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 Conductor Material	
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 NameTypeInner Shield MaterialCoverage (%)Beldfoil®TapeAluminum Foil-Polyester Tape100	
Inner Shield Drain Wire AWG:	
AWG Stranding Conductor Material	
22 7x30 TC - Tinned Copper	
Outer Shield	
Outer Shield Material:	
Outer Shield Trade Name Type 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	
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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	
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 Characteristics (Overall)

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 Flame Test **UL Flame Test:** UL1685 FT4 Loading

C(UL) Flame Test:	FT4	
IEEE Flame Test:	1202	
ICEA Flame Test:	T-29-520	
Suitability		
Suitability - Indoor:	Yes	
Suitability - Outdoor:	Yes	
Suitability - Burial:	Yes	
Sunlight Resistance:	Yes	
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		
300 V RMS	(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.

Revision Number: 1 Revision Date: 03-03-2008

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