Quick Connectors
210 Aluminum

Recommended for Engine Oil Cooling, Transmission Oil Cooling, and Turbocharger Cooling & Oil Supply Applications

Benefits
- Inherent corrosion resistance
- Compact space and weight savings
- Easily serviceable
- Improved ergonomics, low insertion force and tool free installation

Ruggedly constructed from 6061-T6 aluminum: inherent corrosion resistance
Optional washer: component reduction for in-tank coolers
One piece machined body: compact space and lightweight
Designed for maximum performance: 100% production leak tested
Improved ergonomics and cleanliness with rounded corners
Controlled axial clearance: prevents micro leakage
Minimum pressure drop: ensures optimum flow
Robust retainer mechanism: low insertion force
External ISO seal: leak prevention at thread interface
Internal seal: leak prevention at tube interface
Quick Connectors 210

PRODUCT DESCRIPTION

Oetiker Quick Connectors (QC) are an innovative connecting solution for pressure lines carrying media. They enable significant savings in assembly time, space required, assembly costs to be made, reduced warranties, and reduced injuries due to repetitive motion. Thanks to tool-free assembly, Oetiker QCs are an optimal solution for many applications and are particularly suitable as a connecting element for oil and/or coolant and heating lines to turbochargers, engines, and transmissions.

TECHNICAL DATA OVERVIEW

<table>
<thead>
<tr>
<th>Material</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>210</strong> Body: SAE 6061-T6 Aluminum (UNS A96061, DIN W. Nr. 3.3211)</td>
<td>Retainer options: SAE Stainless Steel 302 (UNS S30400)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal and external seal options</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FKM (-40 °C … 205 °C), excellent ozone and heat aging resistance</td>
<td>AEM (-40 °C … 180 °C), very good resistance to oil and grease</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Conical washer for in-tank cooler applications</th>
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<tr>
<th>Corrosion resistance according to ISO 9227</th>
<th></th>
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<tbody>
<tr>
<td>Aluminum ≥ 980 hours to red rust</td>
<td></td>
</tr>
</tbody>
</table>
**TECHNICAL DATA**

**Overall connector dimensions**

<table>
<thead>
<tr>
<th>Line size</th>
<th>HEX size</th>
<th>Ext Thread size</th>
<th>Overall Length</th>
<th>Installed Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>⅜&quot;</td>
<td>⅜&quot;</td>
<td>9/16-18 UNF-2A</td>
<td>20.33 mm</td>
<td>11.81 mm</td>
</tr>
<tr>
<td>½&quot;</td>
<td>1&quot;</td>
<td>⅞-16 UNF-2A</td>
<td>28.4 mm</td>
<td>17.3 mm</td>
</tr>
<tr>
<td>⅝&quot;</td>
<td>1 ½&quot;</td>
<td>7/8-14 UNF-2A</td>
<td>30.9 mm</td>
<td>19.89 mm</td>
</tr>
<tr>
<td>10 mm</td>
<td>22 mm</td>
<td>M16 x 1.5-6g</td>
<td>26.1 mm</td>
<td>13.6 mm</td>
</tr>
<tr>
<td>12 mm</td>
<td>27 mm</td>
<td>M20 x 1.5-6g</td>
<td>28.4 mm</td>
<td>14.4 mm</td>
</tr>
<tr>
<td>16 mm</td>
<td>28 mm</td>
<td>M22 x 1.5-6g</td>
<td>34.5 mm</td>
<td>19.5 mm</td>
</tr>
</tbody>
</table>

**Process monitoring**

Process monitoring is carried out mechanically. With appropriate modification of the plug or tube, visual process monitoring is also possible.

**Temperature range**

The temperature range is dependent on the material of the O-ring and body materials. This is determined according to the requirements.

**ASSEMBLY**

To make the connection, align the tube with connector while pushing straight into the connector. You will hear and feel the “click” connection. Pull firmly back on the tube to ensure a proper connection has been made. Ensure colored identification band on the tube end is hidden within quick connector assembly. Slide the optional assurance cap along the tube and snap it onto the connector.

To disconnect, remove the assurance cap and snap or place the disconnect tool onto the tube with the fingers facing the connector. Slide the disconnect tool down the tube and engage the retainer. Rotate the disconnect tool 60 degrees to expand the retainer. While holding the disconnect tool against the connector, pull back on the tube to remove.

**OETIKER TUBE ENDFORM**

Oetiker quick connectors are qualified only when mating with tube end forms per the Oetiker specification. This specification is Oetiker controlled, and available upon request.

Oetiker’s engineering and quality teams are available to support qualifying tube endform suppliers. Recommended endform tooling and tube suppliers is available.

**PERFORMANCE**

**Operating pressure**

The permissible operating pressure is directly dependent on the O-ring selected, the temperature, and the quality of the male component. It must always be determined in relation to the application.

**OPTIONAL ACCESSORIES**

- Conical washer for in-tank coolers
- Anodizing option – cosmetic & visual manufacturing aid
- Galling reducer – consistent torque profile
- Shipping plug (polypropylene)
- Assurance cap (default) – up to 85 °C (black or grey)
- Assurance cap (high temp.) – up to 230 °C (white)
- Disconnect tool (plastic)
- Customized packaging on request

Shipping plug, assurance cap, disconnect tool