



**Part Number:** 70007E  
INDUSTRIAL ETHERNET EUROPE

## Product Description

Profinet Type B PVC

## Product Specifications

### AG.Filter Attributes

Total Number of Conductors:	4
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### Cabling1

Description@Cabling1:	1 quad with center filler
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## Technical Specifications

### Applicable Patents

Patent:	<a href="http://www.belden.com/p">http://www.belden.com/p</a>
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### General Electrical Parameters

General Electrical Parameters Header:	Reference standard: ISO/IEC 11801 ed 2.0, Cat 5e
Dielectric Strength Cond-Cond (2 sec. ):	2.5 kV DC
Dielectric Strength Cond-Screen (2 sec. ):	2.5 kV DC

### Global Standard

ISO/IEC Compliance:	IEC 11801 2nd edition (2002) and ISO/IEC 11801 Amendment 2 (2010)
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## History

Revision Date (yyyy-mm-dd):	2013-12-13
Revision Number:	4

## Safety

ISO/IEC Flammability:	IEC 60332-1-2
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## Use

Oil Resistance:	IEC 60811-2-1
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### Impedance:

Frequency [MHz]	Nominal Characteristic Impedance	Nominal Characteristic Tolerance
1 - 100	100 Ohm	15 Ohm

### Conductor DCR:

Max. Conductor DCR
57.1 Ohm/km

### Color Chart 1:

Number	Color
Quad 1	White & Blue & Yellow & Orange

### Delay:

Max. Delay	Nominal Velocity of Propagation (VP) [%]
530 ns/100m	68 %

### Voltage:

Voltage Rating [V]
300 V

### High Freq:

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. SRL (Structural Return Loss)
1 MHz	2.1 dB/100m		65.3 dB	64 dB
4 MHz	4.1 dB/100m	56.3 dB	52 dB	23 dB
10 MHz	6.5 dB/100m	50.3 dB	44 dB	25 dB
16 MHz	8.3 dB/100m	47.2 dB	40 dB	25 dB

31.25 MHz	11.7 dB/100m	42.9 dB	34 dB	23.6 dB
62.5 MHz	17 dB/100m	38.4 dB	28 dB	21.5 dB
100 MHz	22 dB/100m	35.3 dB	24 dB	20.1 dB

### Transfer Impedance:

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

### Innerjacket:

Material	Nominal Diameter
PVC Bedding	4.1 mm

### Insulation:

Material	Nominal Diameter	Diameter +/- Tolerance
Polyolefin	1.55 mm	0.05 mm

### Outerjacket 1:

Material	Color	Nominal Diameter	Diameter +/- Tolerance
PVC (Oil resistant)	Green (RAL 6018)	6.5 mm	0.2 mm

### Conductor:

AWG	Stranding	Material	Construction n x D	No. of Conductors
22	Stranded	Tinned copper	7x0.25 mm	4

### Other Electrical Information:

Dielectric Strength Cond-Cond (2 sec.)	2.5 kV DC
Dielectric Strength Cond-Screen (2 sec.)	2.5 kV DC

### Outershield 1:

Type	Material	Thickness of Foil	Min. Coverage [%]
Tape	Aluminum / Polyester		50 µm
Braid	Tinned copper		85 %

## Product Variants

Part Number	Color	Put-Up Type	Length
70007E		Reel	1000 m
70007E.001525	GREEN	Reel	1525 m
70007E.00305	GREEN	Reel	305 m
70007E.00500	GREEN	Reel	500 m
70007E.00B100	GREEN	Flat Box	100 m
70007E	GREEN	Reel	1000 m
70007E	GREEN	Reel	1525 m
70007E	GREEN	Reel	305 m
70007E	GREEN	Reel	500 m
70007E	GREEN	Flat Box	100 m
70007E	GREEN	Reel	500 m
70007E			

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