



LOW PRESSURE IN-LINE SUCTION, DUPLEX

Models Moduflow Plus

MODUFLOW™ *Plus* SERIES

Applications/Features

Power Unit Fabrication

Off-line Filter Loops

Mobile Equipment

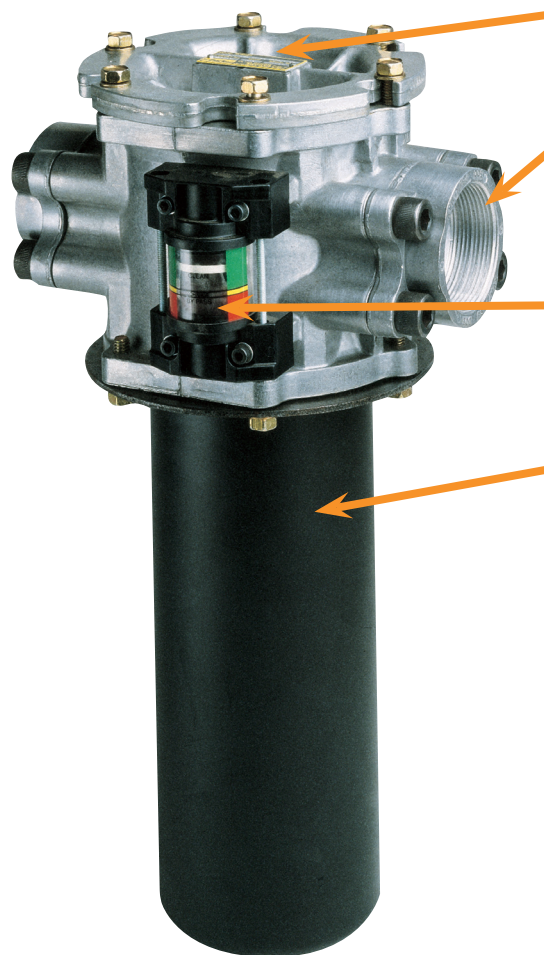
The Moduflow filter is widely considered the most versatile filter available on the market.

The end cap minimizes turbulence and pressure loss through the filter, improving system performance.

The closed bottom elements for the ILP models insures all contamination remains trapped within the element as the filter is serviced.

A wide variety of visual and electrical indicators allows you to know exactly when the element needs to be serviced. There is even a "no element" indicator that can sense when there is not an element installed in the filter.

From top to bottom, the Moduflow filter series provides the high level of filtration and long term dependability so vital to today's hydraulic systems.



Cover

- Slotted for quick release
- Lightweight aluminum

Flanges

- NPT or SAE 3/4" to 2"
- Lightweight aluminum

Indicators

- Visual or electrical
- Mounted on either side
- Standard "no element" indication

Bowl

- Single or double length
- Durable steel construction

Bypass

(not visible)

- Integral 35 psi bypass replaced with every element change

Element

- Available in high performance Microglass media
- Single or double length

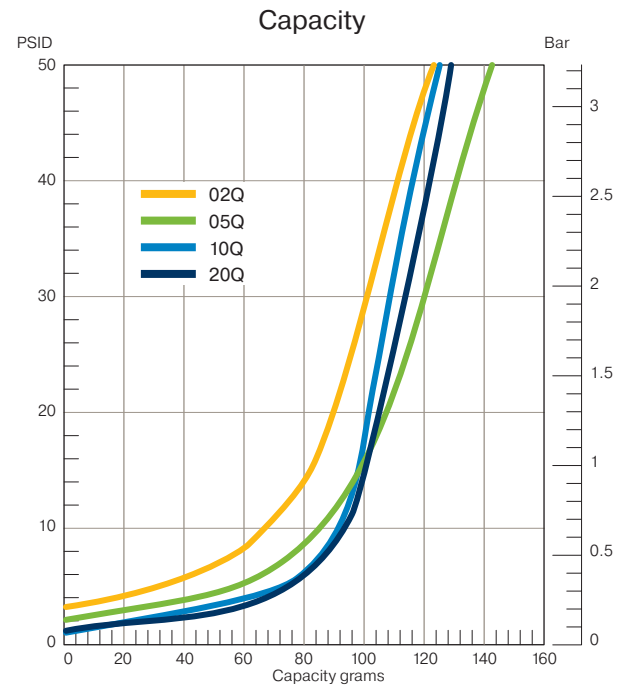
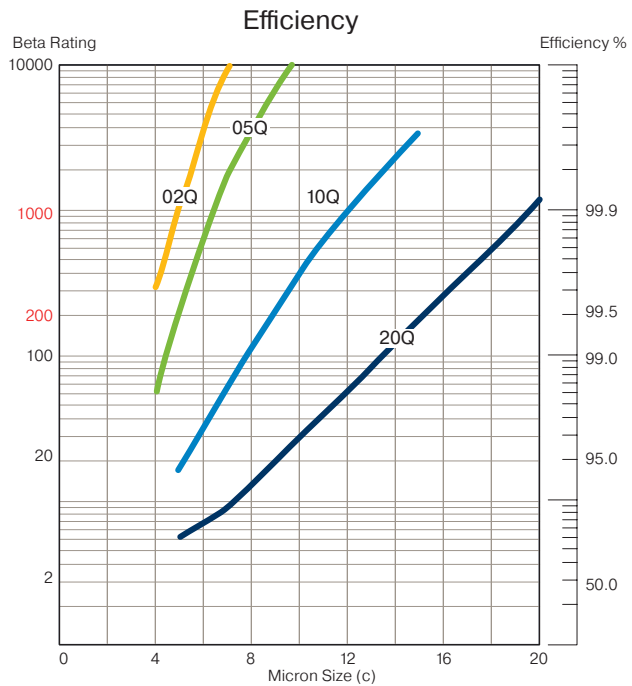
Parker's Moduflow element was designed with built-in diverter and bypass valve, to meet your application needs.



