

DIAMOND

Fiber Optic Components

MF
MULTIPLE FIBER SYSTEM

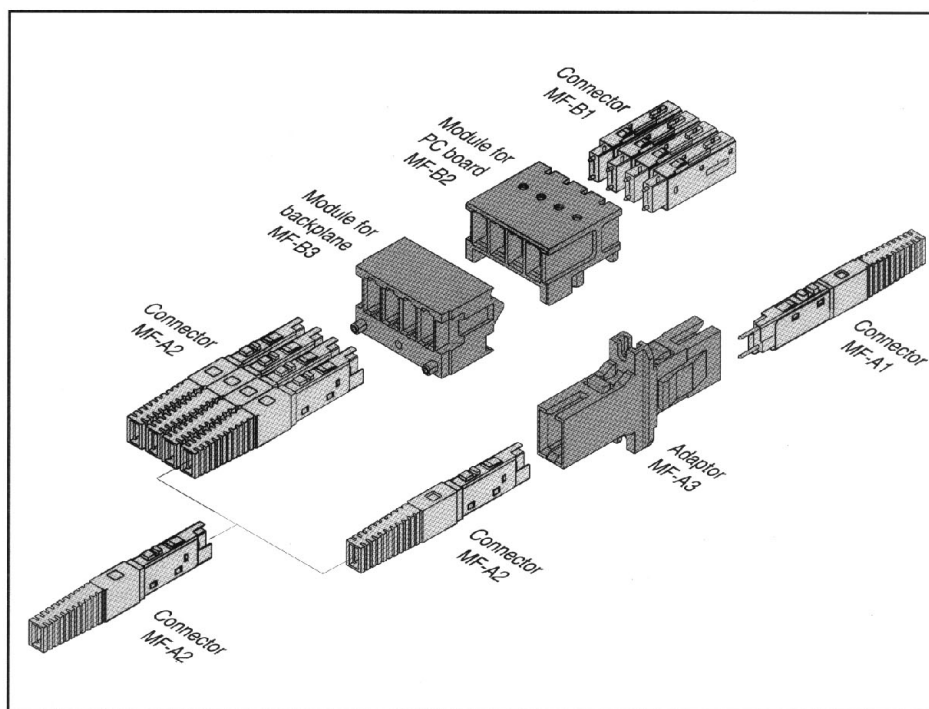
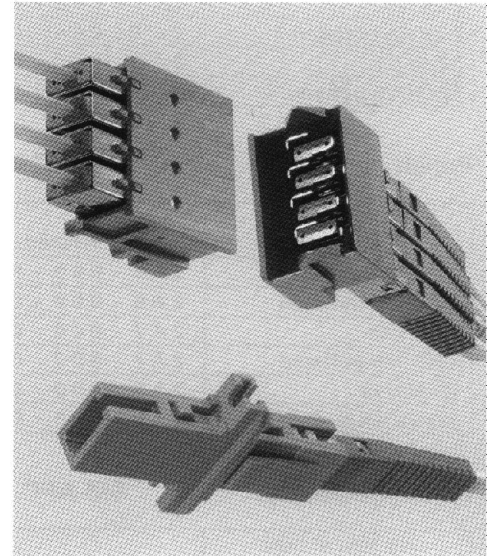
It is a modular system with plugs that can be used equally well in panel, outlet and backplane applications.

Plugs are available for 4-, 8-, 12-fiber ribbon cables single mode - PC as well as APC - or multimode - PC - version. Backplane modules which accept up to 4 plugs (up to 48 fibers) are designed for integration in metric back-plane systems.

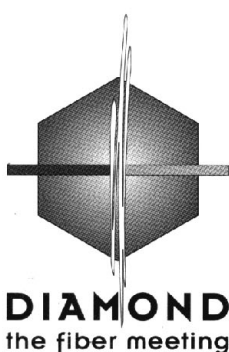
The advanced backplane design permits each plug to be mated individually for ease of assembly and service.

For front panel applications, the mounting cutout is identical to that presently used for the well-known **E-2000™** and SC connector systems.

The DIAMOND Multiple Fiber System offers excellent optical performance without requiring the use of index-matching gels.



