

## Ratings

Voltage: 300 Vac  
Temperature: 80 °C

## Conductor

Gauge: 18 AWG, 0.82 mm<sup>2</sup>  
Material: tinned copper strands  
Strand size: Ø 0.16 mm  
Strand count: 41  
Max resistance at 20 °C: 22 Ω/km

## Insulator

Material: PVC  
Color: white, black  
Outer diameter: 2.05 ±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: 92 ±2

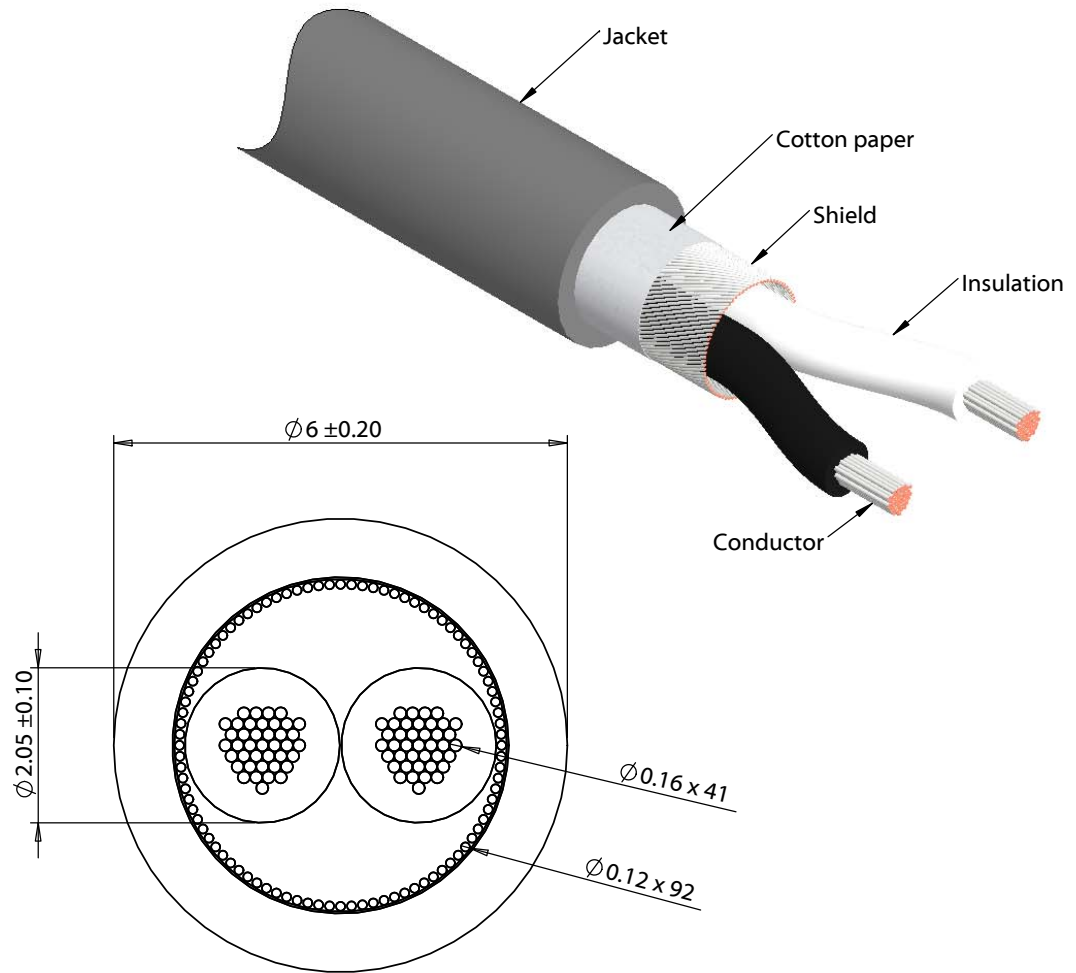
## Outer jacket

Material: TPU, 80 °C  
Type: extruded, non-integral  
Color: gray  
Diameter: 6.0 ±0.20 mm

**Wire marking:** E339579 AWM STYLE 20549 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     | PREPARED:                                                      | NOTES                                                                                      | <h1>TENSILITY</h1> <p>20802 Sockeye Place #130<br/>Bend, OR 97701 USA<br/>tel 541.323.3228 fax 541.323.4202<br/>800 877.670.7118 www.tensility.com</p> |  |  |
|----------|-----------|-----------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| A        | 9/21/2015 | Initial release |                                                                | RoHS and REACH compliant                                                                   |                                                                                                                                                        |  |  |
|          |           |                 | VERIFIED:                                                      | Function test: no open, no short circuit, no intermittent                                  | SIZE<br>A<br>PART NUMBER<br>30-00581                                                                                                                   |  |  |
|          |           |                 |                                                                | Drawing in third angle projected                                                           |                                                                                                                                                        |  |  |
|          |           |                 | DIMENSIONS ARE IN MILLIMETERS                                  | DESCRIPTION:<br>Wire, 2C TS, 18 AWG, UL20549, 300V, 80C, 6.0 mm, shielded, VW-1, TPU, gray | SCALE: 10:1<br>SHEET 1 OF 1                                                                                                                            |  |  |
|          |           |                 | TOLERANCES:<br>X: ± 0.5 mm<br>X.X: ± 0.3 mm<br>X.XX: ± 0.05 mm |                                                                                            |                                                                                                                                                        |  |  |