IL8 Series

Medium Pressure Filters



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

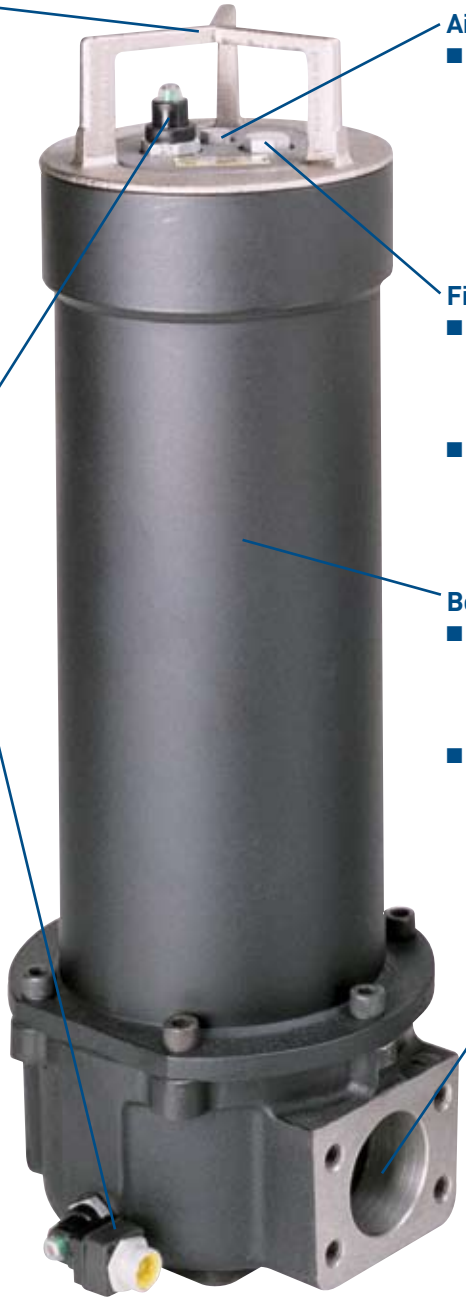
IL8 series filters are excellent choices for your demanding applications whether you require simplex, duplex or quadplex assemblies.

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 annodized 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

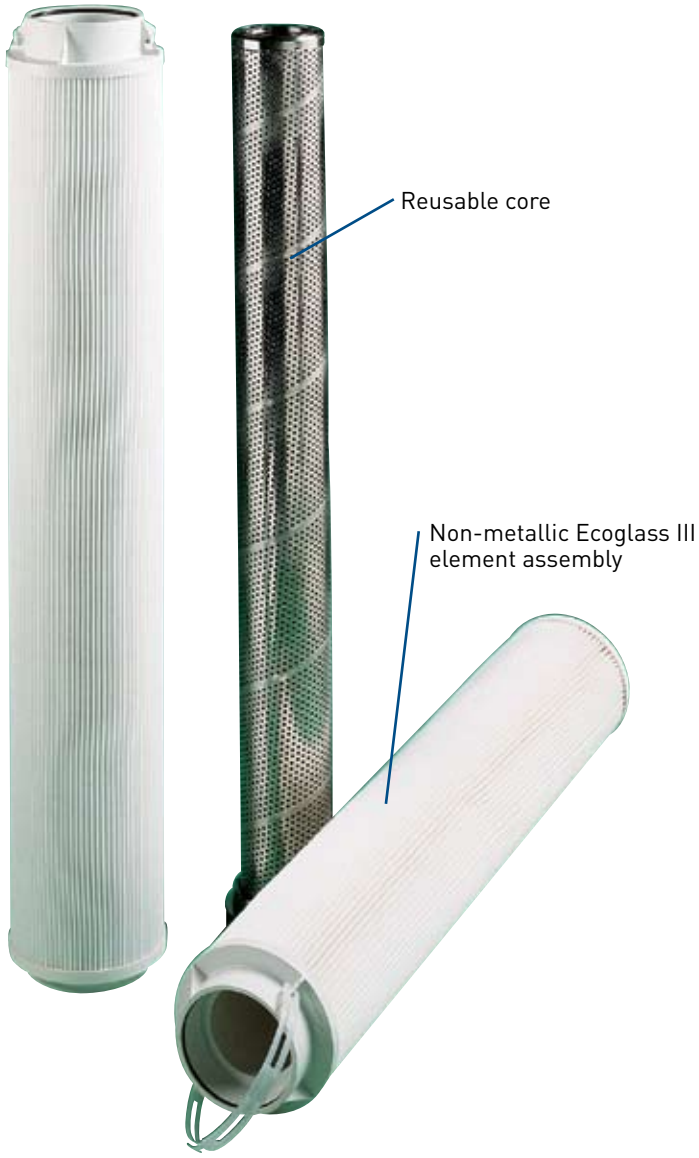
Bypass Valve
(not visible)
- Soft seat design for zero internal leakage
- Located in cover assembly

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

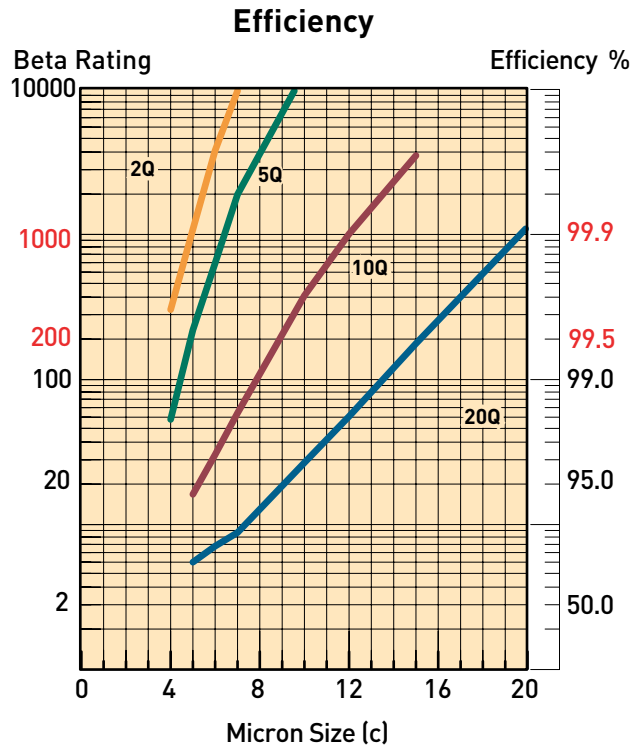
Microglass III represents a leap forward in the performance obtainable in hydraulic and lube filter elements.

