



Product: [70094A](#) 

Life Cycle Status: Discontinued

IE 5E, 4PR #24 Sol BC, PO ins, SF/UTP, PUR HF jkt, UL AWM 20549

Product Description

IE 5E, 4 pair AWG 24 Bare Copper - Solid, Polyethylene insulation, SF/UTP - Overall Braid + Foil shielding, PUR Halogen Free jacket, UL AWM 20549

Technical Specifications

Product Overview

Suitable Applications:	harsh environment, IIoT, factory or process automation, video, audio, data communication, etc.
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Product Life Cycle

Life Cycle:	Discontinued - the product is no longer manufactured
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Construction Details

Conductor

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

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	1.1 mm (0.043 in)	White/Blue & Blue, White/Orange & Orange, White/Green & Green, White/Brown & Brown

Cable Core

Description
4 pairs twisted to cable core covered with a polyester foil

Outer Shield

Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	
Braid	Tinned Copper (TC)	85%

Outer Shield Table Notes:	Aluminum outside
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Outer Jacket

Separator	Material	Nom. Diameter
non-Woven Tape	PUR - Polyurethane (Halogen Free)	6.4 mm (0.25 in)

Overall Cable Diameter (Nominal):	6.4 mm (0.25 in)
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Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
93.8 Ohm/km (28.6 Ohm/1000ft)	56 pF/m (17 pF/ft)	160 pF/100m	100 Ohm

Delay

Max. Delay Skew	Nom. Velocity of Prop.
40 ns/100m	60%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.1 dB/100m	65.3	62.3	63.2	60.2	64	61	23	40	35
4	4 dB/100m	56.3	53.3	52.32	49.3	52	49	23	34	23
10	6.3 dB/100m	50.3	47.3	44	41	44	41	25	30	15
16	8 dB/100m	47.2	44.2	39.2	36.2	39.9	36.9	25	28	10.9
20	9 dB/100m	45.8	42.8	36.8	33.8	38	35	25	27	9
31.25	11.4 dB/100m	42.9	39.9	31.5	28.5	34.1	31.5	23.6	25.1	5.5
62.5	16.5 dB/100m	38.4	35.4	21.9	18.9	28.1	25.1	21.5	22	
100	21.3 dB/100m	35.3	32.3	14	11	24	21	20.1	20	

Transfer Impedance

Frequency	Max. Transfer Impedance
1 Mhz	Max. 10 mOhm/m
10 Mhz	Max. 10 mOhm/m
30 Mhz	Max. 30 mOhm/m
100 Mhz	100 mOhm/m

Transfer Impedance Class:	Grade 1
Screening Class:	Type I
Screening Table Notes:	Coupling Attenuation

Voltage

UL Voltage Rating	Voltage Rating
UL AWM 2464: 300 A.C.	72 V DC

Mechanical Characteristics

Temperature

Operating	Installation	Storage
-40°C to +80°C	0°C To +50°C	-40°C to +80°C

Bend Radius

Stationary Min.	Installation Min.
30 mm (1.2 in)	60 mm

Max. Pull Tension:	80 N (18 lbf)
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Standards and Compliance

Environmental Suitability:	Indoor
AWM Compliance:	AWM 2464
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA 568.2-D
ISO/IEC Compliance:	ISO/IEC 11801-1
CENELEC Compliance:	EN 50173-1, Segregation class according EN50174-2 = d
European Directive Compliance:	EU CE Mark

History

Update and Revision:	Revision Number: 0.174 Revision Date: 09-07-2025
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