Coreless Filters
12AS/50AS Series

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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Advantage</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 500 PSI operating pressure</td>
<td>• Withstands pressure surges, allows application versatility.</td>
<td>• Broader applications compared to 150 PSI rated spin-on cans.</td>
</tr>
<tr>
<td>• Patented element</td>
<td>• Provides head-to-bowl seal.</td>
<td>• Provides optimum leak-free performance.</td>
</tr>
<tr>
<td></td>
<td>• Must be installed for operation.</td>
<td>• Meets system cleanliness requirements.</td>
</tr>
<tr>
<td></td>
<td>• Ensures original element must be used.</td>
<td></td>
</tr>
<tr>
<td>• Coreless Ecoglass elements</td>
<td>• Lightweight, non-metallic.</td>
<td>• Reduces disposal costs.</td>
</tr>
<tr>
<td></td>
<td>• Ease of service and disposal.</td>
<td>• Can be incinerated.</td>
</tr>
<tr>
<td>• Spin-on filter assembly w/reuseable bowl</td>
<td>• Improved, cost-effective design.</td>
<td>• Low environmental impact in landfills.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Easy to maintain.</td>
</tr>
</tbody>
</table>
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.................3 lbs. (1.4 kg)
- 50AS-1.................6 lbs. (2.7 kg)
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

Parker Hannifin Corporation
Hydraulic Filter Division
Metamora, OH
Coreless 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.

<table>
<thead>
<tr>
<th>Index</th>
<th>Description</th>
<th>12AS</th>
<th>50AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Bypass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Element</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Bowl</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Gauge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Pressure Switch</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Index 1 2AS 50AS
1     Head
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
G1 1/4” BSPP NA 940918
2     Bypass
25 psid assembly 928979 930507
50 psid assembly 928981 933424
3     Element
Single
02QE N/A 940816Q
05QE N/A 940817Q
10QE N/A 940818Q
20QE N/A 940819Q
Double
02QE 940765Q N/A
05QE 940764Q N/A
10QE 940763Q N/A
20QE 940762Q N/A
4     Bowl
Single N/A 940823
Double 937599 N/A
5     Gauge
50 PSID bypass 936628 936628
25 PSID bypass 936912 936912
6     Pressure Switch
50 PSID bypass 934617 934617
25 PSID bypass 926923 926923

Indicator Gauge (25 PSI)

Linear Measure = inches
1/8 NPT THREAD
# Coreless Filters

## 12AS/50AS Series

### How To Order
Select the desired symbol (in the correct position) to construct a model code.

**Example:**

<table>
<thead>
<tr>
<th>BOX 1</th>
<th>BOX 2</th>
<th>BOX 3</th>
<th>BOX 4</th>
<th>BOX 5</th>
<th>BOX 6</th>
<th>BOX 7</th>
<th>BOX 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>12AS</td>
<td>2</td>
<td>10QE</td>
<td>B</td>
<td>P</td>
<td>G</td>
<td>S12</td>
<td>1</td>
</tr>
</tbody>
</table>

**BOX 1: Basic Assembly**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12AS</td>
<td>Coreless Spin-On, 20 GPM nominal</td>
</tr>
<tr>
<td>50AS</td>
<td>Coreless Spin-On, 40 GPM nominal</td>
</tr>
</tbody>
</table>

**BOX 2: Length**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Single (50AS model only)</td>
</tr>
<tr>
<td>2</td>
<td>Double (12AS model only)</td>
</tr>
</tbody>
</table>

**BOX 3: Element Media**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>02QE</td>
<td>Ecoglass III,2µm</td>
</tr>
<tr>
<td>05QE</td>
<td>Ecoglass III,5µm</td>
</tr>
<tr>
<td>10QE</td>
<td>Ecoglass III,10µm</td>
</tr>
<tr>
<td>20QE</td>
<td>Ecoglass III,20µm</td>
</tr>
</tbody>
</table>

**BOX 4: Seals**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Nitrile (NBR)</td>
</tr>
</tbody>
</table>

Consult Factory for additional seal options

**BOX 5: Indicator**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Gauge Ports (4) Plugged</td>
</tr>
</tbody>
</table>

**BOX 6: Bypass**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>25 PSID (1.7 bar)</td>
</tr>
<tr>
<td>K</td>
<td>50 PSID (3.5 bar)</td>
</tr>
</tbody>
</table>

**BOX 7: Ports**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S12</td>
<td>SAE-12 integral threads*</td>
</tr>
<tr>
<td>N12</td>
<td>3/4” NPT integral threads</td>
</tr>
<tr>
<td>G12</td>
<td>G¾” BSPP (ISO 220) integral threads</td>
</tr>
<tr>
<td>S20</td>
<td>SAE-20 integral threads*</td>
</tr>
<tr>
<td>N20</td>
<td>1¼” NPT integral threads</td>
</tr>
<tr>
<td>G20</td>
<td>G1¼” BSPP (ISO 220) integral threads</td>
</tr>
</tbody>
</table>

*Porting recommended for best delivery.

**BOX 8: Option**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No options</td>
</tr>
</tbody>
</table>

### Replacement Elements (Ecoglass)

<table>
<thead>
<tr>
<th>Media</th>
<th>Filter Model - Nitrile seals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12AS-2</td>
</tr>
<tr>
<td>02QE</td>
<td>940765Q</td>
</tr>
<tr>
<td>05QE</td>
<td>940764Q</td>
</tr>
<tr>
<td>10QE</td>
<td>940763Q</td>
</tr>
<tr>
<td>20QE</td>
<td>940762Q</td>
</tr>
</tbody>
</table>

### Accessories

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>936912</td>
<td>Pressure gauge, 2” 0-60 psid (25 psid bypass)</td>
</tr>
<tr>
<td>936628</td>
<td>Pressure gauge, 0-100 psid (50 psid bypass)</td>
</tr>
<tr>
<td>926923</td>
<td>Pressure switch, 20 ± 2 psid 5A @ 24 VDC (25 psid bypass)</td>
</tr>
<tr>
<td>934617</td>
<td>Pressure switch, 43 ± 3 psid (50 psid bypass)</td>
</tr>
</tbody>
</table>

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
Brazil • +55 (11) 3917 1407
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India • +91 (22) 451921
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Korea • +82 (2) 561 0414
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Oxnard, CA 93030
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Fax: (805) 604-3401

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Fax: (209) 529-3278

Filtration and Separation, Finite Filter Operation
500 Glaspie Street
Oxford, MI 48371
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Phone: (248) 628-6400
Fax: (248) 628-1850

Filtration and Separation, Balston Operation
242 Neck Road
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Haverhill, MA 01835-0723
Phone: (800) 343-4048
Fax: (978) 858-0625

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Condition Monitoring Centre
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Fax: (44) 1842-756300

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Fax: +358 20 753 2502

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