



**Product:** [72002NH](#)

DataTuff® 5E, 2PR #26 Str BC, PO ins, SF/UTP, LSNH Jkt, AWM 21286

## Product Description

DataTuff® 5E, 2 Pair AWG 26 Bare Copper - Stranded, Polyolefin (PO, PE, PP) insulation, SF/UTP - Overall Braid + Foil shielding, LSZH / FRNC jacket , AWM 21286

## Technical Specifications

### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	Construction n x D	No. of Pairs
26	Stranded	BC - Bare Copper	7x0.16 mm	2

Conductor Count:	4
Total Number of Pairs:	2

#### Insulation

Material	Nominal Diameter	Diameter +/- Tolerance
PO - Polyolefin	0.98 mm	0.05 mm

Bonded-Pair:	No
--------------	----

#### Color Chart

Number	Color
Pair 1	White/Blue & Blue
Pair 2	White/Orange & Orange

#### Outer Shield Material

Type	Material	Min. Coverage [%]
Tape	Bi-Laminate (Alum+Poly)	
Braid	Tinned Copper (TC)	80%

Table Notes:	Aluminum outside
--------------	------------------

#### Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance	Min. Wall Thickness	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	6 mm	0.3 mm	0.8 mm	0.8 mm

### Construction and Dimensions

Min Elongation at Breakof Conductors:	10 %
Min Elongation at Breakof Insulation:	100 %
Min Elongation at Breakof Jacket:	100 %
Min Tensile Strength of Jacket:	9 MPa

### Electrical Characteristics

#### Conductor DCR

Max. Conductor DCR	Max. DCR Unbalanced Within Pair [%]
140 Ohm/km	2 %

## Capacitance

Max. Capacitance Unbalance	Max. Mutual Capacitance
1.6 pF/m	56 pF/m

## Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance	Nominal Input Impedance
100 Ohm	5 Ohm	100 +/- 15 Ohm

## Delay

Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
40 ns/100m	60%

## High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. RL (Return Loss) [dB]
0.772 MHz		67 dB		19.4 dB
1 MHz	3.2 dB/100m	65.3 dB	63.8 dB	20 dB
4 MHz	6 dB/100m	56.3 dB	51.8 dB	23 dB
10 MHz	9.5 dB/100m	50.3 dB	43.8 dB	25 dB
16 MHz	12.1 dB/100m	47.2 dB	39.7 dB	25 dB
20 MHz	13.6 dB/100m	45.8 dB	37.8 dB	25 dB
25 MHz	15.3 dB/100m	44.3 dB	35.8 dB	24.3 dB
31.25 MHz	17.1 dB/100m	42.9 dB	33.9 dB	23.6 dB
62.5 MHz	24.8 dB/100m	38.3 dB	27.9 dB	21.5 dB
100 MHz	32 dB/100m	35.3 dB	23.8 dB	20.1 dB

## Current

Element	Max. Recommended Current [A]
Conductor	1.1 Amps per Conductor

## Voltage

Voltage Rating [V]
450 V DC and 300 V AC

## Temperature Range

Installation Temp Range:	-5°C To +50°C
Operating Temp Range:	-40°C To +80°C

## Mechanical Characteristics

Oil Resistance:	IEC 60811-2-1
Max. Pull Tension:	40 N
Min Bend Radius (W/o Pulling Strength):	60 mm
Min Setting Radius:	30 mm

## Standards

IEC Compliance:	ISO/IEC 11801-1
CPR Euroclass:	Eca
CENELEC Compliance:	EN 50173-1
Data Category:	Category 5e
ANSI Compliance:	ANSI/TIA 568.2-D (2018)

## Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Eca
EU RoHS Compliance Date (yyyy-mm-dd):	2016-01-06

## Suitability

Suitability - Oil Resistance:	Yes
Suitability - Sunlight Resistance:	Yes

## Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
IEC 60754-1 (EN50267-1)- Halogen Amount:	Zero

IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Max. Conductivity:	2.5 µS/mm
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Min. pH:	4.3

## Part Number

### Variants

Item #	Color	Putup Type	Length	EAN
72002NH.02B100	Black	Flat Box	100 m	8719605012845
72002NH.02305	Black	Reel	305 m	8719605012821
72002NH.02500	Black	Reel	500 m	8719605012838

### History

Update and Revision:	Revision Number: 0.221 Revision Date: 12-18-2020
----------------------	--

© 2020 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.