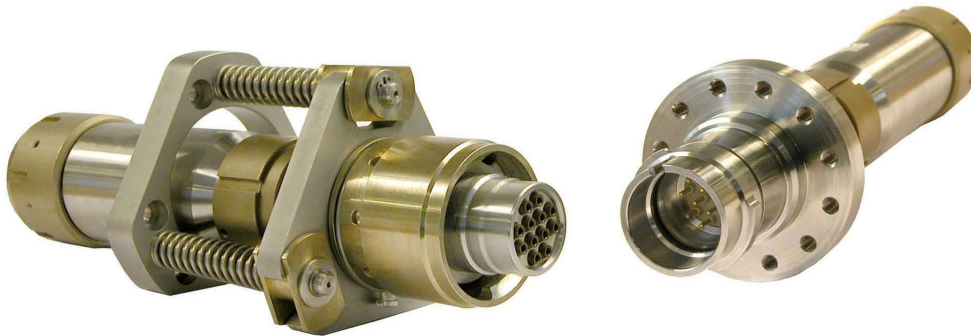




SCM
Systèmes et Connectique du Mans



Signal series



MSD

FPSO Quick Disconnect/Reconnect
Turret Explosion Proof, Splash Zone
Mateable



ATEX

• Technical Characteristics

Electrical

Number of Contacts : 12 or 13 (#12)
Rated Voltage : 1000 V
Rated Current : 20 A
Insulation Resistance : > 10 GΩ at 500 V
Contact Resistance : < 4 mΩ

Operational Environment

Operating Temperature : 50 to 113°F (10°C to 45°C)
Pressure Withstanding : up to 140 bar

Materials

Housing : AISI 316L
Coupling Parts : Marine bronze
Insulators : PEEK
Contacts : Gold plated copper


Contacts and Cables

Termination : crimped

Designation	Size 00		Size 01		Size 02		Size 03		Size 04	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Receptacle	20.3	22.4	14.7	16.4	16.9	18.4	23.9	25.9	26.2	28.
OD (armoured cable)	27 ±1		/	/	/	/	/	/	/	/

For other dimensions, please consult us.

Standards

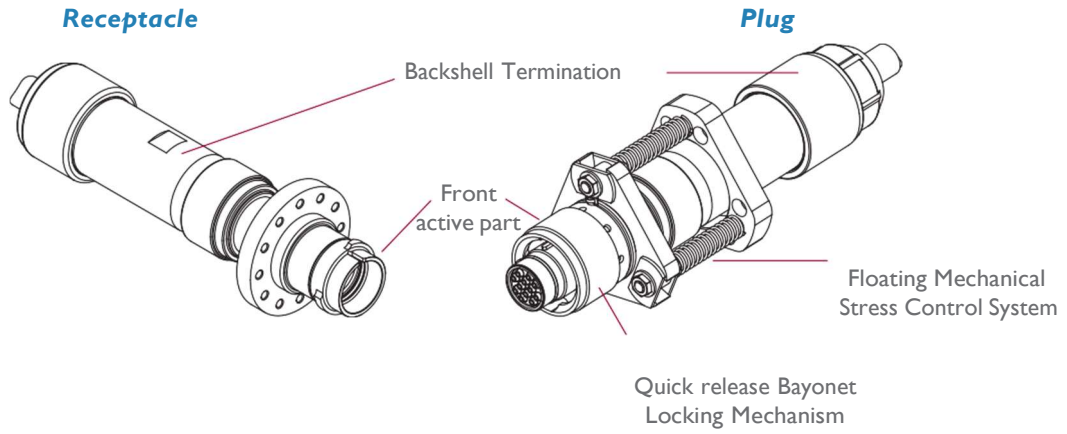
IEC60079-0 & IEC60079-1 /  II 2 G Ex d IIB T4...T6
T4 if operating temperature : < 203°F (95°C)
T5 if operating temperature : < 140°F (60°C)
T6 if operating temperature : < 113°F (45°C)

• Part Numbers

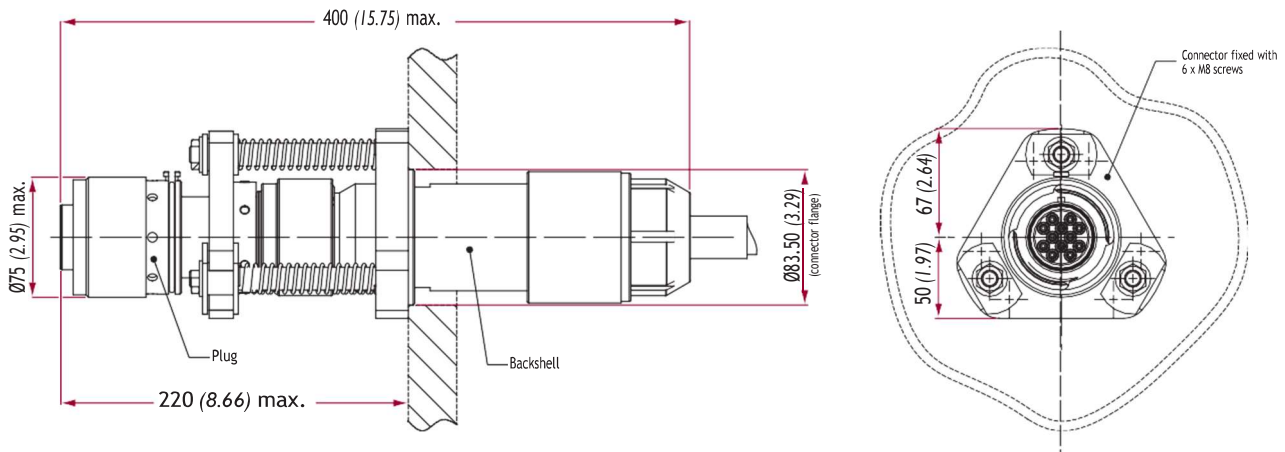
Designation	Part Numbers
Receptacle	MSD-002-0101-XX
Plug	MSD-002-0102-XX

