



Description:

78 ohm, 20 AWG stranded (7x28) .038" tinned copper conductors, plenum, FEP Teflon® insulation, tinned copper braid shield (93% coverage), FEP Teflon® jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
1	20	7x28	TC - Tinned Copper	.038

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Teflon®	FEP - Fluorinated Ethylene Propylene	.074

Outer Shield

Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	TC - Tinned Copper	93

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Teflon®	FEP - Fluorinated Ethylene Propylene

Overall Cabling

Overall Nominal Diameter: 0.198 in.

Pair

Pair Color Code Chart:

Number	Color
1	Clear & Blue

Mechanical Characteristics (Overall)

Operating Temperature Range:	-70°C To +200°C
Bulk Cable Weight:	32 lbs/1000 ft.
Max. Recommended Pulling Tension:	68 lbs.
Min. Bend Radius (Install)/Minor Axis:	2 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
EU CE Mark:	No
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005

EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Flame Test

UL Flame Test:	NFPA 262
C(UL) Flame Test:	FT6

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes
Suitability - Burial:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Non-Plenum Number:	9272

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
78

Nom. Inductance:

Inductance (µH/ft)
0.200

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
18.4

Nominal Velocity of Propagation:

VP (%)
69.5

Nominal Delay:

Delay (ns/ft)
1.46

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
9.5

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
3.9

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	0.6
10	2.1
50	5.0
100	7.5
200	11.0
400	16.0

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Operating Voltage - Non-UL:

Voltage

600 V RMS

Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc. Suitable for aerial applications when supported by a messenger wire.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
89272 0061000	1,000 FT	38.000 LB	BLUE, LIGHT	C	2#20 FEP BRD FEP 78 OHM
89272 006500	500 FT	17.000 LB	BLUE, LIGHT	C	2#20 FEP BRD FEP 78 OHM

Notes:

C = CRATE REEL PUT-UP.

Computer and Instrumentation Cable

78 Ohm, 95 Ohm and 100 Ohm Twinax

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m

78 Ohm • 20 AWG Stranded (7x28) .038" Tinned Copper Conductors • Tinned Copper Braid Shield (93% Coverage)

Polyethylene Insulation • Blue PVC Jacket (Color Code: Clear, Blue)

UL AWM Style 2092 (300V 60°C)	9272	NEC: CM	100	30.5	4.5	2.0	20 AWG (7x28)	.156	3.96	TC Braid 93% Shield Coverage	.244	6.20	78	66%	19.7	64.6	1	.6	2.0
		CEC: CM	500	152.4	18.5	8.4	.038"			TC							10	2.1	6.9
			1000	304.8	39.0	17.7	9.5Ω/M'			3.4Ω/M'							50	5.0	16.4
			1000	304.8	41.0	18.6	31.2Ω/km			11.2Ω/km							100	7.5	24.6
																	200	11.0	36.1
																	400	16.0	52.5

For Plenum version of 9272, see 89272.
CPE jacket optional.



Plenum • FEP Teflon® Insulation • Blue FEP Teflon Jacket (Color Code: Clear, Blue)

200°C	89272	NEC: CMP	500	152.4	17.0	7.7	20 AWG (7x28)	.148	3.76	TC Braid 93% Shield Coverage	.198	5.03	78	69.5%	18.4	60.4	1	.6	2.0
		CEC: CMP FT6	1000	304.8	38.0	17.3	.038"			TC							10	2.1	6.9
							9.5Ω/M'			3.9Ω/M'							50	5.0	16.4
							31.2Ω/km			12.8v/km							100	7.5	24.6
																	200	11.0	36.1
																	400	16.0	52.5

Suitable for Aerial applications when supported by a messenger.

78 Ohm • 20 AWG Stranded (7x28) .038" Tinned Copper Conductors • Beldfoil® (100% Coverage) + TC Braid Shield (55% Coverage)

Polyethylene Insulation • Blue Sunlight-resistant PVC Jacket (Color Code: Clear, Blue)

UL AWM Style 2464 (300V 80°C)	9463	NEC: CM CL2	100	30.5	4.4	2.0	20 AWG (7x28)	.154	3.91	Beldfoil + 55% TC Braid	.238	6.05	78	66%	19.7	64.6	1	.6	2.0
		CEC: CM	500	152.4	18.0	8.2	.038"			TC							10	2.1	6.9
			1000	304.8	39.0	17.7	9.5Ω/M'			4.1Ω/M'							50	3.6	11.8
			1000	304.8	39.0	17.7	9.5Ω/M'			13.4Ω/km							100	7.5	24.6
			6000	1828.7	234.0	106.1	31.0Ω/km										200	11.0	36.1
			10000	3048.0	380.0	172.4											400	16.0	52.5

CPE jacket optional.

PMSHA P-7K-SC-182141*
Allen Bradley P/N 1770-CD

*10000 ft. and 6000 ft. put-ups also available in Brown, Orange and Purple. 10,000 ft. available in Brown or Orange only.

RG-22B/U • 95 Ohm • 18 AWG Stranded (7x26) .046" Bare Copper Conductors • Double Tinned Copper Braid Shield (95% Coverage)**

Polyethylene Insulation • PE Inner Jacket • Black Non-contaminating PVC Outer Jacket (Color Code: Clear, Clear)

80°C VW-1	9250	—	500	152.4	61.5	27.9	18 AWG (7x26)	.285	7.24	(2) TC Braids 95% Shield Coverage	.416	10.67	95	66%	16.0	52.5	1	.3	1.0
			1000	304.8	121.0	54.9	.046"			BC							10	.9	3.0
							6.6Ω/M'			3.0Ω/km							20	1.3	4.3
							21.5Ω/km										50	2.1	6.9
																	100	3.0	9.8
																	400	6.3	20.7

CPE jacket optional.

RG-22B/U Type

**1 conductor has tinned center strand. Non-contaminating PVC jacket.

100 Ohm • 20 AWG Stranded (7x28) .037" One Tinned/One Bare Copper Conductors • Duofoil® + Double TC Braid Shield (95% Coverage)

Polyethylene Insulation • Black High-density Polyethylene Jacket

Direct Burial 80°C	9815	—	500	152.4	34.5	15.7	20 AWG (7x28)	.236	5.99	TC Braid 95% Shield Coverage	.330	8.38	100	66%	14.5	47.6	1	.4	1.3
			1000	304.8	69.0	31.4	.037"			(1) TC, (1) BC							10	1.1	3.6
			2000	609.6	134.0	60.9	9.5Ω/M'			6.6Ω/km							50	2.5	8.2
							31.0Ω/km										100	4.1	13.5
																	200	6.4	21.0
																	400	10.2	33.5

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • PE = Polyethylene • TC = Tinned Copper

*Pennsylvania Department of Environmental Resources and United States Mine Safety and Health Administration Certification.
†Final put-up may vary from length shown. ±10% for spools or reels, ±5% for UnReel® cartons.

Teflon is a DuPont trademark.