



Ethernet Media Specifications

Bulletin Number 1585

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Cable Spools



Unshielded Twisted-pair Ethernet Cable Spool

Features

- 4- and 8-conductor styles
- Unshielded cable types, Cat 5e
- 24 AWG conductors
- Twisted pairs maintain signal balance through cable to provide high noise immunity and return loss
- Designed to ODVA EtherNet/IP specifications and ISO IEC 24702
- Suitable for high noise environments M₃I₃C₃E₃
- Riser PVC cables are used for general-purpose environments
- TPE robotic cable is used for flex applications, transmission-tested to 10 million cycles
- Plenum PVC cable is used for air duct applications
- TPE cable meets channel transmission performance to 10 million flexes

Specifications

Attributes	Bulletin 1585
Certifications	UL Listed and CEC
Cable type	Unshielded: 2- and 4-pair, Cat 5e
Material	Conductor: Tinned copper stranded
Bend radius	10 million cycles at 20 x diameter (TPE cable)
Data rate	Up to 1 GB/s
Operating temperature	-40...+75 °C (-40...+167 °F)
Voltage	300V

Cable and Color Code

Two-pair	Four-pair																								
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Product Selection

Jacket Material	Cable Type	No. of Conductors	Jacket Color	Wire Size [AWG]	Nominal Outer Diameter	Operating Temperature	Cable Rating	Cat. No. (1)
Robotic TPE	Unshielded	4 (two pairs)	Teal	24	5.6 mm (0.22 in.)	-40...+75 °C (-40...+167 °F)	Weld splatter, sunlight, and oil-resistant; UL CM, CMX; cUL CM; Standard TIA 568-B, high flex rated	1585-C4TB-Sx
Plenum		8 (four pairs)	Red		5.84 mm (0.23 in.)			1585-C8TB-Sx
Riser PVC			Teal					1585-C8VB-Sx
							UL CMP; cUL CMG; Standard TIA 568-B	1585-C8MB-Sx
							UL CMR; cUL CMG; Standard TIA 568-B	1585-C8PB-Sx

(1) Replace x with 100 [100 m (328 ft)], 300 [300 m (984 ft)], or 600 [600 m (1969 ft)] for standard cable lengths (example 1585-C4TB-Sx becomes 1585-C4TB-S600 for a 600 m cable).

Shielded Twisted-pair (Foil and Braided Shield)



Shielded Ethernet Cable Spool

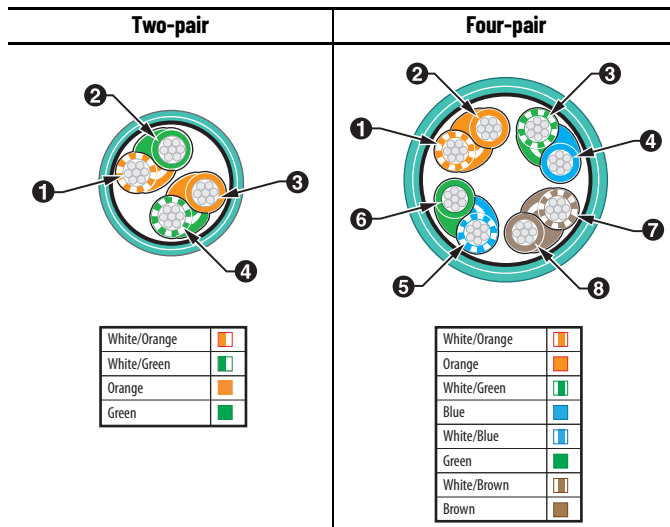
Specifications

Attributes	Bulletin 1585
Certifications	UL Listed and CEC
Material	<ul style="list-style-type: none"> Conductor: Tinned copper stranded Insulation: High-density polyethylene
Bend radius	10 million cycles at 20 x diameter (TPE cable)
Data rate	Up to 1 GB/s, Cat 5e
Voltage	300V

Features

- Four- and eight-conductor styles
- Twisted-pair shielded cable types, Cat 5e
- Twisted pairs maintain signal balance through cable to provide high noise immunity and return loss
- Designed to ODVA EtherNet/IP specifications and ISO IEC 24702
- Suitable for high noise environments $M_3I_3C_3E_3$
- Riser PVC cables used for general-purpose environments
- PUR robotic cable used for flex applications, also Halogen-free
- 600V PVC cable designed to support high-voltage applications
- 600V On-Machine rated cable for use in a cable tray that is shared with high-voltage power cables

