



# Coreless Spin-On Filters

12AS/50AS Series



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## The Smart Alternative to Spin-on Cans!

### Features:

Parker engineers have developed an innovative alternative to the age old spin-on style can. This new design provides all of the benefits of high efficiency, long life Ecoglass III filtration, without the environmental impact.

The new environmentally-friendly 12AS and 50AS hydraulic filters feature a reuseable bowl and a patented filter element constructed primarily of nylon and fiberglass. The element core is permanently attached as part of the filter bowl. When replaced, the element reduces costs, eliminates hot drain requirements, can be easily incinerated, and is better-suited for most landfills.

The 500 psi filters are rated up to 50 gpm, with premium Ecoglass III elements as standard offerings. The patented element design also prevents filter operation if the proper element is not in place.

### Applications:

- Mobile Ag
- Mobile Construction
- Material Handlers
- Aerial Lifts
- Pilot lines
- Charge pump hydrostatic drives
- Industrial power units
- Machine tools

Feature	Advantage	Benefit
<ul style="list-style-type: none"> <li>500 PSI operating pressure</li> </ul>	<ul style="list-style-type: none"> <li>Withstands pressure surges, allows application versatility.</li> </ul>	<ul style="list-style-type: none"> <li>Broader applications compared to 150 PSI rated spin-on cans.</li> </ul>
<ul style="list-style-type: none"> <li>Patented element</li> </ul>	<ul style="list-style-type: none"> <li>Provides head-to-bowl seal.</li> <li>Must be installed for operation.</li> <li>Ensures original element must be used.</li> </ul>	<ul style="list-style-type: none"> <li>Provides optimum leak-free performance.</li> <li>Meets system cleanliness requirements.</li> </ul>
<ul style="list-style-type: none"> <li>Coreless Ecoglass elements</li> </ul>	<ul style="list-style-type: none"> <li>Lightweight, non-metallic.</li> <li>Ease of service and disposal.</li> </ul>	<ul style="list-style-type: none"> <li>Reduces disposal costs.</li> <li>Can be incinerated.</li> <li>Low environmental impact in landfills.</li> </ul>
<ul style="list-style-type: none"> <li>Spin-on filter assembly w/reuseable bowl</li> </ul>	<ul style="list-style-type: none"> <li>Improved, cost-effective design.</li> </ul>	<ul style="list-style-type: none"> <li>Easy to maintain.</li> </ul>



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### Specifications

#### Pressure Ratings:

Maximum Allowable  
 Operating Pressure (MAOP):  
 500 psi (34.5 bar)  
 Fatigue: 400 psi (27.6 bar)  
 1,000,000 cycles: 0-400 psi  
 Design Safety Factor: 2.5:1

#### Operating Temperatures:

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

#### Element Collapse Rating:

150 psid (10.3 bar)

#### Element Condition Indicators:

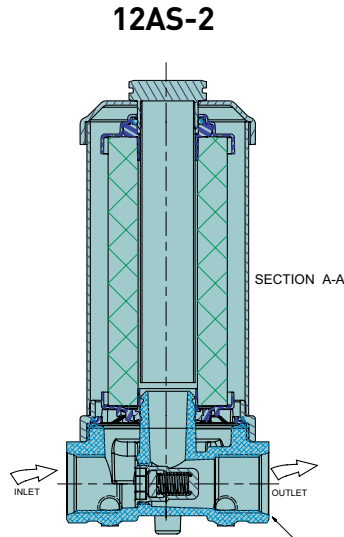
Gauge: 0-60 psi color coded  
 (For use in low pressure applications only.)  
 Pressure Switch: normally open,  
 20 ± 2 psi, 5A @ 24 VDC

