



M29504/4 & /5 Fiber Optic Termini

## About the M29504

Amphenol Fiber Systems International's (AFSI) M29504 /4 & /5 style fiber optic termini, the M29K1000 and M29L1000 series, provide superior optical and mechanical performance. Designed to fit into MIL-DTL-38999 Series III, pin size 16 connectors, this low-cost, high-precision terminus family is ideal for harsh environment fiber optic interconnections. Available for single mode and multimode applications, these termini conform to the rigorous conditions of the MIL-PRF-29504B specification.

The M29K1000 and M29L1000 series termini utilize the highest quality zirconia ceramic ferrules and split alignment sleeves available. AFSI's tight-tolerance ferrules are optimized for low insertion loss, low back reflection and exceptional durability. All ferrules are available in standard and ultra polished end faces for those tight optical budget applications. In addition, epoxy removal and polishing times are minimized by the ferrule's pre-domed design feature.

The M29L1000's zirconia split alignment sleeve design ensures accurate physical contact, fiber-to-fiber alignment and guarantees the highest performing connector of its kind for use in a variety of demanding environmental conditions.

The M29K1000 and M29L1000 series fiber optic termination system offers precise, superior and reliable connections over repeated connector mating cycles and through a wide range of harsh environmental conditions.

#### Features & Benefits

- Precision fiber optic ceramic ferrules
- Pre-radius ferrule design
- Precision "press fit" stainless steel design
- Accurate ferrule alignment system
- Size 16 design (MIL-DTL-38999 compatible)
- · Low insertion loss and back reflection
- Designed and manufactured to MIL-PRF-29504 /4 and /5 specifications

#### **Benefits**

- Solid reliable connectivity through a wide range of harsh environmental conditions
- Compatible with all qualified MIL-DTL-38999, Series III connectors
- Fast termination and polish time
- Reliable, repeatable and durable connections
- Easy to clean

## **Applications**

- Avionics
- NAVAIR
- Commercial aircraft
- Harsh environment
- Land tactical applications
- Shipboard

## **Product Specifications**

Specification	Measurement/Detail	
Back Reflection	Better than -40dB – PC polish Better than -50dB – enhanced PC polish	
Insertion Loss	0.45 typical (measured with 62.5/ 125mm fiber @1310nm)	
Operating Temperature	-65°C to +150°C	
Temperature Life	+150°C for 1000 hours	
Vibration	40G random	
Mechanical Shock	500G	
Mating Durability	500 cycles	
Cable Retention Force	25lbs (dependent on cable construction)	

Fiber Optic Solutions www.fibersystems.com



# M29504/4 Fiber Size Table

AFSI Pin Part Number	Fiber Size Core/Cladding	A Diam. (Microns)	Reference Only M29504 /4-XXXX
M29K2000	9/125	126	M29504/4-4209
M29K1001	50/125 & 62.5/125	126	M29504/4-4210
M29K1000	50/125 & 62.5/125	127	M29504/4-4040
M29K3000	100/140	142	M29504/4-4043
M29K3001	100/140	144	M29504/4-4044
M29K5000	62.5/125/155 (Polyimide)	156	M29504/4-4211
M29K5001	62.5/125/155 (Polyimide)	157	M29504/4-4212
M29K6000	100/140/172 (Polyimide)	173	M29504/4-4087
M29K6001	100/140/172 (Polyimide)	175	M29504/4-4213
M29K8000	200/233	236	M29504/4-4214
M29K8050	200/280	286	M29504/4-4215
M29K9000	400/440	448	M29504/4-4216

Consult factory for additional sizes and QPL status.

## M29504/5 Fiber Size Table

AFSI Socket Part Number	Fiber Size Core/Cladding	A Diam. (Microns)	Reference Only M29504 /5-XXXX
M29L2000	9/125	126	M29504/5-4238
M29L1001	50/125 & 62.5/125	126	M29504/5-4239
M29L1000	50/125 & 62.5/125	127	M29504/5-4046
M29L3000	100/140	142	M29504/5-4049
M29L3001	100/140	144	M29504/5-4050
M29L5000	62.5/125/155 (Polyimide)	156	M29504/5-4240
M29L5001	62.5/125/155 (Polyimide)	157	M29504/5-4241
M29L6000	100/140/172 (Polyimide)	173	M29504/5-4088
M29L6001	100/140/172 (Polyimide)	175	M29504/5-4242
M29L8000	200/233	236	M29504/5-4243
M29L8050	200/280	286	M29504/5-4244
M29L9000	400/440	448	M29504/5-4245

Consult factory for additional sizes and QPL status.



### **How to Order**

For more information on how to order or obtain a price quote on our M29504 or other products, call toll free (U.S. only) at 800.472.4225, international calls please use 1.214.547.2400 or e-mail info@fibersystems.com.

# About Amphenol Fiber Systems International

Amphenol Fiber Systems International (AFSI) designs, manufactures, markets and supports reliable and innovative fiber optic interconnect solutions that withstand the harsh environments of military, oil & gas, mining and broadcast applications. After more than a decade in business, AFSI continues to uphold its position as a global leader in fiber optic interconnect components and systems such as termini, M28876, MIL-ST, TFOCA and the TFOCA-II® connector, which AFSI developed and patented.

AFSI has delivered millions of fiber optic connectors in more than 22 countries. Whenever there is a need for superior, cost-effective fiber optic systems and products that will stand up to demanding operating environments, you can rely on AFSI for engineering know-how, top-quality products and expert technical support.

For more information about AFSI, visit www.fibersystems.com.

Amphenol Fiber Systems International, Inc. 1300 Central Expressway North, Suite 100 Allen, TX 75013 Phone: 214.547.2400 - 800.472.4225

Fax: 214.547.9344

Publication: AFSI-M29504-ds-07.27.08. Specifications subject to change without notice. www.fibersystems.com - info@fibersystems.com © 2008 Amphenol Fiber Systems International. All rights reserved.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Fibre Optic Connectors category:

Click to view products by Amphenol manufacturer:

Other Similar products are found below:

0004700001 6100-R 6313 F709722200 F709730000 F718183204 F727403500 F727752800 8119 9440F20-27S-190 944-120-6001 9441F10SL-3S 9444W28-21S 9444W36-10S 9446W20-16S 953-101-5310-P 954-101-57202B A0270169 12-9122 12-5702 AX101713 AX102420 AX103923 AX104024 AX104193 AX104230 AX104562 AX105203-B25 AX105205-S1 EHSC2M 17-300800 181-011-126 181-011-S 181-057-126 NKSOPBUY 20500002116 2064996-1 20800001065 2170 9132 2612 2620 9291 9440F16-10S 9440F20-18S 9444W32-73S 9446F16-10S-190 953-106-50231 953-120-5003 955-120-5110