

Cable

Specifications

	Type C	Type SC	Type SS	Type SR
Dimensions				
Center conductor – AWG (diameter)	32 (0.2032 mm [0.008 in])	32 (0.2032 mm [0.008 in])	32 (0.2032 mm [0.008 in])	37 (0.1143 mm [0.004 in])
Dielectric/insulating material (diameter)	0.56 mm (0.022 in)	0.406 mm (0.016 in)	0.406 mm (0.016 in)	0.38 mm (0.015 in)
Shield (diameter)	0.025 mm (0.001 in) thickness	0.711 mm (0.028 in)	0.711 mm (0.028 in)	0.51 mm (0.02 in)
Drain wire (parallel to conductor)	32 AWG (0.203 mm [0.008 in])	NA	NA	NA
Jacket outer dimension	0.7874 mm × 1.016 mm (0.031 in × 0.039 in)	1.0 mm (0.04 in)	1.0 mm (0.04 in)	0.51 mm (0.02 in)
Material				
Center conductor	Silver-plated copper	Stranded copper ¹	304 stainless steel ²	Carbon steel ³
Dielectric/insulating material	Gore-Tex® expanded PTFE	Teflon® FEP	Teflon® FEP	Teflon® PTFE
Shield	Aluminized polyester ⁴	Braided gold-plated copper ⁵	304 braided stainless ⁶	304 stainless steel ⁷
Drain wire	Silver-plated copper	NA	NA	NA
Jacket material	FEP	Teflon® FEP	Teflon® FEP	NA
Jacket color	Blue	Gold	Gray	NA
Electrical Properties				
Resistance Ω /m (Ω /ft)				
Center conductor at 293 K (20 °C)	0.541 (0.165)	0.282 (0.086)	23.62 (7.2)	4.30 (1.31)
Shield at 296 K (23 °C)	NA	0.085 (0.026)	3.61 (1.1)	8.63 (2.63)
Drain wire at 296 K (23 °C)	0.541 (0.165)	NA	NA	NA
Center conductor max. DC voltage	150 V	600 V	600 V	700 V
Center conductor max. DC current	150 mA	200 mA	200 mA	200 mA
Temperature range	10 mK to 400 K	<1 K to 400 K	10 mK to 473 K	10 mK to 400 K
Characteristic impedance	50 Ω ($\pm 5 \Omega$)	35 Ω at 10 MHz	40 Ω at 10 MHz	50 Ω ($\pm 2 \Omega$)
Nominal capacitance at 5 kHz	79 pF/m (24 pF/ft)	154.2 pF/m (47 pF/ft)	173.9 pF/m (53 pF/ft)	95.14 pF/m (29 pF/ft)

¹ 65 strands of 50 AWG

² 64 strands of 50 AWG 304 SS wire

³ Silver-plated copper-clad carbon steel (0.103 mm outer diameter carbon steel covered by 0.0057 mm thick copper cladding covered by 0.001 mm thick silver plating)

⁴ Aluminized polyester laminated tape, spirally applied at a 40–50% overlap, aluminum side in

⁵ 12 × 3 matrix of 42 AWG wire

⁶ 12 × 4 matrix of 44 AWG wire

⁷ A seamless tubular metal jacket serves as the outer conductor/shield