TEMPSENS

# FG-101

## THERMOCOUPLE CABLE

### FIBER GLASS - FIBER GLASS INSULATED - 450°C

IS 8784, ANSI MC 96.1

Voltage Grade : 300V

### SPECIFICATIONS

| | | |
|---|---|---|
| Conductor | : | Solid, Multistrand, Thermocouple Grade Materials as per ASTM E230 & ANSI MC 96.1 |
| Insulation | : | Braided or Lapped Fiber with Silicon Varnish, High Temp. Saturated |
| Construction | : | Flat |
| Outer Sheath | : | Braided Fiber with Silicon Varnish, High Temp. Saturated |
| Operating Temp. | : | 450°C |
| Limit of Error | : | According to ASTM E230 / 77 / IEC 584 |
| Color Code | : | According to ANSI MC 96.1 |

### FEATURES

- ✓ Max. Temp. Up to 450°C
- ✓ Excellent Physical Properties
- ✓ Excellent Di-Electric Constant
- ✓ High Temperature Stability
- ✓ High Thermal Endurance
- ✓ Good Moisture, Chemical Abrasion Resistance

### AVAILABLE OPTIONS

- ✓ Double Fiber Braid Insulation
- ✓ Metal Coverings
- ✓ Tighter Than Special Limit Accuracy Tolerance
- ✓ Special Colour Code
- ✓ Calibration Test Report

### CONSTRUCTION DETAILS AND DIMENSIONS

| Cable Odering Code | Wire Type | AWG / SWG No | No of Strands | Strain Dia (mm) | Cross Section Area (mm²) | Nominal Bunched Conductor Dia (mm) | Cable Formation | Nominal Cable Diameter mm (Flat) | Nominal Cable Diameter mm (Twisted) | Cable Wgt (Approx.) Kg/Km |
|---|---|---|---|---|---|---|---|---|---|---|
| FG101 | Solid | 32 AWG | 1 | 0.20 | 0.03 | 0.20 | Flat | 1.7 x 1.1 | - | 4.8 |
| FG102 | Solid | 29 AWG | 1 | 0.30 | 0.07 | 0.30 | Flat | 1.9 x 1.2 | - | 6.1 |
| FG103 | Solid | 24 AWG | 1 | 0.51 | 0.20 | 0.51 | Flat | 2.5 x 1.5 | - | 11.5 |
| FG104 | Multistrand | 7X32 AWG | 7 | 0.20 | 0.22 | 0.56 | Flat | 2.7 x 1.7 | - | 11.8 |
| FG105 | Multistrand | 7X30 AWG | 7 | 0.25 | 0.35 | 0.75 | Flat | 3.1 x 1.9 | - | 15.5 |
| FG106 | Solid | 22 SWG | 1 | 0.71 | 0.40 | 0.71 | Flat | 3.1 x 1.9 | - | 15.6 |
| FG107 | Multistrand | 7X32 SWG | 7 | 0.27 | 0.42 | 0.82 | Flat | 3.2 x 2.0 | - | 17.0 |
| FG108 | Solid | 20 AWG | 1 | 0.81 | 0.50 | 0.81 | Flat | 3.2 x 2.0 | - | 18.0 |
| FG109 | Multistrand | 7X29 AWG | 7 | 0.30 | 0.50 | 0.90 | Flat | 3.6 x 2.2 | - | 18.0 |
| FG110 | Multistrand | 16X32 AWG | 16 | 0.20 | 0.50 | 0.90 | Flat | 3.6 x 2.2 | - | 18.0 |
| FG111 | Multistrand | 7X28 AWG | 7 | 0.32 | 0.56 | 0.96 | Flat | 3.7 x 2.3 | - | 19.0 |
| FG112 | Multistrand | 7X27 AWG | 7 | 0.37 | 0.75 | 1.11 | Flat | 4.0 x 2.3 | - | 24.0 |
| FG113 | Multistrand | 24X32 AWG | 24 | 0.20 | 0.75 | 1.11 | Flat | 4.0 x 2.3 | - | 24.0 |
| FG114 | Solid | 18 AWG | 1 | 1.02 | 0.81 | 1.02 | Flat | 3.9 x 2.2 | - | 26.0 |
| FG115 | Multistrand | 7X26 AWG | 7 | 0.40 | 0.88 | 1.20 | Flat | 4.1 x 2.4 | - | 28.0 |
| FG116 | Solid | 17 AWG | 1 | 1.13 | 1.00 | 1.13 | Flat | 4.0 x 2.3 | - | 31.0 |
| FG117 | Multistrand | 14X29 AWG | 14 | 0.30 | 1.00 | 1.30 | Flat | 4.5 x 2.6 | - | 31.0 |
| FG118 | Multistrand | 32X32 AWG | 32 | 0.20 | 1.00 | 1.30 | Flat | 4.5 x 2.6 | - | 31.0 |
| FG119 | Multistrand | 7 X 27 SWG | 7 | 0.43 | 1.00 | 1.30 | Flat | 4.5 x 2.6 | - | 31.0 |
| FG120 | Multistrand | 3X22 SWG | 3 | 0.71 | 1.20 | 1.55 | Flat | 5.0 x 2.9 | - | 34.0 |
| FG121 | Multistrand | 40X36 SWG | 40 | 0.19 | 1.25 | 1.40 | Flat | 4.6 x 2.7 | - | 35.0 |
| FG122 | Solid | 16 AWG | 1 | 1.29 | 1.30 | 1.29 | Flat | 4.5 x 2.6 | - | 37.0 |
| FG123 | Multistrand | 19X29 AWG | 19 | 0.30 | 1.30 | 1.50 | Flat | 5.0 x 2.9 | - | 40.0 |
| FG124 | Multistrand | 19 X 28 AWG | 19 | 0.32 | 1.50 | 1.60 | Flat | 5.1 x 3.0 | - | 40.0 |
| FG125 | Multistrand | 21X29 AWG | 21 | 0.30 | 1.50 | 1.55 | Flat | 5.1 x 3.0 | - | 40.0 |
| FG126 | Multistrand | 21X29 AWG | 7 | 0.53 | 1.50 | 1.55 | Flat | 5.1 x 3.0 | - | 40.0 |
| FG127 | Multistrand | 48X36 SWG | 48 | 0.19 | 1.50 | 1.55 | Flat | 5.1 x 3.0 | - | 40.0 |

**Note :** Above Parameters are considering single pair cable

### ORDERING CODE

| Conductor Size | Type of T/C | Grade of Conductor | No. of Pairs | Color Code | Cable Formation |
|---|---|---|---|---|---|
| (FGXXX) | (X) | (X) | (XX) | (X) | (X) |
| 101 to 127 | K<br>T<br>J<br>E<br>N<br>R<br>S<br>C<br>B | T<br>X<br>C | 01 | A-(ANSI)<br>I-(IEC)<br>J-(JIS) | F-(Flat) |

Table 1



Rev 01