

EDMC-S electric dry-mate connector

Accelerates installation of downhole cables and gauges with robust, permanent electrical connections



Pressure rating:
20,000 psi [138 MPa]



Temperature rating:
302 degF [150 degC]



Completes connections 4x faster compared with conventional splices

Applications

- Downhole cable-to-cable splice
- Gauge-to-cable-head connection or feedthrough connector to permanent downhole cable (PDC)
- Gauge multidrop installations
- Any condition, subsea or dry tree
- HPHT wells

How it improves wells

The EDMC-S electric dry-mate connector facilitates rapid installation of completions with downhole cables and gauges while maximizing connection quality and lifetime in downhole conditions.

The connector typically improves splicing and cable head connection time by a factor of four while creating a robust triple metal-to-metal seal with three retainer rings. Because the cable armor is not swaged, the PDC retains its full integrity.

How it works

To create virtually perfect nonswaged connections, the EDMC-S connector uses shape memory alloy (SMA) rings, which are deformed at ambient temperature but transform to their original shape when heated. The connection process has no moving parts to make up or torque.

Designed for both cable-to-cable splices and cable-to-gauge connections, this premium connector maximizes downhole monitoring system reliability with pressure-testable triple metal-to-metal seals; retainer rings to absorb downhole cable vibrations, shocks, compression or tension; and an internal cable-to-cable connection to an internal bulkhead pin.

PDC preparation tools simplify makeup at wellsite, and the installation kit is ATEX certified and easy to use on the rig floor.

What it replaces

Conventional spliced and swaged connections that take up to four times longer to complete.

Additional information

The technology is compatible with INCOLOY® 825 and 316L stainless steel PDCs. EDMC-S connector eliminates the need for low-stress encapsulation fillers to protect sensitive electronics, which saves time on the rig floor and eliminates logistics issues.

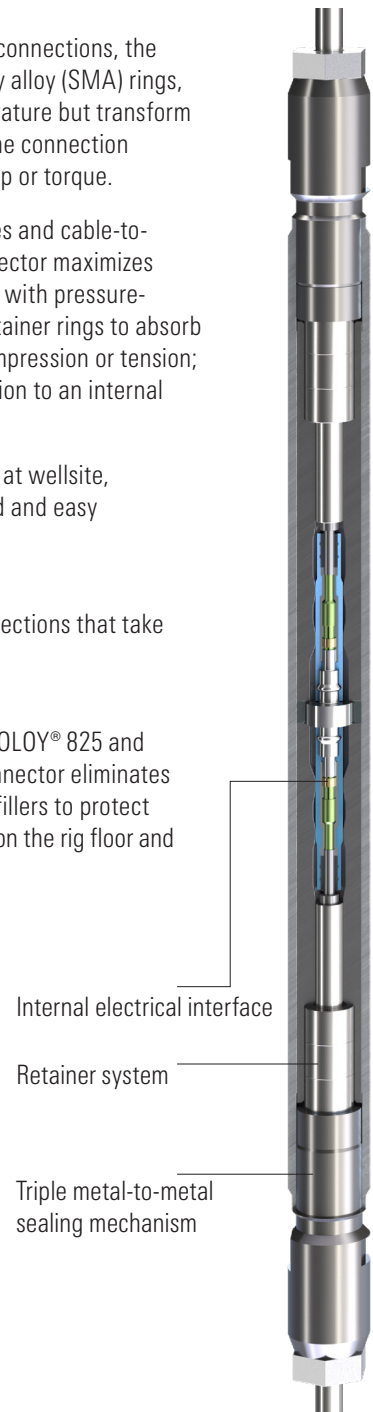
EDMC-S Connector Specifications[†]

Inline monoconductor splice OD × length, in [mm]	0.750 [19.1] × 10.3 [262]
Inline twisted-pair splice OD × length, in [mm]	0.750 [19.1] × 11.8 [300]
Pressure rating, [‡] psi [kPa]	20,000 [137, 895]
Temperature rating, [‡] degF [degC]	302 [150]
PDC OD compatibility, in [mm]	0.250 [6.4]
PDC metallurgy compatibility	INCOLOY 825 or SS316
PDC wall thickness compatibility, in	0.028, 0.035, or 0.049
PDC conductor type compatibility	Monoconductor or twisted pair without internal pin connector
Corrosion resistance	NACE MR0175
Electrical insulation	1 Gohm at 1,000 V DC

All specifications are subject to change without notice.

[†] Qualification tests based on Advanced Well Equipment Standards (AWES) Recommended Practice for Permanently Installed In-Well Drymate Connectors.

[‡] Contact your Schlumberger representative for information about extended temperature and pressure ranges.



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