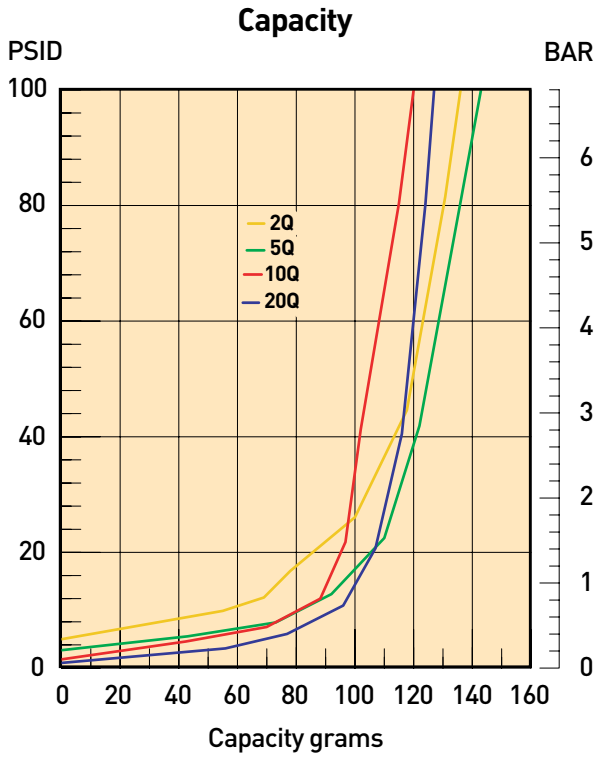
The unique multi-layer design combines high efficiencies with exceptional dirt holding capacities for performance that is unequalled in the industry today. This performance is further enhanced in the IL8 series with the introduction of the deep pleat design. The deep pleat element design increases the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

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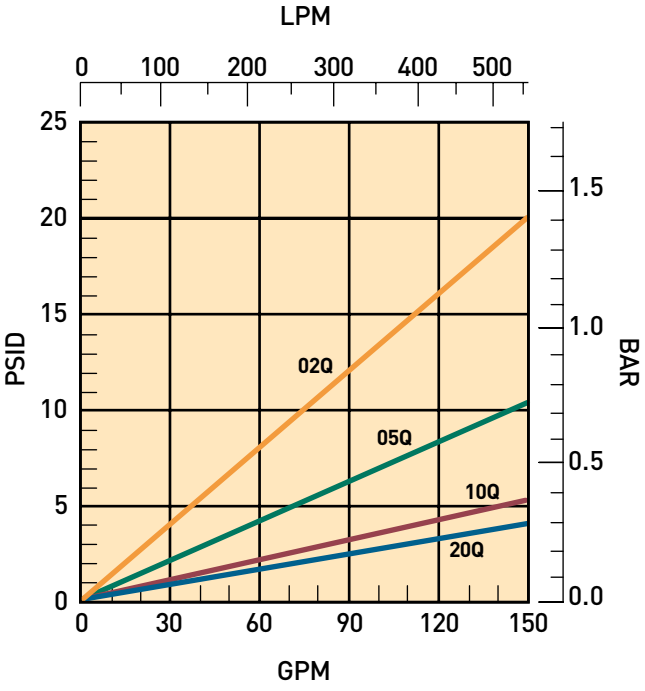
IL8-1 Element Performance

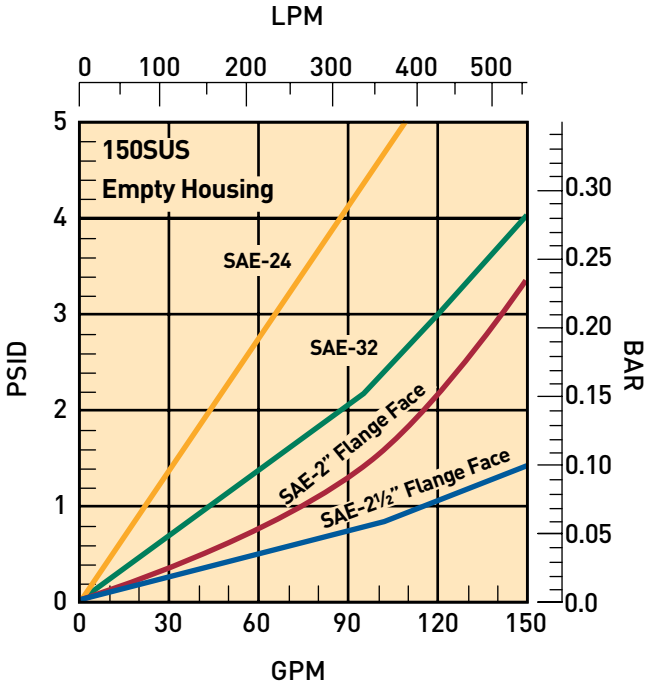




Results typical from Multi-pass tests run per test standard ISO 16889 @ 40 gpm to 60 psid terminal - 10 mg/L BUGL
Refer to Appendix on pages 227-228 for relationship to test standard ISO 4572.

