SCHOTT

Uncompromised reliability for Oil & Gas electronics

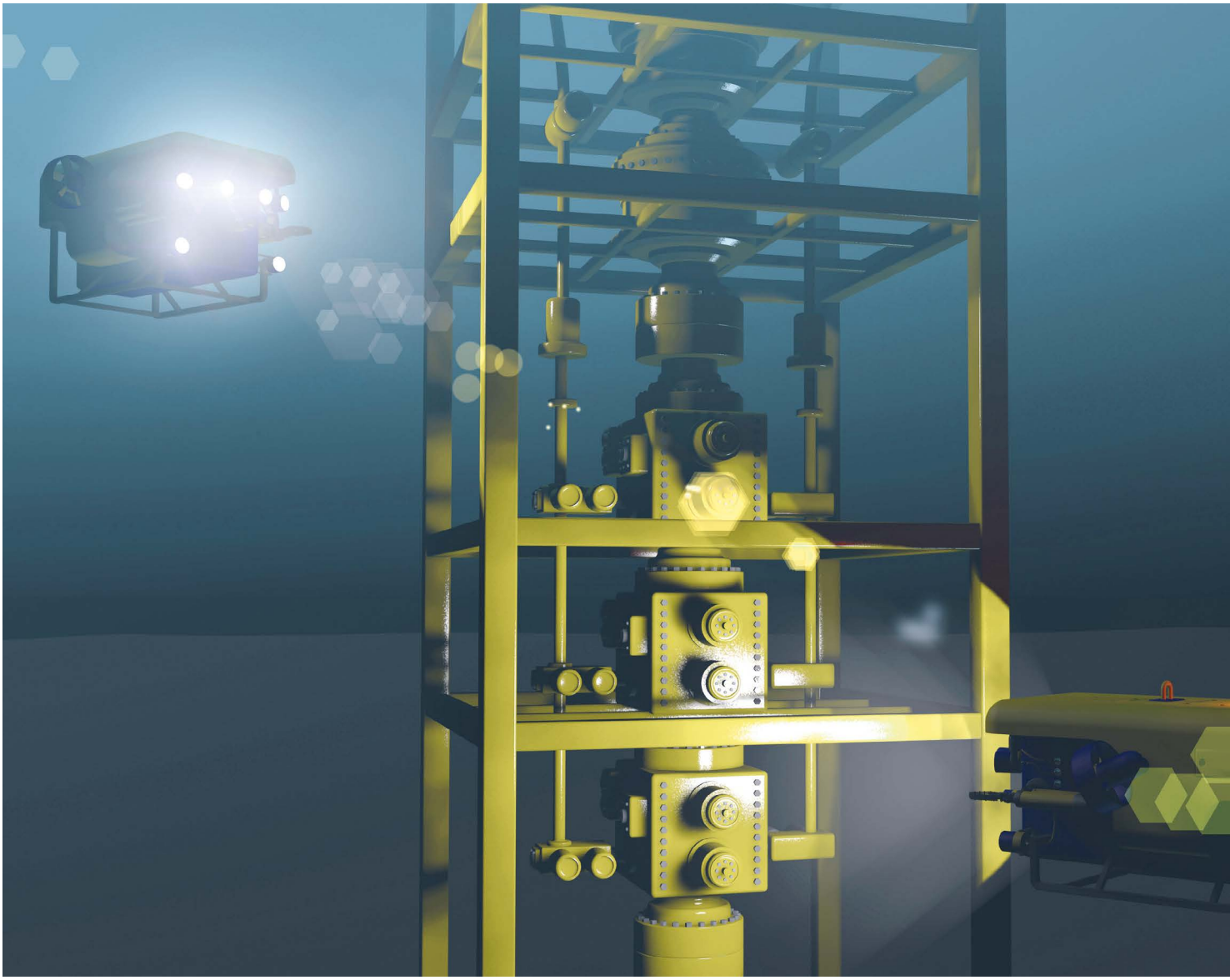
Oil & Gas applications face challenging conditions

Electronic components and systems in oil and gas applications faces some of the harshest conditions imaginable – from extreme temperatures and high pressures deep below the earth's surface to corrosive and explosive atmospheres offshore. In such critical environments, the smallest failure can have severe consequences for safety, reliability, and operational continuity.

SCHOTT's hermetic Eternaloc® components are engineered to perform reliably under exactly these challenges. With unmatched resistance to temperature extremes, pressure, and aggressive media, they enable long-term, gas-tight sealing and reliable signal and power transmission – protecting people, equipment, and productivity where it matters most.

