Pressure Loss



# IL8 Series

## Specifications: IL8/LL8

### Pressure Ratings:

Maximum Allowable Operating Pressure (MAOP): 500psi (34.5 bar)  
 Rated Fatigue Pressure: 330psi (22.8 bar)  
 Design Safety Factor: 3:1

### Operating Temperatures:

Buna: -40°F (-40°C) to 225°F (107°C)  
 Fluorocarbon: -15°F (-26°C) to 275°F (135°C)

### Element Collapse Rating:

150 psid (10.3 bar)

### Element Condition Indicators:

Visual (optional)

Electrical -heavy duty (optional)

SPDT .25 amps (resistive) MAX 5  
 watts 12 to 28 VDC & 110 to 175 VAC

Note: Product of switching voltage and current  
 must not exceed wattage rating

### Color Coding:

White (common)

Black (normally open)

Blue (normally closed)

### Materials:

Bowl: low carbon steel

Cover: anodized aluminum

Handle: nickel plated ductile iron

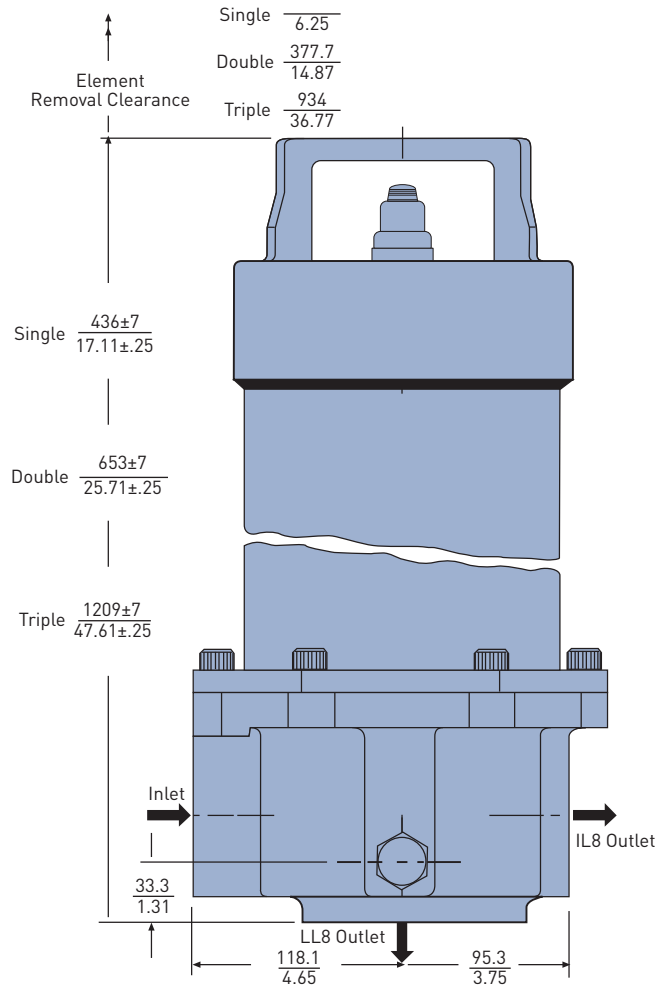
Base: anodized aluminum

### Shipping Weights (approximate):

Single: 40 lbs. (18.1 kg)

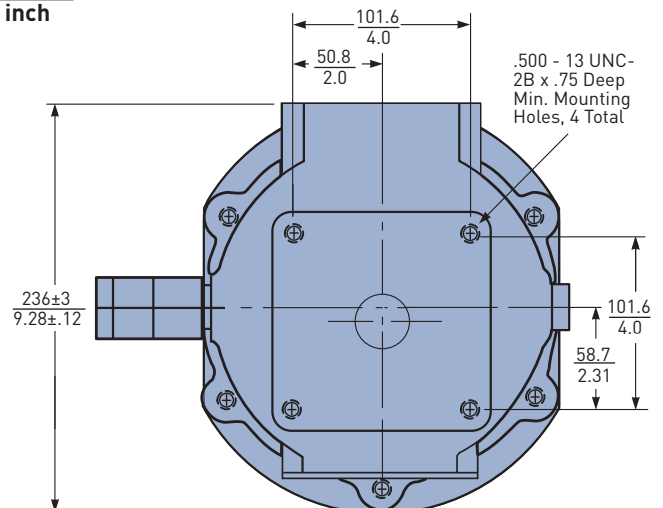
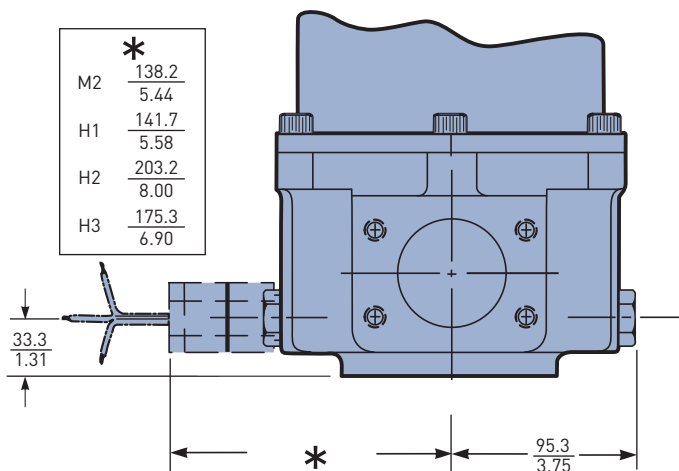
Double: 50 lbs. (22.7 kg)

