

CUSTOM MANUFACTURED PRODUCTS



Teledyne Oil-Filled Hose

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

Teledyne ODI Pressure Balanced Oil-Filled (PBOF) Hose assemblies are proven to be reliable and economical for electrical and optical jumpers. The use of PBOF hose eliminates the need for short run custom cables and adds design flexibility and mechanical durability in a jumper assembly that remains flexible for ease of handling on deck and by an ROV.

The ODI hose is designed and qualified to Teledyne ODI specifications and combines an inner elastomeric tube, layered with both Kevlar fiber and braided synthetic filler, and finished with an outer elastomeric cover. This results in a structure that is radially compliant to allow for necessary pressure compensation yet exhibits low stretch characteristics under axial tension. This double-walled construction of inner and outer elastomeric barriers with fiber

reinforcements has allowed Teledyne ODI's Oil-Filled Hose to be both sturdy and long-wearing, and well suited to the demands of long performance life requirements in deep ocean interconnect and distribution applications.

The hose is filled with non-conductive silicone oil, which acts as a pressure compensator and dielectric. The electrical and/or optical conductors are loosely housed within the oil-filled assembly and there are no metal components to corrode. The hose is available in a range of sizes, to fit specific conductor/fiber requirements and can be terminated to a variety of common industry hose end fittings to enable the ease of assembly in any combination of connectors or feed-throughs. The standard color is high visibility orange (Yellow for -6 hose). Additional non-standard colors available.

FULL LINE OF CUSTOM PRODUCTS:

- Teledyne Oil-Filled Hose
- Teledyne Custom Cable Terminations
- Teledyne Accessories

CUSTOM PRODUCT DATA SHEETS:

To access the electronic version
of this document, go to:

www.odi.com/Products.html



Teledyne ODI is the world leader in subsea electrical and fiber optic interconnect systems for offshore oil and gas, defense, oceanographic, and telecommunication applications.

Teledyne Oil-Filled Hose



- DO NOT SCALE FROM DRAWING.
- SPECIFICATION:
HOSE TO BE GENERALLY IN ACCORDANCE WITH SAE J517, TYPE 100R6.

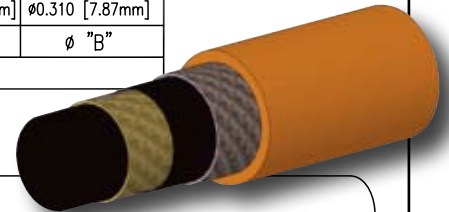
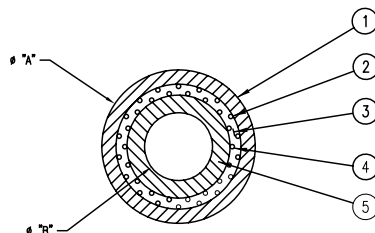
FEATURE	-6 RATING	-8 RATING	-12 RATING
MINIMUM BEND RADIUS:	3" [76.2mm]	4" [101.6mm]	5" [127mm]
AXIAL LOAD:			
MAX WORKING:	300 lbs [1334 N]	400 lbs [1779 N]	600 lbs [2669 N]
MIN FAILURE:	450 lbs [2002 N]	600 lbs [2669 N]	900 lbs [4003 N]
MAX AXIAL STRETCH:	2% @ 300 lbs [1334 N]	3% @ 400 lbs [1779 N]	3% @ 600 lbs [2669 N]
PRESSURE RATING:			
MAX WORKING:	225 psi [15.51 bar]	225 psi [15.51 bar]	225 psi [15.51 bar]
PROOF TEST:	450 psi [31.03 bar]	450 psi [31.03 bar]	450 psi [31.03 bar]
MIN BURST:	900 psi [62.05 bar]	900 psi [62.05 bar]	900 psi [62.05 bar]
MIN 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 COMPATABILITY:	SEAWATER & SILICONE OIL	SEAWATER & SILICONE OIL	SEAWATER & SILICONE OIL
TEMPERATURE RATING:			
LOWER LIMIT:	-4°F [-20°C]	-4°F [-20°C]	-4°F [-20°C]
UPPER LIMIT:	122°F [+50°C]	122°F [+50°C]	122°F [+50°C]
HOSE, OIL FILLED WEIGHT/FT*:			
IN AIR:	0.2-0.3 lb/ft [2.92-4.38 N/m]	0.3-0.4 lb/ft [4.38-5.84 N/m]	0.5-0.7 lb/ft [7.30-10.2 N/m]
IN SEAWATER:	0.05-0.07 lb/ft [0.73-1.02 N/m]	0.05-0.1 lb/ft [0.73-1.46 N/m]	0.1-0.2 lb/ft [1.46-2.92 N/m]

* DEPENDENT ON NUMBER OF CONDUCTORS AND WIRE GAGE

- THE HOSE IS TO BE MARKED AS SHOWN ALONG IT'S LENGTH AT APPROX 12" [304.8mm] INTERVALS.
- DIMENSIONS IN [] ARE IN METRIC UNITS.
- MATERIAL/LAY-UP:

ITEM	DESCRIPTION		ODHOSE-12	Ø1.150 [29.21mm]	Ø0.625 [15.88mm]
1.	OUTER JACKET/COVER		ODHOSE-8	Ø0.850 [21.59mm]	Ø0.410 [10.41mm]
2.	RADIAL REINFORCEMENT		ODHOSE-6	Ø0.700 [17.78mm]	Ø0.310 [7.87mm]
3.	INSULATION		REF. #	Ø "A"	Ø "B"
4.	AXIAL REINFORCEMENT				
5.	INNER LINER/TUBE				

TABLE 1



LOT NO. 123

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TELEDYNE ODI

A Teledyne Technologies Company



IFS D/N 80358 REV. B

This product is covered by one or more of the following U.S. and/or foreign patents; 4,948,377; 5,203,805; 5,171,158; 5,194,012; 1,296,783; 5,645,438; 5,685,727; 5,722,842; 5,645,442; 5,772,457; 5,738,535; 5,873,750; 6,067,395; 6,321,021; 6,315,461; 6,017,227; 6,608,960; 6,439,778; 6,332,787; 6,665,477; 6,402,539; 6,510,270; 6,543,965; 6,796,821; 6,910,910. Other pending U.S. and foreign patents may apply.