



Product: <u>9891</u> ☑

Transceiver 10BASE5, #22-3pr, #20-1pr, FHDPE, Indiv. Foil shielded pairs w/ OA Brd, PVC Jkt, CM

Product Description

IEEE 802.3 Ethernet Transceiver 10BASE5, 20 and 22 AWG stranded tinned copper conductors, foam high-density polyethylene (22 AWG) and PVC (20 AWG) insulation, twisted pairs, Individually foil shielded pairs with overall tinned copper braid shield (95% coverage) drain wire, PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	IEEE 802.3 Transceiver Cable

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Data Pair(s)	3	22 AWG	7x30	TC - Tinned Copper
Pair(s)	1	20 AWG	7x28	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code	Notes
Data Pair(s)	PE - Polyethylene (Foam)	0.017 in (0.43 mm)	0.063 in (1.6 mm)	Yellow & Orange, Blue & Green, Black & White	HDPE
Pair(s)	PVC - Polyvinyl Chloride	0.012 in (0.30 mm)	0.062 in (1.6 mm)	Gray & Purple	

Inner Shield

Element	Shield Type	Material	Coverage	Notes
Data Pair(s)	Таре	Bi-Laminate (Alum+Poly)	100%	Foil Out
Pair(s)	Таре	Bi-Laminate (Alum+Poly)	100%	Foil Out

Outer Shield

Shield Type	Material	Coverage
Braid	Tinned Copper (TC)	95%

Outer Jacket

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Inner Shield DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Pair(s)	18.2 Ohm/1000ft	12.4 Ohm/1000ft (40.7 Ohm/km)	16.7 pF/ft (54.8 pF/m)	29.5 pF/ft (96.8 pF/m)	78 Ohm	78%	2 Amps per Conductor at 25°C
Pair(s)	11.3 Ohm/1000ft (37.1 Ohm/km)	12.4 Ohm/1000ft (40.7 Ohm/km)					2.5 Amps per Conductor at 25°C

Voltage

UL Voltage Rating 300 V (CM), 30 V (AWM 2919)

Mechanical Characteristics

Temperature

UL Temperature	Operating
80°C	-20°C to +80°C

Bend Radius

Stationary Min.	Installation Min.
3.2 in (81 mm)	3.2 in (81 mm)

Max. Pull Tension:	160 lbs (73 kg)
Bulk Cable Weight:	65 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor
·	
Flammability / Reaction to Fire:	UL 1685 FT4 Loading, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CM
AWM Compliance:	AWM 2919
CEC / C(UL) Compliance:	CM
IEEE Compliance:	IEEE 802.3 10Base5
European Directive Compliance:	EU CE Mark, 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)

History

Update and Revision:	Revision Number: 0.575 Revision Date: 02-03-2025

Part Numbers

Variants

Item #	Color	UPC	Footnote
9891 006100	Blue	612825260066	
9891 0061000	Blue	612825260073	С
9891 006500	Blue	612825260080	С
9891 0065000	Blue	612825260097	CZ

© 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.