

Product: 1077A

Inst, 8 Pr #20+22 Str BC, PVC Ins E1, IS/OS, Blk PVC Jkt, 300V PLTC ITC CMG

Request Sample

Product Description

UL Instrumentation, 8 Pair 20+22AWG (7x28) Bare Copper, PVC Insulation E1 Color Code, Individual & Overall Beldfoil® Shield, Black PVC Outer Jacket, PLTC ITC CMG AWM 2464 SUN RES

Technical Specifications

Product Overview

Suitable Applications:	Industrial Control, Raceways Cable trays and ducts, Digital Control, Instruments (4-20ma, 0-10v, ...),low voltage digital control (24v, …), encoders, control circuits, distributed control system (DCS),programmable logic controller (PLC), Solenoids, Valves, Actuators, Positioners

Construction Details

Conductor

Element	Number of Element	Size	Stranding	Material
Pair(s)	8	20 AWG	7x28	BC - Bare Copper
Comm Wire(s)	1	22 AWG	7x30	BC - Bare Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	PVC - Polyvinyl Chloride	0.018 in (0.46 mm)	0.071 in (1.8 mm)	ICEA Chart E1
Comm Wire(s)	PVC - Polyvinyl Chloride	0.019 in (0.48 mm)	0.067 in (1.7 mm)	Orange

Inner Shield

Element	Shield Type	Material	Coverage	Drainwire Type	Notes
Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%	22 AWG (7x30) TC	each pair
Comm Wire(s)	No Shield				

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	20 AWG (7x28) TC

Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	0.053 in (1.3 mm)	0.514 in (13.1 mm)	Yes

Overall Cable Diameter (Nominal):	0.514 in (13.1 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Inner Shield DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Shield	Max. Current
Pair(s)	9.5 Ohm/1000ft	12.86 Ohm/1000ft (42.19 Ohm/km)	30 pF/ft (98 pF/m)	55 pF/ft (180 pF/m)	4.8 Amps per conductor @ 30°C
Comm Wire(s)	17.2 Ohm/1000ft (56.4 Ohm/km)				9.6 Amps per conductor @ 30°C

Voltage

UL Voltage Rating
300 V (PLTC, CMG, AWM 2464), 150 V (ITC)

Mechanical Characteristics

Temperature

UL Temperature	Operating
105°C	-30°C to +105°C

Bend Radius

Stationary Min.	Installation Min.
6.2 in (160 mm)	6.2 in (160 mm)

Max. Pull Tension:	232 lbs (105 kg)
Bulk Cable Weight:	187 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance
Flammability / Reaction to Fire:	UL 1685 FT4 Loading, FT4, T-29-520, IEEE 1202 FT4
NEC / UL Compliance:	Article 725, Article 727, Article 800, CMG, ITC, PLTC
AWM Compliance:	AWM 2464
CEC / C(UL) Compliance:	CMG
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.557 Revision Date: 04-14-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
1077A 0107500	Black	Reel	7,500 ft	612825105930

© 2023 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 here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The 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.