

**Ratings**

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

**Conductor**

Conductor count: 8  
 Gauge: 18 AWG 0.82 mm<sup>2</sup>  
 Material: bare copper strands  
 Strand size:  $\varnothing 0.127 \times 65$   
 Max resistance at 20 °C: 23.2  $\Omega$  /km

**Insulator**

Material: TPE 85A  
 Color: white, black, red, yellow, blue, green, orange, purple  
 Diameter:  $\varnothing 1.8 \pm 0.10$  mm  
 Nominal thickness: 0.21 mm  
 Minimum resistance @ 20 °C: 100 M $\Omega$  /km

**Filler**

Material: cotton rope

**Shield**

Type: braided  
 Material: bare copper strands  
 Stranding:  $\varnothing 0.10$  mm, 65% minimum coverage

**Drain**

Material: bare copper strands  
 Stranding:  $\varnothing 0.127 \times 65$

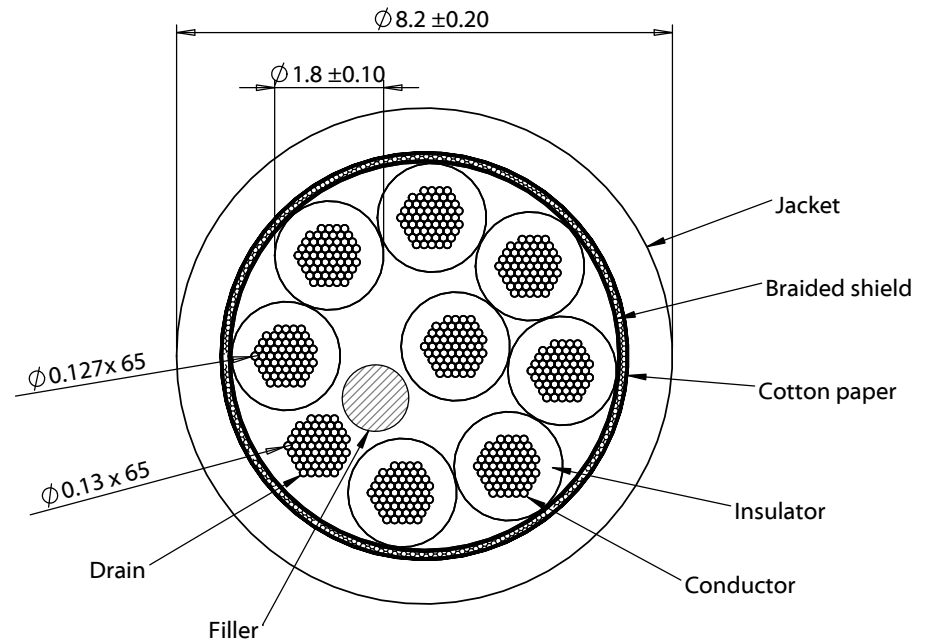
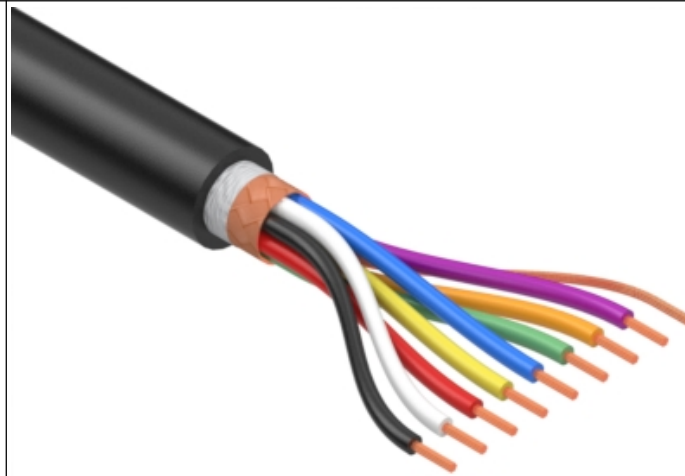
**Outer jacket**

Material: TPU (Polyether Polyurethane) 80A  
 Color: black  
 Diameter:  $\varnothing 8.2 \pm 0.20$  mm  
 Nominal thickness: 0.85 mm

**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:
A	6/12/2019	Initial release

Prepared: <b>AG</b> <small>Digitally signed by AG Date: 2019.06.12 11:55:50 -07'00'</small>
Verified: <b>JW</b> <small>Digitally signed by JW Date: 2019.06.13 09:47:19 -07'00'</small>
Dimensions are in millimeters. Tolerances: X: $\pm 0.5$ mm X.X: $\pm 0.3$ mm X.XX: $\pm 0.05$ mm

Notes: RoHS and REACH compliant Phthalate and halogen free Function: no open, no short circuit, no intermittent
Description: Wire, 8C BC, 18 AWG, UL20280, 300V, 80C, 8.2 mm, braided shield, FT2, TPU

# TENSILITY

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Size: A	Part number: <b>30-00935</b>
Scale: 8:1	

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