Cable and Color Code

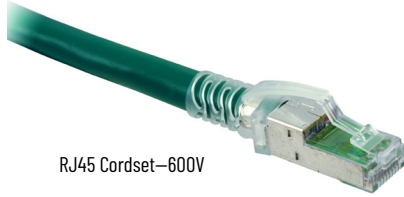


Product Selection

Jacket Material	Cable Type	No. of Conductors	Jacket Color	Wire Size [AWG]	Nominal Outer Diameter	Operating Temperature	Cable Rating	Cat. No. ⁽¹⁾
Riser PVC	Foil and braided shield	8 (four pairs)	Teal	26	5.84 mm (0.23 in.)	-40...+75 °C (-40...+167 °F)	UL CMR; cUL CMG; TIA-568-B	1585-C8CB-Sx
Robotic PUR		4 (two pairs)			—		C(ETL)US TYPE CMX; TIA 568-B, Flex rated, Halogen-Free	1585-C4UB-Sx
		8 (four pairs)			6.2 ± 12 mm (0.244 in.)			1585-C8UB-Sx
600V PVC	Foil shield	8 (four pairs)	Red	22	8.13 ± 0.38 mm (0.32 in.)	-20...+80 °C (-4...+176 °F)	(UL) CMX, CMR; c(UL) CMG; (UL) PLTC or AWM 2570 80 °C 600V; TIA-568-B	1585-C8HB-Sx
		4 (two pairs)	Teal				1585-C8EB-Sx	
		4 (two pairs)	Red				1585-C4HB-Sx	
								1585-C4EB-Sx

(1) Replace x with 100 [100 m (328 ft)], 300 [300 m (984 ft)], or 600 [600 m (1969 ft)] for standard cable lengths (example 1585-C8UB-Sx becomes 1585-C8UB-S600 for a 600 m cable).

600V Ethernet Cable



RJ45 Cordset—600V

Specifications

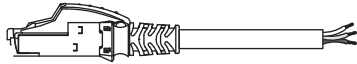
Attributes	Bulletin 1585
Certifications	UL and c-UL Listed
Material	<ul style="list-style-type: none"> Conductor: Thin copper stranded Insulation: Perfluoroalkoxy copolymer and polyolefin Contact: Gold-plated brass
Diameter	8.13 ± 0.38 mm (0.32 ± 0.015 in.)
Cable rating	UL, c-UL TYPE CMG; UL PLTC or UL AWM 2570 80°C 600V, TIA 568B

Cable Spool Product Selection

Jacket Material	Cable Type	No. of Conductors	Jacket Color	Wire Size [AWG]	Nominal Outer Diameter	Operating Temperature	Cable Rating	Cat. No. (1)
600V PVC	Foil shield	8 (four pairs)	Teal	22	8.13 ± 0.38 mm (0.32 in.)	-20...+80 °C (-4...+176 °F)	(UL) CMX, CMR; c(UL) CMG; (UL) PLTC or AWM 2570 80 °C 600V; TIA-568-B	1585-C8HB-Sx
			Red					1585-C8EB-Sx
		4 (two pairs)	Teal					1585-C4HB-Sx
			Red					1585-C4EB-Sx

(1) Replace x with 100 [100 m (328 ft)], 300 [300 m (984 ft)], or 600 [600 m (1969 ft)] for standard cable lengths (example 1585-C4HB-Sx becomes 1585-C4HB-S600 for a 600 m cable).

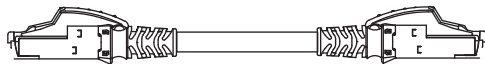
RJ45 Cordsets



Shielding	Cable Type	Cat. No. (1)
Foil shield	8 conductor, teal 600V PVC	1585J-M8HB-x
	8 conductor, red 600V PVC	1585J-M8EB-x
	4 conductor, teal, 600V PVC	1585J-M4HB-x
	4 conductor, red, 600V PVC	1585J-M4EB-x

(1) Replace x with 2 [2 m (6.6 ft)], 5 [5 m (16.4 ft)], or 10 [10 m (32.8 ft)] for standard cable lengths (example 1585J-M8EB-x becomes 1585J-M8EB-10 for a 10 m cable).