- One plug for panel-mount and backplane applications
- Connector for 4, 8, 12 fibers
- Active push pull retention
- Sufficiently long pre-guiding tracks for repeatable mating and high stability
- Backplane modules designed for integrable into metric backplane system
- Backplane modules are for 4 connectors and 48 fibers max., where the single connectors are separately dematable from the modules, too
- Easy detachable by the use of simple tooling
- Without index matching
- Low transmission loss, even for single mode fibers
- PC and APC version available



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*Specifications subject to change
without notice*

002-037-211P001011

Specifications:

	Single mode	Multimode	Single mode 8° APC	Units	Conditions/Notes
Insertion loss (IL)*	typ 0.45 max 1	typ 0.35	typ 0.45 max 1	dB	
Return loss (RL)	min 40	typ 30	min 60**	dB	
Service life	500 mate/demate cycles				
Operating temperature	-40/+85	-40/+85	-40/+85	°C	May be further limited by cable specifications.
Storage temperature	-40/+90	-40/+90	-40/+90	°C	
Strain relief (cable)	> 50			N	

* Without index matching.

** Measured with high resolution reflectometer HP 8504A.

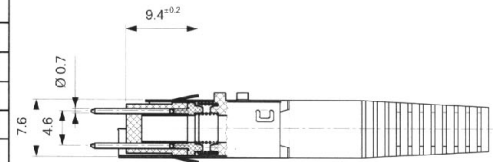
Order numbers:

CONNECTOR MF-A1

Ferrule style: MT
 External parts: Metall
 Polish geometry: SM-PC

Number of fiber Dimensions	Order Number	
	Unterminated connector	Terminated patchcord
4x9/125	1 A 0 - 0 0 0 - 0 0 1 L 0 0 0	1 A 0 - x A 0 - 0 0 1 L x x x
4x9/125 buffered	1 A 0 - 0 0 0 - 0 0 2 L 0 0 0	1 A 0 - x A 0 - 0 0 2 L x x x
8x9/125	1 A 1 - 0 0 0 - 0 0 1 L 0 0 0	1 A 1 - x A 1 - 0 0 1 L x x x
8x9/125 buffered	1 A 1 - 0 0 0 - 0 0 2 L 0 0 0	1 A 1 - x A 1 - 0 0 2 L x x x
12x9/125	1 A 2 - 0 0 0 - 0 0 1 L 0 0 0	1 A 2 - x A 2 - 0 0 1 L x x x
12x9/125 buffered*	1 A 2 - 0 0 0 - 0 0 2 L 0 0 0	1 A 2 - x A 2 - 0 0 2 L x x x

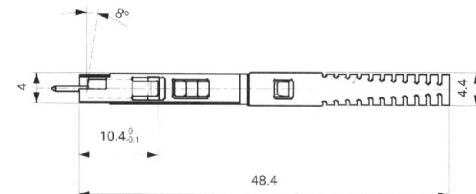
1 2 3 4



Polish geometry: MM-PC

Number of fiber Dimensions	Order Number	
	Unterminated connector	Terminated patchcord
4x50/125	1 A 6 - 0 0 0 - 0 0 1 L 0 0 0	1 A 6 - x A 6 - 0 0 1 L x x x
4x50/125 buffered	1 A 6 - 0 0 0 - 0 0 2 L 0 0 0	1 A 6 - x A 6 - 0 0 2 L x x x
8x50/125	1 A 7 - 0 0 0 - 0 0 1 L 0 0 0	1 A 7 - x A 7 - 0 0 1 L x x x
8x50/125 buffered	1 A 7 - 0 0 0 - 0 0 2 L 0 0 0	1 A 7 - x A 7 - 0 0 2 L x x x
12x50/125	1 A 8 - 0 0 0 - 0 0 1 L 0 0 0	1 A 8 - x A 8 - 0 0 1 L x x x
12x50/125 buffered*	1 A 8 - 0 0 0 - 0 0 2 L 0 0 0	1 A 8 - x A 8 - 0 0 2 L x x x

1 2 3 4



Polish geometry: SM-APC (8°)

