



**Product:** [70093B](#) 

Life Cycle Status: Discontinued

IE 5E, 1Q #22 Str TC, PO ins, F/B, PVC jkt, PROFINET type B UL AWM 2464

## Product Description

IE 5E, 1 Quad AWG 22 Tinned Copper - Stranded, Polyethylene insulation, SF/UTP - Overall Braid + Foil shielding, PVC jacket, PROFINET type B UL AWM 2464

## Technical Specifications

### Product Overview

Suitable Applications:	PROFINET, harsh environment, IIoT, factory or process automation, IP cameras and devices, 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
22 AWG	7x0.25 mm	TC - Tinned Copper	2

#### Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	1.5 mm (0.059 in)	White & Blue & Yellow & Orange
		1 Quad

#### Cable Core

Description
1 quad with center filler

#### Inner Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	3.9 mm (0.15 in)

Inner Jacket Table Notes:	Bedding
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#### Outer Shield

Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	
Braid	Tinned Copper (TC)	90%

Outer Shield Table Notes:	Aluminum outside
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#### Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	6.5 mm (0.26 in)

Overall Cable Diameter (Nominal):	6.5 mm (0.26 in)
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## Electrical Characteristics

### Electricals

Max. Conductor DCR	Nom. Characteristic Impedance
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57.1 Ohm/km (17.4 Ohm/1000ft) 100 Ohm

#### Delay

Nom. Velocity of Prop.
60%

#### High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. ACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.1 dB/100m	65.3	63.2	64	23	40	35
4	4 dB/100m	56.3	52.32	52	23	34	23
10	6.3 dB/100m	50.3	44	44	25	30	15
16	8 dB/100m	47.2	39.2	39.9	25	28	10.9
20	9 dB/100m	45.8	36.8	38	25	27	9
31.25	11.4 dB/100m	42.9	31.5	34.1	23.6	25.1	5.5
62.5	16.5 dB/100m	38.4	21.9	28.1	21.5	22	
100	21.3 dB/100m	35.3	14	24	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
-25°C to +80°C	-5°C To +50°C	-40°C to +80°C

#### Bend Radius

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

### 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
European Directive Compliance:	EU CE Mark

### History

Update and Revision:	Revision Number: 0.136 Revision Date: 09-07-2025
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