Feature	Advantage	Benefit
• Top access element service	• Oil remains in housing • Quicker elements change	• No Spills • Reduced maintenance costs
• Slotted cover	• Quick release cover • Cap screws remain in housing	• Reduced maintenance cost • No loose parts to lose
• Closed bottom elements	• Removes all contaminant during element service	• No downtime contamination from servicing
• Visual or electrical indicators	• Know exactly when to service elements	• Helps prevent bypass condition • No premature disposal
• Flange face ports	• Flexible mounting (3/4" to 2")	• Easy plumbing to your system

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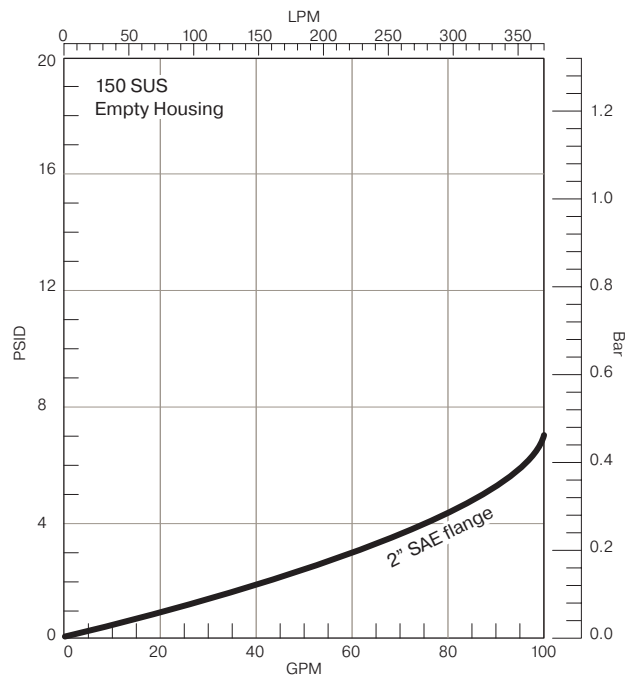
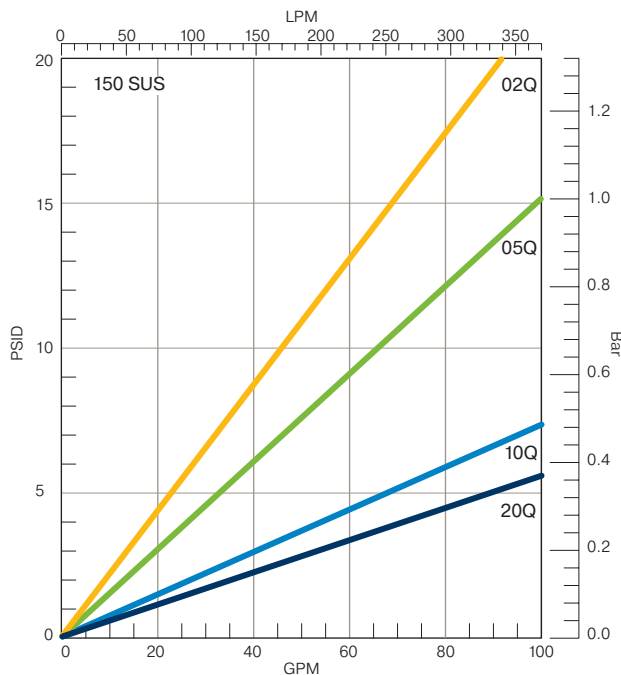
ILP-1 Element Performance



