Technical features

Medium:
Compressed air only

Maximum operating pressure:
Polycarbonate bowl: 145 psi (10 bar)
Metal bowl: 246 psi (17 bar)

Remaining oil content:
0.01 mg/m³ at +69°F (+21°C)

Particle removal:
To 0.01 μm

Port size:
G1/4, G3/8, 1/4 PTF, 3/8 PTF

Dry element flow:
operating pressure 91 psi (6.3 bar)
and a Δp: 7.25 psi (0.5 bar) drop
from set. 1/4”= 32 scfm (15.1 dm³/s)

Automatic drain operating conditions (float operated):
Bowl pressure required to
close drain: 5 psi (> 0.35 bar)
Bowl pressure required to
open drain: 2.9 psi (≤ 0.2 bar)
Minimum air flow required to
close drain: 2 scfm (1 dm³/s)

Materials:
Body: Die cast aluminium
Body covers: ABS
Bowl: Transparent PC with
PP guard or die cast zinc
Liquid level indicator lens
(metal bowl): PA
Filter element:
Synthetic fiber & PE foam
Bowl ‘o’- ring: Chloroprene
Elastomers: NBR

Drain:
Manual or automatic

Ambient/Media temperature:
Polycarbonate bowl:
+14 ... +140°F (-10 ... +60°C)
Metal bowl:
-4 ... +149°F (-20 ... +65°C)

Air supply must be dry enough
to avoid ice formation at
temperatures below +35°F (+2°C).

Note:
Install an F82G filter with a 5 μm
filter element upstream of the F82C
filter for maximum service life.

Technical data F82C

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Port Size (PTF)</th>
<th>Drain</th>
<th>Bowl</th>
<th>Weight lb (kg)</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>1/4</td>
<td>Auto</td>
<td>Guarded polycarbonate</td>
<td>0.55 (0.25)</td>
<td>F82C-2AD-AP0</td>
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<tr>
<td></td>
<td>3/8</td>
<td>Auto</td>
<td>Guarded polycarbonate</td>
<td>0.55 (0.25)</td>
<td>F82C-3AD-AP0</td>
</tr>
<tr>
<td>[ ]</td>
<td>1/4</td>
<td>Auto</td>
<td>Metal with level indicator</td>
<td>0.97 (0.44)</td>
<td>F82C-2AD-AD0</td>
</tr>
<tr>
<td></td>
<td>3/8</td>
<td>Auto</td>
<td>Metal with level indicator</td>
<td>0.97 (0.44)</td>
<td>F82C-3AD-AD0</td>
</tr>
<tr>
<td>[ ]</td>
<td>1/4</td>
<td>Manual</td>
<td>Guarded polycarbonate</td>
<td>0.55 (0.25)</td>
<td>F82C-2AD-QP0</td>
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<tr>
<td></td>
<td>3/8</td>
<td>Manual</td>
<td>Guarded polycarbonate</td>
<td>0.55 (0.25)</td>
<td>F82C-3AD-QP0</td>
</tr>
<tr>
<td>[ ]</td>
<td>1/4</td>
<td>Manual</td>
<td>Metal with level indicator</td>
<td>0.99 (0.45)</td>
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<td>3/8</td>
<td>Manual</td>
<td>Metal with level indicator</td>
<td>0.97 (0.44)</td>
<td>F82C-3AD-QD0</td>
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</tbody>
</table>

Option selector

<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
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<td>2</td>
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<tr>
<td>3/8&quot;</td>
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</table>

Option selector

<table>
<thead>
<tr>
<th>Port size</th>
<th>Substitute</th>
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</thead>
<tbody>
<tr>
<td>PTF</td>
<td>A</td>
</tr>
<tr>
<td>ISO G</td>
<td>G</td>
</tr>
</tbody>
</table>

