

GERI 12-Way ROV WET-Mate Connector

12-Way Electrical ROV WET-Mate Connector

The GERI WET-Mate Connector (WMC) has been designed for long term reliability and ease of use in any demanding and hostile sub-sea environment.

Using a unique patented (US Patent No. 6,196,854 B1) sealing system, WMC offers a high reliability factor for electrical continuity through an independent oil filled and dual sealed contact area. The 6 mm² contact arrangement provides maximum flexibility to accommodate signal or low to medium power.

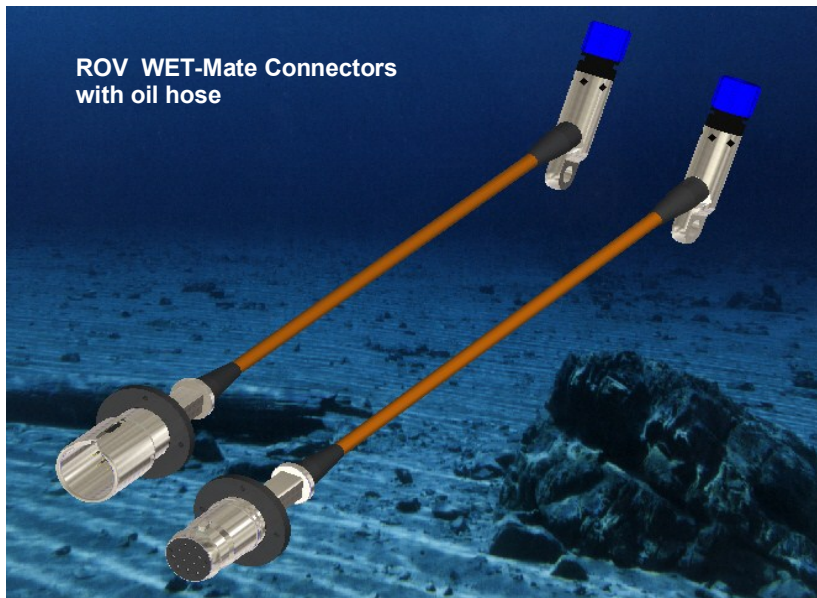
The WMC design has undergone a rigorous qualification program based on major oil company specifications for sub-sea electrical connectors.

Key Features

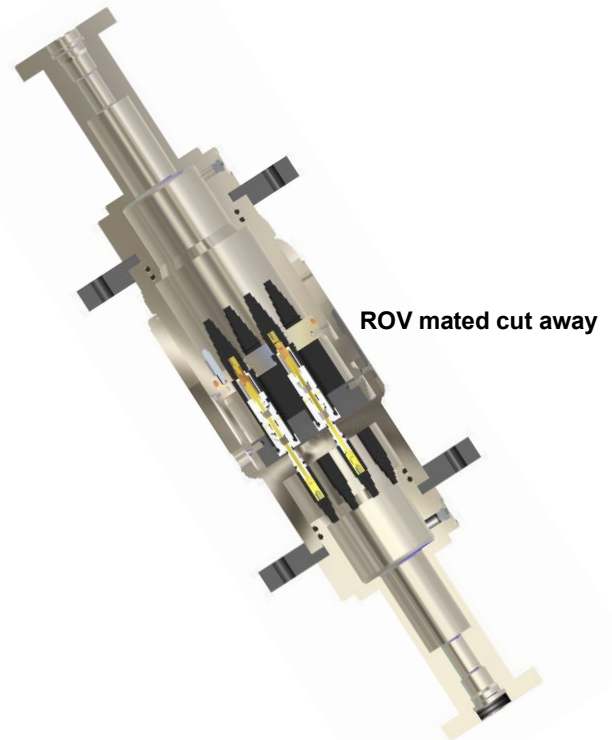
- Two levels of sealing per socket
- Independent pressure compensation to each sealing level
- Modular design
- User friendly



ROV WET-Mate Connector Pairs



ROV WET-Mate Connectors with oil hose



ROV mated cut away



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GERI 12-Way ROV WET-Mate Connector

Mechanical

Pressure rating:	5,000 psi ambient pressure
Max mating/de-mating speed:	2 inches/second
Connector mating force:	Approximately 334N (75 lbs)
Connector de-mating force:	Approximately 578N (130 lbs)
Maximum allowable axial force:	Approximately 1779N (400 lbs)
Temperature rating:	-10 to +50°C Working -25 to +60°C Storage
Mating cycle lifetime:	100 mate cycles MAXIMUM before connector refurbishment
Maximum days exposed to seawater unmated:	Male connector: 45 days Female connector: unlimited
Maximum radial misalignment	± 0.5 inch (12 mm)
Maximum angular misalignment	± 20°
Maximum rotational misalignment	± 15°

Electrical

Maximum working current:	20 amps/circuit
Maximum working voltage:	1,000 VDC mated, 1,000 VDC unmated for female contact. Voltage should not be applied to unmated male contact.
Electrical insulation:	When mated, >10 GΩ between circuits and to seawater @ 1,000 VDC
Contact resistance:	<30mΩ/physical contact

Oil hose

Standard conductors:	Type MIL-W-22759/41 (other types, other sizes, twisted pairs available)
Outside diameter:	25 mm (0.98 inch)
Inside diameter:	12 mm (0.512 inch)
Maximum elongation:	<2% at 2,500 N (562 lbs)
Break loads -Hose -End terminations	>20,000 N (4,496 lbs) >10,000 N (2,248 lbs)
Bending radius:	150 mm (5.90 inch)
Oil type	Dow corning 200 silicone oil, 200cs

Dimensions

	Plug Connector (Socket)		Receptacle Connector (Pin)	
	Metric	US	Metric	US
Outside Diameter (OD)	101.6 mm	4 inch	114.3 mm	4.5 inch
Length	325.12 mm	12.8 inch	355.60 mm	14 inch
Unit Weight in the air	3.91 kg	8.6 lbs	4.91 kg	10.8 lbs