

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 Material	Wall Thickness (mm)
PP - Polypropylene	0.279

### 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

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

**Pair Lay Length & Direction:**

Lay Length (mm)	Twists (twist/m)	Direction
44.450	22.639	Left Hand

## Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2919)
Bulk Cable Weight:	104.174 Kg/Km
Max. Recommended Pulling Tension:	698.367 N
Min. Bend Radius/Minor Axis:	95.250 mm

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
NEC Articles:	800
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2919 (30 V 80°C)
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:	UL1685 UL Loading
CSA Flame Test:	FT1

### Suitability

Suitability - Indoor:	Yes
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### Plenum/Non-Plenum

Plenum (Y/N):	No
Non-Plenum Number:	88778, 87778, 82778

## Electrical Characteristics (Overall)

### 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
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	C	6 FS PR #22 PP PVC
8778 060250	250 FT	19.500 LB	CHROME	C	6 FS PR #22 PP PVC
8778 060500	500 FT	40.000 LB	CHROME	C	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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