#### Materials:

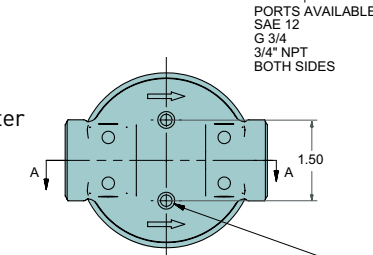
Head: die cast aluminum  
 Bypass valve: nylon with steel spring  
 Filter element: fiberglass and polyester  
 with nylon endcaps  
 Bowl: steel  
 Permanent core: steel

#### Weights (approximate):

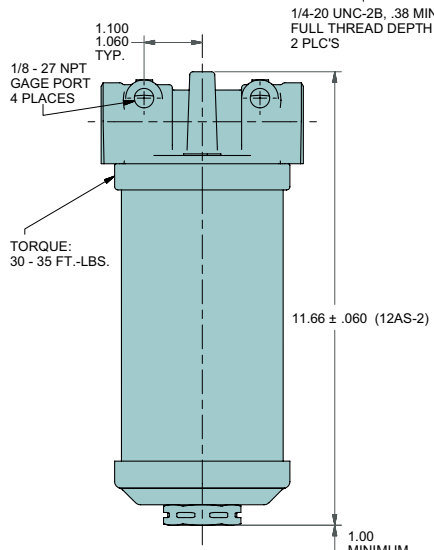
12AS-2.....3lbs. (1.4 kg)  
 50AS-1.....6lbs. (2.7 kg)



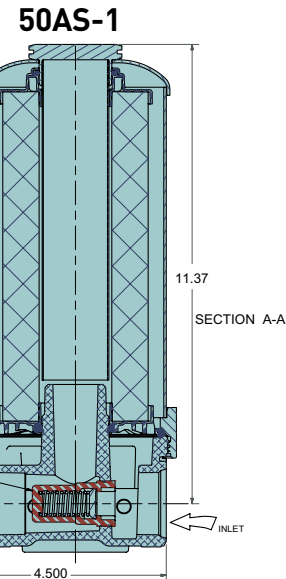
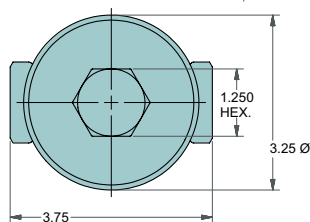
SECTION A-A



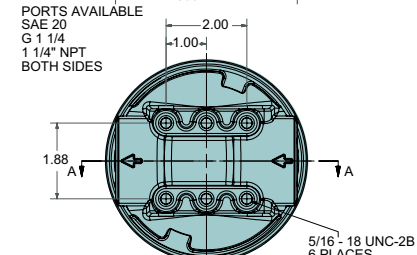
PORTS AVAILABLE  
 SAE 12  
 G 3/4  
 3/4" NPT  
 BOTH SIDES



