

Ratings

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

Conductor

Conductor count: 2
 Gauge: 18 AWG 0.82 mm²
 Material: bare copper
 Strand size: $\varnothing 0.127 \times 65$ mm
 Resistance at 20 °C: 21.8 Ω /km max

Insulator

Material: TPE 85A
 Color: black, white
 Diameter: $\varnothing 1.8 \pm 0.10$ mm
 Nominal thickness: 0.29mm
 Resistance at 20 °C: 100 M Ω /km min

Wrap

Material: cotton paper

Outer jacket

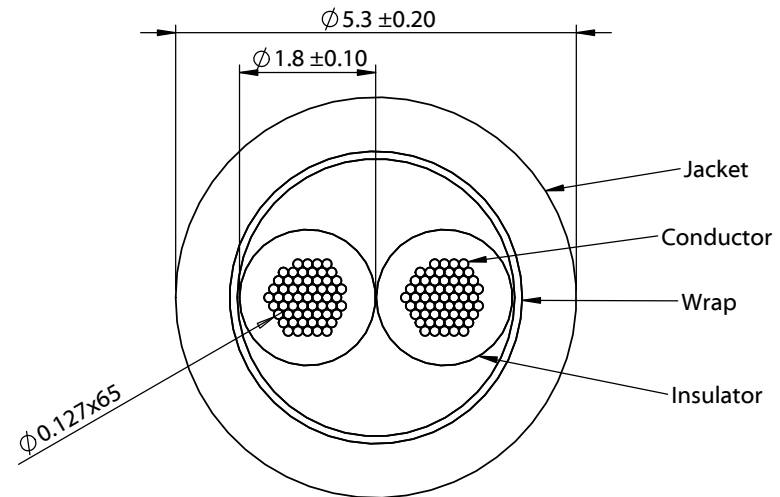
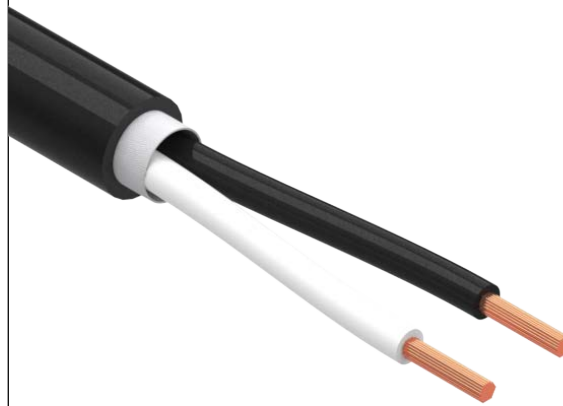
Material: TPU (Polyether Polyurethane) 80A
 Color: black
 Diameter: $\varnothing 5.3 \pm 0.20$ mm
 Nominal thickness: 0.76mm


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/mm²
 Jacket tensile strength: 1.05 kgf/mm²
 After aging at 113 ± 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 ± 1 °C /1 hour, no observed degradation
 Deformation: 121 ± 1 °C /1 hour, ≤ 50 %
 Cold bend: -10 ± 2 °C /1 hour, no observed cracking
 Dielectric test: 2000 Vac for 1 minute without breakdown



Revision:	Date:	Description:	Prepared:	Notes: RoHS compliant	TENSILITY tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com
A	3/2/2023	Initial release	Verified:	Phthalate and halogen free Function test: no open, no short circuit, no intermittent	
			Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Wire, 2C BC, 18 AWG, UL20280, 300V, 80C, 5.3 mm, FT2, TPU	Size: A Part number: 30-02986
					Scale: 10:1  Sheet 1 of 1

5

4

3

2

1