



**Product:** [89880](#)

50Ω, #12 Sol BC, FFEP Ins, Duobond IV® quad shield, PVDF Jkt, CMP

### Product Description

Ethernet 50 Ω 10BASE5, 12 AWG solid bare copper conductor, foam FEP insulation, Overall Duobond® II+Tinned Copper Braid (90%)+Duofoil®+Tinned Copper Braid(90%) Shield, fluorocopolymer jacket, CMP

### Technical Specifications

#### Product Overview

Suitable Applications:	Thick Ethernet (IEEE 802.3 10BASE5)
------------------------	-------------------------------------

#### Construction Details

##### Conductor

Size	Stranding	Nom. Diameter	Material
12 AWG	Solid	0.086 in	BC - Bare Copper

##### Insulation

Material	Nom. Insulation Diameter	Color Code
FEP - Fluorinated Ethylene Propylene (Foam)	0.245 in (6.22 mm)	Clear

##### Outer Shield

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	Duobond® II	100%
2	Braid	Tinned Copper (TC)		90%
3	Tape	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
4	Braid	Tinned Copper (TC)		90%

##### Outer Jacket

Material	Nom. Diameter
PVDF - Polyvinylidene Fluoride	0.365 in (9.27 mm)

Overall Cable Diameter (Nominal):	0.365 in (9.27 mm)
-----------------------------------	--------------------

#### Electrical Characteristics

##### Attenuation

Frequency	Nom. Attenuation
1 MHz	0.18 dB/100ft
5 MHz	0.37 dB/100ft
10 MHz	0.52 dB/100ft
50 MHz	1.15 dB/100ft
100 MHz	1.65 dB/100ft
200 MHz	2.45 dB/100ft
400 MHz	3.80 dB/100ft
700 MHz	5.60 dB/100ft
900 MHz	6.80 dB/100ft
1000 MHz	7.20 dB/100ft

##### Power Rating

Frequency	Max. Power Rating
1 MHz	15,900 W
5 MHz	6,928 W
10 MHz	4,802 W
50 MHz	1,992 W
100 MHz	1,344 W
200 MHz	900 W
400 MHz	602 W
700 MHz	438 W
900 MHz	382 W
1,000 MHz	361 W

#### Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
1.4 Ohm/1000ft	1.5 Ohm/1000ft (4.9 Ohm/km)	26.0 pF/ft (85.3 pF/m)	50 Ohm	78%

#### Voltage

UL Voltage Rating	Voltage Rating
300 V (CMP)	600 V

### Mechanical Characteristics

#### Temperature

UL Temperature	Operating
150°C	-25°C to +150°C

#### Bend Radius

Installation Min.
6.0 in (150 mm)

Max. Pull Tension:	255 lbs (116 kg)
Bulk Cable Weight:	137 lbs/1000ft

### Standards and Compliance

Environmental Suitability:	Indoor - Plenum, Indoor
Sustainability:	CA Prop 65
Flammability / Reaction to Fire:	NFPA 262
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	CL2P, CMP
CEC / C(UL) Compliance:	CMP
IEEE Compliance:	IEEE 802.3 10Base5
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	DEC Part No. 17-00324-00
Non-Plenum Number:	9880

### Product Notes

Notes:	Ring-band stripes every 2.5 meters to aid users in tap placement.
--------	---

### History

Update and Revision:	Revision Number: 0.498 Revision Date: 04-29-2024
----------------------	--

### Part Numbers

#### Variants

Item #	Color	Putup Type	Length	UPC	Footnote
89880 0031000	Orange	Reel	1,000 ft	612825221364	C
89880 0031640	Orange	Reel	1,640 ft	612825221371	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.