Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

8778 Multi-Conductor - CM Rated Cable

For more Information please call

1-800-Belden1



General Description:

22 AWG stranded (7x30) tinned copper conductor, polypropylene insulation, twisted pairs individually shielded with Beldfoil® (100% coverage), overall PVC jacket and 22 AWG stranded tinned copper drain wire.

| Physical Characteristics (Overall) | |
|---|--------------------|
| Conductor AWG: | |
| # Pairs AWG Stranding Conductor Material Dia. (mm) 6 22 7x30 TC - Tinned Copper 0.762 | |
| Total Number of Conductors: | 12 |
| Insulation Insulation Material: | |
| Insulation MaterialWall Thickness (mm)PP - Polypropylene0.279 | |
| Inner Shield Inner Shield Material: | |
| Inner Shield Trade Name Type Inner Shield Material | Coverage (%) |
| Beldfoil® (Z-Fold®) Tape Aluminum Foil-Polyester | Tape 100 |
| Inner Shield Drain Wire AWG: AWG 22 | |
| Inner Shield Drain Wire Stranding: | Stranded |
| Inner Shield Drain Wire Conductor Material: | TC - Tinned Copper |
| Outer Shield Outer Shield Material: Outer Shield Material Unshielded | |
| Outer Jacket Material: Outer Jacket Material: Outer Jacket Material Nom. Wall Thickness (mm) PVC - Polyvinyl Chloride 0.864 | |
| Overall Cable | |
| Overall Nominal Diameter: | 8.941 mm |
| Pair | |
| Pair Color Code Chart: | |
| Number Color 1 Black & Red | |
| 2 Black & White | |
| 3 Black & Green 4 Black & Blue | |
| 5 Black & Yellow | |
| 6 Black & Brown | |

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| Lay Length (m | m) Twists (twist/m) | Direction | |
|------------------------------------|--------------------------------|---------------|---------------------------|
| 44.450 | 22.639 | Left Hand | |
| echanical Ch | aracteristics (| Overall) | |
| Operating Temperature Range: | | : | -20°C To +80°C |
| UL Temperat | ure Rating: | | 80°C (UL AWM Style 2919) |
| Bulk Cable Weight: | | | 104.174 Kg/Km |
| Max. Recomm | nended Pulling Te | ension: | 698.367 N |
| Min. Bend Radius/Minor Axis: | | | 95.250 mm |
| oplicable Spe | cifications an | d Agency Co | ompliance (Overall) |
| pplicable Star | dards & Enviro | nmental Progr | rams |
| NEC/(UL) Spe | cification: | | СМ |
| NEC Articles: | | | 800 |
| CEC/C(UL) S | CEC/C(UL) Specification: | | CM |
| AWM Specification: | | | UL Style 2919 (30 V 80°C) |
| EU Directive 2011/65/EU (ROHS II): | | S II): | Yes |
| EU CE Mark: | | | Yes |
| EU Directive | EU Directive 2000/53/EC (ELV): | | Yes |
| EU Directive | 2002/95/EC (RoH | S): | Yes |
| EU RoHS Cor | npliance Date (m | m/dd/yyyy): | 01/01/2004 |
| EU Directive | 2002/96/EC (WEE | E): | Yes |
| EU Directive | 2003/11/EC (BFR) | : | Yes |
| CA Prop 65 (| CJ for Wire & Cab | le): | Yes |
| MII Order #39 | (China RoHS): | | Yes |
| lame Test | | | |
| UL Flame Tes | it: | | UL1685 UL Loading |
| CSA Flame T | est: | | FT1 |
| uitability | | | |
| Suitability - Ir | idoor: | | Yes |
| lenum/Non-Ple | | | |
| Plenum (Y/N): | | | No |
| Non-Plenum | Number: | | 88778, 87778, 82778 |

Nom. Characteristic Impedance:

Impedance (Ohm) 50

Nom. Inductance:

Inductance (µH/m) 0.59058

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 98.43

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)

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180.455

Nominal Velocity of Propagation:

VP (%) 66

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

49.215

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:

34.779 Ohm/km

Max. Operating Voltage - UL:

| Voltage | Description | | |
|----------|-------------|--|--|
| 300V RMS | UL type CM | | |
| 30V RMS | UL AWM 2919 | | |

Max. Recommended Current:

| Description | Current |
|-------------|---------|
| 100 T | |

10C Temperature Rise 2 Amps per conductor @ 25°C ambient

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|--------------|----------|-------------|--------|-------|--------------------|
| 8778 060100 | 100 FT | 7.900 LB | CHROME | | 6 FS PR #22 PP PVC |
| 8778 0601000 | 1,000 FT | 78.000 LB | CHROME | С | 6 FS PR #22 PP PVC |
| 8778 060250 | 250 FT | 19.500 LB | CHROME | С | 6 FS PR #22 PP PVC |
| 8778 060500 | 500 FT | 40.000 LB | CHROME | С | 6 FS PR #22 PP PVC |
| 8778 0605000 | 5,000 FT | 415.000 LB | CHROME | | 6 FS PR #22 PP PVC |

Notes:

C = CRATE REEL PUT-UP.

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