



# SEACON ADVANCED PRODUCTS, LLC PRODUCT DATASHEET

## PRESSURE BALANCED OIL-FILLED (PBOF) HOSE ENGINEERED SUBSEA FIBER OPTIC & ELECTRICAL PBOF HOSE CONDUIT



### DESCRIPTION

Subsea jumper assemblies and distribution harnesses are provided by Precision Subsea for use with subsea connectors. Many subsea electrical and optical cable and connection systems utilize Pressure Balanced Oil Filled (PBOF) cabling solutions. These cables utilize an elastomeric hose as a conduit for electric wires and fiber optic lines. The elastomeric conduit is filled with a compensating fluid, allowing the sea water pressure to freely communicate with the interior oil volume and equalizing the pressure in the assembly. This option for cabling provides for a reliable and configurable cable system suitable for many subsea applications. This technology has been widely utilized in ocean science observatories, towed arrays, drilling systems, production control systems and Remotely Operated Vehicle (ROV) systems. Precision Subsea is pleased to offer this solution for any configuration of subsea cable network.

### KEY FEATURES

- Temperature and pressure compensated
- Design Life: >25 years in operation subsea
- Volume compensation capacity >12%
- Designed for ROV handling
- Single or double o-ring sealing
- Metal to metal sealing
- Medium voltage design
- 12mm bore capacity
- Integrated longitudinal strain relief. Break >20,000N
- Full torsion flexibility
- Swivel Nut. Serrated for easy handling
- Titanium GR2 and 316L Stainless Steel as an option
- Anti-rotation crimp sleeve system
- MKII compatible through out
- Crimp sleeve electrically connected
- Rubber fitting protector

### QUALITY

- SEACON Advanced Products, LLC operate a Quality Management System certified to ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007.



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### SPECIFICATIONS

- Dimensions ID: 13mm and 20mm
- Dimensions OD: 25mm and 32mm
- Wall Thickness: Nominal 6mm
- Material: Rubber, SBR, NBR or equivalent
- Outside Colour: Orange
- Design: Two layer with tension and pressure armor in between
- Volumetric Expansion: >12% nominally
- Elongation: <2% at 2500 N tension
- Break Load by Tension: >10,000 N (at end terminations)
- Pressure Rating: WP 10 bar. Burst pressure >40 bar
- Minimum Bend Radius: 125mm
- Lifetime Subsea: >25 years
- Working Temperature: -5 to +40°C
- Storage Temperature: -25 to +50°C
- Ozone Resistance: Two months outside without protection
- Compatibility: Sea water, silicon oil
- Armour: Kevlar, Polyester

#### MKII Compatible Hose Fittings



*Fitting Protector*



*13mm & 20mm Fitting*

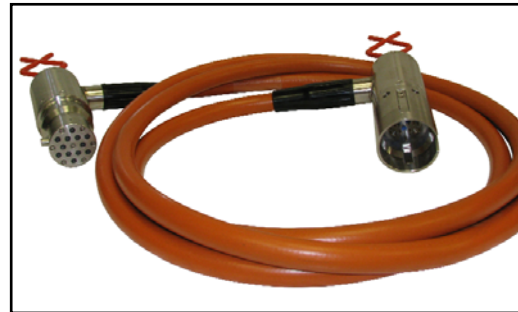


*Dual Seals & Metal Seal*

#### Subsea Optical Harness



#### Subsea 3.3kv Electrical Jumper



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