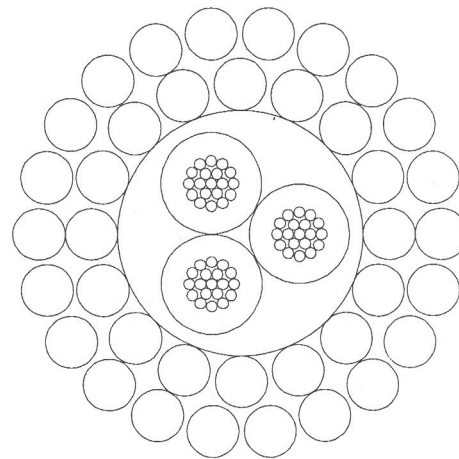


751 Old Brandy Road
Culpeper, Virginia 22701

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

DATA LINE[®]

Description	Inch	mm
<u>INSULATED CONDUCTOR</u> (3)		
Cdr: #19 AWG (19/0.008") Bare Cu	0.039	0.99
Ins: .016" wall Polypropylene	0.071	1.80
<u>ASSEMBLY</u>		
3 ins. cdrs. cabled	0.153	3.89
<u>BELT</u>		
0.015" wall HD Polyethylene	0.183	4.65
<u>ARMOR</u> - 2 layers		
16/0.0375" GEIPS	0.247	6.27
22/0.0375" GEIPS	0.322	8.18



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PERFORMANCE CHARACTERISTICS

Nominal Values @ 20°C

	Metric	English
PHYSICAL		
Weight in Air	260 kg/km	175 lb/kft
Weight in Seawater*	215 kg/km	144 lb/kft
Specific Gravity (SG = 1.028)	6.0	6.0

~473 lbs/km

MECHANICAL

Breaking Strength, Fixed End	52 kN	11,600 lbf
Breaking Strength, Free End	45 kN	10,000 lbf
Working Load @.4% Strain	11 kN	2,500 lbf
Maximum Working Load ¹	22.2	5,000 lbf
Recommended Bend Radius	15 cm	6"
Rotation @ 2,500 lbf	49°/m	15°/ft

ELECTRICAL

Voltage Rating	1,000 V	1,000 V
Insulation Resistance	3,000 MΩ•km	10,000 MΩ•kft
dc Resistance		
Cdr.	30.8 Ω/km	9.4 Ω/kft
Armor	7.9 Ω/km	2.4 Ω/kft
Capacitance (cdr.-armor)	115 pF/m	35 pF/ft

$$(5000 \text{ m}) \left(\frac{3.28 \text{ ft}}{\text{meter}} \right) \left(\frac{\text{kft}}{1000 \text{ ft}} \right) \left(\frac{144 \text{ lb}}{\text{kft}} \right) = 2362 \text{ lbf}$$

weight of 5000m wire

¹"The cable working load as stated on the DATALINE (2,500 lbf) represents the maximum quasi-static load of the operational system that will be supported by the cable. Transient dynamic loads may be applied to the cable providing that the maximum dynamic load applied remains below 5,000 lbf and its period is smooth and gradual, greater than several seconds. Caution must be taken with rapid fluctuations in the loading condition that will result in conductor buckling (compression, otherwise known as "z" kinking). These rapid load variations include, but are not limited to, shock loading, the rapid and erratic removal and increasing of load. This load transient has a period less than a few seconds and can result in cable buckling and/or hocking. Extended excursions above the working load value may affect service life and increases the risk of component buckling."

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