



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
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#### Construction Details

##### Conductor

Size	Stranding	Material	No. of Pairs	No. of Elements
24 AWG	Solid	BC - Bare Copper	4	8

##### 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

<b>UL Voltage Rating</b>
72 V DC

### Mechanical Characteristics

#### Temperature

<b>Operating</b>
-20°C To +75°C

#### Bend Radius

<b>Installation Min.</b>
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
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### History

Update and Revision:	Revision Number: 0.31 Revision Date: 07-05-2024
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### 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

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