

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

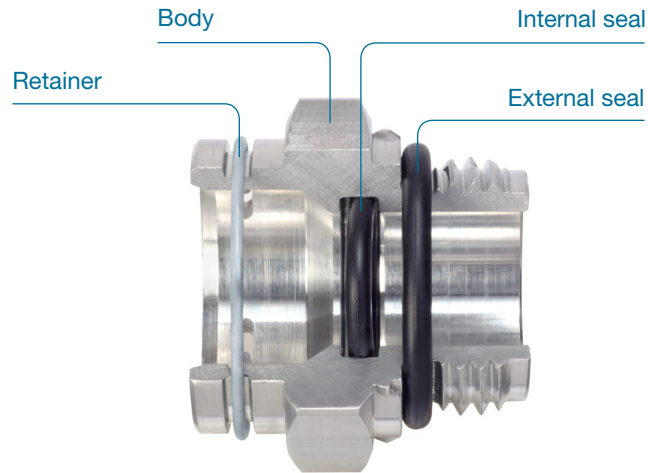
Minimum pressure drop: ensures optimum flow

Robust retainer mechanism: low insertion force

External ISO seal: leak prevention at thread interface

Internal seal: leak prevention at tube interface

FEATURES



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

Material

210 Body: SAE 6061-T6 Aluminum
(UNS A96061, DIN W. Nr. 3.3211)

Retainer options: SAE Stainless Steel 302 (UNS S30400)

Internal and external seal options

FKM (-40 °C ... 205 °C), excellent ozone and heat aging resistance

AEM (-40 °C ... 180 °C), very good resistance to oil and grease

Conical washer for in-tank cooler applications

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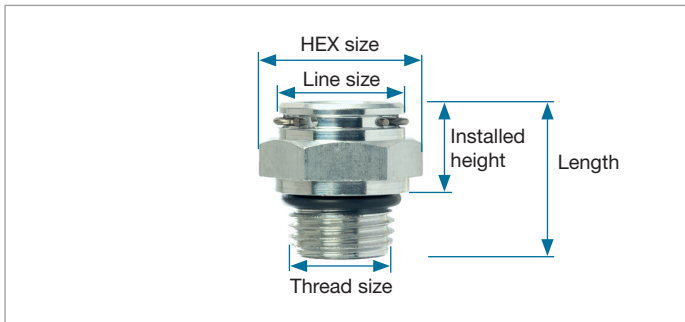


Aluminum QC with conical washer

Corrosion resistance according to ISO 9227

Aluminum ≥ 980 hours to red rust

TECHNICAL DATA



Overall connector dimensions

Line size	HEX size	Ext Thread size	Overall length	Installed height
3/8"	3/4"	9/16-18 UNF-2A	20.33 mm	11.81 mm
1/2"	1"	3/4-16 UNF-2A	28.4 mm	17.3 mm
5/8"	1 1/2"	7/8-14 UNF-2A	30.9 mm	19.89 mm
10 mm	22 mm	M16 x 1.5-6g	26.1 mm	13.6 mm
12 mm	27 mm	M20 x 1.5-6g	28.4 mm	14.4 mm
16 mm	28 mm	M22 x 1.5-6g	34.5 mm	19.5 mm

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.

Line size	Tensile	Burst	Corrosion
3/8", 10 mm	3.5 kN	≥ 11 MPa*	980 hours to red rust
1/2", 12 mm	6.0 kN	≥ 11 MPa*	980 hours to red rust
5/8", 16 mm	7.3 kN	≥ 11 MPa*	980 hours to red rust

* tested to 11MPa without failure

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