Number of fiber Dimensions	Order Number	
	Unterminated connector	Terminated patchcord
4x9/125	1 A 3 - 0 0 0 - 0 0 1 L 0 0 0	1 A 3 - x A 3 - 0 0 1 L x x x
4x9/125 buffered	1 A 3 - 0 0 0 - 0 0 2 L 0 0 0	1 A 3 - x A 3 - 0 0 2 L x x x
8x9/125	1 A 4 - 0 0 0 - 0 0 1 L 0 0 0	1 A 4 - x A 4 - 0 0 1 L x x x
8x9/125 buffered	1 A 4 - 0 0 0 - 0 0 2 L 0 0 0	1 A 4 - x A 4 - 0 0 2 L x x x
12x9/125	1 A 5 - 0 0 0 - 0 0 1 L 0 0 0	1 A 5 - x A 5 - 0 0 1 L x x x
12x9/125 buffered*	1 A 5 - 0 0 0 - 0 0 2 L 0 0 0	1 A 5 - x A 5 - 0 0 2 L x x x

1 2 3 4

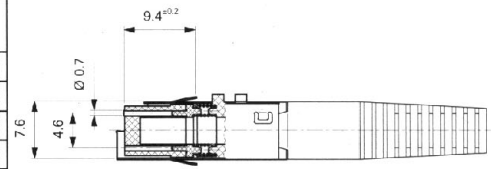
* Available upon request

Order Number Codes
¹ Connector code
² Connector code for termination on other end of assembly
- For pigtails: insert 000
- For patch assemblies: insert connector code for other connector
³ Code for fiber or cable
⁴ Length in meters

CONNECTOR MF-A2

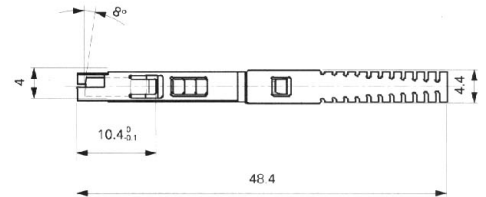
Ferrule style: MT
 External parts: Metall
 Polish geometry: SM-PC

Number of fiber Dimensions	Order Number	
	Unterminated connector	Terminated patchcord
4x9/125	2A0 - 000 - 001L 000	2A0 - xA0 - 001L xxx
4x9/125 buffered	2A0 - 000 - 002L 000	2A0 - xA0 - 002L xxx
8x9/125	2A1 - 000 - 001L 000	2A1 - xA1 - 001L xxx
8x9/125 buffered	2A1 - 000 - 002L 000	2A1 - xA1 - 002L xxx
12x9/125	2A2 - 000 - 001L 000	2A2 - xA2 - 001L xxx
12x9/125 buffered*	2A2 - 000 - 002L 000	2A2 - xA2 - 002L xxx



Polish geometry: MM-PC

Number of fiber Dimensions	Order Number	
	Unterminated connector	Terminated patchcord
4x50/125	2A6 - 000 - 001L 000	2A6 - xA6 - 001L xxx
4x50/125 buffered	2A6 - 000 - 002L 000	2A6 - xA6 - 002L xxx
8x50/125	2A7 - 000 - 001L 000	2A7 - xA7 - 001L xxx
8x50/125 buffered	2A7 - 000 - 002L 000	2A7 - xA7 - 002L xxx
12x50/125	2A8 - 000 - 001L 000	2A8 - xA8 - 001L xxx
12x50/125 buffered*	2A8 - 000 - 002L 000	2A8 - xA8 - 002L xxx



Polish geometry: SM-APC (8°)

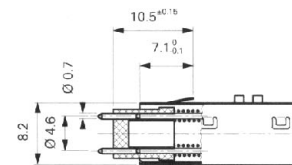
Number of fiber Dimensions	Order Number	
	Unterminated connector	Terminated patchcord
4x9/125	2A3 - 000 - 001L 000	2A3 - xA3 - 001L xxx
4x9/125 buffered	2A3 - 000 - 002L 000	2A3 - xA3 - 002L xxx
8x9/125	2A4 - 000 - 001L 000	2A4 - xA4 - 001L xxx
8x9/125 buffered	2A4 - 000 - 002L 000	2A4 - xA4 - 002L xxx
12x9/125	2A5 - 000 - 001L 000	2A5 - xA5 - 001L xxx
12x9/125 buffered*	2A5 - 000 - 002L 000	2A5 - xA5 - 002L xxx

