Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



1816R Multi-Conductor - CMR Rated Cable



For more Information please call

1-800-Belden1



General Description:

Overall Nominal Diameter:

22 AWG stranded (7x30) TC conductor, polyolefin insulation, individually shielded with bonded Beldfoil®, numbered/color-coded PVC jackets, jackets and shields are bonded so both strip simultaneously, overall black PVC jacket and nylon rip cord.

| <u> </u> | |
|--|--------------------|
| 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 Material Dia. (mm) PO - Polyolefin 1.27 | |
| Inner Shield | |
| Inner Shield Material: | |
| Inner Shield Trade Name Type Inner Shield Material Cover | rage (%) |
| Inner Shield Drain Wire AWG: | |
| AWG | |
| 22 | |
| Inner Shield Drain Wire Stranding: | 7x30 |
| Inner Shield Drain Wire Conductor Material: | TC - Tinned Copper |
| Inner Jacket Inner Jacket Material: | |
| Inner Jacket Material Nom. Dia. (mm) | |
| PVC - Polyvinyl Chloride 3.3782 | |
| Outer Shield Outer Shield Material: | |
| Outer Shield Trade Name Type Outer Shield Material Cove | rage (%) |
| Beldfoil® Tape Aluminum Foil-Polyester Tape 100 | |
| Outer Shield Drain Wire AWG: | |
| AWG Stranding Drain Wire Conductor Material 18 19x30 TC - Tinned Copper | |
| | |
| Outer Jacket Outer Jacket Material: | |
| Outer Jacket Material | |
| PVC - Polyvinyl Chloride | |
| Outer Jacket Ripcord: | Yes |
| Overall Cable Overall Cabling Color Code Chart: | |
| Number Color | |
| 1 Brown | |
| 2 Red | |
| 3 Orange | |
| 4 Yellow | |
| 5 Green | |
| 6 Blue | |

11.735 mm

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Pair

Pair Color Code Chart:

Color Red & Black

| Mechanical | Characteristics | (Overall) | , |
|------------|-----------------|-----------|---|
| | | | |

| Operating Temperature Range: | -20°C To +60°C |
|-----------------------------------|----------------|
| Bulk Cable Weight: | 178.584 Kg/Km |
| Max. Recommended Pulling Tension: | 838.486 N |
| Min. Bend Radius/Minor Axis: | 116.840 mm |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| Applicable Standards & Environmental Programs | |
|---|--------------|
| NEC/(UL) Specification: | CMR |
| CEC/C(UL) Specification: | CMG |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU CE Mark: | Yes |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/95/EC (RoHS): | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004 |
| 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: | UL1666 Riser |
| CSA Flame Test: | FT4 |
| Plenum/Non-Plenum | |
| Plenum (Y/N): | No |
| Plenum Number: | 1816P |

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 50

Nom. Inductance:

Inductance (µH/m) 0.59058

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 101.711

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 183.736

Nominal Velocity of Propagation:

VP (%)

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 48.5588

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 38.7158

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 46.262 Ohm/km

Max. Operating Voltage - UL:

Voltage 300 V RMS

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Max. Recommended Current:

Current 1.45 Amps per conductor @ 25°C

Notes (Overall)

Notes: Pair jackets and shields are bonded so both strip simultaneously with automatic stripping equipment. Beldfoil® provides high reliability with ease of termination.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|-------|-------|------------------------|
| 1816R 0101000 | 1,000 FT | 128.000 LB | BLACK | С | 6 #22 FS PR PVC FS PVC |
| 1816R 010500 | 500 FT | 65.000 LB | BLACK | С | 6 #22 FS PR PVC FS PVC |

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 1 Revision Date: 11-06-2014

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