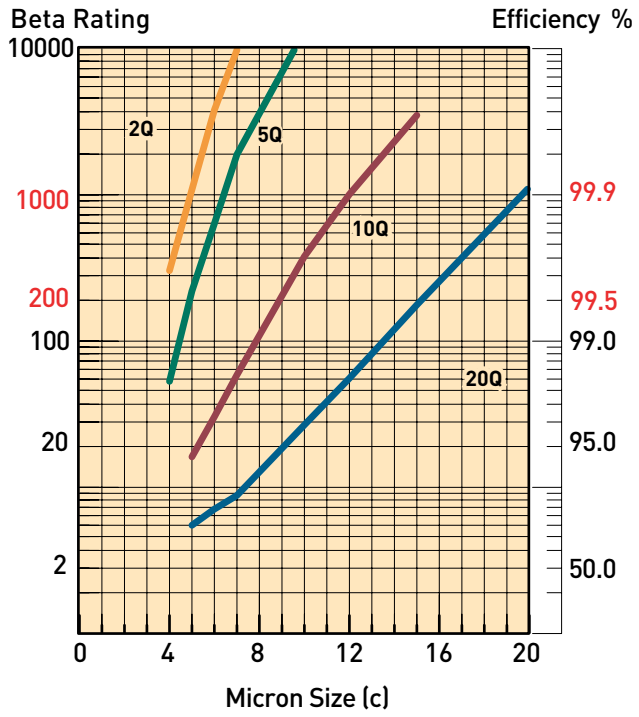
Flow vs. Pressure Loss



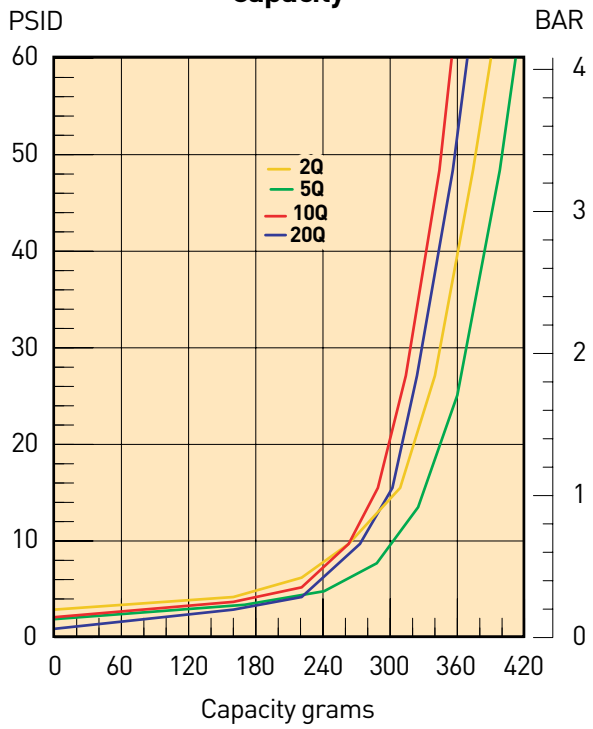


IL8-2 Element Performance

Efficiency

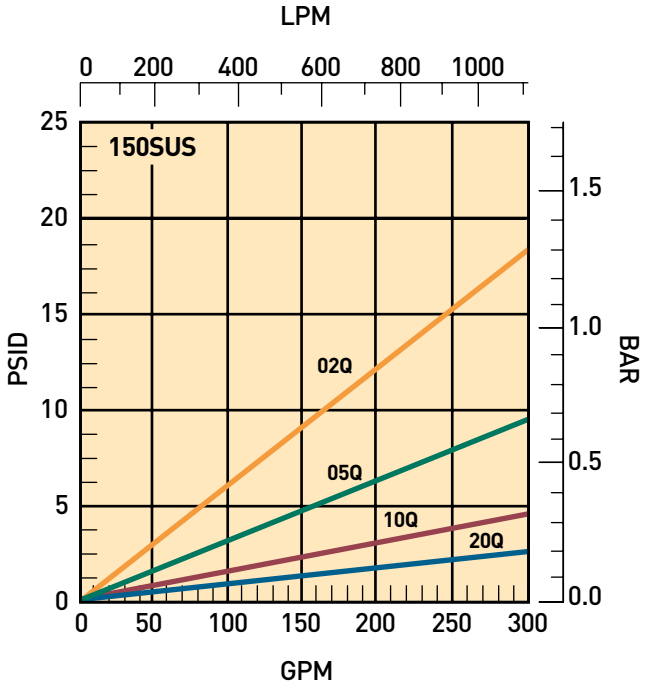


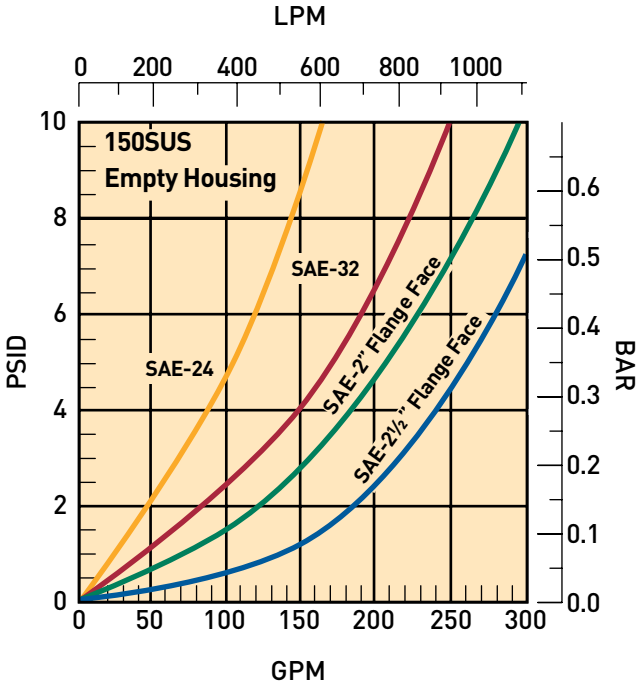
Capacity



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 227-228 for relationship to test standard ISO 4572.

