

OceanPower™

11 kV HV Electrical Wet-Mate Connector

RMSpumptools OceanPower is a range of High and Medium Power Wet-Mate Connectors developed specifically for the Renewables Energy market. The connector technology is proven in the marine environment, providing reliability and ease of system operations during installation. The connectors bring many benefits to tidal stream and wave energy devices, providing innovation to some of the industry's major challenges.

Operational Requirements

Location within Completion:	Subsea Turbine and Hub
Design Life:	25 years
Rated Depth:	350+ Metres
Rated Pressure:	500 Psi
Working Temperature Range:	-20°C to 45°C (-4°F to 113°F)
Storage Temperature Range:	-20°C to 60°C (-4°F to 140°F)

Mechanical Requirements

Fully Compliant Mounting System	
Misalignment Limits:	Radial +/- 1mm, Angular +/- 1°
Envelope Diameter:	As per Customer Specification

Electrical Specification

Number of Phases:	3
Contact Method:	Multi-contact
Working Voltage:	6.35/11 kV
Test Voltage:	14.4 kVdc
Ampacity:	200 A
Frequency Range:	47 - 52 HZ

Material Specification

Housing:	SAF / High Strength CuproNickel
Insulation:	PEEK

Design Philosophy

Protected Male & Female Electrical Contacts
 Oil Filled Pressure Balanced Design
 Test Port Facilities
 Cathodic Protection System Compatible

Cable and Hose

35mm² Cable
 Goodyear Gorilla Hose via Hose Fittings Connection
 Oil-filled & Pressure Balanced
 Other Cables & Hoses are available

Qualification Testing

Shell Continuity
 Proof Voltage
 Insulation Resistance
 Contact Resistance
 Partial Discharge (PD)
 Pressure Test
 Thermal Short Circuit
 Temperature Cycles
 Pull Test

Key Performance Features

Modular inter-changeable Male and Female Connectors
 Plug Connectors can be Energised Unmated
 Dual Sealing Barriers
 Elastomeric Sealing
 Gold-plated Contacts

