



Product: <u>4731P</u> ☑

12 GHz Coax, 4K UHD Precision Video Coax, RG-11/U Type, 75 Ohm, 14 AWG Solid SC, CMP

Product Description

12 GHz, 4K UHD Precision Video Coax, 75 Ohm RG11 Type 14 AWG solid silver plated copper conductor, foam FEP core, Duofoil® bonded to core+95% tinned copper braid+Duofoil®, CMP, PVDF jacket

Technical Specifications

Product Overview

Suitable Applications: SMPTE 2082-1 12 Gb/s UHDTV, SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080P

Construction Details

RG Type: 11

Conductor

No. of Elements	Size	Stranding	Nom. Diameter	Material
1	14 AWG	Solid	0.064 in	SC - Silvered Copper

Insulation

Material	Nom. Insulation Diameter	Color Code
FEP - Fluorinated Ethylene Propylene (Foam)	0.274 in (6.96 mm)	White

Outer Shield

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	Duobond® II	100%
2	Braid	Tinned Copper (TC)		95%
3	Tape	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%

Outer Jacket

Material	Nom. Diameter
PVDF - Polyvinylidene Flu	uoride 0.348 in (8.84 mm)
Overall Cable Diameter (Nominal):	0.348 in (8.84 mm)

Electrical Characteristics

Return Loss (RL)

Frequency	Min. Return Loss	
5 MHz - 1600 MHz	23 dB	
1600 MHz - 4500 MHz	21 dB	
4500 MHz - 12000 MHz	15 dB	

Attenuation

Frequency	Nom. Attenuation
1 MHz	0.16 dB/100ft
3.58 MHz	0.31 dB/100ft
5 MHz	0.36 dB/100ft
6 MHz	0.39 dB/100ft
7 MHz	0.41 dB/100ft

10 MHz	0.48 dB/100ft
12 MHz	0.52 dB/100ft
25 MHz	0.71 dB/100ft
55 MHz	1.03 dB/100ft
67.5 MHz	1.13 dB/100ft
71.5 MHz	1.16 dB/100ft
88.5 MHz	1.29 dB/100ft
100 MHz	1.36 dB/100ft
135 MHz	1.57 dB/100ft
143 MHz	1.62 dB/100ft
180 MHz	1.82 dB/100ft
270 MHz	2.28 dB/100ft
360 MHz	2.70 dB/100ft
540 MHz	3.46 dB/100ft
720 MHz	4.15 dB/100ft
750 MHz	4.26 dB/100ft
1000 MHz	5.11 dB/100ft
1500 MHz	6.64 dB/100ft
2000 MHz	8.01 dB/100ft
2250 MHz	8.65 dB/100ft
3000 MHz	10.51 dB/100ft
4500 MHz	13.61 dB/100ft
6000 MHz	16.44 dB/100ft
12000 MHz	25.89 dB/100ft

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
6.3 Ohm/1000ft (21 Ohm/km)	2.9 Ohm/1000ft (9.5 Ohm/km)	16.1 pF/ft (52.8 pF/m)	75 Ohm	83%

Voltage

UL Voltage Rating 300 V RMS

Mechanical Characteristics

Temperature

UL Temperature	Operating		
125°C	-20°C To +125°C		

Bend Radius

Stationary Min.	Installation Min.
3.5 in (89 mm)	3.5 in (89 mm)

Max. Pull Tension: 145 lbs (65.8 kg)

Bulk Cable Weight: 66 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor - PlenumIndoor/Outdoor, Indoor, Outdoor, Sunlight Resistance, UV Resistance, Aerial - When supported by messenger wire
Flammability / Reaction to Fire:	NFPA 262, FT6
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CMP
CEC / C(UL) Compliance:	CMP
European Directive Compliance:	EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Non-Plenum Number:	4731R

Product Notes

Notes: (1) # Elements@Conductor1 : 1 (Previously Blank) (2) Size@Conductor1 : 14 AWG (Previously 14) (3) Color@Color Chart1 01 : White (Previously Blank) (4) Coverage@OuterShield1 3 : 100% (Previously Blank) (5) Cable Diameter (Nominal) : 0.348 in (Previously Blank) (6) Bulk Cable Weight : 60 lbs/1000ft (Previously 78 lbs/1000ft)

History

Update and Revision: Revision Number: 0.249 Revision Date: 11-27-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
4731P 0101000	Black	Reel	1,000 ft	612825419532

© 2024 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.