

Ratings

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

Conductor

Conductor count: 8
Gauge: 18 AWG 0.82 mm²
Material: bare copper
Strand size: $\phi 0.127 \times 65$ mm
Resistance at 20 °C: 21.8 Ω /km max

Insulator

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

Filler

Material: cotton rope

Wrap

Material: cotton paper

Outer jacket

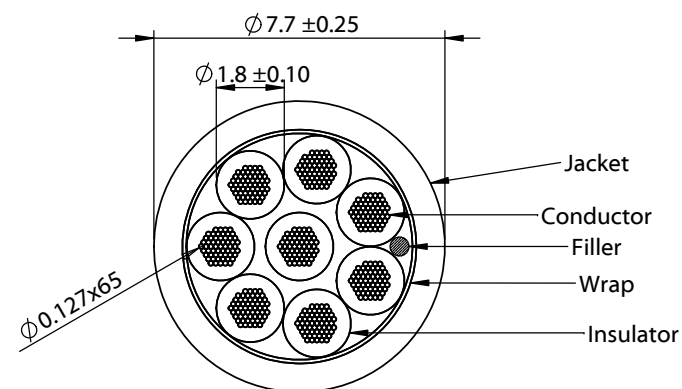
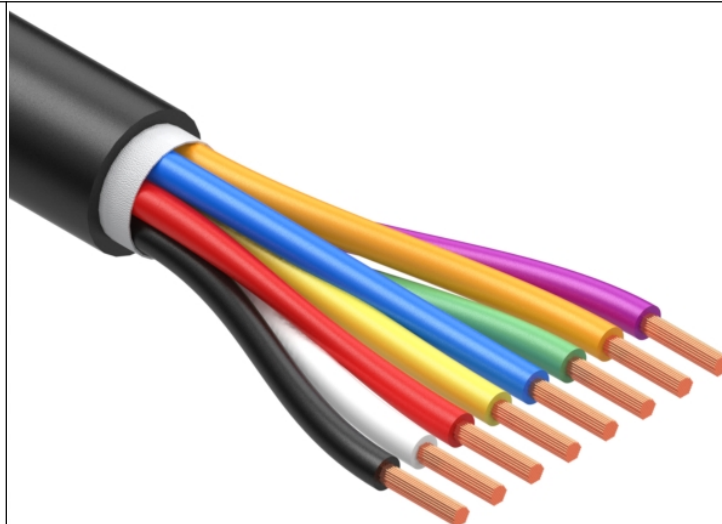
Material: TPU (Polyether Polyurethane) 80A
Color: black
Diameter: $\phi 7.7 \pm 0.25$ mm
Nominal thickness: 0.76mm

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/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:	TENSILITY tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com		
A	11/15/2022	Initial release	Verified:	RoHS compliant Phthalate and halogen free			
			Dimensions are in millimeters.	Function test: no open, no short circuit, no intermittent	Size: Part number: A 30-02383		
			Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Wire, 8C BC, 18 AWG, UL20280, 300V, 80C, 7.7 mm, FT2, TPU			
					Scale: 5:1		Sheet 1 of 1