

Ratings

Voltage: 30 V
Temperature: -20 ~ 70° C

Conductor

Conductor count: 4
Gauge: 30 AWG, 0.05 mm²
Material: bare copper strands
Strand size: $\varnothing 0.08$ (x 11) mm
Resistance at 20 °C: 381 Ω /km max

Enamel

Material: 3UEW-F
Diameter: 0.091 mm
Color(translucent): red, green, blue, natural

Core

Material: Nylon 150D

Outer jacket

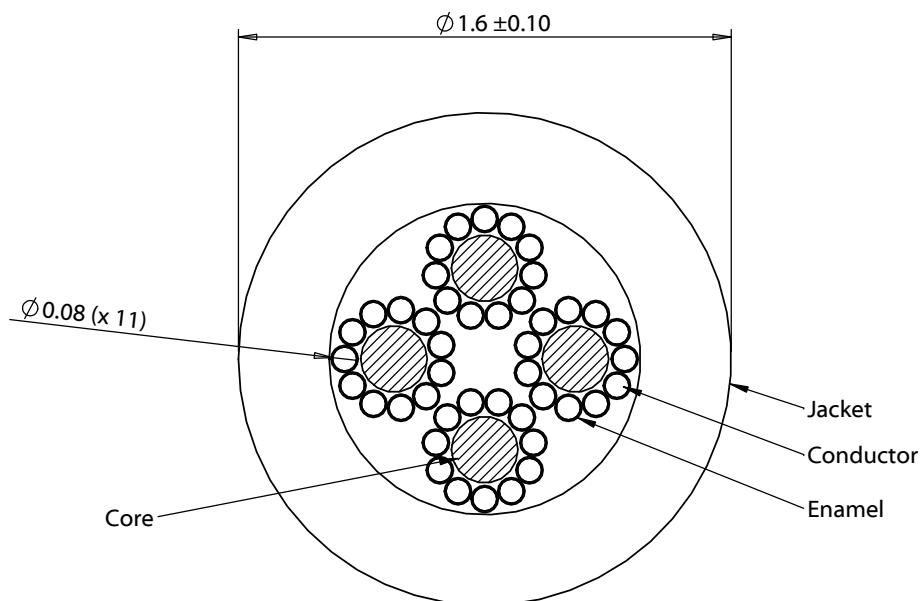
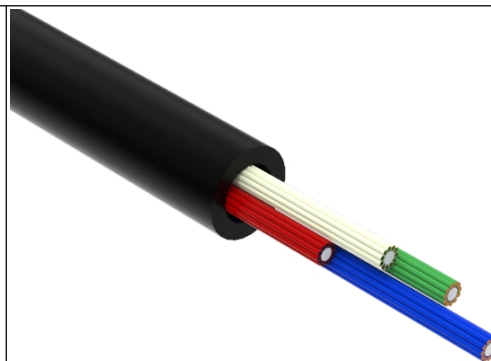
Material: TPU
Color: Black
Diameter: $\varnothing 1.6 \pm 0.10$ mm
Nominal thickness: 0.3 mm

Tests

Jacket tensile strength: 10.3 Mpa
After aging at 113 ± 2 °C for 168 hours:
Minimum jacket tensile strength 70 % original
Minimum jacket elongation 65 % original
Heat shock: 121 ± 1 °C /1 hour, no observed degradation
Deformation: 121 ± 1 °C /1 hour, ≤ 50 %
Cold bend: 10 ± 2 °C /4 hour, no observed cracking
Jacket spark test: 1500 Vac for 1 minute without breakdown

Note:

Enameled wire requires special processing to be soldered correctly. It is recommended to use a solder pot to burn off the enamel and then to tin the wire to ensure proper termination can be achieved.



Revision:	Date:	Description:	Prepared:	Notes:	TENSILITY tel 1.541.323.3228 800 877.670.7118 fax 1.541.323.4202 web tensility.com		
A	06/24/2026	Initial release	CR Digitally signed by CR Date: 2026.08.05 15:41:01 -07'00'	RoHS compliant			
			Verified: KM Digitally signed by KM Date: 2026.08.07 13:59:22 -07'00'	Function test: no open, no short circuit, no intermittent	Size:	Part number:	
			Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Wire, 4C, BC, 30 AWG, 30V, 70C, 1.6 mm, TPU, black, UEW	A	30-03813	
					Scale: 40:1		Sheet 1 of 1

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