Flow vs. Pressure Loss

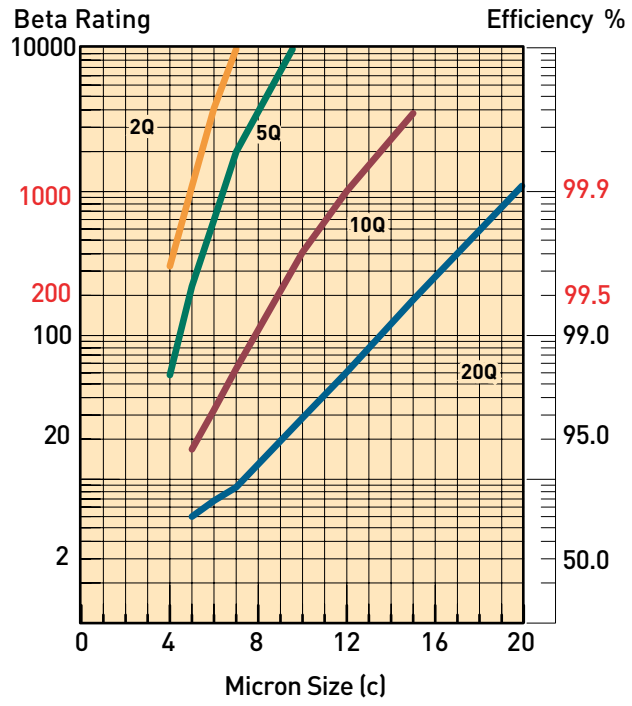




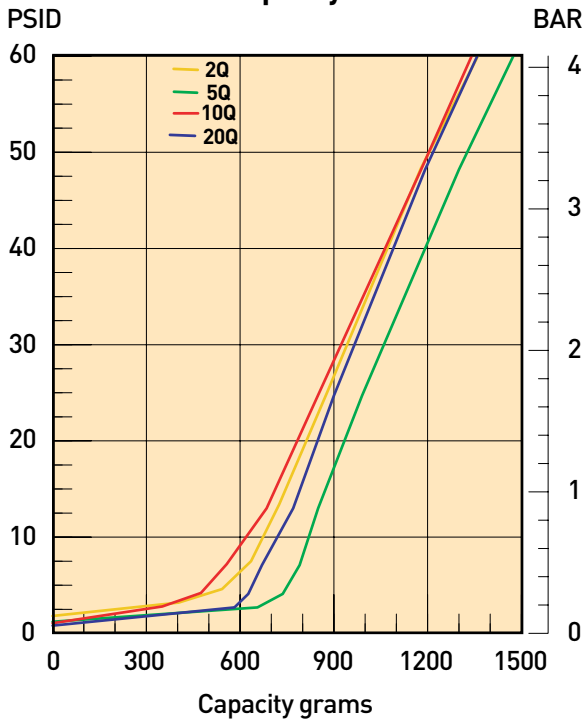
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IL8-3 Element Performance

