Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



89207 Twinax - Electronic Twinax - 100 Ohm



For more Information please call

1-800-Belden1

General Description:

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

Physical Characteristics (Overall)

Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material | Dia. (mm) | |
|---------|---------|-----------|---------------------------|-----------|--|
| 1 | 20 7x28 | | TC - Tinned Copper | 0.9398 | |
| | | | BC - Bare Copper | | |

Total Number of Conductors:

2

Insulation

Insulation Material:

| Insulation Trade Name | Insulation Material | Wall Thickness (mm) |
|-----------------------|--------------------------------------|---------------------|
| Teflon® | FEP - Fluorinated Ethylene Propylene | 0.432 |

Inner Jacket

Inner Jacket Material:

| Inner Jacket Trade Name | | Inner Jacket Material | Nom Wall (mm) | Nom. Dia. (mm) |
|-------------------------|---------|--------------------------------------|---------------|----------------|
| | Teflon® | FEP - Fluorinated Ethylene Propylene | 0.533 | 5.105 |

Outer Shield

Outer Shield Material:

| Layer # | Outer Shield Trade Name | Type | Outer Shield Material | Coverage (%) |
|---------|-------------------------|-------|--|--------------|
| 1 | Duofoil® | Таре | Aluminum Foil-Polyester Tape-Aluminum Foil | 100 |
| 2 | | Braid | TC - Tinned Copper | 85 |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Trade Name | Outer Jacket Material | Nom. | Wall Thickness (mm) |
|-------------------------|--------------------------------------|-------|---------------------|
| Teflon® | FEP - Fluorinated Ethylene Propylene | 0.381 | |

Overall Cable

Overall Nominal Diameter: 6.579 mm

Pair

Pair Color Code Chart:

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

Mechanical Characteristics (Overall)

| Operating Temperature Range: | -70°C To +200°C |
|-----------------------------------|-----------------|
| Bulk Cable Weight: | 77.386 Kg/Km |
| Max. Recommended Pulling Tension: | 391.442 N |
| Min. Bend Radius/Minor Axis: | 69.850 mm |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| CEC/C(UL) Specification: | CMP |
|------------------------------------|-----|
| EU Directive 2011/65/EU (ROHS II): | Yes |

Flame Test

| UL Flame Test: | NFPA 262 | |
|-------------------|----------|--|
| CSA Flame Test: | FT6 | |
| Plenum/Non-Plenum | | |

NEC/(UL) Specification:

| ichani/Non-richani | | | |
|------------------------|------|--|--|
| Plenum (Y/N): | Yes | | |
| Non-Plenum Number: | 9207 | | |

CMP

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Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 100

Nom. Inductance:

Inductance (µH/m) 0.508555

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 45.934

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 75.463

Nominal Velocity of Propagation:

69.5

Nominal Delay:

Delay (ns/m)

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 31.1695

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 8.2025

Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100m) |
|-------------|-----------------------|
| 1 | 0.9843 |
| 10 | 3.9372 |
| 50 | 9.1868 |
| 100 | 13.4521 |
| 200 | 20.9984 |
| 300 | 27.5604 |
| 400 | 33.4662 |

Max. Operating Voltage - UL:

Voltage 300 V RMS

Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|-------|-------|---------------------|
| 89207 010100 | 100 FT | 6.700 LB | BLACK | С | 2#20 FEP FEP SH FEP |
| 89207 0101000 | 1,000 FT | 55.000 LB | BLACK | С | 2#20 FEP FEP SH FEP |
| 89207 010500 | 500 FT | 27.500 LB | BLACK | С | 2#20 FEP FEP SH FEP |

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 09-26-2012

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