Multipass tests run @ 40 gpm to 50 psid terminal - 5mg/L BUGL

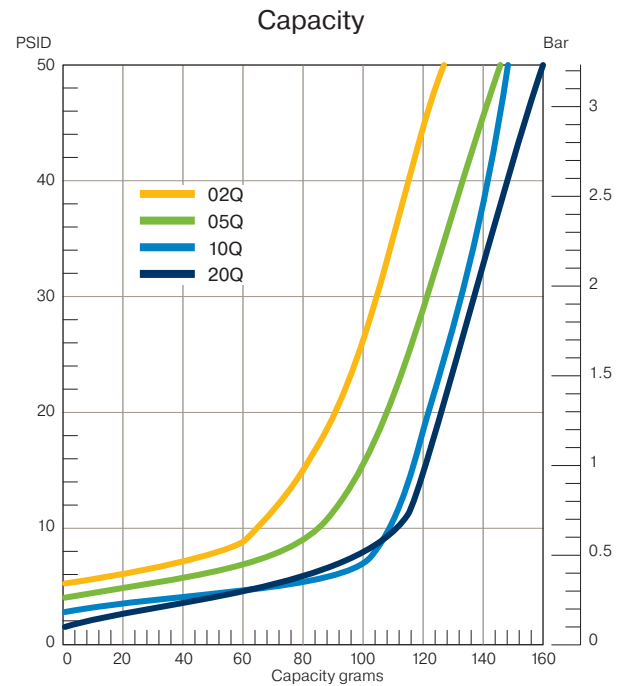
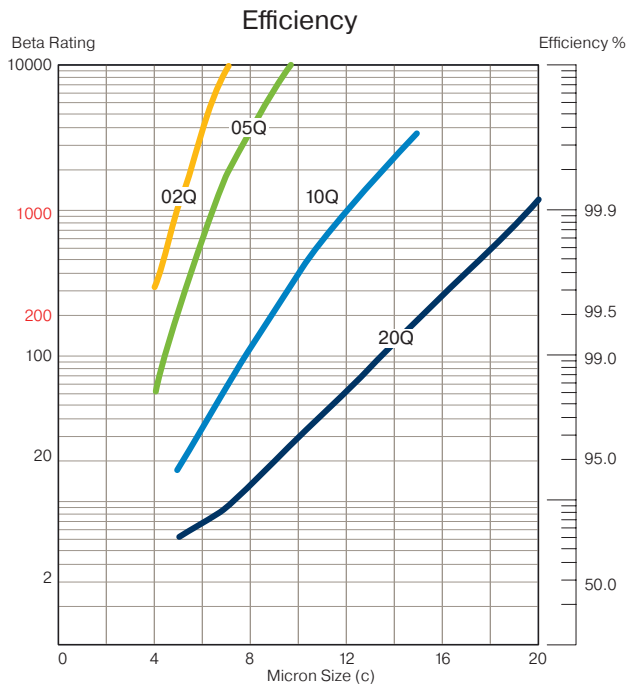
Results typical from Multi-pass tests run per test standard ISO 16889 @ 40 gpm to 50 psid terminal - 5 mg/L BUGL
Refer to Appendix for relationship to test standard ISO 4572.

Flow vs. Pressure Loss



MODUFLOW™ *Plus* SERIES

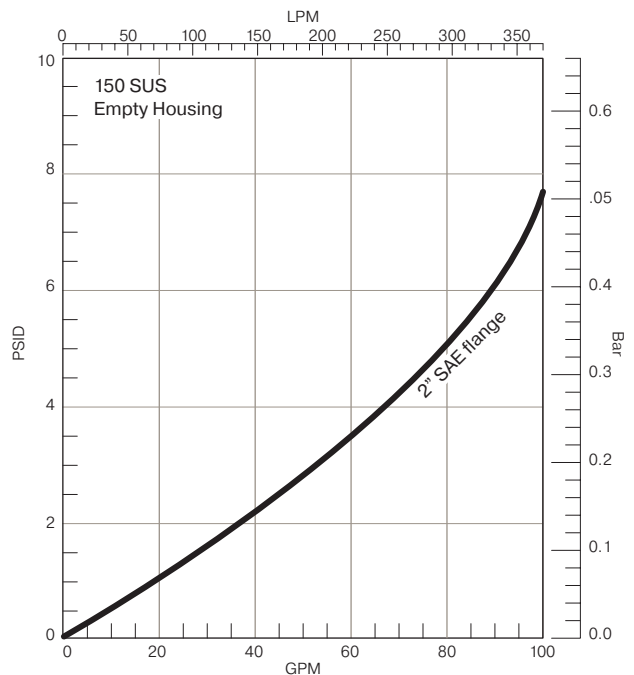
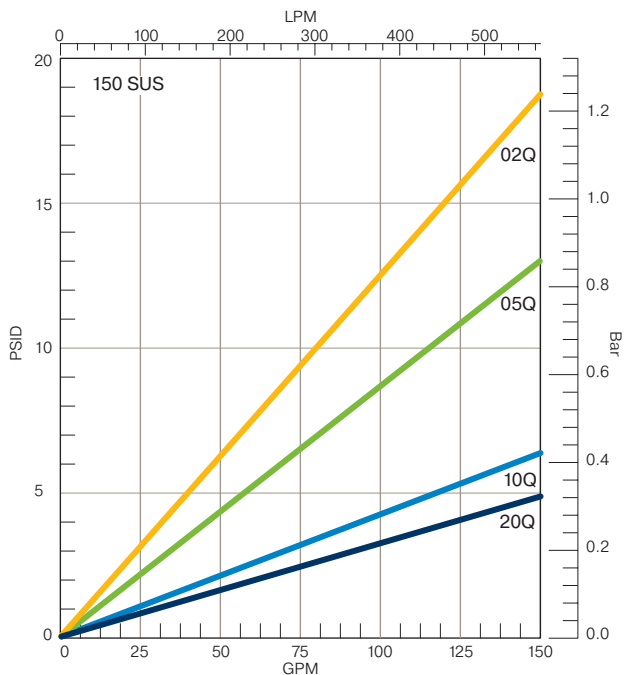
ILP-2 Element Performance



