



Product: [1081A](#)

Inst, 36 Pr #20+22 Str BC, PVC Ins E1, IS/OS, Blk PVC Jkt, 300V PLTC ITC CMG

[Request Sample](#)

Product Description

UL Instrumentation, 36 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	No. of Elements	Size	Stranding	Material
Pair(s)	36	20 AWG	7x28	BC - Bare Copper
Comm Wire(s)	1	22 AWG	7x30	BC - Bare Copper

Insulation

Element	Material	Nom. Thickness	Color Code
Pair(s)	PVC - Polyvinyl Chloride	0.018 in (0.46 mm)	Black, White and Numbered
Comm Wire(s)	PVC - Polyvinyl Chloride	0.019 in (0.48 mm)	Orange

Inner Shield

Element	Shield Type	Material	Coverage	Drainwire Type
Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%	22 AWG (7x30) TC
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	0.074 in (1.9 mm)	1.091 in (27.71 mm)	Yes

Overall Cable Diameter (Nominal):	1.091 in (27.71 mm)
-----------------------------------	---------------------

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Shield	Max. Current
Pair(s)	9.5 Ohm/1000ft (31 Ohm/km)	30 pF/ft (98 pF/m)	55 pF/ft (180 pF/m)	3 Amps per conductor @ 25°C
Comm Wire(s)	14.7 Ohm/1000ft (48.2 Ohm/km)			

Voltage

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

Mechanical Characteristics

Temperature

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

Bend Radius

Stationary Min.	Installation Min.
10.9 in (277 mm)	10.9 in (277 mm)

Max. Pull Tension:	1359 lbs (616.4 kg)
Bulk Cable Weight:	633 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance
Flammability / Reaction to Fire:	UL1685 (FT4 Loading), FT4, T-29-520, 1202
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: 0.578 Revision Date: 01-11-2024
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
1081A 0102000	Black	Reel	2,000 ft	612825106074	C Z

© 2024 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.