Triple: 75 lbs. (34 kg)



Drawings are for reference only.  
 Contact factory for current version.

Linear Measure: millimeter  
inch



# IL8 Series

## Specifications: HDIL8/HQIL8

### Pressure Ratings:

Maximum Allowable Operating Pressure (MAOP): 400psi (27.6 bar)  
 Rated Fatigue Pressure: 330psi (22.8 bar)  
 Design Safety Factor: 2.5:1

### Operating Temperatures:

-15°F (-26°C) to 200°F (93°C)

### Element Collapse Rating:

150 psid (10.3 bar)

### Materials:

Changeover valve: steel  
 Bowl: low carbon steel  
 Cover: anodized aluminum  
 Cover handle: nickel plated ductile iron  
 Base: steel

### Element Condition Indicators:

Visual (optional)  
 Electrical-heavy duty (optional)  
 SPDT .25 amps (resistive) MAX 5 watts  
 12 to 28 VDC & 110 to 175 VAC  
 Note: Product of switching voltage and current must not exceed wattage rating

### Color Coding:

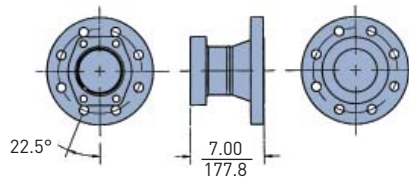
White (common)  
 Black (normally open)  
 Blue (normally closed)

### Shipping Weights (approximate):

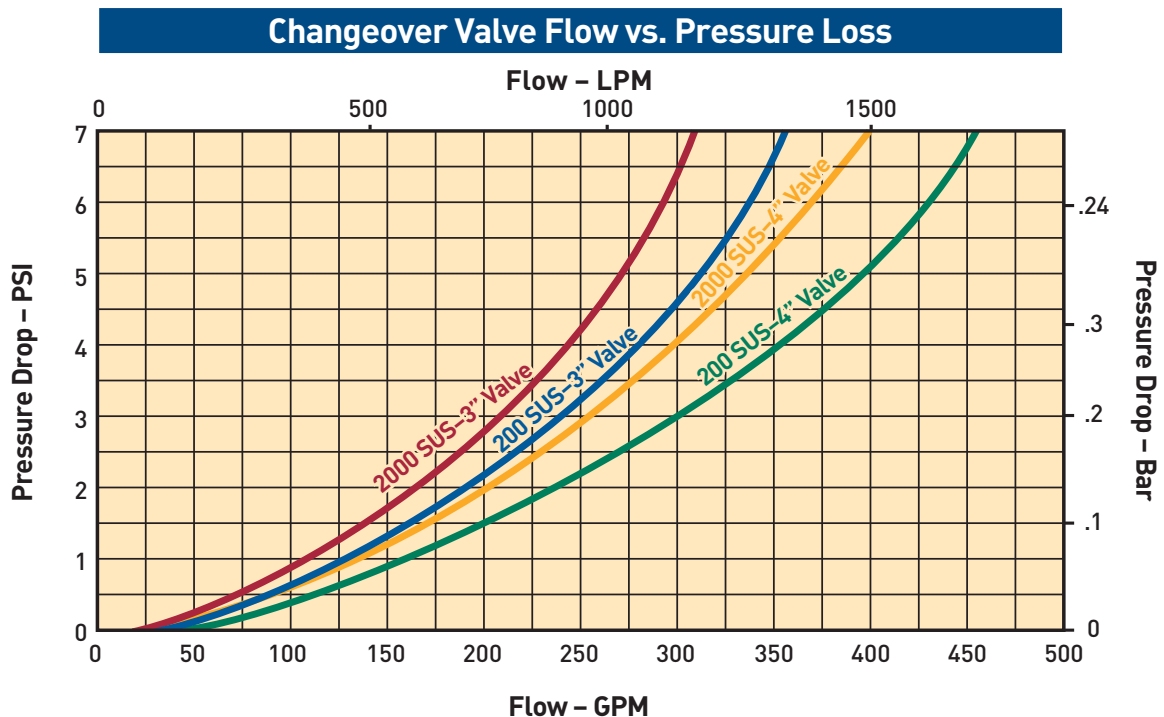
HDIL8-2	320 lbs. (145 kg)
HDIL8-3	375 lbs. (170 kg)
HQIL8-2	525 lbs. (238 kg)
HQIL8-3	650 lbs. (295 kg)

