



FLEXIBLE TORSION CABLE MULTICONDUCTOR, UNSHIELDED



Xtreme Performance In Multi-Axis, Torsional Flexing Applications Up To 360° From Neutral Position

XTREME PERFORMANCE BENEFITS:

- Flexible Hytrel® Insulation And Xtra Rugged Polyurethane Jacket With Overall Cable Design For Installation In Twisting And Random Robotic Flexing Applications +/- 360° Per Meter
- Outstanding Service Life In Heavy Duty, High-Speed Torsional Applications
- Xtreme Oil, Solvent, Chemical And Fuel Resistance
- Perfectly Round Geometry Helps Insure A Liquid-Tight Installation Per IP-67 Or NEMA 6

XTRA-GUARD® FLEXIBLE TORSION CABLE APPLICATIONS:

- Twisting and Random Robotic Flexing Applications
- Power Supply to Welding, Painting and Articulating Robots
- Automation Networking
- Connecting Sensors and Actuators to Controllers

CHARACTERISTICS

Operating Temperature:

- -10°C to 80° C (Flexing)
- -30° C to 80° C (Stationary)

Voltage Rating:

- 600 Volt

Color Description:

- Color Code: Black with White (Alternate and Inverted) Numbers and One Green/Yellow Grounding Conductor (Conductor count includes Ground conductor)
- Jacket Color: Black

Product Description:

- Conductor: Stranded Bare Copper
- Insulation : Thermoplastic Elastomer
- Minimum Bend Radius: 10X O.D. (Static) 15X O.D. (Dynamic)
- Maximum Twisting ±360° C Per Meter
- Jacket: Oil Resistant Polyurethane

SPECIFICATIONS

- UL AWM 20234
- CSA AWM I A/B II A/B FT1
- CE LVD-CD 73/23/EEC Modified by CD 93/68/EEC
- RoHS Compliant



AVAILABILITY

- Most Items Are Available For Same-Day Shipment From Inventory
 - Orders Placed By 6:00 EST Will Be Shipped The Same Day
- Please Refer To <http://www.alphawire.com/pages/stk.cfm> For Stocked Items
 - Minimums May Apply For Non Stocked Items

FTT® TUBING RECOMMENDATION

FTT® - FLEX - Highly Flexible Irradiated Silicone Rubber

(See Page 134 for Product Specifications)

FTT® - 650 - Chemical and Temperature Resistant Viton®

(See Page 132 for Product Specifications)

Viton® is a registered trademark of DuPont Performance Elastomers L.L.C.



24 AWG (0,23mm ²), 7/32(7x0,203mm), Insulation Thickness: 0.016(0,41mm)					
Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87003	3	0.050	1,27	0.227	5,77
87004	4	0.050	1,27	0.242	6,15
87005	5	0.050	1,27	0.259	6,58
87007	7	0.050	1,27	0.294	7,47

22 AWG (0,35mm ²), 19/34(19x0,16mm), Insulation Thickness: 0.016(0,41mm)					
Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87103	3	0.050	1,27	0.244	6,20
87104	4	0.050	1,27	0.261	6,63
87105	5	0.050	1,27	0.281	7,14
87107	7	0.050	1,27	0.321	8,15

20 AWG (0,5mm ²), 19/32(19x0,203mm), Insulation Thickness: 0.016(0,41mm)					
Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87203	3	0.050	1,27	0.262	6,65
87204	4	0.050	1,27	0.281	7,14
87205	5	0.050	1,27	0.302	7,67
87207	7	0.050	1,27	0.347	8,81

18 AWG (0,96mm ²), 19/30(19x0,254mm), Insulation Thickness: 0.016(0,41mm)					
Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87303	3	0.050	1,27	0.283	7,19
87304	4	0.050	1,27	0.305	7,75
87305	5	0.050	1,27	0.329	8,36
87307	7	0.050	1,27	0.380	9,65

16 AWG (1,32mm ²), 19/0.0117(19x0,297mm), Insulation Thickness: 0.016(0,41mm)					
Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87403	3	0.050	1,27	0.300	7,67
87404	4	0.050	1,27	0.327	8,31
87405	5	0.050	1,27	0.354	8,99
87407	7	0.050	1,27	0.410	10,41

14 AWG (2,1mm ²), 19/0.0147(19x0,373mm), Insulation Thickness: 0.027(0,69mm)					
Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87503	3	0.050	1,27	0.382	9,70
87504	4	0.050	1,27	0.417	10,59
87505	5	0.050	1,27	0.455	11,56
87507	7	0.050	1,27	0.535	13,59