Efficiency

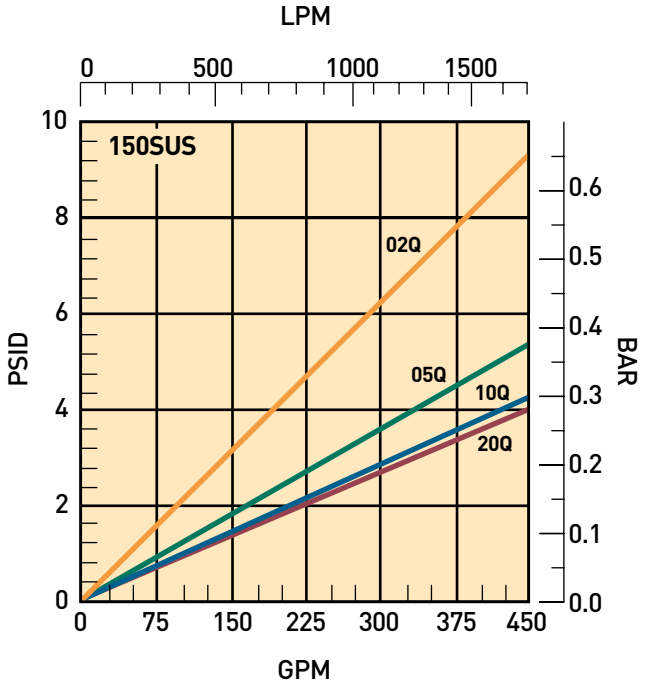


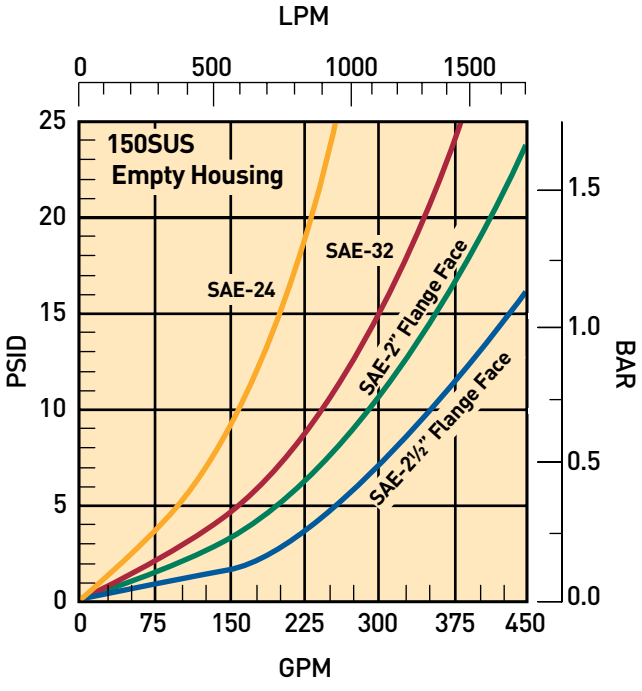
Capacity



Capacity grams0300600900120015006050403020100432102020Q5Q10Q2QCapacityPSIDEfficiency %BAR
Refer to Appendix on pages 227-228 for relationship to test standard ISO 4572.

Flow vs. Pressure Loss





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)

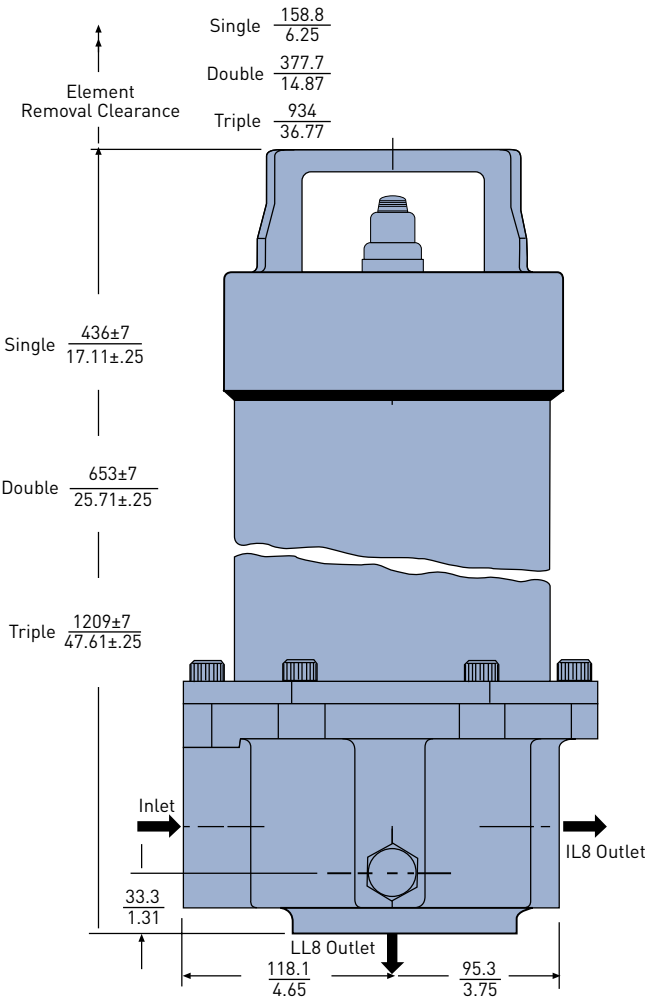
Element Collapse Rating:
150 psid (10.3 bar)

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

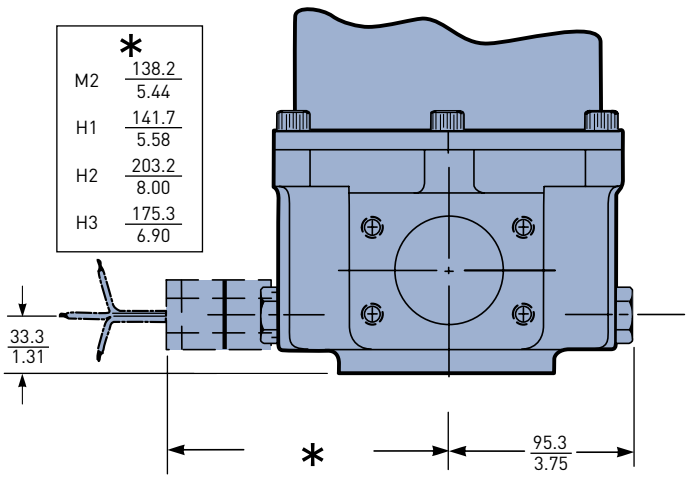
Color Coding:
White (common)
Black (normally open)
Blue (normally closed)

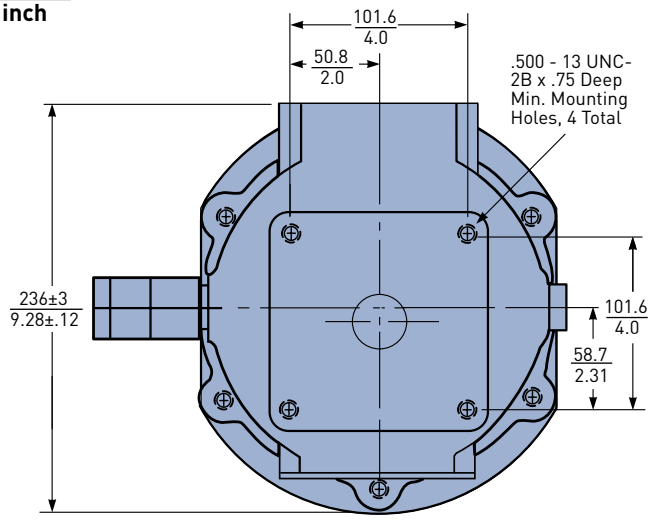
Materials:
Bowl: low carbon steel
Cover: anodized aluminum
Handle: nickel plated ductile iron
Base: anodized aluminum

