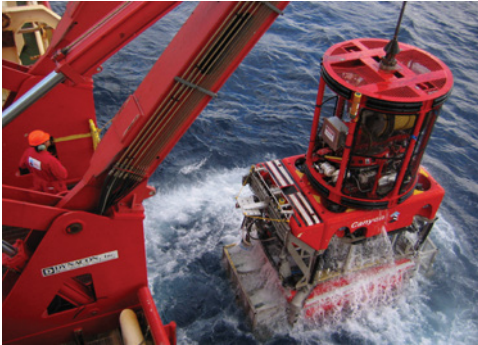


ROV Tethers & Umbilicals



As a manufacturer of Harsh Environment cables, Umbilicals International has the design and manufacturing capability to provide a variety of Remotely Operated Vehicle (ROV) cables. Umbilicals International has extensive experience designing and manufacturing tethers and umbilicals for the full spectrum of ROV's, from small electric Eyeball systems to large hydraulically powered Workclass vehicles.

Depending on the intended operating conditions, the ROV umbilical may be designed with strength properties obtained from Kevlar/Vectran or from a steel armor. The steel armor offers additional benefits, such as protection of the cable; however this does increase the system weight significantly and should be taken into account when selecting the best overall solution.



| | | |
|-----|---|------------------|
| REV | 0 | Released For Cut |
| | 1 | Design Review |

Outer Jacket
6.0mm Yellow 19K
Wall Thickness Pass
Color: Yellow

Strength Member
Integrated Aramid Yarn
Double Layer

PP Fillers for Roundness

68MFD 301250250 μm , 100KPSI
(BLU, ORG, GRN, BRN, GRY, WHT)
68MFD 6125250 μm , 100KPSI
(RED, BLK, YEL, VIO, PINK, AQUA)
Tube is insulated with PP to 3.90 mm
(1 PLC)

(C) 3.3 kVAC Power Conductor
10AWG 0.7 mm² 7x19 234mm BCS
Insulated with PP to 5.30mm OD
(3 PLCS)

(D) 3KVAC Power Conductor
13AWG 2.30 mm² 19x40mm BCS
Insulated with PP to 4.10mm
(2 PLCS)

(A) Jacketed Shielded Twisted Quad
20AWG 56 mm² 7x107mm BCS Insulated
with PP to 1.66mm, 8x203mm TCW
Drain and Au/Mylar Tape Shielding.
PE Jacket to 5.30 mm OD
(1 PLC)

(1)(A), 8 x .52 mm² TCW Drain Wires
insulated PE, Cu/Mylar Tape
Tape and Intersics are Filled with
PP

Finished Diameter: 35.0 mm +/- 1.0 mm

| Metric | Electrical Properties: | Dist. Seal Dist @ 200 | Wet Dist @ 200 | Non- Dispersed @ 200 | Preformed (MFD) | Non- Absorption (MFD) | Min. Voltage Rating (V ac) |
|------------|-------------------------------------|--------------------------|-------------------|----------------------------|--------------------|-----------------------------|-------------------------------|
| 35.0 mm | 20 AWG 52 mm ² STQ (A) | <39.0 | >5.0 | 75 ±5 | --- | --- | 500 |
| 295 mm | Fiber Tube (B) 68MFD | --- | --- | --- | 860 | 3.5 | --- |
| 400 mm | Fiber Tube (B) 68MFD | --- | --- | --- | 1300 | 1.5 | --- |
| 1114 kg/km | Fiber Tube (B) 68MFD | --- | --- | --- | 1500 | 20 | --- |
| 126 kg/km | 10 AWG 5.7mm ² Core (C) | <3.80 | >5.0 | --- | --- | --- | 3,000 |
| 80.0 kN | 13 AWG 2.30mm ² Core (D) | <8.20 | >5.0 | --- | --- | --- | 3,000 |

selected with the nearest standard AWG's in order to reduce manufacturing lead time.

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Buoyant SCV Tether Cable 35.0mm

DRAWN BY: JULIO ESPINOSA FILE NAME: CDR012135 SCALE: NTS
DATE: 11/20/2007 SHEET: 1 OF 1
PART NO: CDR012135



Whether the requirement is for the supply of a recognized design or an innovative new construction, the Umbilicals International engineers located at the corporate office in Stafford, Texas are able to design and produce a cable quickly and cost effectively. Be sure to contact Umbilicals International for all of your harsh environment cable requirements.