Fairview Microwave
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FMCA2605/YW-36 DATA SHEET

12G SDI 75 Ohm HD-BNC Male to 75 Ohm 1.0/2.3 Male Cable 75 Ohm 4694R-YW Coax in 36 Inch

The 75 ohm HD-BNC male to 75 ohm 1.0/2.3 male 36 inch cable using 75 ohm 4694R-YW coax, part number FMCA2605/YW-36, from Fairview Microwave is in-stock and ships same day. This Fairview HD-BNC to 1.0/2.3 cable assembly has a male to male gender configuration with 75 ohm flexible Belden 4694R-YW coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2605/YW-36 HD-BNC male to 1.0/2.3 male cable assembly operates to 12 GHz and enables 12Gb/s data transfer rates for high resolution uncompressed video signal transmission. These products offer 4K and Ultra-HD quality signals that meet SMPTE Standard 2082-1.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		12	GHz
VSWR			1.5:1	
Velocity of Propagation		84.5		%
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		15.9 [52.17]		pF/ft [pF/m]
Inductance		0.106 [0.35]		uH/ft [uH/m]
DC Resistance Inner Conductor		6.4 [21]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		2.8 [9.19]		Ω/1000ft [Ω/Km]
Operating Voltage (AC)			300	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	5	12	GHz
Insertion Loss (Typ.)	0.33	0.38	0.49	0.62	0.89	dB

Electrical Specification Notes:
The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Length*	36 in [914.4 mm]
Weight	0.1 lbs [45.36 g]

Cable

Cable Type	Belden 4694R-YW
Impedance	75 Ohms

Configuration:

- HD-BNC Male
- 1.0/2.3 Male
- Belden 4694R-YW

Features:

- Max Frequency 12 GHz
- 84.5% Phase Velocity
- PVC Jacket
- Meets SMPTE ST 2082-1
- Backwards Compatible with 2081-1
- 12Gb/s Transmission
- Cost Effective

Applications:

- General Purpose
- Laboratory Use
- 12G-SDI, Video, and Broadband UHDTV
- Broadband Internet Delivery
- Broadcast A/V
- 4K/8K Video Equipment
- Medical Equipment Requiring High Speed Video
- HD Cameras

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Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	HDPE
Number of Shields	1
Shield Layer 1	Aluminum Polyester
Shield Layer 2	Tinned Copper
Jacket Material	PVC, Yellow
Jacket Diameter	0.274 in [6.96 mm]

Connectors

Description	Connector 1	Connector 2
Type	HD-BNC Male	1.0/2.3 Male
Impedance	75 Ohms	75 Ohms
Contact Material & Plating	Brass, Gold	Brass, Gold
Contact Plating Spec.	10 µin minimum	10 µin minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Brass, Nickel	Brass, Gold
Outer Cond Plating Spec.	50 µin minimum	3 µin minimum
Body Material & Plating	Brass, Nickel	Brass, Nickel
Body Plating Spec.	100 µin minimum	100 µin minimum
Seal Gasket Material	Silicone	

Environmental Specifications

Temperature

Operating Range -30 to +75 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

How to Order

Part Number Configuration: **FMCA2605/YW - xx uu**

- xx = Length
- uu = cm = Centimeters, <blank> = Inches

Example: FMCA2605/YW-12 = 12 inches long cable
FMCA2605/YW-100cm = 100 cm long cable

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12G SDI 75 Ohm HD-BNC Male to 75 Ohm 1.0/2.3 Male Cable 75 Ohm 4694R-YW Coax in 36 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: 12G SDI 75 Ohm HD-BNC Male to 75 Ohm 1.0/2.3 Male Cable 75 Ohm 4694R-YW Coax in 36 Inch FMCA2605/YW-36

URL: https://www.fairviewmicrowave.com/12g-sdi-75-ohm-hd-bnc-male-to-75-ohm-1.0-2.3-male-cable-75-ohm-4694r-yw-coax-in-36-inch-fmca2605-yw-36-p.aspx

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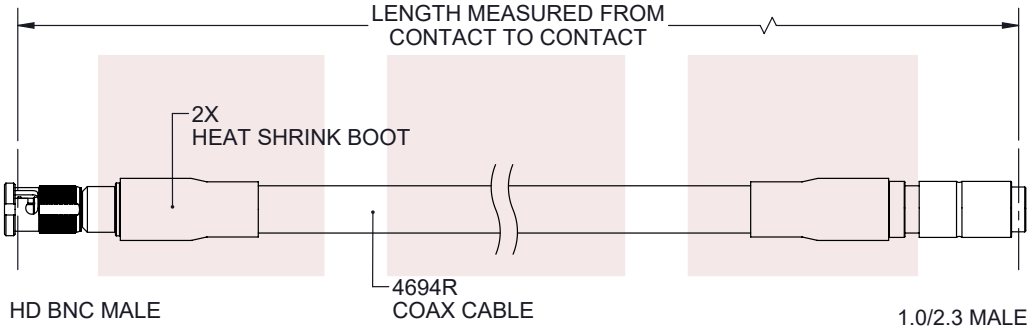
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	4/29/22	AGANWANI



FMCA2605/ZZ (ZZ = CABLE COLOR DESIGNATION)	COAX CABLE COLOR
FMCA2605/BK	BLACK
FMCA2605/BL	BLUE
FMCA2605/GR	GREEN
FMCA2605/OR	ORANGE
FMCA2605/RD	RED
FMCA2605/VL	VIOLET
FMCA2605/WH	WHITE
FMCA2605/YW	YELLOW

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TITLE

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [5.08] FRACTIONS
.XX = ±.02 [.51] ± 1/32
.XXX = ±.005 [.13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	HBAKKE	FMCA2605/ZZ	A

T-Rev.D