

WellConnect™

Instrumentation Dry Mate Optical Connector V1 (Field Attachable)

The Dry Mate consists of two halves, male and female. The male half has metal to metal sealing whilst the female is a Field Attachable Connector. The Connectors are used for Subsea equipment including Tubing Hanger & Tubing Hanger Running Tools.

Operational Requirements

Design Life:	25 years
Location within Completion:	Subsea TH & THRT
Rated Pressure:	15,000 psi
Test Pressure:	22,500 psi
Working Temperature Range:	-18°C to 150°C
Storage Temperature Range:	-18°C Min
Water Depth:	3,000 metres

Mechanical Requirements

Outer Diameter: 30.2mm (1-3/16")

Optical Specification

Number of Contacts:	6 - with any combination of single mode or multi-mode
Contact Method:	APC Ferrule
Insertion Loss:	≤ 0.5 dB Single Mode (1310nm, 1550nm & 1625nm) ≤ 1.0 dB Multi-mode (850nm & 1300nm)
Return Loss:	≤ -45 dB Single Mode ≤ -30 dB Multi-mode
Max. Optical Crosstalk:	≤ -60 dB Single Mode ≤ -60 dB Multi-mode

Material Specification

Housing:	High Strength Cupronickel
Insulation:	PEEK 450G

Design Philosophy

Slimline Design
Metal to Metal Sealing - Tubing Hanger Half
Field Attachable Dry Mate
Test Port Facilities

Cable

1/4" PDC Cable	
Fibre:	Single Mode / Multi-mode
Tube:	OD 6.35mm (0.25") Nominal
Encapsulation:	All sizes compatible (removed locally where terminated into product)

Qualification Testing

Insertion Loss
Return Loss
Optical Power
Pressure Test
API 6A PSL4 Pressure & Temperature Cycling
API 17D Pressure & Temperature Cycling (Mechanical Barriers) - Gas

