

Product: CX3C1 ☐





Product Description

COAX 3 FOAM F18 PE CATV

Technical Specifications

Product Overview

Environmental Space:	Outdoor
Suitable Applications:	Coaxial cables used in cabled distribution networks designed according the European Standard EN 50117; Operating at frequencies between 5 MHz and 2150 MHz; The International Standard IEC 1196

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	Diameter +/- Tolerance	No. of Coax
8	Solid	BC - Bare Copper	3.38 mm	0.03 mm	1
Condu	uctor Count:		1		

Insulation

Туре	Material	Nominal Diameter	Diameter +/- Tolerance
Dielectric	FPE - Foamed Polyethylene	14.9 mm	0.2 mm
Insulation,	, Table Note:	Centricity min. 85%	

Outer Shield Material

Type	Material	Min. Overlap	Nominal Diameter	Diameter +/- Tolerance
Tape	Copper	5 mm	15.3 mm	0.3 mm

Outer Jacket Material

	Material	Nominal Diameter	Diameter +/- Tolerance
Р	E - Polyethylene	18 mm	0.3 mm
С	uterJacket1, Tabl	e Note:	According to European Sta

Construction and Dimensions

Min Elongation at Breakof Jacket:	300 %
Min Tensile Strength of Jacket:	10 MPa

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. Conductor Loop	Max. Shield DCR
1.9 Ohm/km	4.5 Ohm/1000ft	2.6 Ohm/km

Capacitance

Nom. Capacitance	Capacitance Tolerance
54 pF/m	2 pF/m

Impedance

Nominal Characteristic Impedance | Nominal Characteristic Tolerance | Regularity of Impedance

75 Ohm 3 Ohm Min. 46 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
5 MHz	0.4 dB/100m
50 MHz	1.3 dB/100m
100 MHz	1.8 dB/100m
200 MHz	2.6 dB/100m
400 MHz	3.9 dB/100m
600 MHz	4.8 dB/100m
800 MHz	5.7 dB/100m
1000 MHz	6.5 dB/100m
1350 MHz	7.7 dB/100m
1750 MHz	9 dB/100m
2150 MHz	10.2 dB/100m
2400 MHz	10.9 dB/100m

Delay

Nominal Velocity of Propagation (VP) [%]	Velocity of Propagation Tolerance
84 %	2 %

High Freq

Frequency [MHz]	Min. RL (Return Loss) [dB]
5 - 30 MHz	26 dB
30 - 470 MHz	26 dB
470 - 862 MHz	22 dB
862 - 2400 MHz	18 dB

High Freq Table Note: In each frequency band, 3 peak values up to 4 dB lower are allowed

Screening

Frequency [MHz]	Min. Screening Attenuation
30 - 1000 MHz	100 dB

Voltage

Voltage Test Dielectric
3.0 kV DC

Temperature Range

Installation Temp Range:	-5°C To +50°C
Storage Temp Range:	-40°C To +70°C
Operating Temp Range:	-40°C To +70°C

Mechanical Characteristics

Bulk Cable Weight:	267 kg/km
Max Recommended Pulling Tension:	1200 N
Min Bend Radius (W/o Pulling Strength):	180 mm
Crush Resistance:	Max. 1% (load of 700N) N
Adhesion Dielectric:	53-530 N at 50 mm N

Standards

ISO/IEC Compliance:	IEC 1196
CENELEC Compliance:	EN 50117 and EN 50117-1
Series Type:	CATV-Trunk Type

Applicable Environmental and Other Programs

EU RoHS Compliance Date (yyyy-mm-dd):	1998-01-01

Part Number

Variants

Item# Color Length

	CX3C1.001050	Black	1,050 m
	CX3C1.00700	Black	700 m
	CX3C1.009999	Black	1,049 m
	CX3C1.011050	Green	1,050 m
	CX3C1.01700	Green	700 m
	CX3C1.019999	Green	1,049 m
	CX3C1.K1700	Green	700 m

History

Update and Revision: Revision Number: 0.150 Revision Date: 01-31-2020

© 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.