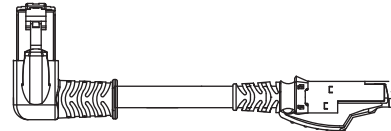
RJ45 Patchcords



No. of Conductors	Jacket Material	Cable Type	Cable Rating	Cat. No. (1)
8	Teal 600V, PVC	Foil shield	(UL) CMX, CMR; c(UL) CMG; (UL) PLTC or AWM 2570 80 °C 600V; TIA-568-B	1585J-M8HBJM-x
	Red 600V PVC			1585J-M8EBJM-x
4	Teal 600V, PVC			1585J-M4HBJM-x
	Red 600V PVC			1585J-M4EBJM-x

(1) Replace x with 2 [2 m (6.6 ft)], 5 [5 m (16.4 ft)], or 10 [10 m (32.8 ft)] for standard cable lengths (example 1585J-M4HBJM-x becomes 1585J-M4HBJM-10 for a 10 m cable).

RJ45 Patchcords



No. of Conductors	Jacket Material	Cable Type	Cable Rating	Angle	Cat. No. (1)
8	Teal 600V PVC	Foil shield	(UL) CMX, CMR; c(UL) CMG; (UL) PLTC or AWM 2570 80 °C 600V; TIA-568-B	Right	1585J-E8HBJM-x
4					1585J-E4HBJM-x
8				Left	1585J-L8HBJM-x
4					1585J-L4HBJM-x

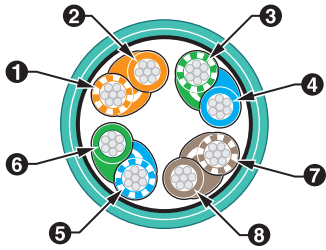
(1) Replace x with 2 [2 m (6.6 ft)], 5 [5 m (16.4 ft)], or 10 [10 m (32.8 ft)] for standard cable lengths (example 1585J-E4HBJM-x becomes 1585J-E4HBJM-5 for a 5 m cable).

RJ45 IDC Connector

Insulation Diameter [mm (in.)]	Cable Diameter [mm (in.)]	Cat. No.
0.85...1.6 (0.033...0.063)	5...9 (0.197...0.354)	1585J-M8CC-H

Cable and Color Code

Four-pair



White/Orange	
Orange	
White/Green	
Blue	
White/Blue	
Green	
White/Brown	
Brown	

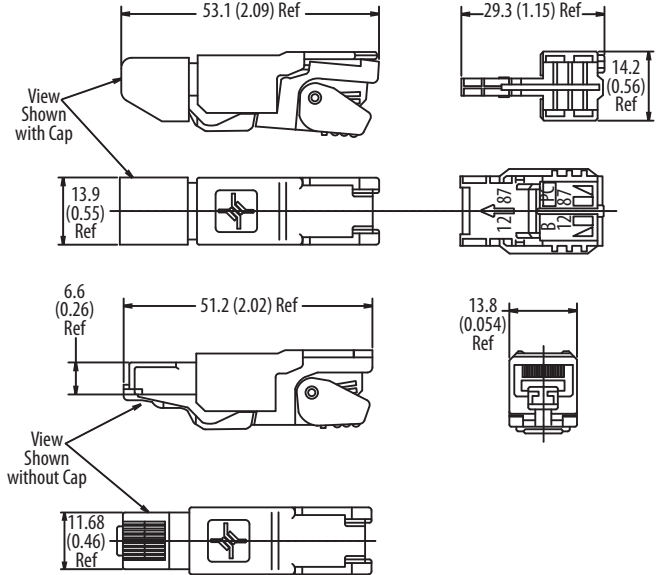
Color Code

Color Code	Face View RJ45 Pinout	
	8-pin	
A	1 White/Orange 2 Orange 3 White/Green 4 Blue 5 White/Blue 6 Green 7 White/Brown 8 Brown	TxData + TxData - Recv Data + Unused Unused Recv Data - Unused Unused

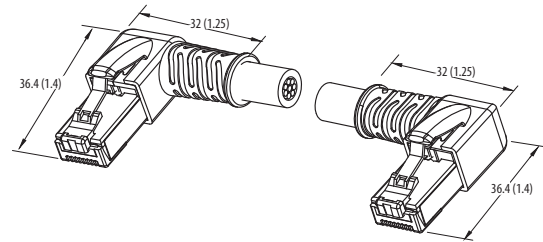
Approximate Dimensions

Dimensions are shown in mm (in.). Dimensions are not intended to be used for installation purposes.

RJ45 IDC Connector



RJ45 90° Left and Right Angle Patchcord



RJ45 Cordset and Patchcord

