

## 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. (in.)
6	22	7x30	TC - Tinned Copper	.030

Total Number of Conductors: 12

#### Insulation

##### Insulation Material:

Insulation Material	Wall Thickness (in.)
PP - Polypropylene	0.011

#### 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 (in.)
PVC - Polyvinyl Chloride	0.034

#### Overall Cable

Overall Nominal Diameter: 0.352 in.

#### 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 &amp; Direction:

Lay Length (in.)	Twists (twist/ft)	Direction
1.750	6.900	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:	70 lbs/1000 ft.
Max. Recommended Pulling Tension:	157 lbs.
Min. Bend Radius/Minor Axis:	3.750 in.

**Applicable Specifications and Agency Compliance (Overall)**

## Applicable Standards &amp; 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/ft)
0.18

## Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
30

## Nom. Capacitance Cond. to Other Conductor &amp; Shield:

Capacitance (pF/ft)
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55

**Nominal Velocity of Propagation:**

VP (%)  
66

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)  
15

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 10.600 Ohm/1000 ft

**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.

Revision Number: 4    Revision Date: 08-06-2013

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