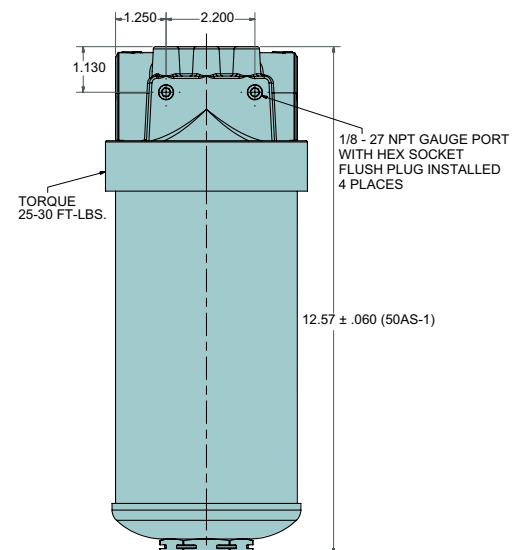
1.00 MINIMUM ELEMENT REMOVAL CLEARANCE



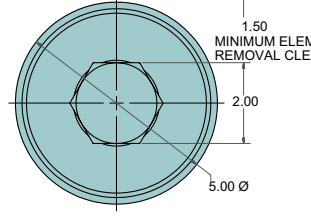
SECTION A-A



PORTS AVAILABLE  
 SAE 20  
 G 1 1/4  
 1 1/4" NPT  
 BOTH SIDES



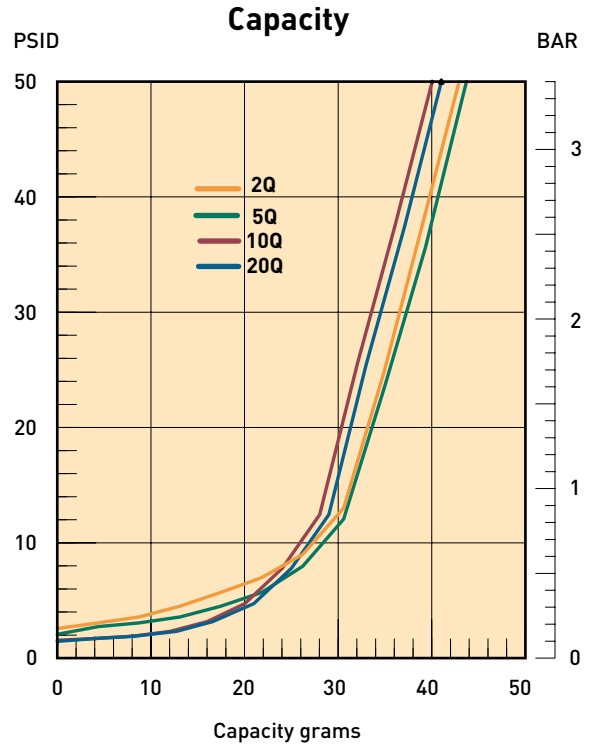
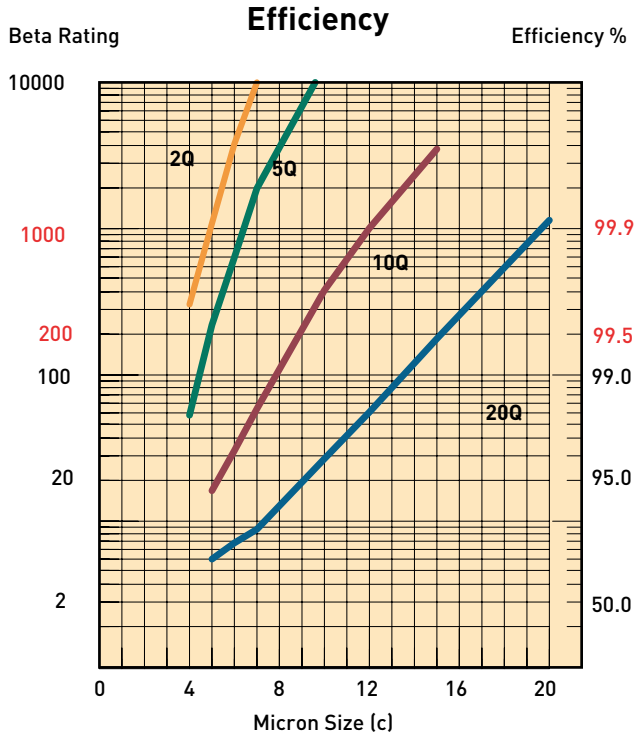
1.50 MINIMUM ELEMENT REMOVAL CLEARANCE