### Ansi Flange Adapter

End, Side View



Linear Measure: millimeter  
inch



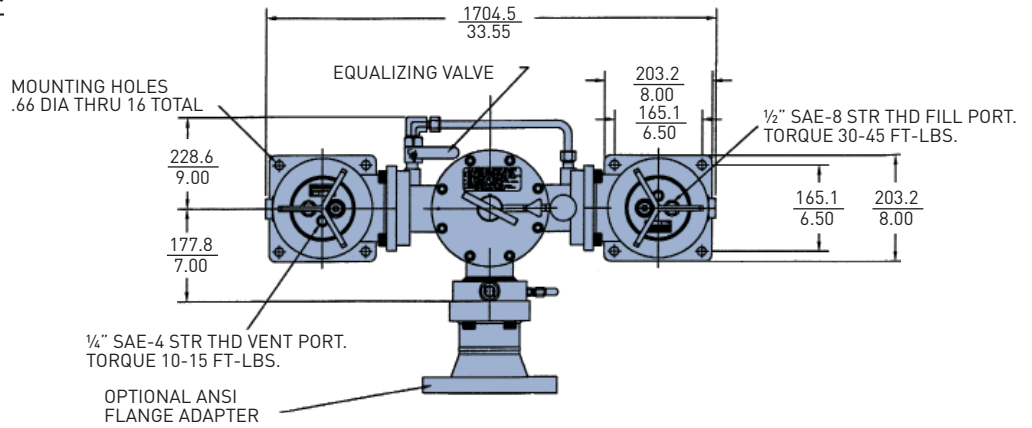


# IL8 Series

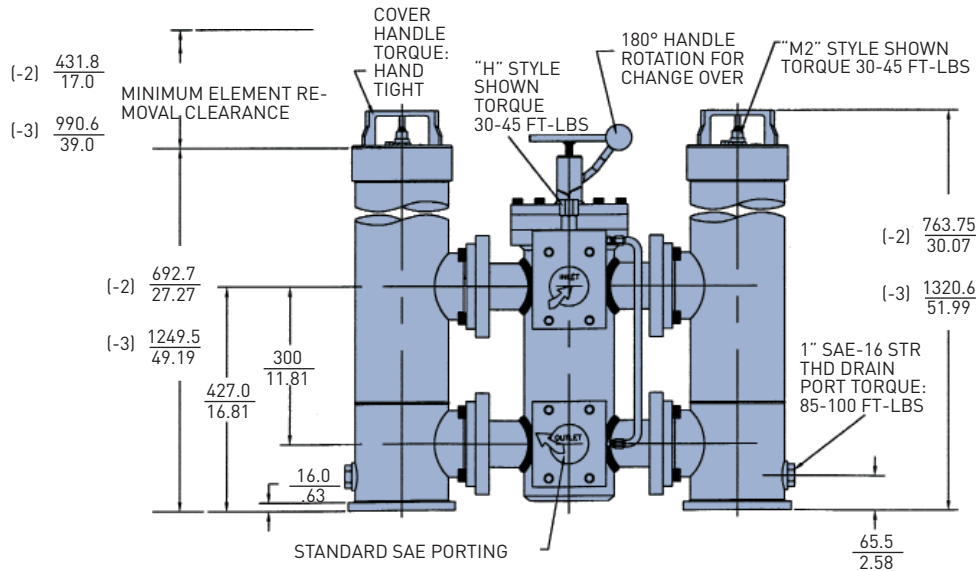
## Specifications: HDIL8/HQIL8

Linear Measure: millimeter  
inch

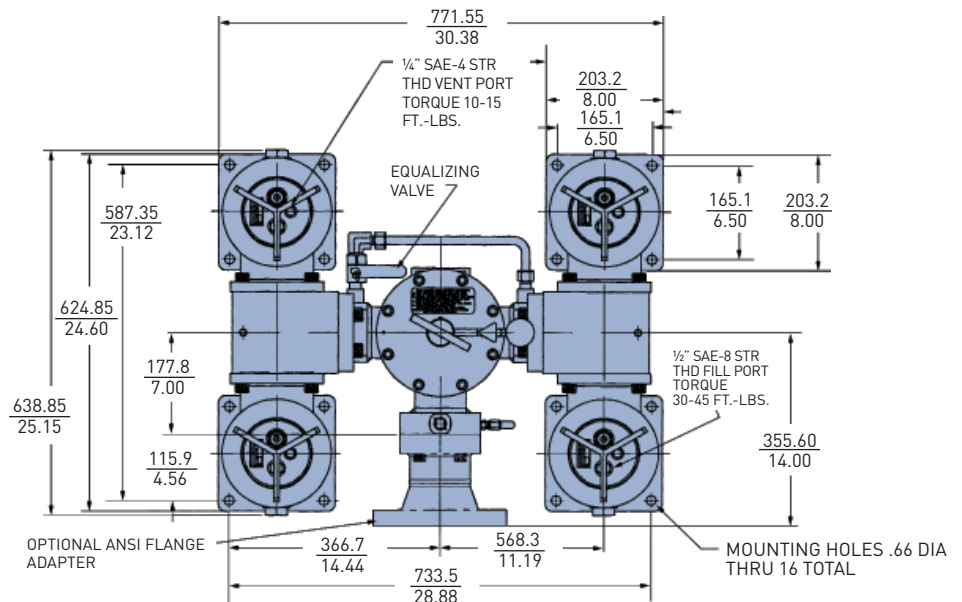
