# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



### 1077A Multi-Conductor - 300V Power-Limited Tray Cable



For more Information please call

1-800-Belden1



### **Description:**

20 AWG pairs stranded (7x28) bare copper conductors, twisted pairs, PVC insulation, individually shielded plus an overall Beldfoil shield (100% coverage), PVC jacket.

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

#### Conductor

#### AWG:

# Conductors	# Pairs	AWG	Stranding	<b>Conductor Material</b>
	8	20	7x28	BC - Bare Copper
1		22	7x30	BC - Bare Copper

**Total Number of Conductors:** 

17

#### Insulation

#### **Insulation Material:**

Insulation Material	Dia. (mm)
PVC - Polyvinyl Chloride	1.7272

#### **Inner Shield**

#### Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

#### Inner Shield Drain Wire AWG:

AWG	Stranding	<b>Conductor Material</b>
22	7x30	TC - Tinned Copper

#### **Outer Shield**

#### **Outer Shield Material:**

Outer Shield Trade Name	Туре	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

#### **Outer Shield Drain Wire AWG:**

AWG	Stranding	Drain Wire Conductor Material	
20	7x28	TC - Tinned Copper	

#### **Outer Jacket**

#### **Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	1.3462

Outer Jacket Ripcord:

Yes

### **Overall Cable**

#### Overall Cabling Lay Length & Direction:

Direction Left-hand Lay

Overall Nominal Diameter: 13.056 mm

#### Pair

#### **Pair Color Code Chart:**

Number	Color	
1	Black & White and Numbered 1	

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2	Black & White and Numbered 2
3	Black & White and Numbered 3
4	Black & White and Numbered 4
5	Black & White and Numbered 5
6	Black & White and Numbered 6
7	Black & White and Numbered 7
8	Black & White and Numbered 8
Communication Wire	Orange

Mechanical	Charact	teristics (	(Overall)	
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Operating Temperature Range:	-30°C To +105°C
UL Temperature Rating:	105°C
Bulk Cable Weight:	248.529 Kg/Km
Max. Recommended Pulling Tension:	1423.420 N
Min. Bend Radius/Minor Axis:	139.700 mm

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

### **Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	PLTC, ITC, CMG
CEC/C(UL) Specification:	CMG
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):	04/01/2005
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
me Test	
UL Flame Test:	UL1685 FT4 Loading
C(UL) Flame Test:	FT4
	10.00

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UL Flame Test:	UL1685 FT4 Loading	
C(UL) Flame Test:	FT4	
IEEE Flame Test:	1202	
ICEA Flame Test:	T-29-520	
itability		
Suitability - Indoor:	Yes	

#### Suit

Suitability - Indoor:	Yes	
Suitability - Outdoor:	Yes	
Suitability - Burial:	Yes	
Sunlight Resistance:	Yes	
onum/Non Blonum		

### Plenum/Non-Plenum

Plenum (Y/N): No

### **Surface Printing (Overall)**

## **Electrical Characteristics (Overall)**

Nom. Inductance:

Inductance (µH/m) 0.62339

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

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180.455

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 98.43

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 31.1695

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 21.3265

Max. Operating Voltage - UL:

Voltage	Description		
	(PLTC CMG)		
150 V RMS	(ITC)		

#### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1077A 0107500	2,286 MT	694.000 KG	BLACK	CZ	8 SH PR #20 + 1 #22 PVC FS PVC

#### Notes:

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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