# Coreless Spin-on Filters

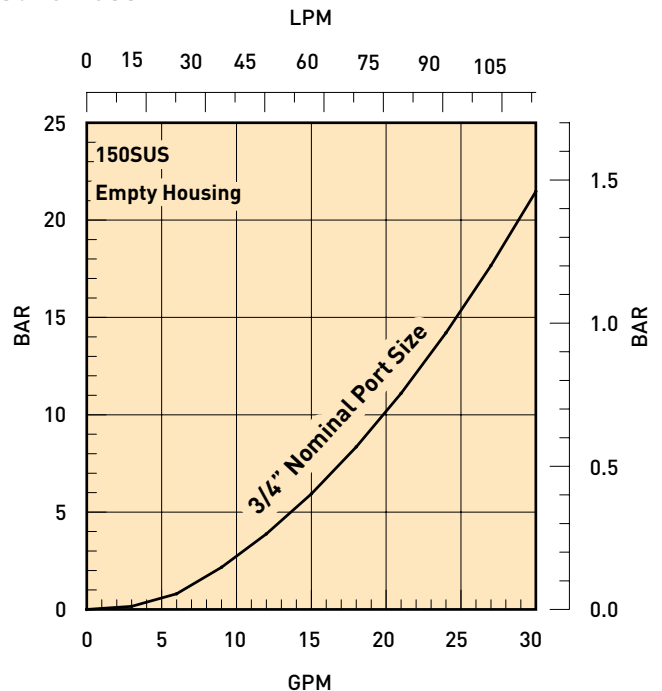
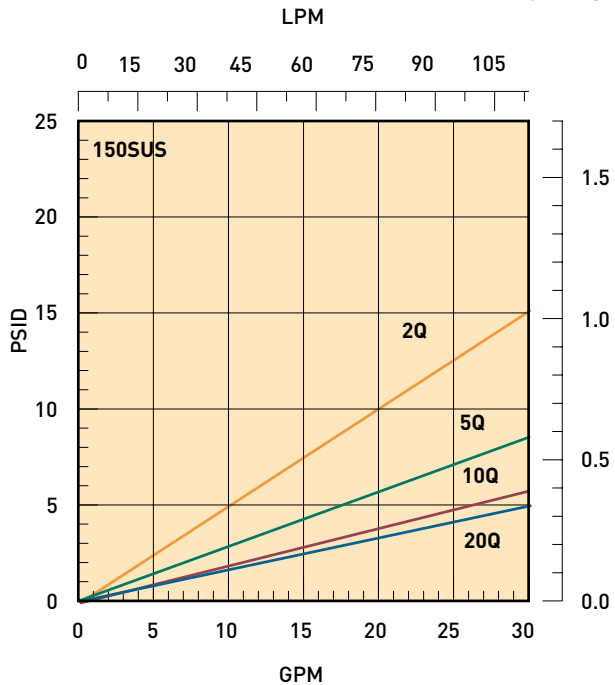
12AS/50AS Series

## 12AS-2 Performance

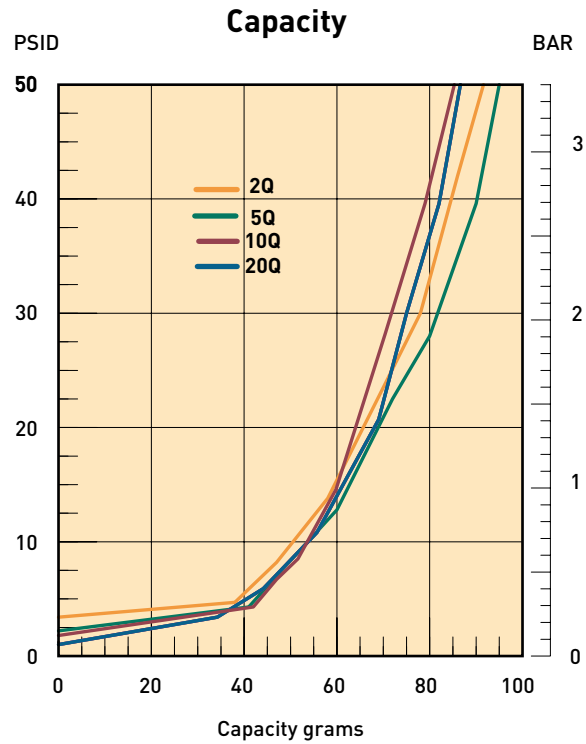
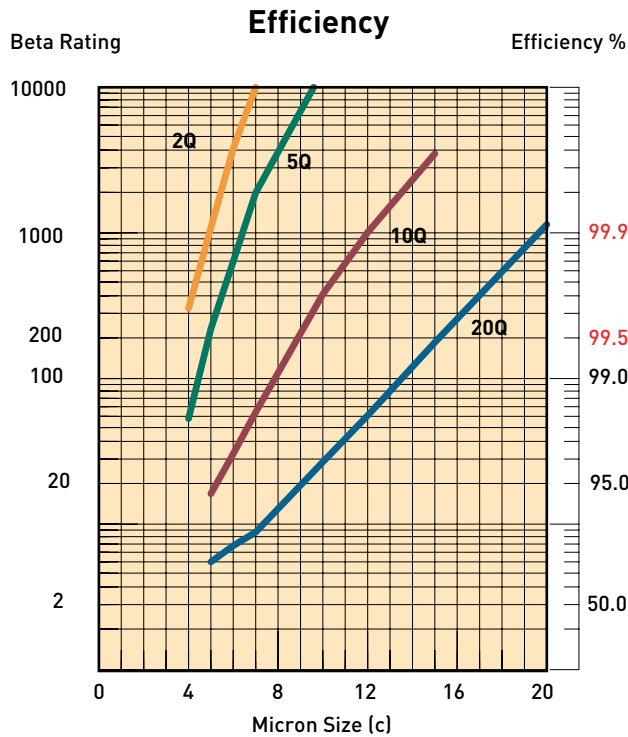


