

Trident

Extreme-conditions motor lead extension

APPLICATIONS

- Offshore and onshore high-profile wells
- MaxFORTE* high-reliability ESP systems and REDA* Maximus* ESP systems with high horsepower
- High-H₂S environments
- 7½-in [19-cm] or larger casings and pods
- Single- or dual-ESP completions

BENEFITS

- Reduces operating costs by improving ESP motor reliability and run life
- Simplifies installation and saves rig time

FEATURES

- Three separate and individually armored leads to improve phase separation, insulation, mechanical protection, and heat dissipation
- Polyetheretherketone (PEEK®)-insulated cable leads, with extra-thick 0.04-in [1.016-mm] lead sheaths, to protect against gas ingress and H₂S corrosion
- PEEK-insulated, solid copper conductor cable leads to provide high current-bearing capacity, temperature stability, and excellent dielectric strength
- Advanced elastomers to accommodate wide temperature swings
- 6¼-in [16-cm] motor head OD compatible with 7½-in [19-cm] or larger casings and pods
- Optional test ports in motorhead for each individual connector

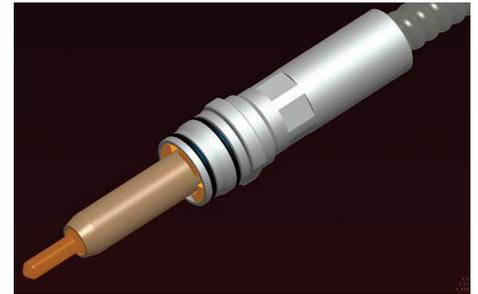
The Trident* extreme-conditions motor lead extension (MLE) maximizes ESP system reliability with an innovative, robust design that uses advanced materials to ensure long-term, dependable performance in the most high-power-demand and run-life-critical applications.

The Trident MLE comprises three PEEK-insulated, copper conductor cable leads that plug directly into the motor through individual connectors. This design minimizes the cable manipulations usually required during the manufacturing and assembly processes. Such additional manipulations can lead to undetectable insulation microcracks and internal damage, which can reduce system reliability.

Proven, field-friendly design

The high current-carrying capacity of Trident MLE single-core conductors enables higher horsepower with lower stator voltages and less insulation stress than previously possible.

By securing the leads tightly within the OD of the system, the Trident MLE ensures that cables and pothead connectors are protected from mechanical impact and damage while the system is being lowered in the well.



The Trident MLE features innovative pothead design and PEEK-insulated solid copper conductors for superior current-carrying capability and thermal stability.



Three Trident MLEs are installed on an ESP motor. The robust, field-proven design of the Trident MLE and the simple plug-and-play installation ensure superior reliability and longer ESP run life.

Trident Motor Lead Extension Specifications

Series	562	738	738	562	562
Conductor material	1AWG solid copper	1AWG solid copper	1AWG solid copper	4AWG solid copper	4AWG solid copper
Max. voltage, V	5,000	5,000	5,000	5,000	5,000
Max. amperage, A, at bottomhole temperature degF [degC],	225 at 200 [93] 211 at 230 [110] 200 at 250 [121]	247 at 200 [93] 227 at 250 [121] 201 at 300 [149]	167 at 200 [93] 142 at 230 [110] 121 at 250 [121]	128 at 200 [93] 119 at 230 [110] 113 at 250 [121]	92 at 200 [93] 78 at 230 [110] 67 at 250 [121]
Temperature range, degF [degC]	-40 to 400 [-40 to 204]	32 to 450 [0 to 232]	32 to 300 [0 to 151]	10 to 400 [-12 to 204]	-40 to 300 [-40 to 151]
Minimum storage temperature, degF [degC]	-60 [-51]	23 [-5]	28 [-20]	-60 [-51]	-60 [-51]
Conductor insulation, in [mm]	0.075 [1.905] PEEK	0.075 [1.905] PEEK	0.075 [1.905] PEEK	0.075 [1.905] PEEK	0.075 [1.905] PEEK
Barrier, in [mm]	0.040 [1.016]	0.040 [1.016]	0.040 [1.016]	0.040 [1.016]	0.040 [1.016]
Armor	MONEL	MONEL	MONEL	MONEL	MONEL