Shipping Weights (approximate):
Single: 40 lbs. (18.1 kg)
Double: 50 lbs. (22.7 kg)
Triple: 75 lbs. (34 kg)



Linear Measure: millimeter / inch





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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)

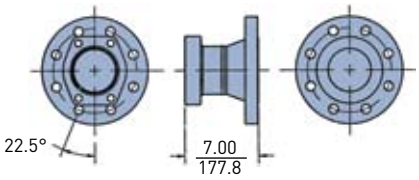
Materials:
Changeover valve: steel
Bowl: low carbon steel
Cover: anodized aluminum
Cover handle: nickel plated ductile iron
Base: steel

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)

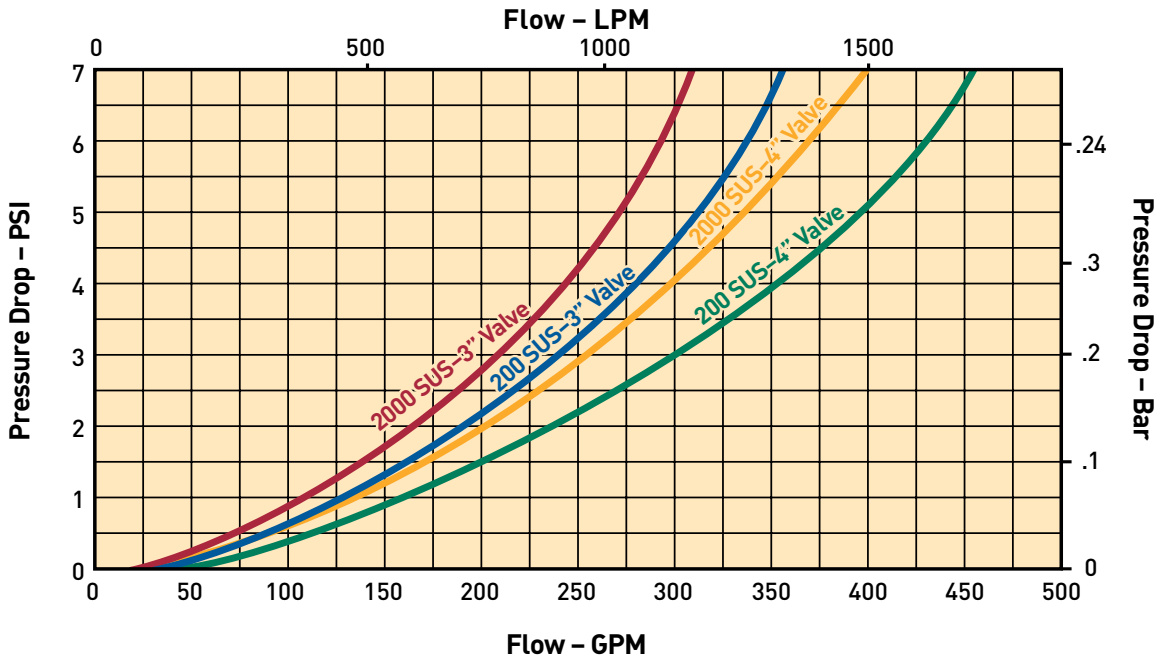
Shipping Weights (approximate):
HDIL8-2 320 lbs. (145 kg)
HDIL8-3 375 lbs. (170 kg)
HQIL8-2 525 lbs. (238 kg)
HQIL8-3 650 lbs. (295 kg)