### HDIL8 Top View



### HDIL8/HQIL8 Side View



### HQIL8 Top View



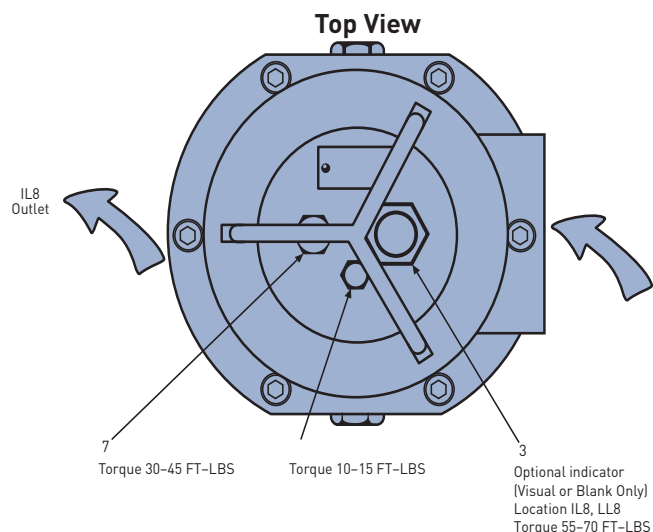
Drawings are for reference only.  
Contact factory for current version.

# IL8 Series

## Element Servicing Instructions: IL8

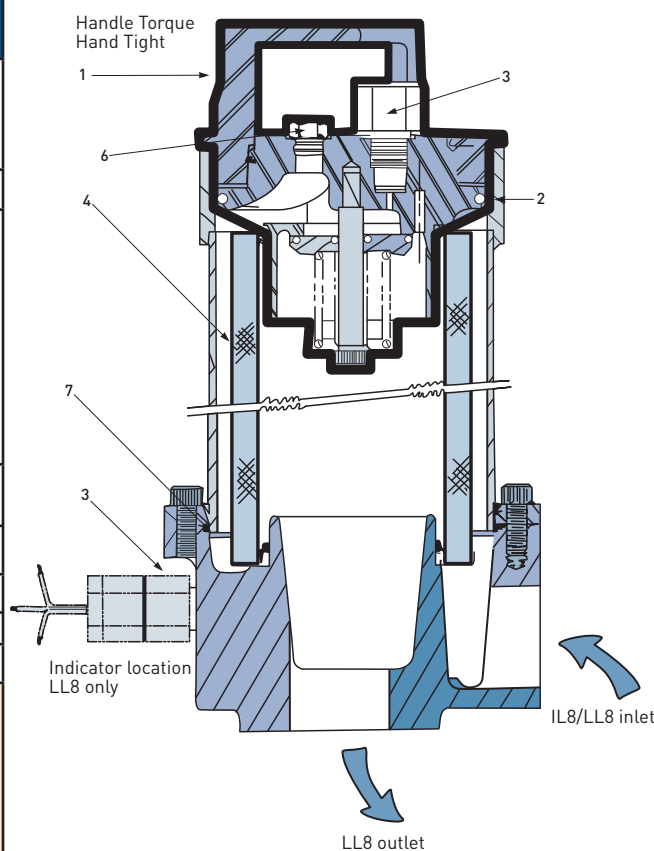
When servicing the IL8/LL8 filter, use the following procedure:

