



Product: [SPE103](#)

Datatuff Ind SPE 10Mbps 18AWG SF/UTP PVC, TC, CMG, FT4

Product Description

Datatuff Industrial Single Pair Ethernet 10Mbps, 18AWG PE SF/UTP PVC, UL TC, CMG, FT4 rated

Technical Specifications

Product Overview

Suitable Applications:	data communications, cameras, PLCs, switches, outdoor, indoor etc.
------------------------	--

Construction Details

Conductor

Size	Stranding	Material	No. of Pairs
18 AWG	Solid	TC - Tinned Copper	1

Insulation

Nom. Insulation Diameter	Color Code
0.128 in (3.25 mm)	White & Blue

Outer Shield

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

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.368 in (9.35 mm)

Overall Cable Diameter (Nominal):	.368 in (9.35 mm)
-----------------------------------	-------------------

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance
23 Ohm/km (7.0 Ohm/1000ft)	56 pF/m (17 pF/ft)	330 pF/100m

Delay

Frequency	Max. Delay
20 MHz	510 ns/100m

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation) [dB/100m]	Min. RL (Return Loss) [dB]	Min. PSANEXT [dB]	Min. Coupling Attenuation [dB]	Nom. Characteristic Impedance [Ohm]
0.1	1.0	11.5	67	60	100
0.5	1.2	18.5	64.7	60	100
0.772	1.3	19.4	61.5	60	100
1	1.4	20	61.4	60	100
2	1.9	21.5	54.5	60	100
4	2.6	23	49.4	60	100
8	3.6	24.5	44.3	60	100

10	5.9	25	42.6	60	100
16	5.1	25	39.1	60	100
20	5.7	25	37.5	60	100

Voltage

UL Voltage Rating

(UL 1277 TC, UL 444)

Mechanical Characteristics

Temperature

UL Temperature	Operating
75°C DRY	-30°C To +75°C

Bend Radius

Installation Min.
2.7 in (69 mm)

Max. Pull Tension:	25 lbs (11 kg)
Bulk Cable Weight:	67 lbs/1000ft (100 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, UV Resistance, Oil Resistance
Flammability / Reaction to Fire:	UL 1685 UL Loading, IEEE 1202 FT4, FT4, 1202
NEC / UL Compliance:	Article 336, Article 800, TC, CMG
CEC / C(UL) Compliance:	FT4
IEEE Compliance:	IEEE 802.3cg
Data Category:	SPE 10 Mbps
TIA/EIA Compliance:	ANSI/TIA-568.5
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: 2022-04-27
APAC Compliance:	China RoHS II (GB/T 26572-2011)

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: 0.12 Revision Date: 02-13-2025
----------------------	---

© 2025 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.