Results typical from Multi-pass tests run per test standard ISO 16889 @ 15 gpm to 50 psid terminal - 10 mg/L BUGL  
Refer to Appendix for relationship to test standard ISO 4572.

## Flow vs Pressure Loss

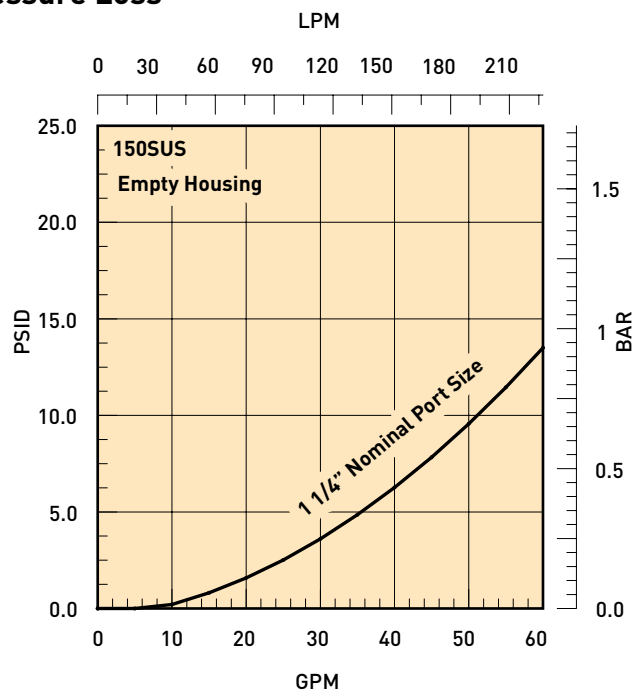
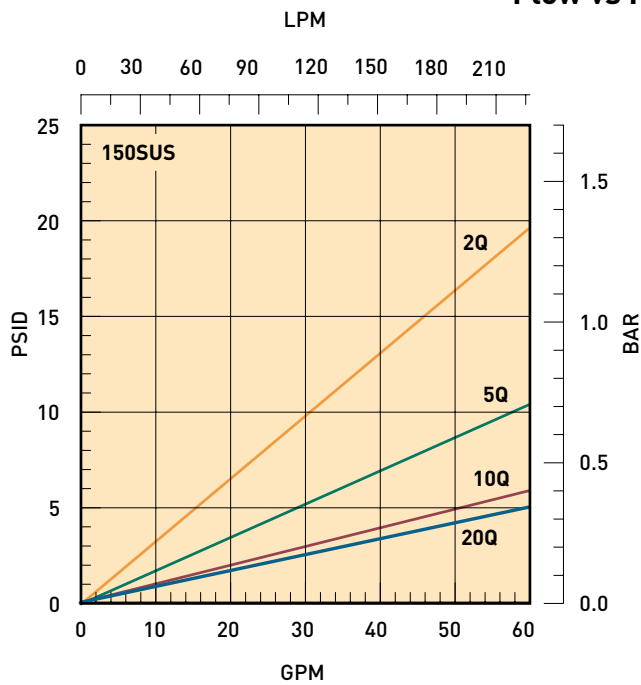