F82C−★★D−★★0

Bowl
Transparent with guard
Metal with liquid indicator

Drain
Manual
Auto drain

Substitute
P
D
Q
A
Flow characteristics

Port size: 1/4"
Oil Coalescing Filter

<table>
<thead>
<tr>
<th>Inlet Pressure psi (bar)</th>
<th>Flow-rate to maintain media velocity of ISO12500-1 test on oil coalescing filter (L/sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 (2.5)</td>
<td>2.6</td>
</tr>
<tr>
<td>58 (4)</td>
<td>3.7</td>
</tr>
<tr>
<td>91 (6.3)</td>
<td>5.5</td>
</tr>
<tr>
<td>116 (8)</td>
<td>6.8</td>
</tr>
<tr>
<td>145 (10)</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Dry Flow

Port size: 1/4"

![Graph showing flow characteristics for 1/4" port size](image)

Port size: 3/8"

![Graph showing flow characteristics for 3/8" port size](image)
**Accessories**

- **Wall mounting bracket**  
  page 4  
  820024-50KIT  

- **Quikclamp®**  
  page 4  
  820014-51KIT  

- **Quikclamp® with bracket assembled**  
  page 4  
  820014-52KIT  

- **Pressure removal filters**  
  page 4  
  820016-50KIT  

- **Auto drain kit with metal Nut - Imperial**  
  page 4  
  820044-50KIT  

- **Auto drain kit with metal Nut - Metric**  
  page 4  
  6000-60KIT  

- **Metal with S/Glass & auto drain, 1/4 PIF**  
  page 5  
  6000-60KIT  

- **Filter Bowl (Guarded Poly bowl with auto drain, 1/4 PIF)**  
  page 4  
  820025-51KIT  

- **Filter Bowl (Guarded Poly bowl with manual drain)**  
  page 4  
  820025-50KIT  

- **Filter Bowl (Metal with S/Glass & auto drain, 6 mm PIF)**  
  page 5  
  820003-51KIT  

- **Filter Bowl (Metal with S/Glass & manual drain)**  
  page 5  
  820003-56KIT  

- **Filter Bowl (Metal with S/Glass & auto drain, 1/4 PIF)**  
  page 4  
  820025-53KIT  

- **Coalescing filter element**  
  page 6  
  820044-50KIT  

*1) Flanged version. For other pressure ranges, please see data sheet 5.11.001  
*2) For other pressure ranges, please see data sheet 5.11.385  

**Spare parts**

- **Filter Bowl**  
  page 5  
  820025-51KIT  

- **Filter Bowl**  
  page 5  
  820025-50KIT  

- **Filter Bowl**  
  page 5  
  820003-51KIT  

- **Filter Bowl**  
  page 5  
  820003-56KIT  

- **Filter Bowl**  
  page 5  
  820003-50KIT  

**Maintenance/Service**

- **Auto drain kit with metal Nut - Metric**  
  6000-60KIT  

- **Auto drain kit with metal Nut - Imperial**  
  6000-61KIT  

- **Coalescing filter element**  
  820044-50KIT  

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Dimensions

Dimensions in inches (mm)
Projection/Third angle

# Minimum clearance for bowl removal
- Main ports 1/4", 3/8" (ISO G/PTF)
- Transparent bowl with guard
- Metal bowl with liquid level indicator lens
- Service indicator

Dimensions in inches (mm)
Projection/Third angle

# Minimum clearance for bowl removal
- Main ports 1/4", 3/8" (ISO G/PTF)
- Transparent bowl with guard
- Metal bowl with liquid level indicator lens
- Service indicator
Accessories

Quikclamp® with wall bracket

Quikclamp®

Pressure sensing block

Dimensions in inches (mm)
Projection/Third angle

Mounting bracket

Full flow porting block

Porting block for 18D pressure switch

18D Pressure switch

18D Porting block and 18D assembled

Pipe adaptor

Dimensions in inches (mm)
Projection/Third angle

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51D Pressure switch - digital

Warning
These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under «Technical features/data». Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI Precision Engineering, Norgren Ltd. Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure. System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided. System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.