## **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION





## 1078A 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.

25

## **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

# Conductors	# Pairs	AWG	Stranding	Conductor Material
	12	20	7x28	BC - Bare Copper
1		22	7x30	BC - Bare Copper

Total Number of Conductors:

#### Insulation

#### Insulation Material:

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

#### **Inner Shield**

## Inner Shield Material:

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

## 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 Shield Trade Name Ty		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	1.6256

Outer Jacket Ripcord: Yes

#### **Overall Cable**

## **Overall Cabling Lay Length & Direction:**

**Direction** Left-hand Lay

Overall Nominal Diameter: 16.180 mm

Page 1 of 3 09-04-2012

# **Detailed Specifications & Technical Data**

## METRIC MEASUREMENT VERSION



## 1078A Multi-Conductor - 300V Power-Limited Tray Cable

## Pair

#### Pair Color Code Chart:

Number	Color
1	Black & White and Numbered 1
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
9	Black & White and Numbered 9
10	Black & White and Numbered 10
11	Black & White and Numbered 11
12	Black & White and Numbered 12
Communication Wire	Orange

Mechanical	Charac	teristics	(Overall	)
------------	--------	-----------	----------	---

Operating Temperature Range:	-30°C To +105°C
UL Temperature Rating:	105°C
Bulk Cable Weight:	361.633 Kg/Km
Max. Recommended Pulling Tension:	2081.760 N
Min. Bend Radius/Minor Axis:	171.450 mm

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

## **Applicable Standards & Environmental Programs**

UL Flame Test:	UL1685 FT4 Loading
ame Test	
MII Order #39 (China RoHS):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2002/96/EC (WEEE):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
EU Directive 2002/95/EC (RoHS):	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU CE Mark:	Yes
CEC/C(UL) Specification:	CMG
NEC/(UL) Specification:	PLTC, ITC, CMG

## Fla

Flame	Test	
UL	Flame Test:	UL1685 FT4 Loading
C(L	IL) Flame Test:	FT4
IEE	E Flame Test:	1202
ICE	A Flame Test:	T-29-520
Suitab	ility	
Sui	tability - Indoor:	Yes
Sui	tability - Outdoor:	Yes
Sui	tability - Burial:	Yes

Yes

## Plenum/Non-Plenum

Sunlight Resistance:

Plenum (Y/N): No

## **Detailed Specifications & Technical Data**

METRIC MEASUREMENT VERSION



### 1078A Multi-Conductor - 300V Power-Limited Tray Cable

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

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

Nom. Inductance:

Inductance (µH/m) 0.62339

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m) 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:

300 V RMS (PLTC CMG) 150 V RMS (ITC)

Max. Recommended Current:

Current
3 Amps per conductor @ 25°C

## **Put Ups and Colors:**

	tem #	Putup	Ship Weight	Color	Notes	Item Desc
ſ	1078A 0107500	2,286 MT	891.313 KG	BLACK	CZ	12 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: 04-11-2008

© 2012 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 be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if 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.

Page 3 of 3 09-04-2012