XX = cable size (00 - 01 - 02 - 03 - 04)

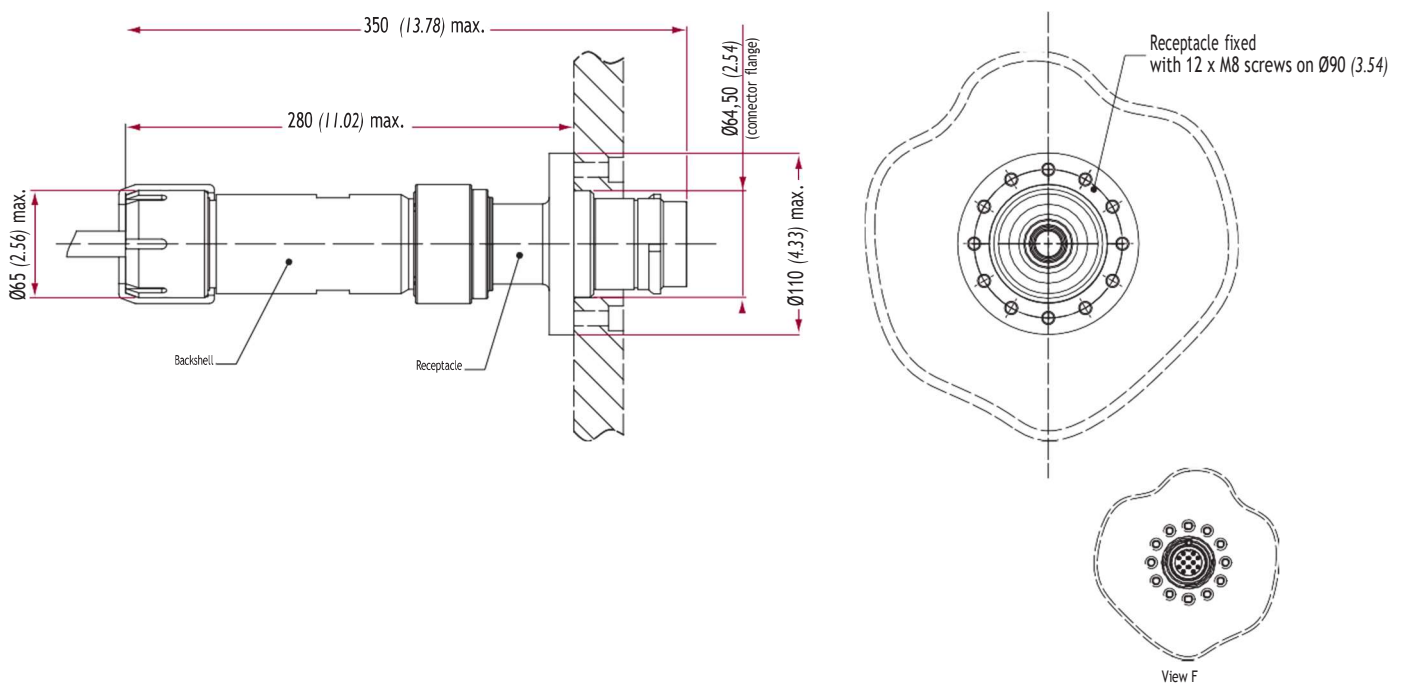
- Receptacle and Plug



- Plug and Backshell Dimensions - mm (inch)



- Receptacle with Backshell Dimensions - mm (inch)



- **Qualification Tests - Passed**

Test type	Qualification Tests	Standards	Test conditions Acceptance criteria
Visual Inspection	Dimension & Tolerance Check		Compliant with drawing
	Interface Check		Compliant with drawing
	Verification of Markings		Compliant with drawing
	Weight Measurement		Receptacle : 6,2 kg - Plug : 10,5 kg
Electrical Tests	Contact Resistance		< 0.4 m ohms
	Shell Continuity		Compliant with customer specification
	Screen Continuity (if relevant)		Compliant with customer specification
	High Voltage AC Withstanding	IEC 60502-2	4 kV for 1 min.
	Insulation Resistance		> 10 G ohms at 500 V
	Temperature Rise	IEC 60694	22 A during 24H $\Delta T < 45^{\circ}K$ on conductors $\Delta T < 25^{\circ}K$ on surface
	Electrical Breakdown	IEC 60502-4	No breakdown at 7500 V
Mechanical Tests	Helium Leak Test		$\leq 1.10^{-6}$ atm.cm ³ /s.
	Maximum Misalignment		+ 5°, ± 2 mm (0.08 inch)
	Locking Device		Bayonet quick connect/disconnect
	Thermal Shock Test		70°C for 4 hours then rapidly cooled to 0°/4,5°C
Turbid Tank Tests	Pressure Testing Simulated Design Life		20 mating / unmating Test under 30 bars
	Post Turbid Tank Test Inspection		No changes in electrical characteristics after test

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SCM reserves the right to alter the specifications of the products described in this brochure without prior notice.

Overall dimensions and specifications are given for guidance only. For further details, please contact us.