Multipass tests run @ 40 gpm to 50 psid terminal - 5mg/L BUGL

Results typical from Multi-pass tests run per test standard ISO 16889 @ 40 gpm to 50 psid terminal - 5 mg/L BUGL
Refer to Appendix for relationship to test standard ISO 4572.

Flow vs. Pressure Loss



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Specifications

Pressure Ratings:

Maximum Allowable Operating Pressure

(MAOP): 200 psi (13.8 bar)

Design Safety Factor: 2:1

Rated Fatigue Pressure: 150 psi (10.3 bar)

Element Burst Rating: 70 psid (4.8 bar)

Filter Materials:

Head, Cover, Flanges: die cast aluminum

Bowl: steel

Operating Temperatures:

Nitrile: -40°F to 225°F (-40°C to 107°C)

Fluorocarbon: -15°F to 275°F (-26°C to 135°C)

Weight (approximate):

Single: 20 lbs. (9.1 kg)

Double: 25 lbs. (11.3 kg)

Indicators:

Visual (optional)

Electrical (optional) 15A @ 125VAC / .5A @ 125 VDC

Electrical ("D" option) 5A @ 250VAC / 3A @ 28 VDC

Color Coding:

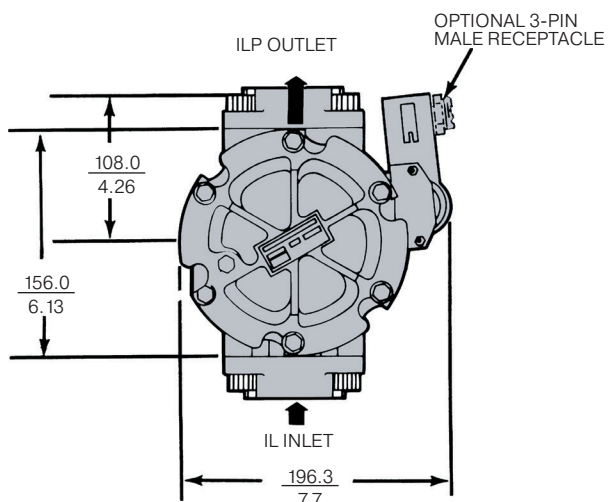
White (normally closed)

Red (normally open)

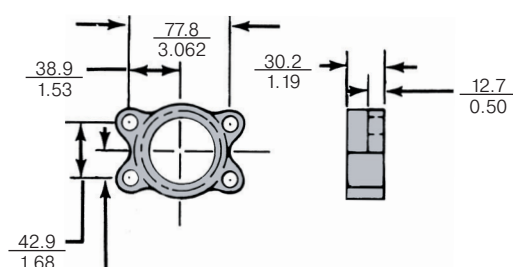
Black (common)

Model	Dimensions: mm/inch			
	A	B	C	D
ILP-1	<u>65.0</u> 2.56	<u>336.0</u> 13.24	N/A	<u>117.1</u> 4.61
ILP-2	<u>68.3</u> 2.69	<u>618.0</u> 24.32	N/A	<u>117.1</u> 4.61

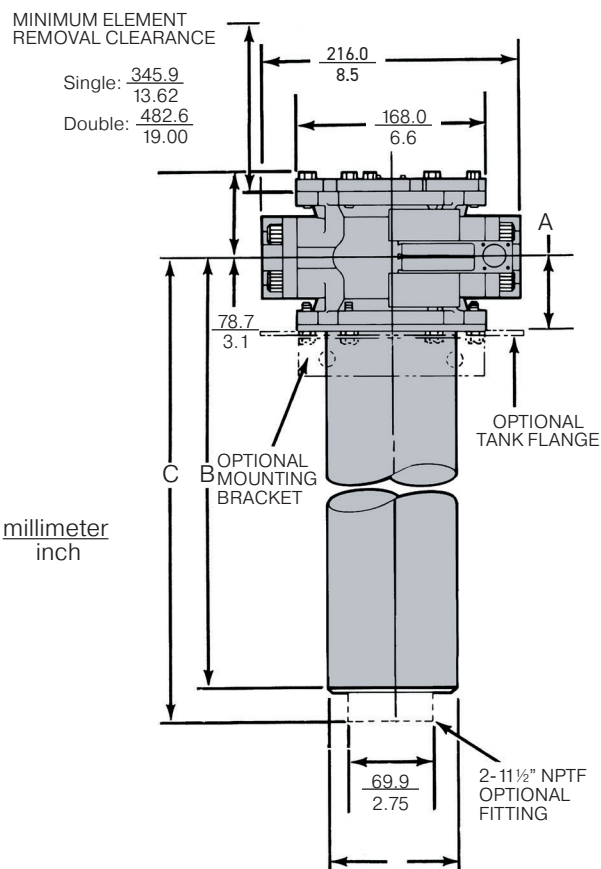
Drawings are for reference only.
Contact factory for current version.