1. Stop the system's power unit.
2. Relieve pressure in the filter line. Drain fluid from housing if desired.
3. Rotate cover handle counter-clock wise. Carefully lift and remove the cover.
4. Remove element from the housing. Discard all disposable elements as they are not cleanable. With Ecoglass III elements the permanent core will remain in the housing.
5. Place new element in housing, centering it on the element locator in the bottom of bowl.
6. Inspect cover o-ring and replace if necessary.
7. Install cover, rotate clockwise and hand tighten.



### Parts List

Index	Description	Nitrile P/N	Fluorocarbon P/N
1	<b>Cover Assembly</b> 25 psi bypass w/indicator port 50 psi bypass w/indicator port No bypass w/indicator port	928887 928889 928891	928888 928890 928892
2	<b>Cover o-ring</b>	N72257	V72257
3	<b>Indicators</b> P option-indicator port plug M 225 PSI M 250 PSI H25 PSI H50 PSI H 225 PSI H 250 PSI H 325 PSI H 350 PSI	N/A N/A N/A N/A N/A N/A N/A N/A N/A	925515 932026 932027 933053 932905 933141 933142 934164 934165
4	<b>Elements</b> (See chart on model code page)		
not shown	<b>Bleed (vent) Plug, SAE 4</b>	931357	931358
6	<b>Fill Plug, SAE 8</b>	908822	928628
not shown	<b>Drain Port Plug, SAE 10</b>	925513	928883
7	<b>Base O-ring</b>	N72262	V72262
NOTE:	Flange Kits (optional)		
	1 1/2" NPTF (w/2" flange face only)	924786	926011
	2" NPTF (w/2" flange face only)	924785	926010
	SAE-24 (w/2" flange face only)	924782	926007
	2 1/2" socket weld (w/2 1/2" flange face only)	929313	929346
	SAE-32 (w/2 1/2" flange face only)	929314	929347
	2 1/2" NPTF (w/2 1/2" flange face only)	929315	929348
The 2 1/2" Flange Face Kits include the minimum width SAE J518 Code 61 Flanges.			



Drawings are for reference only.  
Contact factory for current version.

# IL8 Series

## Element Servicing Instructions: HDIL8/HQIL8

The system does not need to be shut down to service the elements.

1. Red arrow on operating handle points to on-duty chamber(s).
2. Open off-duty vent plug(s). Do not thread out completely.
3. Open the pressure equalizing (fill line) valve slowly to admit fluid to the off-duty chamber(s).
4. When fluid is discharged from the off-duty vent plug(s), close and tighten.
5. Turn the “T” handle, on the center valve section, counter-clockwise 5 turns.
6. Depress the operating handle to unseat the seal shoes, then rotate 180° and return handle upward into the opposite slot.
7. Turn the “T” handle fully clockwise and hand tighten only. This will seat the shoes.
8. Close the pressure equalizing valve.
9. Red arrow now points to the new on-duty chamber(s).
10. Open the new off-duty vent plug(s).
11. Remove the new off-duty chamber cover(s) by rotating counter-clockwise.
12. Remove the new off-duty drain plugs and drain chambers to desired level.
13. Follow steps 3 - 7 on opposite page.
14. Close and tighten the vent plug(s).

