

1816R Multi-Conductor - CMR Rated Cable



For more Information
please call

1-800-Belden1

**General Description:**

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.

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	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

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	Coverage (%)
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

Overall Nominal Diameter: 11.735 mm

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**

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
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:

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Capacitance (pF/m)

183.736

Nominal Velocity of Propagation:**VP (%)**

66

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

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	305 MT	58.060 KG	BLACK	C	6 #22 FS PR PVC FS PVC
1816R 010500	152 MT	29.484 KG	BLACK	C	6 #22 FS PR PVC FS PVC

Notes:

C = CRATE REEL PUT-UP.

Test Reports**a) UL**

- i) UL Test Reports are available on-line through the UL Client Document Access web portal.
- ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

b) CSA

- i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.
- ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

* other test data may be available if requested at time of order.

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