OPTIONAL PORT FLANGE



Linear Measure: millimeter
inch



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DILP Specifications

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

Pressure Ratings:

Maximum Allowable Operating Pressure

(MAOP): 200 psi (13.8 bar)

Design Safety Factor: 2:1

Rated Fatigue Pressure: 150 psi (10.3 bar)

Element Burst Rating: 70 psid (4.8 bar)

Filter Materials:

Divter Valve Assembly: die cast aluminum

Check Valve Assembly: die cast aluminum

Filter Assembly: see IL2 specifications

Operating Temperatures:

Nitrile: -40°F to 225°F (-40°C to 107°C)

Fluorocarbon: -15°F to 275°F (-26°C to 135°C)

Weight (approximate):

Single: 55 lbs. (24.9 kg)

Double: 65 lbs. (29.5 kg)

Indicators:

Visual (optional)

Electrical (optional) 15A @ 125VAC / .5A @ 125 VDC

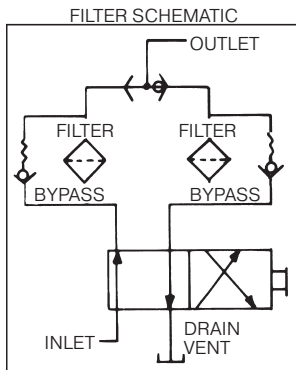
Electrical ("D" option) 5A @ 250VAC / 3A @ 28 VDC

Color Coding:

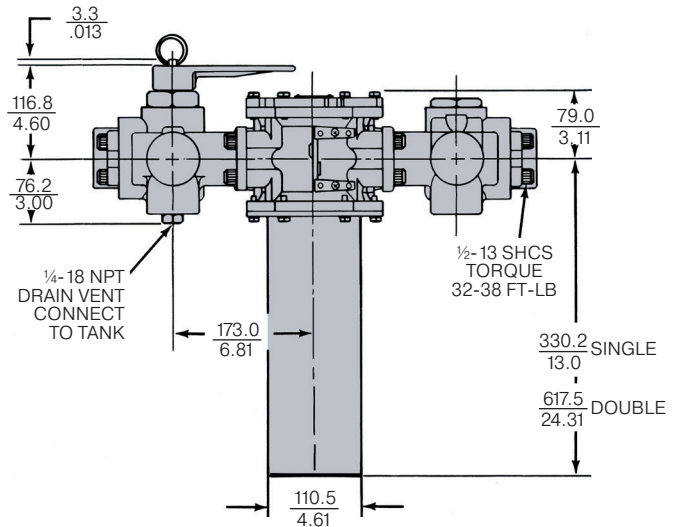
White (normally closed)

Red (normally open)

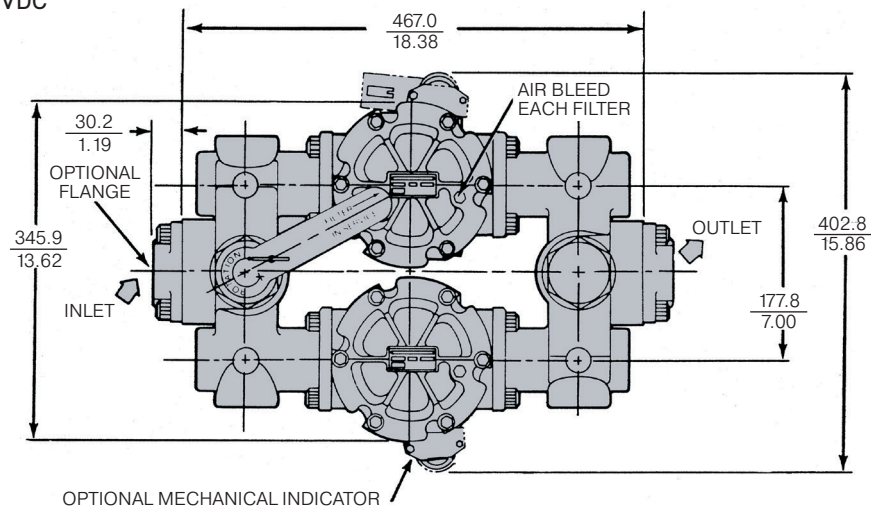
Black (common)



