



MOTIONFLEX® Series Cable



LUTZE MOTIONFLEX® is ideal for use with any Variable Frequency Drive and motor combination for the continuous motion applications. Designed for torisional, linear motion and cable tray applications. AutomationDirect is proud to offer the full line of MOTIONFLEX® cable from 18AWG up to 8AWG. This cable is available in bulk lengths starting as low as 10 feet up to over 1000 feet on most part numbers.

MOTIONFLEX® is rated Tray Cable- Exposed Run (TC-ER) meaning that it can be used with or without conduit, making the installations more cost effective by reducing the cost of labor and materials.

The XHHW-2 jacket is oil and sunlight resistant and suitable for dry, damp, wet, and direct burial locations.

Carrying multiple approvals and ratings, LUTZE MOTIONFLEX® cable can be used for most all motion drive and motor application.

Features

- Flexible fine wire stranded tinned copper conductors for improved electrical characteristics and reduced oxidation
- Black with white numbers and one green/yellow ground
- Thermoset XLPE insulation type XHHW-2, Wet/Dry
- Shielded with tinned copper braid with 85% optical coverage, and drain wire
- Type XHHW-2 insulation offering smaller ODs for general VFD applications
- TC-ER for use with cable trays without conduit, which can reduce installation costs in industrial environments
- Sunlight resistant
- Direct burial
- Talc and silicone free
- Oil resistant jacket
- Black jacket similar to RAL 9005
- Cut to length in 1 foot increments
- Minimum cut lengths as low as 10 feet*
- Made in USA



Please Note: Our prices on Servo Cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.



Click on the above thumbnail or go to <https://www.automationdirect.com/VID-WD-0016> for a short introduction on our cut to length cable



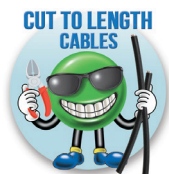
| MOTIONFLEX® Cable Specifications | | | |
|---|---|----------------------------|---|
| Conductors Gauge & Stranding | 18AWG (41 Strands) to 8AWG (336 Strands), tinned Copper | Approvals** | UL Type Flexible Motor Supply Flexible VFD Servo Cable, TC-ER WTTTC Meets NEC 336, 392 Class I & 11, Div. 2 and Class I Zone 2 per NEC 501, 502, 505 AWM 21270 c(UL)TC CIC FT4 UL 1277 |
| Shield | Foil tape, tinned copper braid with 80% optical coverage, and drain wire | | |
| Voltage Rating | 600V UL TC ER 1000V WTTTC 1000V Flexible Motor Supply 600V UL AWM 105C | | |
| Outer Jacket Material | Thermoset XLPE | | |
| Outer Jacket Color | Black with white print | | |
| Temperature Ratings | -40°F to +221°F (-40°C to +105°C) | Sample Print Legend | WWW.LUTZE.COM PART# AXXXXXXX MOTIONFLEX® M (C) TPE CONSTANT FLEXING CABLE SERVO AWG16/4C XHHW-2 E352875 -46 FLEXIBLE MOTOR SUPPLY 90°C 1000V WET OR DRY OR WTTTC 1000V 90C DRY OR UL TYPE TC-ER 600V SUN RES OIL RES I & II -40C OR AWM 21270 105C 600V |
| Conductor Insulation | Black with white numbers and one green/yellow ground Thermoset XLPE insulation | | |
| * See web store for minimum and maximum cut lengths | | | |
| ** To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at www.AutomationDirect.com | | | |



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| MOTIONFLEX® Cable Selection | | | | | | | | | | | | | | | | |
|-----------------------------|--|-----|---------------------|--------|------------------------|--------------|-------------------------|--|---------------------------------|-------------------|---------------------------|------|-------------------------|--------|----------------------------|----------------|
| Part Number | Number of Conductors (includes ground) | AWG | Conductor OD inches | Strand | Power Conductors (AWG) | Ground (AWG) | Minimum Cut Length (ft) | Nom. Insulation Thickness PVC/Nylon (mils) | Nominal Jacket Thickness (mils) | Nominal OD inches | *Ampacity NEC 310.16 Amps | | Min. Bend Radius inches | | Approximate Weight (lb/ft) | Price per foot |
| | | | | | | | | | | | 75°C | 90°C | Fixed | Moving | | |
| | | | | | | | | | | | | | | | | |
| A4061804-1 | 4 | 18 | 0.103 | 41/34 | 18 | 18 | 20 | 32 | 32 | 0.38 | 7 | 14 | 2.28 | 4.56 | 40 | \$4.40 |
| | | | | | | | | | | | | | | | | |
| A4061604-1 | 4 | 16 | 0.12 | 65/34 | 16 | 16 | 20 | 32 | 32 | 0.425 | 10 | 18 | 2.55 | 5.1 | 55 | \$4.86 |
| | | | | | | | | | | | | | | | | |
| A4061404-1 | 4 | 14 | 0.131 | 104/34 | 14 | 14 | 20 | 32 | 32 | 0.45 | 20 | 25 | 2.7 | 5.4 | 76 | \$5.42 |
| | | | | | | | | | | | | | | | | |
| A4061204-1 | 4 | 12 | 0.167 | 168/34 | 12 | 12 | 20 | 32 | 32 | 0.535 | 25 | 30 | 3.21 | 6.42 | 115 | \$6.98 |
| | | | | | | | | | | | | | | | | |
| A4061004-1 | 4 | 10 | 0.192 | 259/34 | 10 | 10 | 20 | 32 | 32 | 0.625 | 35 | 40 | 3.75 | 7.5 | 165 | \$9.17 |
| | | | | | | | | | | | | | | | | |
| A4060804-1 | 4 | 8 | 0.254 | 336/34 | 8 | 8 | 20 | 46 | 46 | 0.775 | 50 | 55 | 4.65 | 9.3 | 259 | \$14.13 |

* Ampacity based on NFPA 79 12.5.1 Conductor Ampacity Based on Copper Conductors

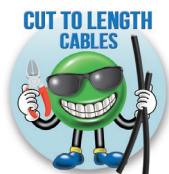


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| MOTIONFLEX® Cable Specifications Continued | | | | | | |
|---|--|---|---|---|-------------------------|------------------------------------|
| Part Number | Nom. Capacitance Conductor to Shield (pF/ft.) | Nom. Capacitance Conductor to Conductor (pF/ft.) | Nom. Conductor DC Resistance @ 20°C (Ohm/1000 ft.) | Nominal Outer Shield DC Resistance @ 20°C (Ohm/1000 ft.) | Impedance (ohms) | Max. Operating Voltage - UL |
| <u>A4061804-1</u> | 32.99 | 17.72 | 6.71 | 5.067 | 89.55 | 1000V |
| <u>A4061604-1</u> | 36.94 | 19.03 | 4.23 | 3.092 | 73.6 | 1000V |
| <u>A4061404-1</u> | 46.58 | 21.76 | 2.62 | 3.165 | 66.0 | 1000V |
| <u>A4061204-1</u> | 57.99 | 24.41 | 1.7 | 2.345 | 51.7 | 1000V |
| <u>A4061004-1</u> | 69.27 | 26.65 | 1.1 | 2.11 | 45.7 | 1000V |
| <u>A4060804-1</u> | 59.93 | 24.81 | 0.7 | 1.853 | 49.1 | 1000V |



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