751 Old Brandy Road
Culpeper, Virginia 22701

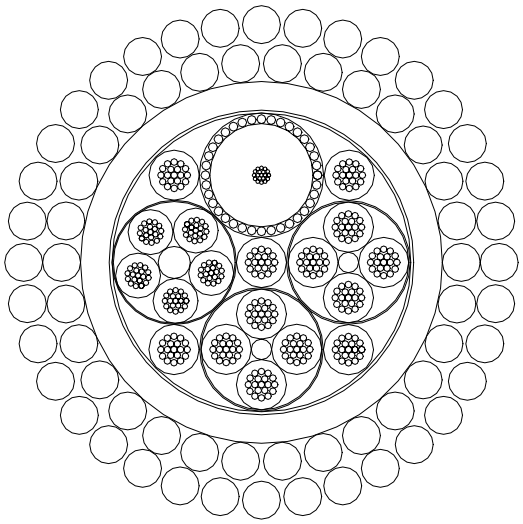
Tele: 540 825-2111
Fax: 540 825-2238

DATALINE®

Description	Inch	mm
ELEMENT A - Coax (1)		
Cdr: # 22 AWG Cu (0.39 mm^2)	0.030	0.76
Ins: Polyethylene	0.177	4.50
Served Shield: # 11 AWG Cu (4.34 mm^2)	0.207	5.26
Taped Shield: Cu Polyester	0.213	5.41
ELEMENT B - Quint (1)		
Cdr: #18 AWG Cu (0.81 mm^2)	0.045	1.14
Ins: Polypropylene	0.077	1.96
Ass'y: 5 ins. cdrs cabled around a monofilament; void filled and taped.	0.212	5.39
ELEMENT C - Quad (2)		
Cdr: #16 AWG Cu (1.23 mm^2)	0.054	1.37
Ins: Polypropylene	0.086	2.18
Ass'y: 4 ins. cdrs cabled around a monofilament; void-filled and taped.	0.213	5.41
ELEMENT D - Single (5)		
Cdr: #16 AWG Cu (1.23 mm^2)	0.054	1.37
Ins: Polypropylene	0.086	2.18

Description	Inch	mm
ASSEMBLY		
Core: 1 Element D	0.086	2.18
Layer #1: 1 Element A, 1 Element B, 2 Element C's with 1-D in each interstice; void filled and taped.	0.522	13.26
BELT		
Hytrel®, Black	0.620	15.75
ARMOR - 2 Layers		
1st Layer; 30/0.065" GIPS	0.750	19.05
2nd Layer; 36/0.065" GIPS	0.880	22.35

Hytrel® is a registered trademark of Du Pont



tyco / Electronics / **The Rochester Corporation**

Instrumentation and Control Cable
Code: IE020522HO00

Date	Page	Revision	Part No.
11/04/2005	1	R	A390880

PERFORMANCE CHARACTERISTICS

Nominal Values @ 20°C	Metric	English
PHYSICAL		
Weight in Air	1610 kg/km	1,082 lb/kft
Weight in Freshwater	1265 kg/km	850 lb/kft
Weight in Seawater	1254 kg/km	843 lb/kft
Specific Gravity	4.8	4.8
MECHANICAL		
Breaking Strength	205 kN	46,000 lbf
Working Load	51 kN	11,500 lbf
Recommended Bend Radius*	46 cm	18 inches
ELECTRICAL		
Voltage Rating		
Element A	2,000 Volts	2,000 Volts
Element B	600 Volts	600 Volts
Element C	1,000 Volts	1,000 Volts
Element D	1,000 Volts	1,000 Volts
Insulation Resistance		
Element A	12,000 MΩ•km	40,000 MΩ•kft
Element B	3,000 MΩ•km	10,000 MΩ•kft
Element C	3,000 MΩ•km	10,000 MΩ•kft
Element D	3,000 MΩ•km	10,000 MΩ•kft
dc Resistance		
Element A		
cdr	50.9 Ω/km	15.5 Ω/kft
shield	4.9 Ω/km	1.5 Ω/kft
Element B	24.6 Ω/km	7.5 Ω/kft
Element C	16.1 Ω/km	4.9 Ω/kft
Element D	16.1 Ω/km	4.9 Ω/kft
Attenuation		
Element A		
@ .5MHz	7.2 dB/km	2.2 dB/kft
@ 1 MHz	10.8 dB/km	3.2 dB/kft
@ 5 MHz	23.0 dB/km	7.0 dB/kft
Capacitance		
Element A	68.9 pF/m	21 pF/ft
Characteristic Impedance @ 1 MHz		
Element A	74 Ω	74 Ω

* 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.