* Available upon request

CONNECTOR MF-B1

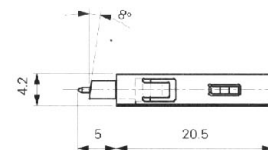
Ferrule style: MT
 External parts: Metall
 Polish geometry: SM-PC

Number of fiber Dimensions	Order Number	
	Unterminated connector	Terminated patchcord
4x9/125	3A0 - 000 - 001L 000	3A0 - xA0 - 001L xxx
8x9/125	3A1 - 000 - 001L 000	3A1 - xA1 - 001L xxx
12x9/125	3A2 - 000 - 001L 000	3A2 - xA2 - 001L xxx



Polish geometry: MM-PC

Number of fiber Dimensions	Order Number	
	Unterminated connector	Terminated patchcord
4x50/125	3A6 - 000 - 001L 000	3A6 - xA6 - 001L xxx
8x50/125	3A7 - 000 - 001L 000	3A7 - xA7 - 001L xxx
12x50/125	3A8 - 000 - 001L 000	3A8 - xA8 - 001L xxx



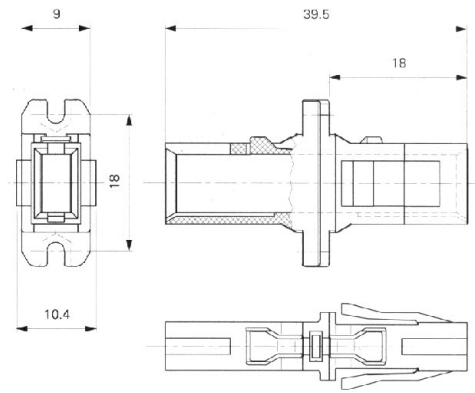
Polish geometry: SM-APC (8°)

Number of fiber Dimensions	Order Number	
	Unterminated connector	Terminated patchcord
4x9/125	3A3 - 000 - 001L 000	3A3 - xA3 - 001L xxx
8x9/125	3A4 - 000 - 001L 000	3A4 - xA4 - 001L xxx
12x9/125	3A5 - 000 - 001L 000	3A5 - xA5 - 001L xxx

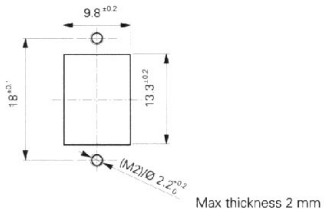
MATING ADAPTER

Type designation: **MF-A3**
 External parts: **Plastic**

Color	Order Number
blue (SM-PC)	166 - 306 - 901 V 001
black (MM)	166 - 306 - 901 V 003
green (APC)	166 - 306 - 901 V 002



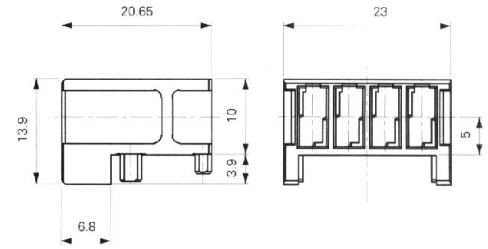
Cutout dimensions for MF-A3



PCB MODULE

Type designation: **MF-B2**
 External parts: **Plastic**

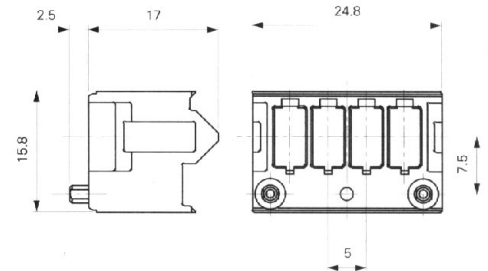
Color	Order Number
blue (SM-PC)	070 - 035 - 011 V 001
black (MM)	070 - 035 - 011 V 003
green (APC)	070 - 035 - 011 V 002



BACKPLANE MODULE

Type designation: **MF-B3**
 External parts: **Plastic**

Color	Order Number
blue (SM-PC)	070 - 035 - 010 V 001
black (MM)	070 - 035 - 010 V 003
green (APC)	070 - 035 - 010 V 002



Cutout dimensions for MF-B2/MF-B3

