### **TELEDYNE MARINE**

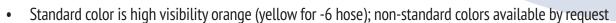
# **Teledyne Oil-Filled Hose**

Custom-Manufactured Hose Assembly System Designed Specifically for Pressure Balanced Oil-Filled Subsea Harnesses – Available in -6, -8, and -12 Sizes

Teledyne ODI Pressure Balanced Oil Filled (PBOF) Hose assemblies are a proven, reliable and economical element in subsea electrical and optical jumpers.

### FEATURES

- Filled with non-conductive silicone oil, which acts as a pressure compensator & dielectric
- Conductors (electrical & optical) are loosely housed within the oil-filled assembly
- No metal components to corrode
- Radially compliant to allow for necessary pressure compensation
- Low stretch when under axial tension



- Sturdy and longwearing owing to a double-walled construction & specially designed support layers
  - -- High tensile aramid fiber layer for axial support & a polyester braided layer for radial support
  - -- Inner elastomeric tube inside of the support layers AND outer, abrasion resistant elastomeric cover encasing the entire hose structure

### **PRODUCT ADVANTAGES**

- Eliminate the need for short run custom cables and accommodate jumper design flexibility
  - Terminate to a variety of hose end fittings to enable ease of assembly in any combination of connectors or feed-throughs
  - Available in a range of sizes to fit specific conductor/fiber requirements
- Offer mechanical durability suited to the demands of a long performance life in deep ocean applications
- Materially flexible for ease of handling on deck, or subsea by an ROV
- Designed and qualified to industry and customer requirements



CICEAN DESIGN NC. LOT NO. 2 16 300 12/00

Pressure Balanced

**Oil-Filled Hoses** 

## **Teledyne Oil-Filled Hose**

Custom-Manufactured Hose Assembly System Designed Specifically for Pressure Balanced Oil-Filled Subsea Harnesses – Available in -6, -8, and -12 Sizes

### **TECHNICAL SPECIFICATIONS**

Hose to be generally in accordance with SAE J517, TYPE 100R6.

AREA AREA	

FEATURE	-6 RATING	-8 RATING	-12 RATING
Minimum Bend Radius	3" [76.2]	4" [101.6]	5" [127]
Axial Load			
Maximum Wo Minimum F	5	400 LB [1779 N] 600 LB [2669 N]	600 LB [2669 N] 1150 LB [5115 N]
Maximum Axial Stretch	2%@ 300 LB [1334 N]	2%@ 400 LB [1779 N]	2%@ 600 LB [2669 N]
Pressure Rating Maximum Wo Proc Minimum	Test 450 PSI [31.03 BAR]	225 PSI [15.51 BAR] 450 PSI [31.03 BAR] 900 PSI [62.05 BAR]	225 PSI [15.51 BAR] 450 PSI [31.03 BAR] 900 PSI [62.05 BAR]
Minimum Radial Expansion	15%@ 150 PSI [10.34 BAR]	15%@ 150 PSI [10.34 BAR]	15%@ 150 PSI [10.34 BAR]
Length Change Under Pressure	+0/-1%@ 150 PSI [10.34 BAR]	+0/-1%@ 150 PSI [10.34 BAR]	+0/-1%@ 150 PSI [10.34 BAR]
Fluid Compatibility	Seawater & Silicone Oil	Seawater & Silicone Oil	Seawater & Silicone Oil
Temperature Rating Lower Upper	· · · · · · · · · · · · · · · · · · ·	-4°F [-20°C ] 122°F [+50°C ]	-4°F [-20°C ] 122°F [+50°C ]
Hose, Oil Filled Weight/Ft* In Sea	n Air 0.2-0.3 LB/FT [2.92-4.38 N/M] vater 0.05-0.07 LB/FT [0.73-1.02 N/M]	0.3-0.4 LB/FT [4.38-5.84 N/M] 0.05-0.1 LB/FT [0.73-1.46 N/M]	0.5-0.7 LB/FT [7.30-10.2 N/M] 0.1-0.2 LB/FT [1.46-2.92 N/M]

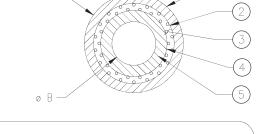
\* Dependent on number of conductors and wire gage.

This hose is to be marked as shown along it's length at approx. 12" [304.8] intervals. Dimensions in [] are in millimeters and are for reference only, unless otherwise specified.

### **DESIGN SPECIFICATIONS**

ODHOSE-12	ODHOSE-8	ODHOSE-6	REF.#
Ø1.150 [29.21]	Ø0.850 [21.59]	Ø0.700 [17.78]	ØA
Ø0.625 [15.88]	Ø0.410 [10.41]	Ø0.310 [7.87]	ØB

MATERIAL/LAY-UP				
ITEM	DESCRIPTION			
1	Outer Jacket/Cover			
2	Radial Reinforcement			
3	Insulation			
4	Axial Reinforcement			
5	Inner Liner/Tube			





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#### www.teledynemarine.com

1026 N.Williamson Boulevard, Daytona Beach, FL 32114 USA Tel +1-386-236-0780 or 1-888-506-2326 • Fax +1-386-236-0906 Email: teledynemarine@teledyne.com