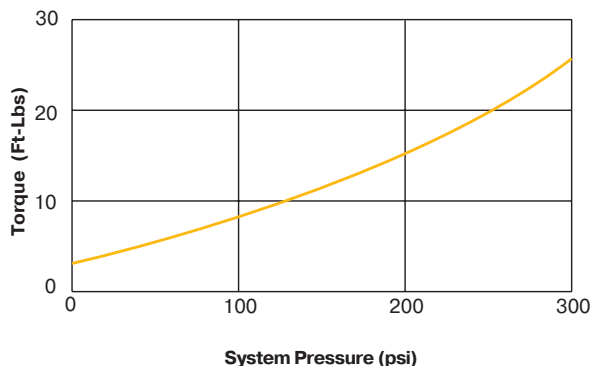
BOTH CHECK VALVES MOVE SAME DIRECTION



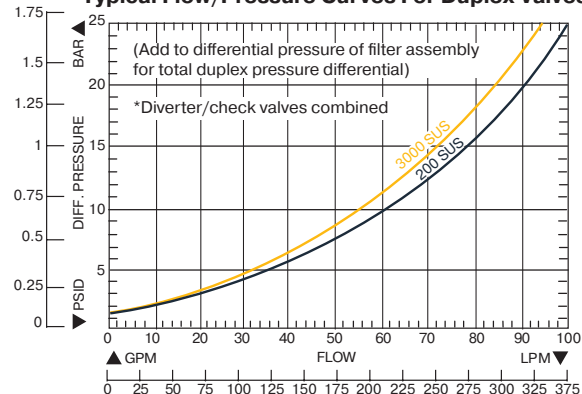
Linear Measure: millimeter
inch



Approximate handle torque required for changeover.



Typical Flow/Pressure Curves For Duplex Valves



MODUFLOW™ Plus SERIES

Specifications

Manifold Specifications

Rated Static Pressure, max.:

20.7 bar (300 psi)

Typical Burst Pressure:

62.1 bar (900 psi)

Operating Temperature

(Nitrile seals): -40°C to 121°C
(-40°F to 250°C)

Housing Material:

ANSI 356-T6 cast aluminum

Approximate Shipping Weight:

3.6 kg (8 lbs)

Porting: See Options Below

Screws & O-Rings Separately:

Inlet & outlet screws (12 required):
P/N 900228

Outlet port o-rings (2 required):

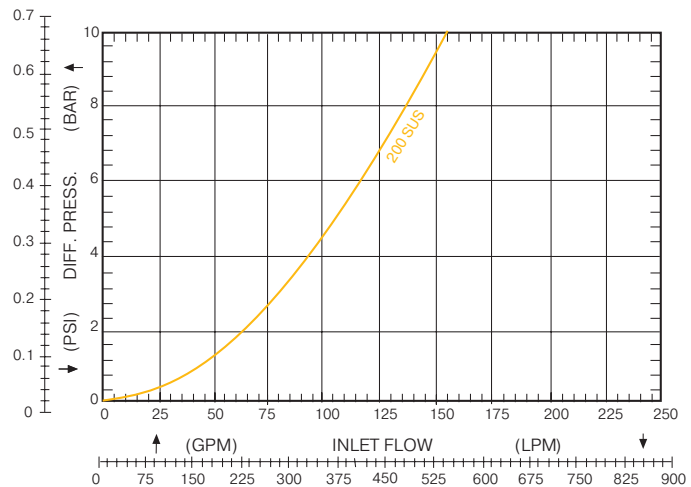
Nitrile: P/N N72228
Fluorocarbon: P/N V92228

High Flows At Low Cost

The model MM is designed to extend the flow range of Moduflow™ Filters when operating with 10 Micron and finer filter media. When mounted to a pair of ILP-2 filters, this manifold will allow flows up to 130 gpm in return lines (15 fps velocity).

Note: The Model MM is not applicable to suction lines due to its pressure drop characteristics.

