



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

Life Cycle Status: Discontinued

IE 5E, 1Q #22 Str TC, PO ins, F/B, PUR HF jkt, PROFINET type C UL AWM 20549

## Product Description

IE 5E, 1 Quad AWG 22 Tinned Copper - Stranded, Polyethylene insulation, SF/UTP - Overall Braid + Foil shielding, PUR Halogen Free jacket, PROFINET type C UL AWM 20549

## Technical Specifications

### Product Overview

Suitable Applications:	PROFINET, harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc
------------------------	---

### Product Life Cycle

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

### Construction Details

#### Conductor

Size	Stranding	Material	No. of Pairs
22 AWG	19x0.15 mm	TC - Tinned Copper	2

#### Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	1.55 mm (0.0610 in)	White & Blue & Yellow & Orange
		1 Quad

#### Cable Core

Description
1 quad with center filler

#### Inner Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	3.9 mm (0.15 in)

Inner Jacket Table Notes:	Bedding
---------------------------	---------

#### Outer Shield

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

Outer Shield Table Notes:	Aluminum outside
---------------------------	------------------

#### Outer Jacket

Separator	Material	Nom. Diameter
non-Woven Tape	PUR - Polyurethane	6.5 mm (0.26 in)

Overall Cable Diameter (Nominal):	6.5 mm (0.26 in)
-----------------------------------	------------------

## Electrical Characteristics

### Electricals

Max. Conductor DCR	Nom. Characteristic Impedance
--------------------	-------------------------------

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

#### Trailing/Flexing Properties

Motion	Number of Cycles	Radius	Speed	Acceleration
Trailing/Bending	5,000,000	60 mm	3 m/s	3 m/s <sup>2</sup>

#### 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
GENELEC Compliance:	EN 50173-1
European Directive Compliance:	EU CE Mark

## History

Update and Revision:	Revision Number: 0.137 Revision Date: 09-07-2025
----------------------	--

© 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.