PIC MATES • 75 OHM COAXIAL CABLE

V75268

CABLE CONSTRUCTION

Conductor: Silver-Plated Copper **Dielectric:** FEP Shield #1: Tin-Plated Copper Braid Jacket: Extruded FEP, Red

lacket

V75268 is a 75 ohm coaxial cable that is substantially stronger (more than twice the tensile strength) and has better attenuation characteristics than the M17/94-RG179 cables. The V75268's construction features a silver-plated copper center conductor nearly 60% larger than in RG179 — yet the overall diameter of the cable increases by only 22%. To achieve the correct impedance in this proportionately-smaller diameter, a foamed fluoropolymer dielectric having a high velocity of propagation is employed to surround the center conductor. The cable is 95% (minimum) shielded with a braid of tin-plated copper. A distinctive red fluoropolymer jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation. Because of the critical effect of impedance-matched terminations, a comprehensive family of 75-ohm connectors are available.

PHYSICAL DATA

Conductor: Temperature Range: Outer Diameter: in (mm) Minimum Bend Radius: in (mm) Weight: lbs/100 ft (kg/100 m) 26 AWG Stranded SPC -55 to +150°C 0.122 (3.1) 0.6 (15.24) 1.3 (1.9)

ENVIRONMENTAL DATA

Skydrol Resistant:SAE AS4373E, Method 601RoHS Compliant:RoHS Directive 2002/95/EC)Flame / Smoke Requirements:FAR Part 25.869 (a) App. F,Part 1, (a)(3)Berry Specialty Metals Compliance:DFARS 252.225-7014,Alt 1

RECOMMENDED MAX TRANSMISSION LENGTHS

SMPTE 259M (SD-SDI Component): f (m)	461 (141)
SMPTE 259M (SD-SDI Widescreen): f (m)	394 (120)

(Max length based on 30 dB max. Contact system OEM to verify max loss allowed)

ELECTRICAL DATA

Impedance:	75 ohms
Capacitance: pF/ft (m)	16 (52.5)
Velocity of Propagation:	80%
Time Delay: ns/ft (m)	1.27 (4.17)
Shielding Effectiveness: dB min	-50
DC Resistance: ohms/1000 ft (m)	34.5 (113.2)

ATTENUATION DATA

Nom / Max
(dB/100 m)
(19.4/21.3)
(22.6/24.9)
(28.2/31.2)
(33.1/36.4)

Formula for Attenuation:

 $(K1 \times \sqrt{F(MHz)} + (K2 \times F(MHz)))$

K Values (nom loss): K1 = 0.478 K2 = 0.0029

All values nominal, unless otherwise noted

Conductor

Dielectric

Shield #1





CONTACTS/CONNECTORS FOR V75268

ARINC CONTACTS

PART #	CONTACT TYPE
190703	Size 5 Socket
190733	Size 5 Socket
190729	Size 8 Socket
190732	Size 8 Socket
190730	Size 16 Socket
110237	Mil-C-81659 Size 9 Socket

M39029 FOR MIL-C-38999 CONTACTS

PART #	CONTACT TYPE
190738	Size 8 Pin
190738-01	Size 8 Pin 50 ohm w/seal
190740	Size 8 Pin
190740-01	Size 8 Pin (w/ Environmental Seal)
190766	Size 12 Pin
190735	Size 16 Pin
190739	Size 8 Socket
197039-01	Size 8 Socket (w/ Environmental Seal)
190741	Size 8 Socket
190741-01	Size 8 Socket (w/ Environmental Seal)
190767	Size 12 Socket
190734	Size 16 Socket

DIN CONNECTOR

PART #	CONNECTOR TYPE
110842	1.0/2.3 DIN Plug

M39012 CONNECTORS

PART #	CONNECTOR TYPE
190712	BNC Straight Plug
110717	HD-BNC Straight Plug
111163	HD-BNC 90° Plug
110249	BNC 90° Plug
190745	BNC Mini Straight Plug
111069	BNC Mini 90° Plug
190727	BNC Inline Jack
190728	BNC Bulkhead Jack
110783	HD Straight Bulkhead Jack
110677	F Straight Plug
110218	RCA Straight Plug
190736	SMB Socket
110285	SMC Female Plug
190768	SMC 90° Female Plug
110863	SMZ Straight Female Plug
110865	SMZ 90° Female Plug
190714	SMA Straight Plug
190708	TNC Straight Plug
190721	TNC Bulkhead Jack
190752	MCX 90° Plug

D-SUB CONTACTS

PART #	CONTACT TYPE
110235	Size 8 Pin
190763	Size 8 Pin
110236	Size 8 Socket
190764	Size 8 Socket



www.PICwire.com | 800.742.3191 | sales@theangeluscorp.com

PIC Wire & Cable and PICMates are trademarks of The Angelus Corporation. ©2024 The Angelus Corporation, All rights reserved. ISO 9001 • AS 9100 • FAA PMA Certified