## 50AS-1 Performance



Results typical from Multi-pass tests run per test standard ISO 16889 @ 30 gpm to 50 psid terminal - 10 mg/L BUGL  
Refer to Appendix for relationship to test standard ISO 4572.

## Flow vs Pressure Loss



# Coreless Spin-on Filters

12AS/50AS Series

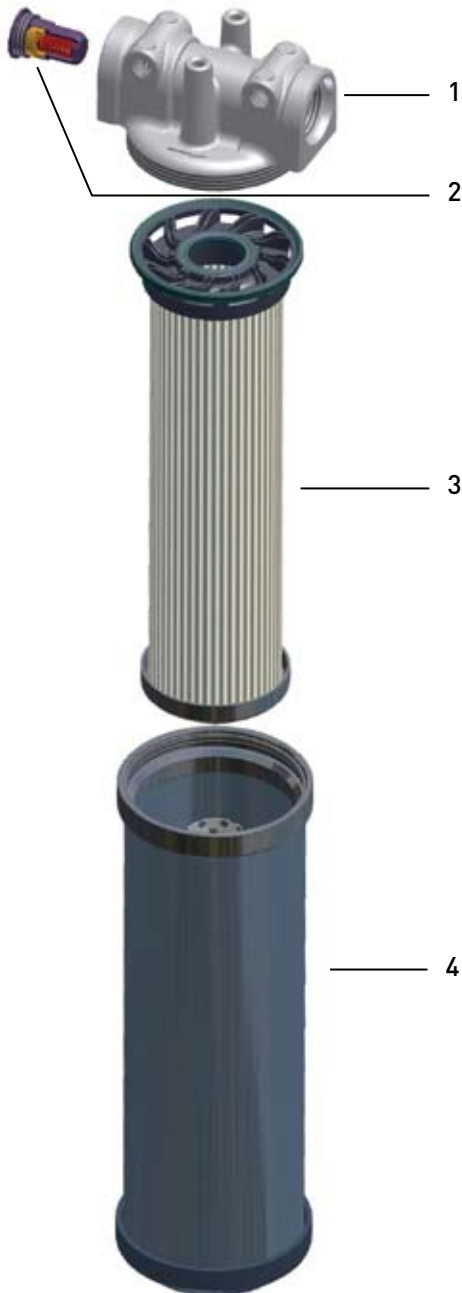
## Service Instructions 12AS/50AS Series

### Filter Service

Filter element should be replaced as indicated by filter indicator gauge, or at specified service intervals recommended by the OEM.

### Replacement element procedure

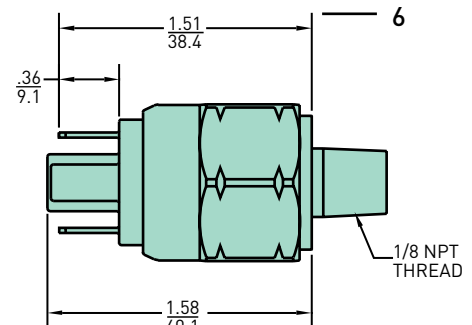
- A. Shut down system and release pressure in the filter line.
- B. Loosen bowl and remove rotating counter clockwise.
- C. Remove dirty element from filter head and discard.
- D. Lubricate element seals on clean element and install on filter head element locator.
- E. Install reusable bowl onto element and filter head. Tighten to specified torque.



