BELDEN

Product: 734C1

DS-3 and DS-4, 734C Series, #20-1 SPC Coax, CMR/CMG

Picture Not Available

Product Description

20 AWG solid .032" silver-plated copper conductors, gas-injected FHDPE insulation, Duobond®; tinned copper braid shield (85% coverage), inner PVC jacket, overall PVC jacket with ripcord.

Technical Specifications

Product Overview

Suitable Applications:	Central Office wiring for DS3 transmissions.

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
20	Solid	SCCS - Silvered Copper Covered Steel	0.032 in	1

Conductor Count:	1

Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.148 in

Table Notes:	Gas Injected

Inner Shield

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duobond®	100%
Braid	2	Tinned Copper (TC)		85%

Table Notes:	Tape bonded to dielectric

Inner Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.235 in

Outer Shield

Material
No Shield

Outer Jacket

Material	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.235 in	Yes

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Conductor DCR Conductor Resistance	Nominal Inner Shield DCR	Outer Conductor DCR
10 Ohm/1000ft	10 Ohm/1000ft	2.4 Ohm/1000ft	2.4 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16.8 pF/ft

Inductance

Nominal Inductance
0.097 µH/ft

Impedance

Nominal Characteristic Impedance
75 Ohm

Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5-150 MHz	32 dB

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.27 ns/ft	80%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)
1 MHz	0.28 dB/100ft
5 MHz	0.59 dB/100ft
10 MHz	0.8 dB/100ft
22.5 MHz	1.18 dB/100ft
50 MHz	1.82 dB/100ft
100 MHz	2.6 dB/100ft
150 MHz	3.22 dB/100ft

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Operating Temperature Range:	-40°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	30 lbs/1000ft
Max. Pull Tension:	60 lbs
Min Bend Radius (Overall):	2.5 in

Standards

NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMG
RG Type:	59

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Riser
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft
CSA Flammability:	FT4
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
734C1 0081000	Gray	Reel	1,000 ft	612825184225
734C1 0083000	Gray	Reel	3,000 ft	612825184232
734C1 0085000	Gray	Reel	5,000 ft	612825184256

Footnote:	C - CRATE REEL PUT-UP.

History

Update and Revision:	Revision Number: 0.336 Revision Date: 02-03-2025