

 **Part Number:** 7937ACat 5e Waterblocked DataTuff®, (4 pr) 24 AWG Solid
BC, PO/LLPE/LLPE, Foil+TC Braid Shld, Direct Burial

Product Description

Four Cat 5e 24 AWG solid bare copper conductors, twisted pairs, polyolefin insulation, polymer gel waterblocked, inner LLPE jacket, overall Beldfoil® shield (100% coverage), LLPE jacket.

Product Specifications

Technical Specifications

Suitable Applications:	Industrial Ethernet Cable, Harsh Environments, 100MHz Category 5e, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, RS-422, CMX - Outdoor, RJ-45 Compatible, Noisy Environments
-------------------------------	---

Construction and Dimensions

Conductor:

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
24	Solid	BC - Bare Copper	0.02 in	4
Total Number of Conductors:			8	

Insulation:

Element	Material	Nominal Diameter	Nominal Wall Thickness
	PO - Polyolefin	0.038 in	0.009 in
Polymer gel			

Color Chart 1:

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

Innerjacket:

Material	Nominal Diameter
LLPE - Linear Low Density Polyethylene	0.215 in

Outershield 1:

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Aluminum Foil-Polyester Tape	Beldfoil®	100 %	TC - Tinned Copper	24	7x32 mm

Outerjacket 1:

Material	Nominal Diameter	Nominal Wall Thickness	Ripcord
LLPE - Linear Low Density Polyethylene	0.276 in	0.02 in	No

Electrical Characteristics

Conductor DCR:

Max. Conductor DCR	Max. DCR Unbalance
9.38 Ohm/1000ft	3 %

Capacitance:

Max. Capacitance Unbalance	Nom.Mutual Capacitance
330 pF/ft	15 pF/ft

Delay:

Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
538 @ 100MHz ns/100m	45 ns/100m	70 %

High Freq:

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. SRL (Structural Return Loss)	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1 MHz	2 db/100m	65.3 dB	62.3 dB	63 dB	60 dB	63.8 dB	60.8 dB	20 dB	23 dB	100 ± 15 Ohm	
4 MHz	4.1 db/100m	56.3 dB	53.3 dB	51 dB	49 dB	51.7 dB	48.7 dB	23 dB	23 dB	100 ± 15 Ohm	
8 MHz	5.8 db/100m	51.8 dB	48.8 dB	46 dB	43 dB	45.7 dB	42.7 dB	24.5 dB	24.5 dB	100 ± 15 Ohm	
10 MHz	6.5 db/100m	50.3 dB	47.3 dB	43 dB	41 dB	43.8 dB	40.8 dB	25 dB	25 dB	100 ± 15 Ohm	
16 MHz	8.2 db/100m	47.3 dB	44.3 dB	39 dB	36 dB	39.7 dB	36.7 dB	25 dB	25 dB	100 ± 15 Ohm	
20 MHz	9.3 db/100m	45.8 dB	42.8 dB	36.5 dB	33.5 dB	37.7 dB	34.7 dB	25 dB	25 dB	100 ± 15 Ohm	
25 MHz	10.4 db/100m	44.3 dB	41.3 dB	33.9 dB	30.9 dB	35.8 dB	32.8 dB	24.3 dB	24.3 dB	100 ± 15 Ohm	
31.25 MHz	11.7 db/100m	42.9 dB	39.9 dB	31 dB	28 dB	33.9 dB	30.9 dB	23.6 dB	23.6 dB	100 ± 15 Ohm	
62.5 MHz	17 db/100m	38.4 dB	35.4 dB	22 dB	19 dB	27.8 dB	24.8 dB	21.5 dB	21.5 dB	100 ± 15 Ohm	
100 MHz	22 db/100m	35.3 dB	32.3 dB	14 dB	11 dB	23.8 dB	20.8 dB	20.1 dB	20.1 dB	100 ± 15 Ohm	100 ± 15 Ohm
1 MHz											
4 MHz											
8 MHz											
10 MHz											
16 MHz											
20 MHz											
25 MHz											
31.25 MHz											
62.5 MHz											
100 MHz											

Voltage:

UL Voltage Rating

300 V RMS

Use

Suitability - Oil Resistance:	Yes
Suitability - Burial:	Yes - Telcordia, IEC, ICEA
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes
Max Recommended Pulling Tension:	40 lbs

Safety

Suitability - Non-Halogenated:	Yes
--------------------------------	-----

Temperature Range

Installation Temp Range:	-25°C To +75°C
Operating Temp Range:	-40°C To +75°C
Storage Temp Range:	-40°C To +85°C

Mechanical Characteristics

Min Bend Radius/Minor Axis:	2.75 in
-----------------------------	---------

Part Number

Plenum (Y/N):	No
---------------	----

Standards

ISO/IEC Compliance:	Other Standards
Telecommunications Standards:	Telecommunications Standards
CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)
MII Order #39 (China RoHS):	MII Order #39 (China RoHS)
Other Specification:	Other Specification
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)

History

Notes:	Operating temperatures are subject to length de-rating. Cable passes -40°C Cold Bend per UL 1581. Sequential marking at two foot intervals. Polymer gel waterblocking material.
--------	---

Product Variants

Part Number	Color	Put-Up Type	Length
7937A 0101000	BLACK	Reel	1000 ft

© 2016 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 herein 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 "AS IS" 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.