Belden



Product: DEDN168F

Indoor/Outdoor Digital Electricity™, 8 Pr #16 Str TC, O/A Foil, PVC Jkt, CL4, CMG, Wet Locations

Product Description

Indoor/Outdoor Digital Electricity™ Copper Cable, 8 Twisted Pair 16 AWG (7 x 24) Stranded Tinned Copper, PVC Insulation, Overall foil shield, Black PVC Jacket, Ripcord, CL4, CMG, Wet Locations, 2000 Ft Reel

Technical Specifications

Product Overview

Suitable Applications:	Digital Electricity™, Fault Managed Power Systems (FMPS), remote powering, wet locations, in-conduit

Construction Details

Conductor

Size	Stranding	Material
16	7x24	TC - Tinned Copper

Insulation

Material	Nom. Thickness	Color Code
PVC - Polyvinyl Chloride	0.017 in (0.43 mm)	Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown, Black & Orange, Red & White

Outer Shield

Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	100%

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.043 in (1.1 mm)	0.593 in (15.1 mm)

Electrical Characteristics

Electricals

Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Max. Current
4.55 Ohm/1000ft	29.25 pF/ft (95.96 pF/m)	52.75 pF/ft (173.1 pF/m)	5.5 Amps per Conductor at 25ºC (35°C Temperature Rise)

Nom Outer Shield DCR@Cond DCR1-cnv:	4.7 Ohm/1000ft (15 Ohm/km)

Voltage

UL Voltage Rating
450 V RMS

Mechanical Characteristics

Temperature

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

Max. Pull Tension:	570 lbs (260 kg)
Bulk Cable Weight:	220 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Sunlight Resistance
Flammability / Reaction to Fire:	UL 1685 FT4 Loading, FT4
NEC / UL Compliance:	Article 725, Article 800, CL4, CL3, CMG
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), REACH: 2020-01-28
APAC Compliance:	China RoHS II (GB/T 26572-2011)

History

Update and Revision:	Revision Number: 0.118 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	Length
DEDN168F	Black	2,000 ft

© 2025 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.