12 AWG (3,3mm ²), 19/0.0185(19x0,47mm), Insulation Thickness: 0.027(0,69mm)					
Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87603	3	0.060	1,52	0.444	11,28
87604	4	0.060	1,52	0.483	12,27
87605	5	0.060	1,52	0.526	13,36
87607	7	0.060	1,52	0.618	15,70

10 AWG (5,22mm ²), 37/0.0167(37x0,42mm), Insulation Thickness: 0.030(0,76mm)					
Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87703	3	0.060	1,52	0.508	12,90
87704	4	0.060	1,52	0.555	14,10
87705	5	0.070	1,78	0.627	15,93
87707	7	0.070	1,78	0.737	18,72





FLEXIBLE TORSION CABLE
MULTICONDUCTOR, SHIELDED



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- Outstanding Service Life In Heavy Duty, High-Speed Torsional Applications
- Xtreme Oil, Solvent, Chemical And Fuel Resistance
- Perfectly Round Geometry Helps Insure A Liquid-Tight Installation Per IP-67 Or NEMA 6
- Superior Performance Against EMI/RFI



XTRA-GUARD® FLEXIBLE SHIELDED TORSION CABLE APPLICATIONS:

- Twisting and Random Robotic Flexing Applications
- Power Supply to Welding, Painting and Articulating Robots
- Automation Networking
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- Color Code: Black with White Numbers (Alternate and Inverted) and One Green/Yellow Grounding Conductor (Conductor count includes Ground conductor)
- Jacket Color: Black

Product Description:

- Conductor: Stranded Bare Copper
- Insulation : Thermoplastic Elastomer
- Shielding : Tinned Copper Spiral 90% Coverage
- Minimum Bend Radius: 10X O.D. (Static) 15X O.D. (Dynamic)
- Maximum Twisting: ±360° Per Meter
- Jacket: Oil Resistant Polyurethane

SPECIFICATIONS

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24 AWG (0,23mm²), 7/32(7x0.203mm), Insulation Thickness: 0.016(0,41mm)

Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87003CY	3	0.050	1,27	0.246	6,25
87004CY	4	0.050	1,27	0.261	6,63
87005CY	5	0.050	1,27	0.278	7,06
87007CY	7	0.050	1,27	0.313	7,98

22 AWG (0,38mm²), 19/34(19x0.16mm), Insulation Thickness: 0.016(0,41mm)

Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87103CY	3	0.050	1,27	0.263	6,68
87105CY	5	0.050	1,27	0.300	7,62
87107CY	7	0.050	1,27	0.340	8,64

20 AWG (0,62mm²), 19/30(19x0.203mm), Insulation Thickness: 0.016(0,41mm)

Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87203CY	3	0.050	1,27	0.281	7,14
87204CY	4	0.050	1,27	0.300	7,62
87205CY	5	0.050	1,27	0.321	8,15

18 AWG (0,98mm²), 19/30(19x0.254mm), Insulation Thickness: 0.016(0,41mm)

Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87303CY	3	0.050	1,27	0.302	7,67
87304CY	4	0.050	1,27	0.324	8,23
87305CY	5	0.050	1,27	0.348	8,84
87307CY	7	0.050	1,27	0.399	10,13

16 AWG (1,32mm²), 19/0.0117(19x0.297mm), Insulation Thickness: 0.016(0,41mm)

Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87403CY	3	0.050	1,27	0.321	8,15
87405CY	5	0.050	1,27	0.373	9,47
87407CY	7	0.050	1,27	0.429	10,90

14 AWG (2,07mm²), 19/0.0147(19x0.373mm), Insulation Thickness: 0.027(0,69mm)

Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87503CY	3	0.050	1,27	0.401	10,19
87504CY	4	0.050	1,27	0.436	11,07
87505CY	5	0.050	1,27	0.474	12,07

12 AWG (3,29mm²), 19/0.0185(19x0.47mm), Insulation Thickness: 0.027(0,69mm)

Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87603CY	3	0.060	1,52	0.463	11,78
87604CY	4	0.060	1,52	0.502	12,75
87605CY	5	0.060	1,52	0.545	13,84
87607CY	7	0.060	1,52	0.637	16,18

10 AWG (5,22mm²), 37/0.0167(37x0.424mm), Insulation Thickness: 0.030(0,76mm)

Alpha Part No.	No. of Cond.	Jacket Thickness		Nominal Diameter	
		Inches	mm	Inches	mm
87703CY	3	0.060	1,52	0.527	13,39
87704CY	4	0.060	1,52	0.574	14,58
87705CY	5	0.070	1,78	0.646	16,41
87707CY	7	0.070	1,78	0.756	19,20

