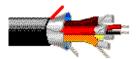
**ENGLISH MEASUREMENT VERSION** 



#### 1821R Multi-Conductor - CMR Rated Cable



For more Information please call

1-800-Belden1



# **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	<b>Conductor Material</b>	Dia. (in.)
24	22	7x30	TC - Tinned Copper	.030

Total Number of Conductors: 48

#### Insulation

**Insulation Material:** 

Insulation Material	Dia. (in.)
PO - Polyolefin	.050

### **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:



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. (in.)
PVC - Polyvinyl Chloride	.133

#### **Outer Shield**

**Outer Shield Material:** 

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Таре	Aluminum Foil-Polyester Tape	100

#### Outer Shield Drain Wire AWG:

AWG	Stranding	<b>Drain Wire Conductor Material</b>
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:** 

Page 1 of 4 09-04-2012

#### **ENGLISH MEASUREMENT VERSION**



# 1821R Multi-Conductor - CMR Rated Cable

Number	Color
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Purple
8	Gray
9	White
10	Black
11	Tan
12	Pink
13	Gray/Brown Stripe
14	Gray/Red Stripe
15	Gray/Orange Stripe
16	Gray/Yellow Stripe
17	Gray/Green Stripe
18	Gray/Blue Stripe
19	Gray/Purple Stripe
20	Gray/Gray Stripe
21	Gray/White Stripe
22	Gray/Black Stripe
23	Gray/Tan Stripe
24	Gray/Pink Stripe

**Overall Nominal Diameter:** 

0.969 in.

### Pair

## Pair Color Code Chart:



# Pair Lay Length & Direction:

Lay Length (in.)	Twists (twist/ft)
1.500	8.000

# **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-20°C To +60°C
Bulk Cable Weight:	478 lbs/1000 ft.
Max. Recommended Pulling Tension:	679.900 lbs.
Min. Bend Radius/Minor Axis:	9 in.

# **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

Page 2 of 4 09-04-2012

**ENGLISH MEASUREMENT VERSION** 



#### 1821R Multi-Conductor - CMR Rated Cable

Flame Test		
UL Flame Test:	UL1666 Riser	
CSA Flame Test:	FT4	
Plenum/Non-Plenum		
Plenum (Y/N):	No	

### **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 50

Nom. Inductance:

Inductance (µH/ft) .18

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
31

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
56

**Nominal Velocity of Propagation:** 

**VP (%)** 

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 14.8

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 11.8

Ind. Pair Nominal Shield DC Resistance @ 20 14.100 Ohm/1000 ft

Deg. C:

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
1821R 0101000	1,000 FT	518.000 LB	BLACK	С	24 #22 FS PR PVC FS PVC
1821R 010500	500 FT	263.500 LB	BLACK	C	24 #22 FS PR PVC FS PVC

Notes:

C = CRATE REEL PUT-UP.

Page 3 of 4 09-04-2012

#### **ENGLISH MEASUREMENT VERSION**



#### 1821R Multi-Conductor - CMR Rated Cable

Revision Number: 1 Revision Date: 04-18-2008

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Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

Page 4 of 4