# **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:

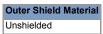


Inner Shield Drain Wire Stranding: Stranded

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

Page 1 of 3 10-30-2013

# **Detailed Specifications & Technical Data**





## 8778 Multi-Conductor - CM Rated Cable

### 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
ame Test	
UL Flame Test:	UL1685 UL Loading
CSA Flame Test:	FT1

# Flar

## Suitability

Suitability - Indoor: Yes

## Plenum/Non-Plenum

Plenum (Y/N): No

Non-Plenum Number: 88778, 87778, 82778

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm)

Nom. Inductance:

Inductance (µH/m) 0.59058

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)

# **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



### 8778 Multi-Conductor - CM Rated Cable

180.455

**Nominal Velocity of Propagation:** 

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

Ind. Pair Nominal Shield DC Resistance @ 20

34.779 Ohm/km

Deg. C:

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	l	

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8778 060100	30 MT	3.583 KG	CHROME		6 FS PR #22 PP PVC
8778 0601000	305 MT	35.380 KG	CHROME	С	6 FS PR #22 PP PVC
8778 060250	76 MT	8.845 KG	CHROME	С	6 FS PR #22 PP PVC
8778 060500	152 MT	18.144 KG	CHROME	С	6 FS PR #22 PP PVC
8778 0605000	1,524 MT	188.242 KG	CHROME		6 FS PR #22 PP PVC

#### Notes:

C = CRATE REEL PUT-UP.

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

© 2013 Belden, Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

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