Indicator Gauge (25 PSI)

## Parts List

Index		12AS	50AS	
1	<b>Head</b>			
	SAE-12	937600	N/A	
	3/4" NPT	937612	N/A	
	G3/4" BSPP	940898	N/A	
	SAE-20	N/A	940791	
	1 1/4" NPT	N/A	940792	
2	<b>Bypass</b>			
	25 psid assembly	928979	930507	
	50 psid assembly	928981	933424	
	3	<b>Element</b>		
		Single		
		02QE	N/A	940816Q
05QE		N/A	940817Q	
10QE	N/A	940818Q		
20QE	N/A	940819Q		
4	<b>Bowl</b>			
	Double			
	02QE	940765Q	N/A	
	05QE	940764Q	N/A	
	10QE	940763Q	N/A	
	20QE	940762Q	N/A	
5	<b>Gauge</b>			
	50 PSID bypass	936628	936628	
	25 PSID bypass	936912	936912	
6	<b>Pressure Switch</b>			
	50 PSID bypass	934617	934617	
	25 PSID bypass	926923	926923	



Pressure Switch

Linear Measure = inches  
mm

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## 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
<b>12AS</b>	<b>2</b>	<b>10QE</b>	<b>B</b>	<b>P</b>	<b>G</b>	<b>S12</b>	<b>1</b>

BOX 1: Basic Assembly	
Symbol	Description
<b>12AS</b>	Coreless Spin-On, 20 GPM nominal
<b>50AS</b>	Coreless Spin-On, 40 GPM nominal

BOX 6: Bypass	
Symbol	Description
<b>G</b>	25 PSID (1.7 bar)
<b>K</b>	50 PSID (3.5 bar)

BOX 2: Length	
Symbol	Description
<b>1</b>	Single (50AS model only)
<b>2</b>	Double (12AS model only)

BOX 7: Ports	
Symbol	Description
	<u><b>12AS</b></u>
<b>S12</b>	<b>SAE-12 integral threads*</b>
<b>N12</b>	3/4" NPT integral threads
<b>G12</b>	G3/4" BSPP (ISO 220) integral threads
	<u><b>50AS</b></u>
<b>S20</b>	<b>SAE-20 integral threads*</b>
<b>N20</b>	1 1/4" NPT integral threads
<b>G20</b>	G1 1/4" BSPP (ISO 220) integral threads

BOX 3: Element Media	
Symbol	Description
<b>02QE</b>	Ecoglass III, 2µm
<b>05QE</b>	Ecoglass III, 5µm
<b>10QE</b>	Ecoglass III, 10µm
<b>20QE</b>	Ecoglass III, 20µm

\*Porting recommended for best delivery.

BOX 4: Seals	
Symbol	Description
<b>B</b>	Nitrile (NBR)
Consult Factory for additional seal options	

Symbol	Description
<b>1</b>	No options

BOX 5: Indicator	
Symbol	Description
<b>P</b>	Gauge Ports (4) Plugged

### Replacement Elements (Ecoglass)

Media	Filter Model - Nitrile seals	
	12AS-2	50AS-1
02QE	940765Q	940816Q
05QE	940764Q	940817Q
10QE	940763Q	940818Q
20QE	940762Q	940819Q

### Accessories

Part Number	Description
936912	Pressure gauge, 2" 0-60 psid <b>(25 psid bypass)</b>
936628	Pressure gauge, 0-100 psid <b>(50 psid bypass)</b>
926923	Pressure switch, 20 ± 2 psid 5A @ 24 VDC <b>(25 psid bypass)</b>
934617	Pressure switch, 43 ± 3 psid <b>(50 psid bypass)</b>

Accessories for use in low pressure application only.





## Parker Worldwide Sales Offices

Contact Parker's worldwide service  
and distribution network by calling:

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Belgium • +32 (2) 762 1800  
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Canada • 1-800-272-7537  
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Fax: (419) 644-6205

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Thetford, Norfolk  
IP24 3RT England  
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<http://www.parker.com/hydraulicfilter>