Oil & Gas - Cable Solutions

Exploration & Production

ESP Cables
Flat Cables

DW 450 MLE - Motor Lead Flat Cable 450 °F

Motor lead flat cable. For easier installation and maintenance, Prysmian ESP cables are shipped on reels of a continuous, splice-free length. Maximum permissible temperature is 450 °F (232 °C).

APPLICATION
Downhole extraction systems are critical for crude oil extraction. The reliability of the electrical power supply to an Electrical Submersible Pump (ESP) system depends on the performance and reliability of the power feed through to the wellhead, power cable, motor lead cable, pig tail connectors and related equipment such as the pump and motor. Prysmian ESP cables offer an efficient, rugged and easy to handle solution that delivers reliable performance in a package that is straightforward to install and maintain.

STANDARDS & APPROVALS
IEEE 1018 as far as applicable.

QUALITY & TESTING
Prysmian has a built-in multi-step quality assurance program, covering the production process from cable design and raw material purchases to final inspection and testing documentation.

The ISO 9001 quality system of Prysmian Group (together with ISO 14001 and OHSAS 18001) has been assessed, approved and is currently audited by SGS.

DESIGN & CONSTRUCTION

1. CONDUCTOR
   Solid plain copper conductors.

2. TAPE
   Two layers of Kapton tape are applied on the conductors to allow high thermal and electrical performances.

3. INSULATION
   A proprietary high quality EPDM compound is chemically bonded to the conductor. It is specially formulated to provide high dielectric and low swell characteristics in presence of oil.

4. LEAD SHEATH
   A continuous, impervious, fatigue and corrosion resistant lead sheath is extruded over the insulation to provide excellent protection against oil, chemicals and gases and insulation decompression.

5. BRAID
   A synthetic braid, applied with full coverage over the lead sheath, provides additional mechanical reinforcement, hoop strength and armour bedding. A suitable overlapped tape can be used as an alternative.

6. ARMOUR
   A 50% lapped, Monel 400 tape armour provides excellent mechanical protection with a high degree of flexibility and is available in thickness of 0.015". Stainless steel or fully galvanized (4 sides) steel tape armour (thickness 0.020") is available for use in less corrosive well environments.
PERFORMANCES/RATINGS

TECHNICAL DATA

**DW 450 MLE - 3 Conductors KAPTON/EPDM/LEAD/MONEL 4 kV - MOTOR LEAD EXTENSION**

<table>
<thead>
<tr>
<th>SIZE</th>
<th>CONDUCTOR STRANDS</th>
<th>CONDUCTOR DIAMETER</th>
<th>INSULATION THICKNESS</th>
<th>INSULATION DIAMETER</th>
<th>DIMENSIONS UNDER ARMOUR</th>
<th>OVERALL DIMENSIONS</th>
<th>WEIGHT</th>
<th>ELECTRICAL PARAMETERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(awg)</td>
<td>(mm²)</td>
<td>(nr)</td>
<td>(in)</td>
<td>(in)</td>
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</tbody>
</table>

r = conductor electrical resistance at 450 °F | x = inductive reactance at 60 Hz

Note: overall dimensions and weights are based on 0.015” armoured tape thickness

This product information sheet is provided for reference only.
For Voltage Drop/Ampacity data, please contact your Prysmian representative.