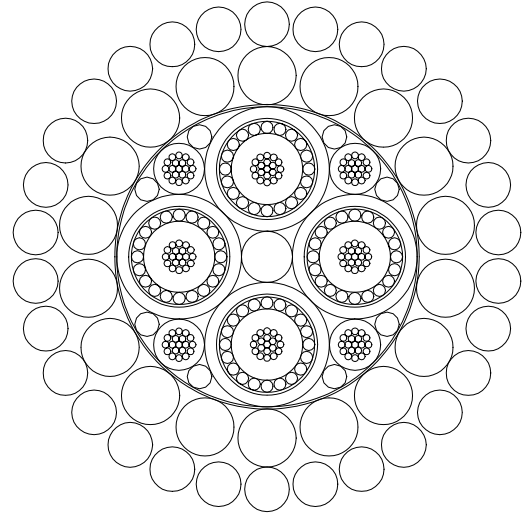


# DATALINE®

Description	Inch	mm
<u>ELEMENT A; Coax (4)</u>		
Cdr: #22 AWG (0.38 mm <sup>2</sup> ) Cu	0.030	0.76
Ins: Polypropylene	0.068	1.73
Shld: #16 AWG (1.29 mm <sup>2</sup> ) Cu	0.090	2.29
Tape: Copper Polyester	0.095	2.41
Belt: Polypropylene	0.121	3.07
<u>ELEMENT B; Single (4)</u>		
Cdr: #22 AWG (0.38 mm <sup>2</sup> ) Cu	0.030	0.76
Ins: Polypropylene	0.050	1.27
<u>ASSEMBLY</u>		
Core: Fill Rod	0.050	1.27
Layer 1: 4 Element A's with 4 Element B's in major interstices and fill rods as necessary.		
Bound with SBR Nylon tape.	0.286	7.26
<u>ARMOR</u>		
Layer #1: 18/0.0545" GEIPS	0.395	10.03
Layer #2: 30/0.042" GEIPS	0.479	12.17



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## PERFORMANCE CHARACTERISTICS

Nominal Values @ 20°C	Metric	English
<b><u>PHYSICAL</u></b>		
Weight in Air	568 kg/km	382 lb/kft
Weight in Seawater	469 kg/km	315 lb/kft
Operating Temperature Range	-30°C to 120°C	-20°F to 250°F
<b><u>MECHANICAL</u></b>		
Breaking Strength	85 kN	19,000 lbf
Working Load	18 kN	4,000 lbf
Recommended Minimum Bend Radius <sup>1</sup>	25 cm	10 in
<b><u>ELECTRICAL</u></b>		
Voltage Rating		
Element A		
cdr - return	600 V	600 V
Element B	600 V	600 V
dc Resistance		
Element A		
cdr	50.9 Ω/km	15.5 Ω/kft
return	15.7 Ω/km	4.8 Ω/kft
loop	66.6 Ω/km	20.3 Ω/kft
Element B	50.9 Ω/km	15.5 Ω/kft
Insulation Resistance		
Element A @ 1,000 Vdc		
cdr - return	12,000 MΩ•km	40,000 MΩ•kft
Element B @ 500 Vdc	7,600 MΩ•km	25,000 MΩ•kft
Capacitance		
Element A	151 pF/m	46 pF/ft
Characteristic Impedance @ 1 MHz		
Element A	35 Ω	35 Ω
Attenuation		
Element A		
@ 0.5 MHz	18.1 dB/km	5.5 dB/kft
@ 1.0 MHz	25.3 dB/km	7.7 dB/kft
@ 5.0 MHz	57.1 dB/km	17.4 dB/kft

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

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