



Product: <u>SPE405</u> ☑

# DataTuff Ind SPE 40mGb 22AWG SF/UTP LSZH

## **Product Description**

DataTuff Ind SPE 40mGb 22AWG SO SF/UTP LSZH

## **Technical Specifications**

## **Construction Details**

## Conductor

AWG	Stranding	Material	Number of Pairs
22	Solid	BC - Bare Copper	1

#### Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	0.069	White & Blue
Bonded-Pair:	No	

## Outer Shield Material

Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	100%
Braid	Tinned Copper (TC)	80%

## Outer Jacket Material

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.201 in

## **Electrical Characteristics**

## Electricals

Max. Conductor DCR	Max. DCR Unbalanced Between Pairs [%]	Max. Capacitance Unbalance	Min. Insulation Resistance	Dielectric Withstand
54.3 Ohm/km	2%	1,200 pF/km	5,000 MOhm*km	2000 V AC For 1 Min.

### Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew
100 MHz	538 ns/100m	25 ns/100m

## High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. TCL [dB]	Min. ELTCTL [dB]	Max. Surface Transfer Impedance	Min. Coupling Attenuation	Nom. Characteristic Impedance
1 MHz	2.1 dB	40 dB	40 dB	15 mOhm/m		
4 MHz	3.7 dB	40 dB	28 dB	11.75 mOhm/m		
8 MHz	5.2 dB	36.5 dB	21.9 dB	10.4 mOhm/m		
10 MHz	5.8 dB	35.0 dB	20.0 dB	10 mOhm/m		
16 MHz	7.3 dB	31.9 dB	15.9 dB	20 mOhm/m		
20 MHz	8.2 dB	30.5 dB	14 dB	20 mOhm/m		
25 MHz	9.2 dB	29 dB	12 dB	25 mOhm/m		
30 MHz	10.1 dB	27.8 dB	10.5 dB	30 mOhm/m	40 dB	
60 MHz	14.3 dB	23.3 dB	5 dB		40 dB	

100 MHz	18.5 dB	20 dB	5 dB	40 dB	100 Ohm
200 MHz	26.5 dB	15.5 dB	5 dB	34 dB	
250 MHz	29.7 dB	14 dB	5 dB	32 dB	
300 MHz	32.7 dB	12.8 dB	5 dB	30.5 dB	
350 MHz	35.4 dB	11.8 dB	5 dB	29.1 dB	
400 MHz	38 dB	11 dB	5 dB	28 dB	
450 MHz	40.4 dB	10.2 dB	5 dB	26.9 dB	
500 MHz	42.8 dB	9.5 dB	5 dB	26 dB	
550 MHz	45 dB	8.9 dB	5 dB	25.2 dB	
600 MHz	47.1 dB	8.3 dB	5 dB	24.4 dB	

#### Voltage

UL Voltage Rating	Non-UL Voltage Rating	
300 V (UL AWM 2095)	300 V (IEC 61156-11)	

#### **Mechanical Characteristics**

#### Temperature

UL Rating	Operating
80°C	-30°C To +80°C

#### **Bend Radius**

Installation Min.
2 in

Bulk Cable Weight: 10.9 lbs/1000ft

#### **Standards and Compliance**

Environmental Suitability:	Indoor
Flammability / Fire Resistance:	FT2, FT2, 60332-1
AWM Compliance:	AWM 2095, AWM I A/B
IEEE Compliance:	IEEE 802.3bp
IEC Compliance:	IEC 61156-12
ISO/IEC Compliance:	IEC 61156-12
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE), REACH: 2020-01-16
APAC Compliance:	China RoHS II (GB/T 26572-2011)

#### **Part Number**

#### Variants

Item #	Color	Putup Type	Length
SPE405 0101000	Black	Reel	1,000 ft
SPE405 0061000	Blue, Light	Reel	1,000 ft

#### **Product Notes**

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system.

## **History**

Update and Revision:	Revision Number: 0.15 Revision Date: 03-16-2021

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