### **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



#### 8777 Multi-Conductor - Shielded Twisted Pair Cable

For more Information please call

1-800-Belden1



#### **General Description:**

22 AWG stranded (7x30) tinned copper conductors, polypropylene insulation, twisted pairs individually Beldfoil® Shielded (100% coverage), 22 AWG stranded tinned copper drain wire, PVC jacket.

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#### **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

# Pairs	AWG	Stranding	<b>Conductor Material</b>	Dia. (mm)
3	22	7x30	TC - Tinned Copper	0.762

Total Number of Conductors:

#### Insulation

#### **Insulation Material:**

# Insulation Material Wall Thickness (mm) PP - Polypropylene | 0.279

#### **Inner Shield**

#### Inner Shield Material:

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum-Polyester	100.000

#### Inner Shield Drain Wire AWG:



Inner Shield Drain Wire Stranding: 7x30

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: 6.934 mm

#### **Pair**

#### Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green

#### Pair Lay Length & Direction:

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

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Me	echanical Characteristics (Overall)				
	Storage Temperature Range:	-40°C To +80°C			
	Operating Temperature Range:	-20°C To +80°C			
	UL Temperature Rating:	80°C (UL AWM Style 2919)			
	Bulk Cable Weight:	58.040 Kg/Km			
	Max. Recommended Pulling Tension:	351.408 N			
	Min. Bend Radius/Minor Axis:	69.850 mm			
Ap	plicable Specifications and Agency Com	pliance (Overall)			
Ap	plicable Standards & Environmental Progran	ns			
	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			
Fla	ame Test				
	UL Flame Test:	UL1685 UL Loading			
	CSA Flame Test:	FT1			
Su	itability				
	Suitability - Indoor:	Yes			
Ple	enum/Non-Plenum				
	Plenum (Y/N):	No			
	Plenum Number:	88777, 87777, 82777			

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

Nom. Characteristic Impedance:

Impedance (Ohm) 50

Nom. Inductance:

Inductance (µH/m)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 180.455

Nominal Velocity of Propagation:

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### **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



#### 8777 Multi-Conductor - Shielded Twisted Pair Cable

#### 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		
300 V RMS	Listed type CM		
30 V RMS	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
8777 060U1000	305 MT	18.597 KG	CHROME		3 SH PR #22 PP PVC
8777 060U500	152 MT	9.525 KG	CHROME		3 SHLD PR #22 PP PVC
8777 060100	30 MT	2.132 KG	CHROME		3 SHLD PR #22 PP PVC
8777 0601000	305 MT	19.505 KG	CHROME	С	3 SHLD PR #22 PP PVC
8777 06010000	3,048 MT	208.653 KG	CHROME	CY	3 SHLD PR #22 PP PVC
8777 0601640	500 MT	31.244 KG	CHROME	С	3 SHLD PR #22 PP PVC
8777 060250	76 MT	5.103 KG	CHROME	С	3 SHLD PR #22 PP PVC
8777 0603280	1,000 MT	62.487 KG	CHROME	С	3 SHLD PR #22 PP PVC
8777 060500	152 MT	9.752 KG	CHROME	С	3 SHLD PR #22 PP PVC
8777 0605000	1,524 MT	97.523 KG	CHROME	С	3 SHLD PR #22 PP PVC

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 08-02-2013

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Y = FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN.MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.