

WellPower™

Junction Box

The RMS pumptools Junction Box for power systems distributing Single and Split-Phase ESP Cables provides a long term reliable connection in a subsea downhole environment.

Operational Requirements

Design Life:	Permanently Installed Connector 10 years
Rated Pressure:	5,000 Psi
Test Pressure:	7,500 Psi
Design Pressure:	11,250 Psi
Working Temperature Range:	0°C to 150°C (32°F to 302°F)
Storage Temperature Range:	-30°C to 40°C (-22°F to 104°F)

Mechanical Requirements

Outside Diameter:	5" or 5.5"
Production Tube:	2.9" or 3.56"
Box Only Length:	13.4"
Junction Box Min Length:	16"
System Length with WMEC's:	32"

Electrical Specification

Rated Voltage:	2.89 / 5.0 kVAC (Uo/U)
Breakdown Voltage:	> 8Uo (23.1 kV)
Ampacity:	80 - 125 A
Frequency Range:	30 - 85 HZ

Material Specification

Housing:	316 Stainless Steel Duplex Stainless Steel (2205)
Contacts:	Gold Plated Beryllium Copper
Insulation:	PEEK 450G

Design Philosophy

Sealing: Dual electrical and mechanical barriers
 Primary Metallic Cone Seal and Elastomeric Back-up
 Electrical insulation Primary: Thermoplastic or Elastomer
 Lower Connector Pressure Barrier

Cable

Various Cable Options

Qualification Testing

Standard Electrical Integrity Tests
 Pre-Epoxy Full Pressure Test
 Endurance Test
 Simulated Environment Material Compatibility Test
 Temperature Rise (current)
 High Voltage

Key Performance Features

Provides 180° U-Turn
 Flat MLE to WMEC rear PB
 HPHT Application Materials
 Energised Seals
 Metal to Metal Sealing
 Gold-plated Contacts
 Crimp Technology
 Plug and Play Jumpers to Wet-Mate

