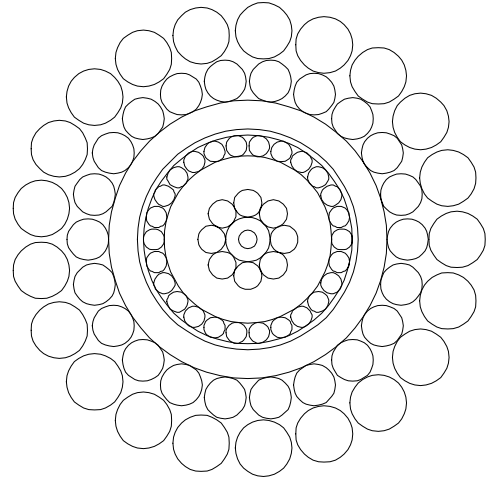


# DATALINE®

Description	Inch	mm
<u>OPTICAL WAVEGUIDE</u>		
Fiber: 62.5/125/245 $\mu$ m MMF	0.010	0.25
Buffer: Hytrel®	0.024	0.61
<u>CONDUCTOR</u>		
8/.015" (0.91 mm <sup>2</sup> ) HD Cu	0.054	1.37
<u>INSULATION</u>		
EPC	0.099	2.51
<u>SERVED RETURN</u>		
#16 AWG" (1.62 mm <sup>2</sup> ) Cu	0.113	2.87
Copper/Polyester Tape	0.120	3.05
<u>BELT</u>		
EPC	0.151	3.83
<u>ARMOR</u>		
Inner: 22/0.0225" GIPS	0.161	4.09
Outer: 21/0.0305" GIPS	0.257	6.53



Hytrel® = Dupont Trademark

PROPRIETARY; Use Pursuant to Company Instructions

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## PERFORMANCE CHARACTERISTICS

Nominal Values @ 20°C

Metric

English

### PHYSICAL

Weight in Air	165 kg/km	111 lb/kft
Weight in Fresh Water	137 kg/km	92 lb/kft
Operating Temperature Range	-15° C to 65° C	5° F to 150° F

### MECHANICAL

Breaking Strength	25.1 kN	5,600 lbf
Recommended Working Load	6.3 kN	1,400 lbf
Recommended Bend Radius <sup>1</sup>	13 cm	5 in

### ELECTRICAL

Voltage Rating		
Conductor to return	600 Vdc	600 Vdc
Insulation Resistance @ 500 Vdc		
Conductor to return	3,000 MΩ•km	10,000 MΩ•kft
dc Resistance		
Conductor	20.0 Ω/km	6.1 Ω/kft
Return	11.2 Ω/km	3.4 Ω/kft
Capacitance	223 pF/m	68 pF/ft
Characteristic Impedance @ 1 MHz	24 Ω	24 Ω
Attenuation		
@ 1 MHz	25.6 dB/km	7.8 dB/kft
@ 10 MHz	83.7 dB/km	25.5 dB/kft

### OPTICAL

Attenuation		
@ 850 nm	3.8 dB/km	
@ 1300 nm	1.8 dB/km	
Bandwidth		
@ 850 nm	160 MHz•Km	--
@ 1300 nm	500 MHz•Km	--

<sup>1</sup>Note: The relationship between sheave diameter and cable diameter is a critical factor used to establish a products fatigue resistance or relative serviceability. Operation over smaller than recommended sheave diameters may adversely affect service life.

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