Eternaloc® subsea connectors and feedthroughs

Years of maintenance-free performance above 20,000 PSI enabling continued revenue



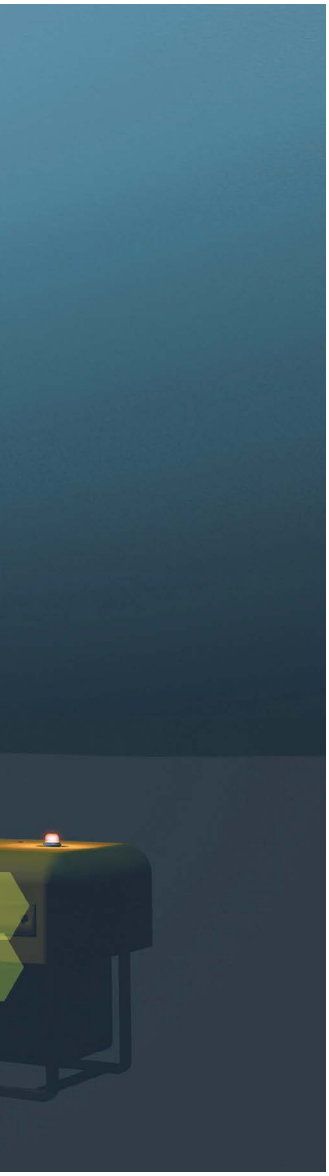
Eternaloc® connectors are designed as maintenance-free, customizable barriers that are hermetically sealed and remain leak-tight, even after years of use. They offer long-term durable protection of subsea tree components, such as wellhead pressure sensors, in high temperature, high pressure conditions. Moreover, hermetic feedthroughs are key components of active magnetic bearing systems (AMB) in transportation applications.

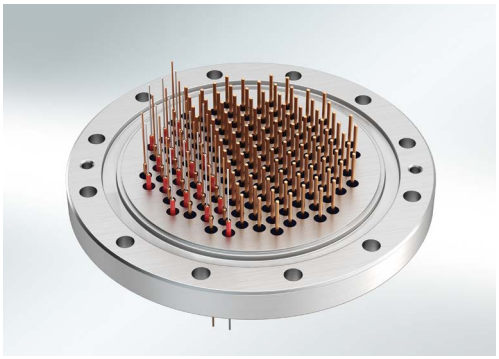
Temperature resistance
–170 °C to +450 °C
(-274 °F to + 842 °F)

Pressure resistance
Design pressure: 20,000 PSI
Burst pressure: 50,000 PSI

Fully customizable
- Up to: 600 mm diameter, 500 mm height and 250 kg
- Electrical performance up to 13,800V, 1500A; coax, triax and fiber optic connections available

Long-term, maintenance-free durability
Decades of proven performance in harsh environment applications preventing costly component replacements.





Eternaloc® connectors for oil exploration

Built to withstand >35,000 PSI in extreme environments to maintain performance when failure is not an option.

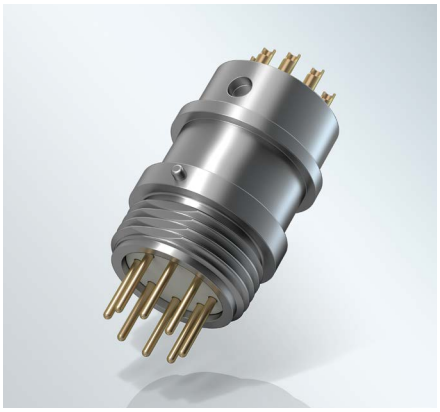
SCHOTT has developed customizable Eternaloc® connectors for use in high pressure, high temperature oil & gas exploration environments. These components are designed to support safe and reliable transmission of valuable data and information provided by sensors in Wireline, MWD and LWD applications.

Temperature resistance
Withstanding temperatures in excess of 500°F / 260°C

Pressure resistance
Design: 20,000 PSI
Burst: 50,000 PSI

Insulation resistance
≥ 10GΩ, higher IR can be achieved at 500°F / 260°C

Fully customizable
Single and multi-pin, custom materials & designs



Specialty glass seals – The secret to success

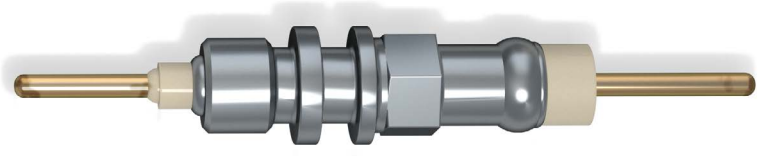
Thermoplastic

The extreme conditions in drilling applications are prohibitive for lesser-quality materials. Connectors using thermoplastic seals are prone to deformation from creepage, leading to an increased risk of seal compromise.

SCHOTT glass-sealing

Connectors sealed with specialty glass maintain integrity even at 35KSI / 260°C (500ºF) thanks to:

- Inorganic, non-aging material
- Resistance to extreme temperature



Glass seals maintain integrity

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