**Warning: You should not rotate the handle until you equalize the pressure.**

### Parts List

Index	Description	HDIL8		HQIL8	
		Nitrile	Fluorocarbon	Nitrile	Fluorocarbon
1	Cover Assembly	928887	928888	928887	928888
	25psi bypass w/indicator port	928889	928890	928889	928890
	50psi bypass w/indicator port	928891	928892	928891	928892
	No bypass w/indicator port				
2	Cover O-ring	N72257	V72257	N72257	V72257
3	Indicators				
	P option-indicator port plug	N/A	925515	N/A	925515
	M2 25psi	N/A	932026	N/A	932026
	M2 50psi	N/A	932027	N/A	932027
	H 25psi	N/A	933053	N/A	933053
	H 50psi	N/A	932905	N/A	932905
	H2 25psi	N/A	933141	N/A	933141
	H2 50psi	N/A	933142	N/A	933142
	H3 25psi	N/A	934164	N/A	934164
	H3 50psi	N/A	934165	N/A	934165
4	Elements (see chart on model code page)				
5	Bleed (vent) Plug SAE-4	931357	931358	931357	931358
6	Fill Plug SAE-8	908822	928628	908822	928628
7	Drain Plug SAE-16	925353	928364	925353	928364
8	Transfer Valve				
	SAE 4"	933824	936123	933824	936123
	SAE 3"	933825	936122	933825	936122
9	Housing Assembly				
	Double length	933832	933832	933832	933832
	Triple length	933831	933831	933831	933831
10	5/8"-11 x 3" SHCS	933928	933928	933928	933928
11	5/8" Lock Washer	933879	933879	933879	933879
12	Adapter Block Kit (block, 3 o-rings, 12 bolts)	N/A	N/A	N/A	933833
13	Flange Adapter Kit (flange, o-ring, 4 bolts)				
	3" SAE 300 lb. flange	934170	934171	934170	934171
	4" SAE 300 lb. flange	934172	934173	934172	934173
14	Seal Kit Transfer Valve	Consult factory		Consult factory	
15	Seal Kit Housing Assembly	Consult factory		Consult factory	
16	Equalizing Valve	Consult factory		Consult factory	



# IL8 Series

## How to Order

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8	BOX 9
	HDIL8	2	R	20QE	HM2	25	QQ	1

BOX 1: SEALS Symbols	Description
None	Nitrile
F3	Fluorocarbon

BOX 2: Basic Assembly Symbols	Description
IL8	In-line
LL8	90° angle porting
HDIL8	Duplex
HQIL8	Quadplex

BOX 3: Basic Assembly Symbols	Description
1	Single length
2	Double length
3	Triple length

BOX 4: Core Symbols	Description
None*	Disposable core
R	Reusable core
*Single length only	

BOX 5: Element Media Symbols	Description
20QE	Ecoglass III
10QE	Ecoglass III
05QE	Ecoglass III
02QE	Ecoglass III
20Q	Microglass III
10Q	Microglass III
05Q	Microglass III
02Q	Microglass III

Note: Microglass III elements only available in single length, and must utilize.

BOX 6: Indicators Symbol	Description
P	Port plugged
M2	Visual auto reset
H	Electrical w/ conduit connection
H2	Electrical w/ DIN 43650 connector
H3	Electrical w/ 3-pin ANSI/B 93.55M connector
E	Electrical/Visual (w/ 1/2" NPT conduit connection and wire leads)

Note: Two symbols required, first is for housing, the second is for the cover(s). Electrical indicators only available on the housing

BOX 7: Bypass & Indicator Setting Symbols	Description
25	25 psid
50	50 psid
XX	No indicator and blocked bypass

BOX 8: Ports Symbols	Description
	<b>IL8/LL8</b>
PP	SAE-24 straight thread
RR	SAE-32 straight thread
YY	SAE 2" flange face
ZZ*	SAE 2-1/2" flange face
* Note: IL8 outlet port requires minimum width SAE J518 code 61 flange.	
	<b>HDIL8/HQIL8</b>
WW	3" SAE flange face (code 61)
QQ	4" SAE flange face (code 61)

BOX 9: Option Symbols	Description
1	None
11	Blocked bypass

Please note the bolded options reflect standard options with a reduced lead-time. Consult factory on all other lead-time options.

## Replacement Elements

Microglass III (Fluorocarbon)				Ecoglass III (Fluorocarbon)			
Media	Single	Double	Triple	Media	Single	Double	Triple
20Q	929099Q	933047Q	932875Q	20QE	N/A	933837Q	933736Q
10Q	927661Q	933046Q	932874Q	10QE	N/A	933836Q	933735Q
05Q	927861Q	933045Q	932873Q	05QE	N/A	933835Q	933612Q
02Q	927663Q	933044Q	932872Q	02QE	N/A	933834Q	933734Q
WR	929103	929109	932006	Reuseable Core	N/A	933838	933636

Global products as identified are offered worldwide through all Parker locations and utilize a common ordering code.

