

Tensioned monitoring string

General

Deepwater's reference electrode tensioned monitoring string allows for the permanent placement of reference electrodes to facilitate monitoring of the CP system performance. The combination of zinc reference electrodes and Ag/AgCl reference electrodes creates a reliable long-term monitoring solution. Potentials can be measured through either a hand-held voltmeter or a datalogger capable of measuring variations in voltage.

Overall weights & dimensions*

Dimensions	3 m x 3 m variable geometry
Gross weight (air)	Project specific (1500 kg typical)

Silver / Silver chloride reference electrode

Material	Sintered Ag/AgCl on solid silver wire core
Dimensions	Ø 8 mm x 45 mm
Accuracy	±5 mV
Cable connection	Polyurethane cold molded

Zinc reference electrode

Material	Zinc, high purity 99.95%, (MIL-A-18000-K)
Dimensions	Ø 19 mm x 101 mm
Weight	0.23 kg
Anti-passivation	Embedded carbon steel rods
Accuracy	±20 mV

Tension device

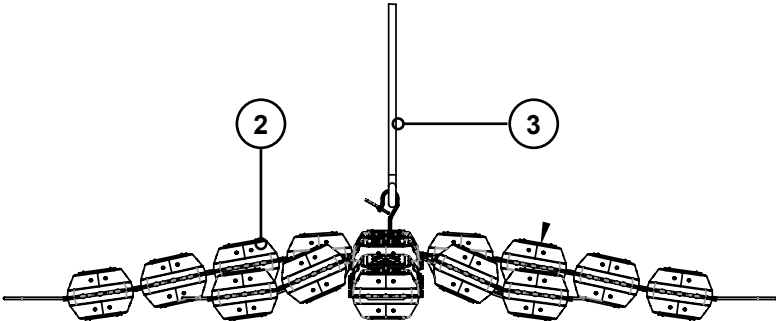
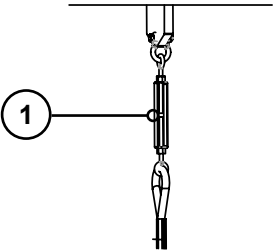
Structure hang-off	Turnbuckle (Item 1)
Anchor/ tension system	Modular concrete mattress (Item 2)
Footprint	Ø 5000 mm
Anchor weight (air)	2250 kg

Anchor weight cathodic protection

Anode net weight	7.7 kg
Anode dimension	Ø 180 mm x 114 mm
Core	Ø 12.7 mm x 118 mm
Anode alloy	Deep 7
Percent mattress fill	10%

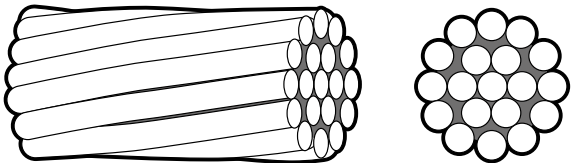
Tensioned tether (Item 3)

Strength member	Vectran (Item 4)
Rated working load	13 kN
Rated break strength	93 kN
Length	Project specific
Abrasion protection	Braided polyester sheath (Item 5)
Anti-vibration	PE filled helical strake (Item 6)



Conductor cable (Item 7)

Description	Galvanized steel aircraft cord that is a flexible strand of nineteen wires.
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Material	Galvanized steel
Diameter	1/8 inch [Ø 3.175 mm]
lbs per 1,000 ft.	35 [15.88 kg]
Breaking strength (lbs)	2,100 [952.5 kg]
MIL SPEC	MIL-DTL-83420

