SCHOTT Eternaloc™ Electrical Terminal Headers
Proven in more than 6,000 Cryogenic Submerged Pumps and Expanders since 1985

Product Information

Electrical terminal headers serve as the hermetic feedthroughs for electrical power, and as the control and instrumentation conductors in expanders, compressors and submerged LNG pumps.

As safety-critical components, terminal headers have to maintain the pressure boundary integrity of the containment and remain absolutely leak tight, even in case of an accident. Their quality and reliability is of utmost importance.

Advantages of SCHOTT Eternaloc™ Terminal Headers

Extensive reference list
Eternaloc™ terminal headers are performing maintenance-free in more than 6,000 LNG pumps and turbine expanders worldwide since 1985, in both on- and offshore applications.

Experience in explosion-proof certification
Eternaloc™ terminal headers comply with ATEX and IECEx standards as well as local regulations such as KOSHA.

Superior technology
Using SCHOTT’s unique, compression glass-to-metal sealing technology, Eternaloc™ terminal headers provide:

- **Enhanced safety** in cases of accidents or explosions
- **Superior resistance** against mechanical stress, high pressure, temperature cycling, extreme temperatures and radiation
- **Longer lifetime** as non-aging glass-to-metal seals are maintenance-free, thereby reducing recalls and replacements as well as the total cost of ownership.

Other sealing technologies that use organic polymers or ceramics could compromise the integrity of the seal and result in leakage and electrical malfunction. Hence, SCHOTT’s glass-to-metal sealing technology is deemed to be the safest available today.

Standard and customized solutions
Our in-house engineering capabilities, including materials science, simulations and type tests as well as certification know-how, enable us to provide both standard as well as fully customized designs of electrical penetrators, connectors and complete electrical system solutions.
**SCHOTT Eternaloc™ Electrical Terminal Headers**
Proven in more than 6,000 Cryogenic Submerged Pumps and Expanders since 1985

<table>
<thead>
<tr>
<th>Product Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Temperature resistance</strong></td>
</tr>
<tr>
<td><strong>Pressure resistance</strong></td>
</tr>
<tr>
<td><strong>Electrical rating</strong></td>
</tr>
</tbody>
</table>
| **Quality assurance** | • 100% final inspection of all products  
• In-house testing capabilities:  
  - Current / Voltage (up to high voltage)  
  - Hermeticity (helium mass spectrometer)  
  - Insulation resistance  
  - Non-destructive tests / investigations (PMI)  
  - Pressure Tests up to 160 MPa  
  - Cryogenic tests |
| **Installation** | • Minimum space impact  
• Easy and low cost installation utilizing a connector  
• Detailed installation instructions, supervision as well as training support |
| **Lifetime** | Unlimited lifetime of the non-aging pressure barrier |
| **Certifications** | SCHOTT Eternaloc™ Terminal Headers comply with ATEX and IECEx standards, as well as local regulations such as KOSHA. |

**About SCHOTT Electronic Packaging**

SCHOTT’s Business Unit Electronic Packaging is a worldwide leading supplier of hermetic packaging solutions for the reliable, long-term protection of sensitive electronic devices. Since the 1930s, we have been developing, manufacturing and optimizing hermetic packaging solutions by using specialized glass, glass-to-metal and today also ceramic-to-metal sealing technology.

With 1,500 employees at five production locations in Germany, the Czech Republic, Singapore, U.S.A. and Japan as well as competence centers worldwide, local customer support and co-developments are at the heart of the business.

**About SCHOTT**

SCHOTT is an international technology group with more than 130 years of experience in the areas of specialty glasses and materials and advanced technologies. The SCHOTT Group maintains close proximity to its customers with manufacturing and sales units in 35 countries and a workforce of around 15,400 employees worldwide.