Flow/Pressure Curve

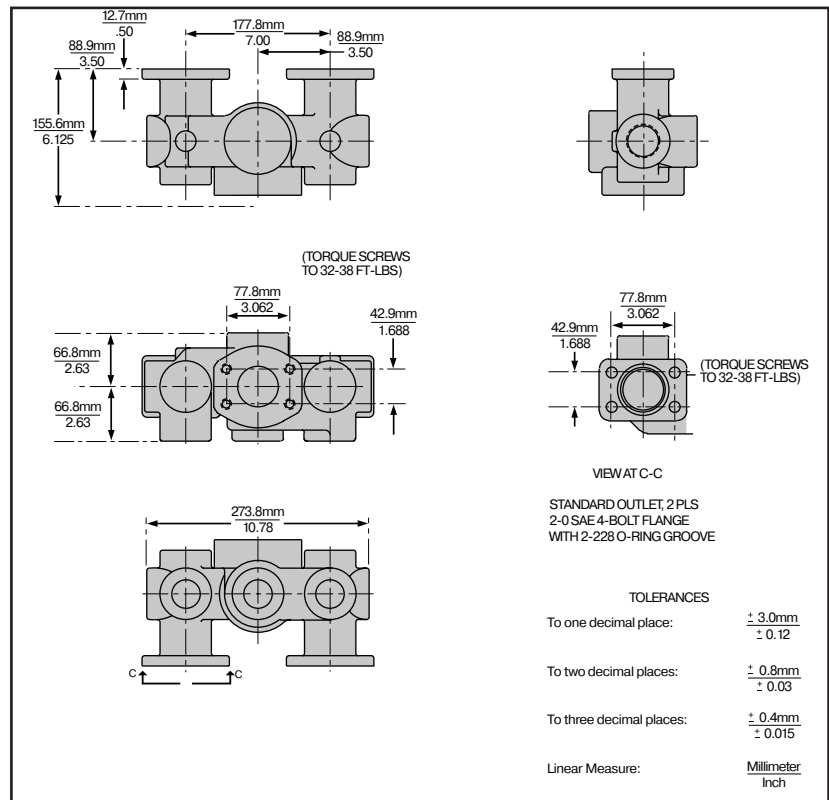


How to order manifolds

Part Number	Description
926466	Moduflow Manifold (MM)

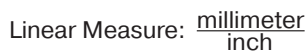
* Inline mounted ILP filters will require two manifolds on both inlets and outlets.

INSTALLATION DIMENSIONS



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

Accessories



Black - Common
White - Normally Closed
Red - Normally Open

Flange Kits (flange, 4 bolts, o-ring)

		Part Number	
Size	Code	Nitrile	Fluorocarbon
¾ inch NPTF	YB	924788	926013
1 inch NPTF	YC	924787	926012
1¼ inch NPTF	YD	924912	926004
1½ inch NPTF	YE	924786	926011
2 inch NPTF	YF	924785	926010
SAE - 12	YM	924784	926009
SAE - 16	YN	924783	926008
SAE - 20	YO	924913	926005
SAE - 24	YP	924782	926007
BLANK FLANGE	—	924781	926006

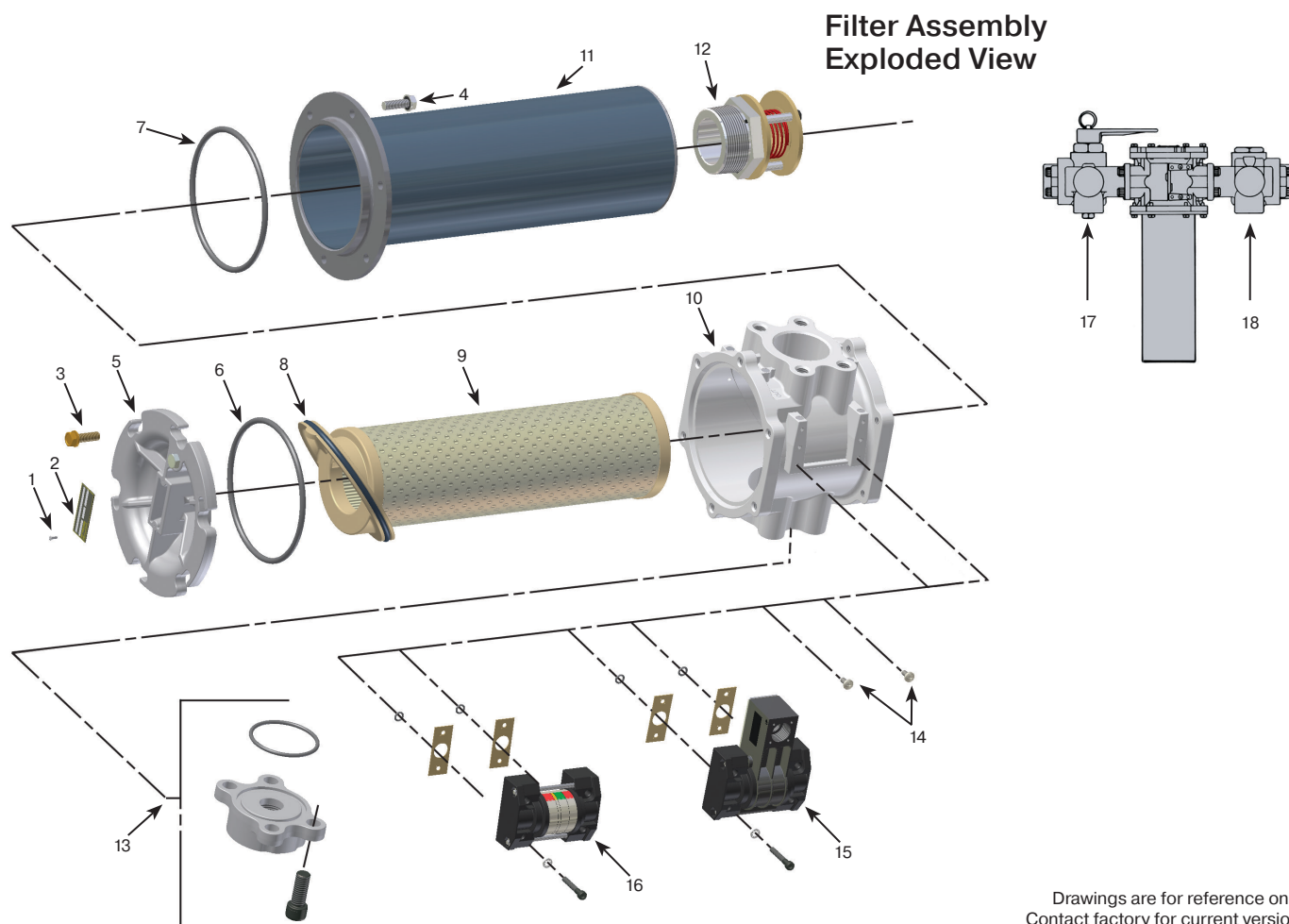
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Parts List

