# **Detailed Specifications & Technical Data**

**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	<b>Conductor Material</b>	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:

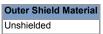


Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

### **Outer Shield**

## **Outer Shield Material:**



## **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

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## Pair Lay Length & Direction:

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

Mechanical	Charact	eristics	(Overall	1)
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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**

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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
lame Test	
UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT1
uitability	
Suitability - Indoor:	Yes
lenum/Non-Plenum	
Plenum (Y/N):	No

88778, 87778, 82778

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Non-Plenum Number:

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

34.779 Ohm/km

Deg. C:

Max. Operating Voltage - UL:

Voltage	Description		
300V RMS	*'		
30V RMS	UL AWM 2919		

#### Max. Recommended Current:

Description	Current	
10C Temperature Rise	2 Amps per conductor @ 25°C ambient	l

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