



Product: [50105F](#) 

Paired - Category 5e F/UTP Unbonded - Pair Cable

Product Description

24 AWG solid bare copper conductors, non-plenum, Polyolefin insulation, twisted pairs, foil shield, drain wire, see color code chart (below), PVC jacket (blue, gray, black).

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422
------------------------	--

Construction Details

Conductor

Size	Stranding	Material	No. of Pairs
24 AWG	Solid	BC - Bare Copper	4

Insulation

Material	Color Code
PO - Polyolefin	Blue & White with Blue Stripe, Orange & White with Orange Stripe, Green & White with Green Stripe, Brown & White with Brown Stripe

Outer Shield

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

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	6.0 mm (0.24 in)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
95 Ohm/km (29 Ohm/1000ft)	56 pF/m (17 pF/ft)	330 pF/100m	100 Ohm

Delay

Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
538 ns/100m	45 ns/100m	65%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]
1	-	65.3	62.3	63.8	60.8	
4	4.1 dB/100m	56.3	53.3	51.8	48.8	23
8	5.8 dB/100m	51.8	48.8	45.7	42.7	24.5
10	6.5 dB/100m	50.3	47.3	43.8	40.8	25
16	8.3 dB/100m	47.2	44.2	39.7	36.7	25
20	9.3 dB/100m	45.8	42.8	37.8	34.8	25
25	10.4 dB/100m	44.3	41.3	35.8	32.8	24.3
31.25	11.7 dB/100m	42.9	39.9	33.9	30.9	23.6

62.5	17 dB/100m	38.4	35.4	27.9	24.9	21.5
100	22 dB/100m	35.3	32.3	23.8	20.8	20.1

Voltage

UL Voltage Rating
72 V DC

Mechanical Characteristics

Temperature

Operating
-20°C To +75°C

Bend Radius

Installation Min.
48 mm (1.9 in)

Max. Pull Tension:	100 N (22 lbf)
Bulk Cable Weight:	39 kg/km (26 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, IEC 60332-3-25
NEC / UL Compliance:	CM
CEC / C(UL) Compliance:	CM
ISO/IEC Compliance:	ISO/IEC 11801 Cat 5e

Product Notes

Notes:	Jacket sequentially metre marked
--------	----------------------------------

History

Update and Revision:	Revision Number: 0.35 Revision Date: 02-20-2026
----------------------	---

Part Numbers

Variants

Item #	Color	Length
50105F 010A305M	Black	305 m
50105F 010305M	Black	305 m
50105F 006A305M	Blue	305 m
50105F 006305M	Blue	305 m
50105F 008A305M	Gray	305 m
50105F 008305M	Gray	305 m

© 2026 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.