

Part Number: 89207

100Ω Twinax, #20-1c TC/1c BC, FEP, Duofoil® TC Braid, FEP Jkt, CMP



Product Description

100 Ohm Twinax, 20 AWG stranded (7x28) one tinned, one bare copper conductor, FEP insulation, overall FEP dielectric, Duofoil® + tinned copper braid shield 85%, FEP jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Construction n x D	Nominal Diameter	No. of Conductors	No. of Pairs
20	7x28	TC - Tinned Copper	Stranded	0.037 in	1	1
	7x28 AWG	BC - Bare Copper	Stranded	0.037 in	1	

Conductor Count:	2
Conductor Size:	20 AWG

Insulation

Material	Material Trade Name	Nominal Diameter
FEP - Fluorinated Ethylene Propylene	Teflon®	0.072 in

Color Chart

Number	Color
1	Natural (bare conductor)
2	Natural (tinned conductor)

Inner Jacket Material

Material	Material Trade Name	Nominal Diameter
FEP - Fluorinated Ethylene Propylene	Teflon®	0.201 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum/Polyester/Aluminum	Duofoil®	100 %
Braid	2	TC - Tinned Copper		85 %

Outer Jacket Material

Material	Material Trade Name	Nominal Diameter
FEP - Fluorinated Ethylene Propylene	Teflon®	0.259 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
9.5 Ohm/1000ft	2.5 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield	Nom. Capacitance Conductor to Shield
14 pF/ft	23 pF/ft	14 pF/ft
Shielding:		Foil + Braid(s)

Inductance

Nominal Inductance

0.155 µH/ft

Impedance**Nominal Characteristic Impedance**

100 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.3 dB/100m
10 MHz	1.2 dB/100m
50 MHz	2.8 dB/100m
100 MHz	4.1 dB/100m
200 MHz	6.4 dB/100m
300 MHz	8.4 dB/100m
400 MHz	10.2 dB/100m

Delay

Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
69.5 ns/100m	1.46 ns/ft	69.50 %

Voltage**UL Voltage Rating**

300 V RMS

Temperature Range

Operating Temp Range:	-70°C To +200°C
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Mechanical Characteristics

UV Resistance:	Yes - Black only
Bulk Cable Weight:	52 lbs/1000ft
Max Recommended Pulling Tension:	88 lbs
Min Bend Radius/Minor Axis:	2.75 in

Standards

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
CPR Euroclass:	Eca

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2011/65/EU (ROHS II)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2001-01-01

Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Part Number

Non-Plenum Number:	9207
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Variants

Item #	Color	Footnote
89207 010100	Black	C
89207 0101000	Black	C
89207 010500	Black	C

Footnote:	C - CRATE REEL PUT-UP.
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