Index	Description	Part No.	Quantity
1	Screws, Nameplate	900028	2
2	Name Plate, Unstamped	920928	1
3	Cover Screws, 5/16-18 UNC x 1"	926633	6
4	Bowl Screws, 5/16-18 UNC x 1"	926633	6
5	Cover, Without nameplate	924634	1
6	Cover O-Ring Nitrile Fluorocarbon	N72350 V72350	1 1
7	Bowl O-Ring Nitrile Fluorocarbon	N72251 V72251	1 1
8	Element Seal Nitrile Fluorocarbon	937410 937411	1 1
9	Element	Refer to Table	1
10	Head, Machined only 2" SAE flange face SAE-24 combination inlet port	941160	1
11	Bowl, Select desired model ILP-1 ILP-2	925916 924816	1 1

Index	Description	Part No.	Quantity
12	Check Valve Assy.	925120	1
13	Flange Kits O-Ring	Refer to Table V72228	1 1
14	Plug Kit, Fastener, self-sealing, O-ring seal included with fastener	925974	2
15	Indicator Electrical 35 psid 35 psid, 3-pin male receptacle Gasket O-Ring	926643 926753 926126 V72010	Optional 2 2
16	Indicator Visual 35 psid 4-band Bracket, Inline mounting Indicator Kit, Remote mount	926748 924904 924894	Optional Optional Optional
17	Changeover Valve Assy., Duplex	926758	Optional
18	Check Valve Assy., Duplex	926757	Optional
Not Shown	Check Valve Assy., Duplex	N72265	1



MODUFLOW™ *Plus* 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
ILP	1	10Q	B	MP	35	Y9Y9	1

BOX 1: Filter Series	
Symbol	Description
ILP	Inline filter
ILPW	Inline filter anodized for HWCF fluid
DILP	Inline duplex filter
DILPW	Inline duplex filter anodized for HWCF fluid

BOX 2: Element Length	
Symbol	Description
1	Single
2	Double

BOX 3: Media Code	
Symbol	Description
02Q	Microglass, 2 micron
05Q	Microglass, 5 micron
10Q	Microglass, 10 micron
20Q	Microglass, 20 micron
WR	Water Removal

BOX 4: Seal Material	
Symbol	Description
B	Nitrile
E ²	Ethylene Propylene
V	Fluorocarbon

BOX 5: Indicator ³	
Symbol	Description
P	Pressure ports drilled/plugged
M	Visual indicator w/ "no element" warning
MM	Visual indicator (DILP)
E	Electrical indicator w/ 12" leads
EE	Electrical indicator (DILP)
D	Electrical indicator w/ 3-pin male quick disconnect
DD	Electrical 3-pin indicator (DILP)

BOX 6: Bypass	
Symbol	Description
35	35 psid (2.4 bar)

BOX 7: Ports ⁴	
Symbol	Description
ILP	Y9Y9 2" SAE Flange Face / SAE-24 combination inlet port
DILP	Y9Y9 2" SAE Flange Face only

BOX 8: Options	
Symbol	Description
1	None

1. Filters include the element you select already installed.
2. Par-Gel™ Water Removal (WR) elements are not available with EPR seals.
3. Two letters are required for the indicator code.
4. See Flange Kits table for port flange options. Flange Kits are ordered separately.

ILP / DILP Replacement Elements

Media	Nitrile Seals		Fluorocarbon Seals	
	Single	Double	Single	Double
02Q	937393Q	937397Q	937401Q	937405Q
05Q	937394Q	937398Q	937402Q	937406Q
10Q	937395Q	937399Q	937403Q	937407Q
20Q	937396Q	937400Q	937404Q	937408Q
WR	940733	940734	940735	940736



Inline



Tank Mounted

Parker Hannifin Corporation
**Engine Mobile Hydraulic
& Fuel Filtration Division**
16810 County Rd 2
Metamora, OH 43540
phone 419 644 4311
email HFF.support@support.parker.com
www.parker.com/emhff

2300-18 Moduflow 12/09/2024

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