

**Ratings**

Voltage: 300 V  
Temperature: -40~80 °C  
Flammability: FT2

**Conductor**

Conductor count: 6  
Gauge: 18 AWG 0.82 mm<sup>2</sup>  
Material: bare copper  
Strand size:  $\phi 0.127 \times 65$  mm  
Resistance at 20 °C: 21.8  $\Omega$  /km max

**Insulator**

Material: TPE 85A  
Color: red, black, white, yellow, blue, green  
Diameter:  $\phi 1.8 \pm 0.10$  mm  
Nominal thickness: 0.29mm  
Resistance at 20 °C: 100 M $\Omega$  /km min

**Wrap**

Material: cotton paper

**Outer jacket**

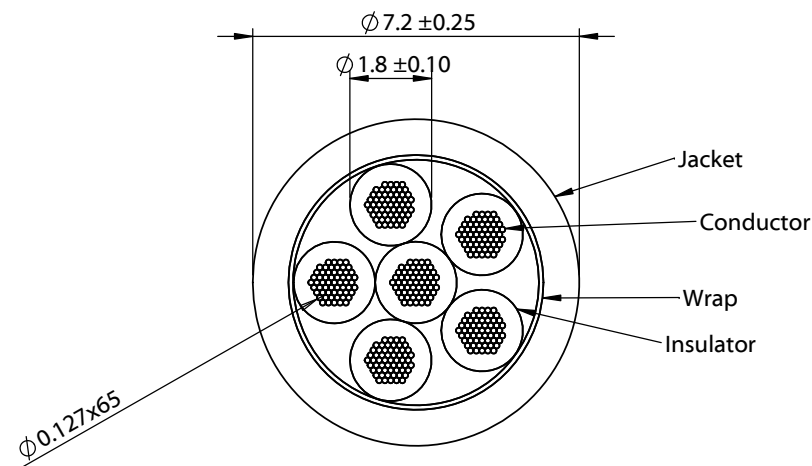
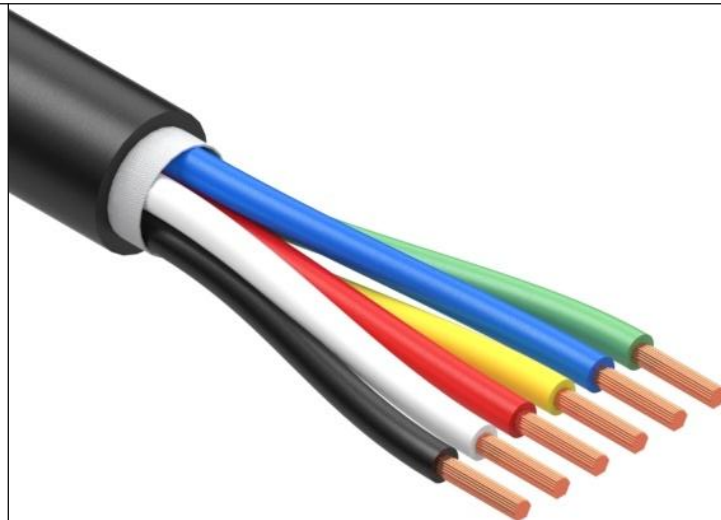
Material: TPU (Polyether Polyurethane) 80A  
Color: black  
Diameter:  $\phi 7.2 \pm 0.25$  mm  
Nominal thickness: 0.76mm

**Wire marking**

E339579 UL AWM STYLE 20280 18 AWG 80°C 300V - - - cUL  
AWM I/II A 80°C 300V FT2 TENSILITY

**Tests**

Spark test: 3.0 kV  
Insulation tensile strength: 0.562 kgf/mm<sup>2</sup>  
Jacket tensile strength: 1.05 kgf/mm<sup>2</sup>  
After aging at 113  $\pm 2$  °C for 7 days:  
Minimum jacket tensile strength 70 % original  
Minimum insulation tensile strength 75 % original  
Minimum jacket elongation 65 % original  
Minimum insulation elongation 75 % original  
Heat shock: 121  $\pm 1$  °C /1 hour, no observed degradation  
Deformation: 121  $\pm 1$  °C /1 hour,  $\leq 50$  %  
Cold bend: -10  $\pm 2$  °C /1 hour, no observed cracking  
Dielectric test: 2000 Vac for 1 minute without breakdown



|           |            |                 |                                                                                                              |                                                                                                           |                                                                                                 |                          |              |
|-----------|------------|-----------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------|--------------|
| Revision: | Date:      | Description:    | Prepared:                                                                                                    | Notes:                                                                                                    | <b>TENSILITY</b><br>tel 1.541.323.3228 800 877.670.7118<br>fax 1.541.323.4202 web tensility.com |                          |              |
| A         | 11/14/2022 | Initial release | Verified:                                                                                                    | RoHS compliant<br>Phthalate and halogen free<br>Function test: no open, no short circuit, no intermittent |                                                                                                 |                          |              |
|           |            |                 | Dimensions are in millimeters.<br>Tolerances:<br>X: $\pm 0.5$ mm<br>X.X: $\pm 0.3$ mm<br>X.XX: $\pm 0.05$ mm | Description:<br>Wire, 6C BC, 18 AWG, UL20280, 300V, 80C, 7.2 mm, FT2, TPU                                 | Size:<br>A                                                                                      | Part number:<br>30-02367 | Sheet 1 of 1 |
|           |            |                 |                                                                                                              |                                                                                                           | Scale: 6:1                                                                                      |                          |              |