

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

Conductor
Conductor count: 3
Gauge: 32 AWG, 0.03 mm²
Material: bare copper strands
Strand size: $\varnothing 0.08$ (x 7) mm
Resistance at 20 °C: 588 Ω /km max

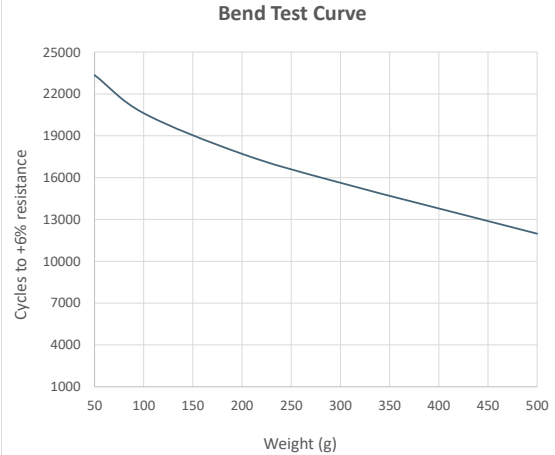
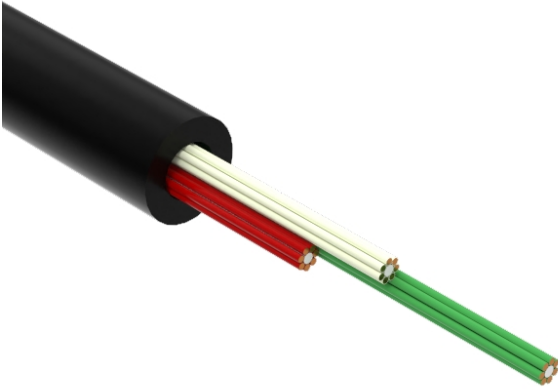
Enamel
Material: 3UEW-F
Diameter: 0.091 mm
Color(translucent): red, green, natural

Core
Material: Nylon 150D

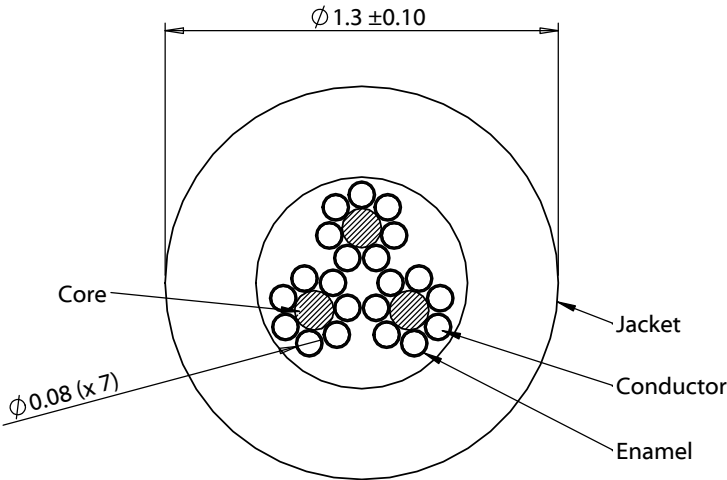
Outer jacket
Material: TPU
Color: Black
Diameter: $\varnothing 1.3 \pm 0.10$ mm
Nominal thickness: 0.3 mm

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.



Testing performed using cyclic bend at a 12.7 mm radius under specified loads, with failure defined as a $\geq 6\%$ increase in conductor resistance. Data points represent measured cycles to failure at each load; the trendline is a power-law fit used to project fatigue life at lower loads.



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	AG	RoHS compliant			
			Verified:	Jacket meets ISO 10993 biological compatibility	Size: Part number: A 30-03814		
			Dimensions are in millimeters. Tolerances: X: ± 0.5 mm X.X: ± 0.3 mm X.XX: ± 0.05 mm	Description: Wire, 3C, BC, 32 AWG, 30V, 70C, 1.3 mm, TPU, black, UEW			
					Scale: 40:1		Sheet 1 of 1