

Product: [74005NH](#) 

DataTuff® 7, 4PR #26 Str BC, PO ins, S/FTP, LSNH Jkt, AWM 20851



Product Description

DataTuff® 7, 4 Pair AWG 26 Bare Copper - Stranded, Polyolefin (PO, PE, PP) insulation, S/FTP - Overall Braid / Individual Foil shielding, LSZH / FRNC jacket , AWM 20851

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Construction n x D	No. of Pairs
26	Stranded	BC - Bare Copper	7x0.16 mm	4

Conductor Count:	8
Total Number of Pairs:	4

Insulation

Material	Nominal Diameter	Diameter +/- Tolerance
FPE - Foamed Polyethylene	1.05 mm	0.05 mm

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

Color Chart

Number	Color
Pair 1	White & Blue
Pair 2	White & Orange
Pair 3	White & Green
Pair 4	White & Brown

Inner Shield Material

Type	Material
Tape	Aluminum / Polyester

InnerShield, Table Note:	Aluminum outside
--------------------------	------------------

Outer Shield Material

Type	Material	Min. Coverage [%]
Braid	TC - Tinned Copper	65 %

Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance	Nominal Wall Thickness
LSZH / FRNC (UV stabilised and oil resistant)	6.8 mm	0.3 mm	0.5 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 [%]
145 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	70 %

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]
1 MHz	2.7 dB/100m	80 dB	77 dB			
4 MHz	5.5 dB/100m	80 dB	77 dB	80 dB	77 dB	23 dB
10 MHz	8.5 dB/100m	80 dB	77 dB	74 dB	71 dB	25 dB
16 MHz	10.8 dB/100m	80 dB	77 dB	69.9 dB	66.9 dB	25 dB
20 MHz	12.1 dB/100m	80 dB	77 dB	68 dB	65 dB	25 dB
31.25 MHz	15.2 dB/100m	80 dB	77 dB	64.1 dB	61.1 dB	23.6 dB
62.5 MHz	27.8 dB/100m	75.1 dB	72.1 dB	58.1 dB	55.1 dB	21.5 dB
100 MHz	27.8 dB/100m	72.4 dB	69.4 dB	54 dB	51 dB	20.1 dB
200 MHz	40.1 dB/100m	67.9 dB	64.9 dB	48 dB	45 dB	18 dB
300 MHz	50 dB/100m	65.3 dB	62.3 dB	44.5 dB	41.5 dB	17.3 dB
600 MHz	73.3 dB/100m	60.8 dB	57.8 dB	38.4 dB	35.4 dB	17.3 dB

Transfer Impedance

Frequency [MHz]	Transfer Impedance
10 Mhz	Max. 5 mOhm/m

Current

Element	Max. Recommended Current [A]
Conductor	1 A

Voltage

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

Temperature Range

Installation Temp Range:	-15°C To +60°C
Storage Temp Range:	-40°C To +80°C
Operating Temp Range:	-40°C To +80°C

Mechanical Characteristics

Oil Resistance:	IEC 60811-2-1
Max Recommended Pulling Tension:	80 N
Min Bend Radius (W/o Pulling Strength):	65 mm
Min Setting Radius:	30 mm

Standards

ISO/IEC Compliance:	ISO/IEC 11801 Ed. 2.2:2002/A2:2010/C1:2011
CPR Euroclass:	Eca
CENELEC Compliance:	EN 50173-1 Ed. 3:2011
Data Category:	Category 7
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):	2004-01-01

Suitability

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

Flammability, LSOH, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-1-2
Amount of Halogen acc. to IEC 60754-1 & EN50267-1:	Zero

Part Number

Variants

Item #	Color	Length
74005NH.07500	Black	500 m
74005NH.11500	Blue	500 m
74005NH.01500	Blue	500 m
74005NH.10500	Gray	500 m
74005NH.08500	Green	500 m
74005NH.09500	Orange	500 m
74005NH.13500	Red	500 m
74005NH.06500	Red	500 m
74005NH.12500	Yellow	500 m

Patent:	https://www.belden.com/resources/patents
---------	---

History

Update and Revision:	Revision Number: 0.195 Revision Date: 02-03-2020
----------------------	--

© 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.