Ansi Flange Adapter
End, Side View



Linear Measure: millimeter / inch

Changeover Valve Flow vs. Pressure Loss

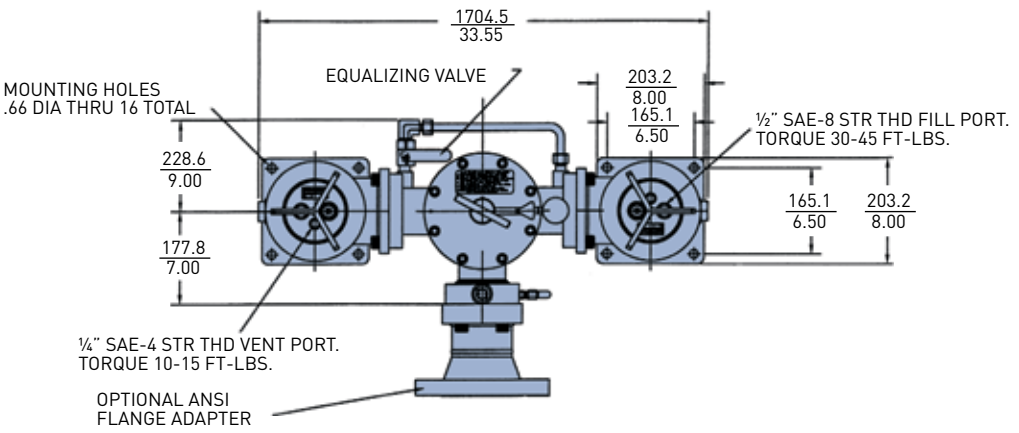


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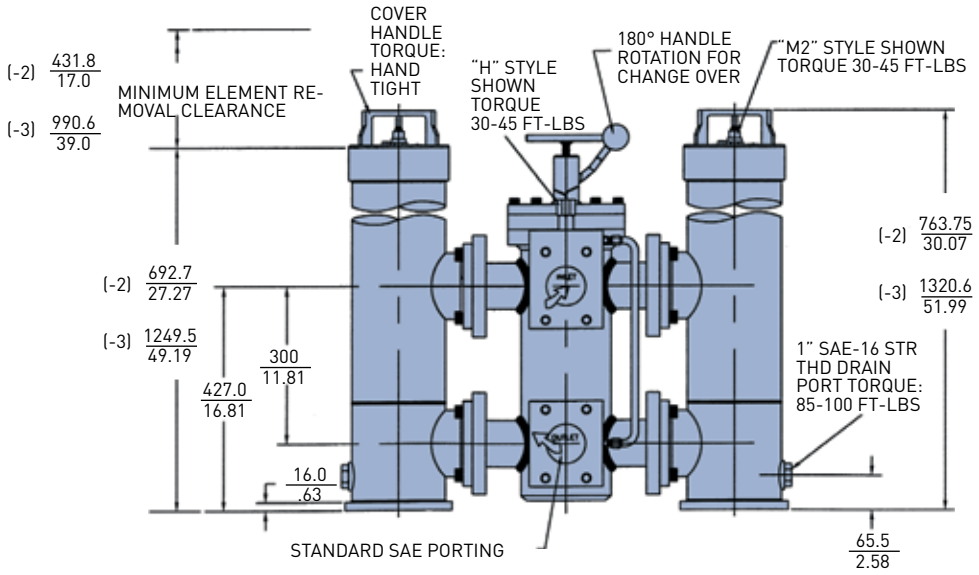
Specifications: HDIL8/HQIL8

Linear Measure: millimeter / inch

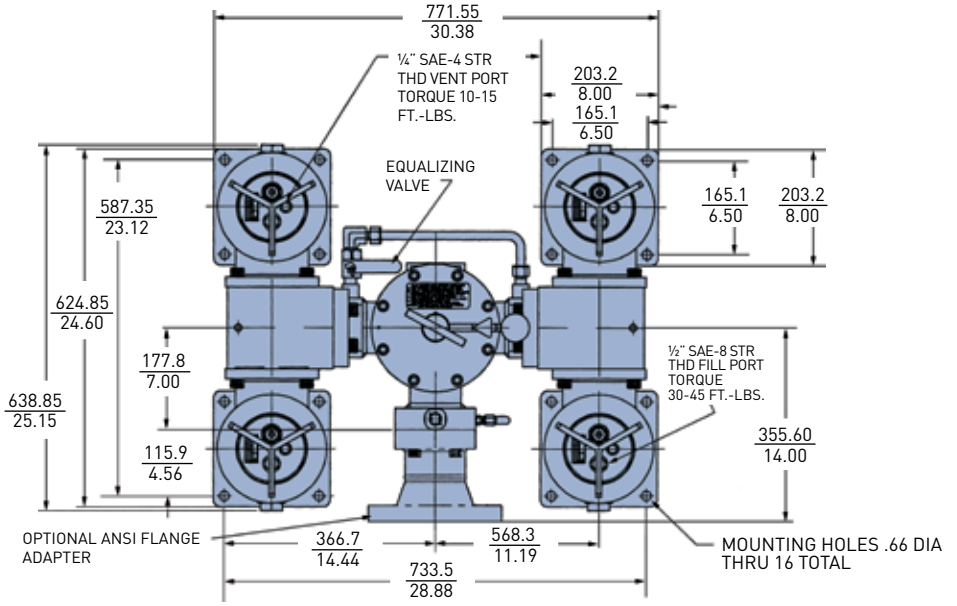
HDIL8
Top View



HDIL8/HQIL8
Side View



HQIL8
Top View

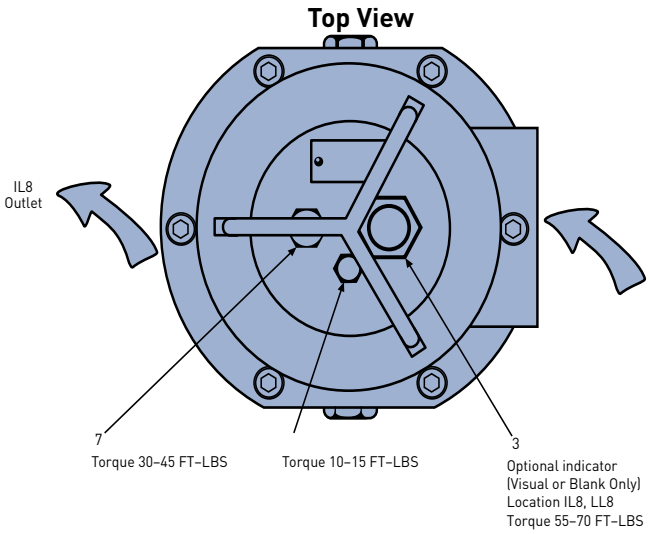


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Element Servicing Instructions: IL8

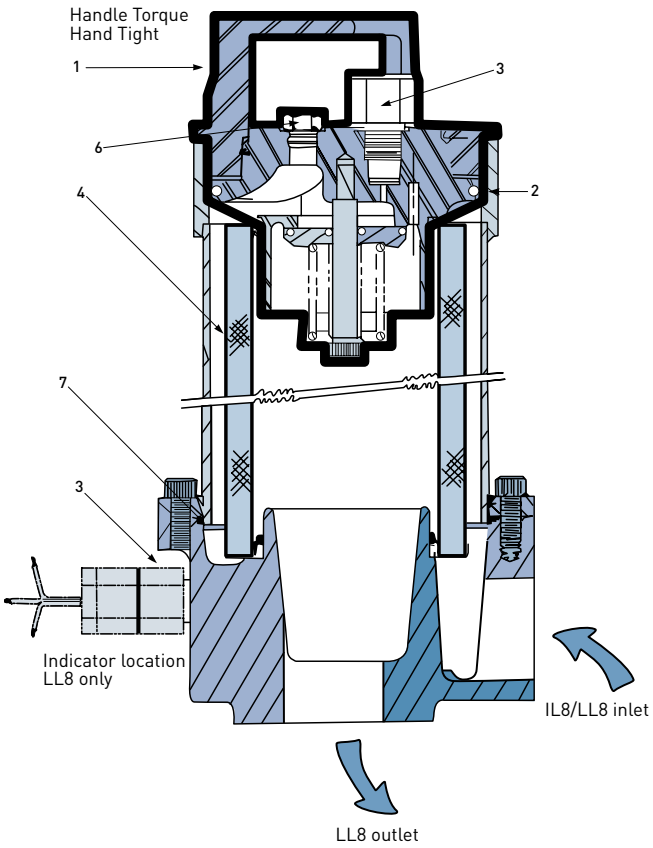
When servicing the IL8/LL8 filter, use the following procedure:

