

**Ratings**  
 Voltage: 300 V  
 Operating temperature: -20° to 80 °C

**Conductor**  
 Gauge: 20 AWG, 0.52 mm<sup>2</sup>  
 Material: tinned copper strands  
 Strand size: Ø 0.178 mm  
 Strand count: 21  
 Max resistance at 20 °C: 36.7 Ω/km

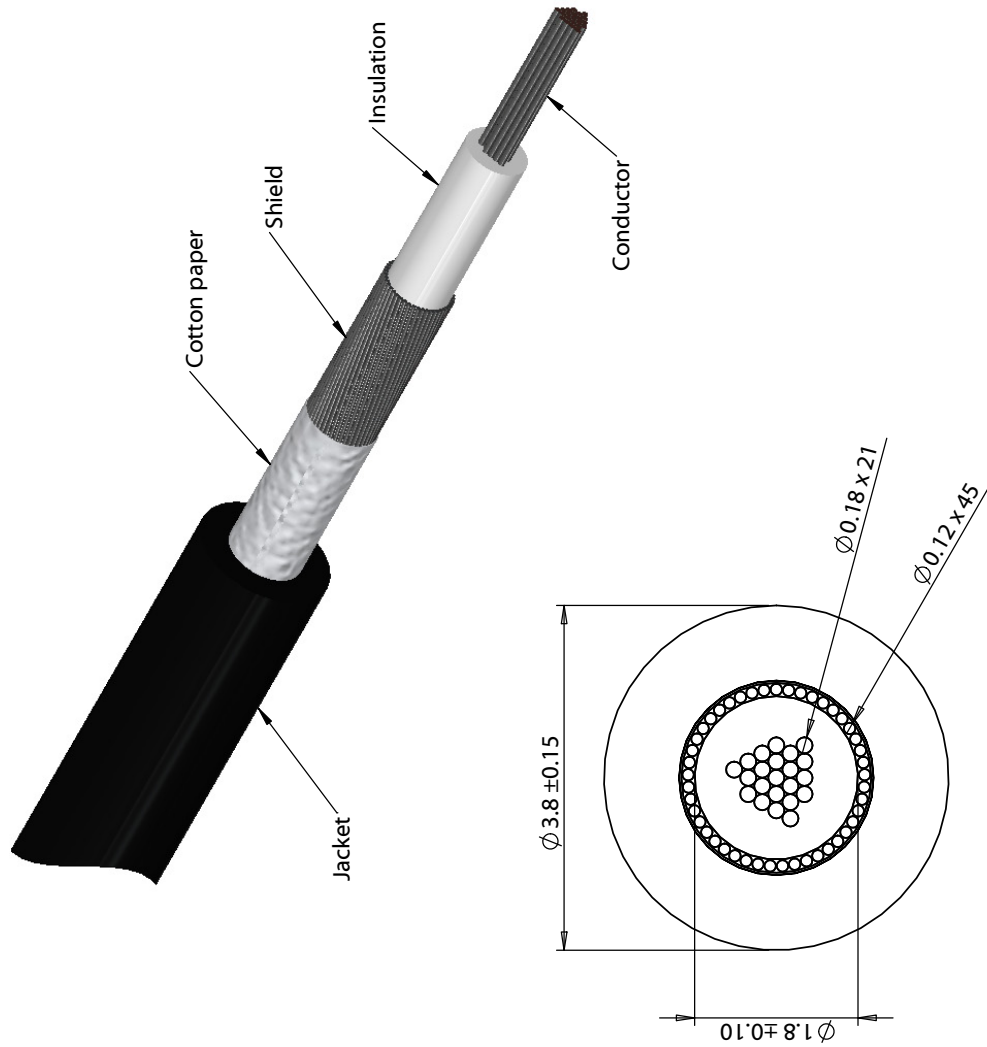
**Insulator**  
 Material: PVC  
 Color: white  
 Outer diameter: 1.8 ±0.10 mm  
 Min resistance at 20 °C: 10 MΩ/km

**Shield**  
 Type: spiral  
 Material: tinned copper strands  
 Strand size: Ø 0.12 mm  
 Strand count: 45 ±2

**Outer jacket**  
 Material: TPU, 80 °C  
 Type: extruded, non-integral  
 Color: black  
 Diameter: 3.8 ±0.15 mm

**Wire marking:** E339579 AWM STYLE 10846 80°C  
 300V VW-1 ---C AWM I/II A 80°C 300V FT1 TENSILITY

**Tests**  
 Voltage test: 300 V  
 Spark test: 3.0 kV  
 Tensile strength: 1.05 kgf/mm<sup>2</sup>  
 After aging at 113 ±2 °C for 7 days:  
 Minimum tensile strength 70 % original  
 Minimum elongation 65 % original  
 Heat shock: 121 ±1 °C/1 hour, no observed degradation  
 Deformation: 121 ±1 °C/1 hour, ≤ 50 %  
 Cold bend: -10 ±1 °C/1 hour, no observed cracking  
 Flammability: FT1, VW-1  
 Dielectric test: 1500 V ac for 1 minute without breakdown



REVISION	DATE	DESCRIPTION
A	9/2/2015	Initial release
A1	9/14/2015	Upgraded fire rating to VW-1/FT1
A2	3/10/2016	Updated operating temperature range

**PREPARED:**  
**VERIFIED:**  
 DIMENSIONS ARE IN MILLIMETERS  
 TOLERANCES:  
 X: ± 0.5 mm  
 X.X: ± 0.3 mm  
 X.XX: ± 0.05 mm

**NOTES**  
 RoHS and REACH compliant  
 Function test: no open, no short circuit, no intermittent  
 Drawing in third angle projected  
 DESCRIPTION:  
 Wire, 1C TS, 20 AWG, UL10846, 300V, 80C, 3.8 mm, shielded, VW-1, TPU

<h1>TENSILITY</h1> <p>20802 Sockeye Place #130          Bend, OR 97701 USA          tel 541.323.3228 fax 541.323.4202          800 877.670.7118 www.tensility.com</p>		SIZE	PART NUMBER
		A	30-00561
SCALE: 12:1			SHEET 1 OF 1