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	Fluoro-carbon P/N
1	**Cover Assembly**		
	25 psi bypass w/indicator port	928887	928888
	50 psi bypass w/indicator port	928889	928890
	No bypass w/indicator port	928891	928892
2	**Cover o-ring**	N72257	V72257
3	**Indicators**		
	P option-indicator port plug	N/A	925515
	M225 PSI	N/A	932026
	M250 PSI	N/A	932027
	H25 PSI	N/A	933053
	H50 PSI	N/A	932905
	H225 PSI	N/A	933141
	H250 PSI	N/A	933142
	H325 PSI	N/A	934164
	H350 PSI	N/A	934165
4	**Elements** (See chart on model code page)		
not shown	**Bleed (vent) Plug,** SAE 4	931357	931358
6	**Fill Plug,** SAE 8	908822	928628
not shown	**Drain Port Plug,** SAE 10	925513	928883
7	**Base O-ring**	N72262	V72262
	Flange Kits (optional)		
	1 ½" 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
	2½" socket weld (w/2½" flange face only)	929313	929346
	SAE-32 (w/2½" flange face only)	929314	929347
	2½ NPTF (w/2½" flange face only)	929315	929348
NOTE:	The 2½" Flange Face Kits include the minimum width SAE J518 Code 61 Flanges.		



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Element Servicing Instructions: HDIL8/HQIL8

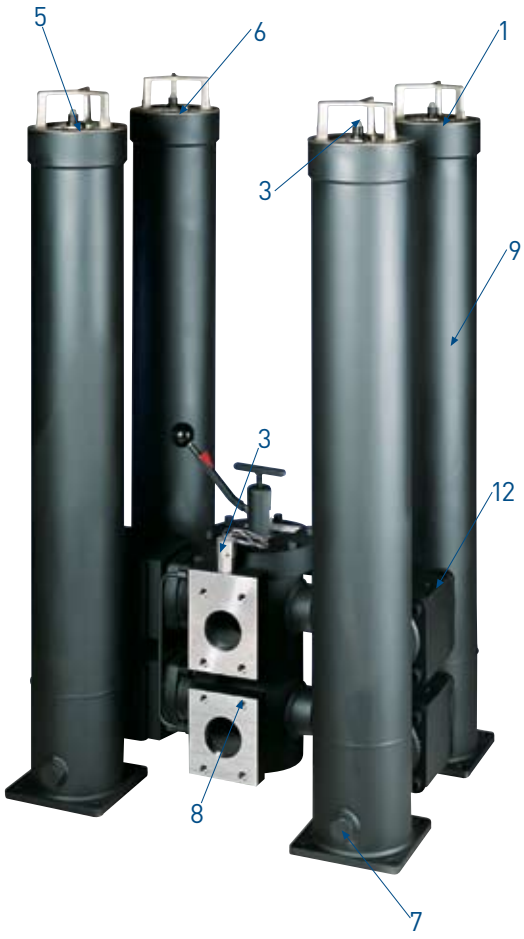
The system does not need to be shut down to service the elements.

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	Fluoro-carbon	Nitrile	Fluoro-carbon
1	Cover Assembly 25psi bypass w/indicator port 50psi bypass w/indicator port No bypass w/indicator port	 928887 928889 928891	 928888 928890 928892	 928887 928889 928891	 928888 928890 928892
2	**Cover O-ring**	N72257	V72257	N72257	V72257
3	**Indicators** P option-indicator port plug M2 25psi M2 50psi H 25psi H 50psi H2 25psi H2 50psi H3 25psi H3 50psi	 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	 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	**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" SAE 3"	 933824 933825	 936123 936122	 933824 933825	 936123 936122
9	**Housing Assembly** Double length Triple length	 933832 933831	 933832 933831	 933832 933831	 933832 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 4" SAE 300 lb. flange	 934170 934172	 934171 934173	 934170 934172	 934171 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	



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Metamora, OH

Medium Pressure Filters

IL8 Series

HOW TO ORDER:

Select the desired symbol (in the correct position) to construct a model code.

Example:

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5	BOX 6	BOX 7	BOX 8	BOX 9
	IL8	3	R	10QE	HP	50	RR	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**

*Not available for HDIL8 or HQIL8

BOX 4: Core

Symbols	Description
None	**Disposable core**
R*	**Reusable core**

*Not available for HDIL8 or HQIL8

BOX 5: Element Media

Symbols	Description
20Q	**MicroglassIII**
10Q	**MicroglassIII**
05Q	**MicroglassIII**
02Q	MicroglassIII
WR	Water removal
20QE	**Ecoglass III**
10QE	**Ecoglass III**
05QE	**Ecoglass III**
02QE	Ecoglass III

Note: Ecoglass III elements must utilize "R" option in BOX 4.

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/ ½" 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
	IL8/LL8
PP	SAE-24 straight thread
RR	SAE-32 straight thread
YY	SAE 2" flange face
ZZ*	SAE 2-½" flange face

* Note: IL8 outlet port requires minimum width SAE J518 code 61 flange.

	HDIL8/HQIL8
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

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