

# DIAMOND

## Fiber Optic Components

### CABLE ASSEMBLIES AND ADAPTERS

#### FEATURES AND BENEFITS

- ▶ Based on 2.5-mm Ferrula
- ▶ Up to 4 channels
- ▶ Hybrid, FO – Electrical contacts
- ▶ Genderless mating and self-aligning design
- ▶ Easy front-face ferrule access for cleaning & inspection
- ▶ Easy termini insertion and removal for field termination and repair
- ▶ Compatible with several fiber types such as MM, SM, PM, Power Solution and small-core fibers
- ▶ Available in PC and APC versions
- ▶ Steady and repeatable low IL and high return loss
- ▶ High and steady ER when terminated with PM fibers
- ▶ Lensed Ferrule 1.7mm
- ▶ Electrical pin: 20 AWG

#### OPTICAL PERFORMANCES (obtained with the diamond proposed cables)

MEASUREMENT/TEST	MULTIMODE	SINGLE MODE PC/APC	STANDARDS
Insertion loss (std. version)	typ. 0.20 dB max. 0.50 dB	typ. 0.15 dB max. 0.45 dB	IEC 61300-3-4 (λ = 1310 / 1550 nm)
Insertion loss (fusion version)	typ. 0.20 dB max. 0.50 dB	typ. 0.25 dB max. 0.45 dB	IEC 61300-3-4 (λ = 1310 / 1550 nm)
Insertion loss (PM version)	-	typ. 0.25 dB max. 0.45 dB	IEC 61300-3-4 (λ = 1310 / 1550 nm)
Return loss (Including connector loss)	min. 40 dB	min. 75 dB (APC) min. 50 (PC)	IEC 61300-3-6 (λ = 1550 nm)
Extinction Ratio	-	typ. 23 dB min. 20 dB	Diamond validated cross polarizers method (λ = 1550 nm)

#### OPTICAL SPECIFICATIONS LENSED FERRULE (SM)

MEASUREMENT / TEST	METHOD	VALUES SINGLE MODE
Insertion loss, random mated	IEC 61300-3-34	IL type 0.6 dB max 1 dB
Return loss	IEC 61300-3-6	RL min. 35 dB

#### ELECTRICAL TESTS

Insulation resistant test	Resistance >200 MΩ	IEC 60512-3-1: 2002 (500V / 60 s)
Voltage Proof test	PASS	IEC 60512-4-1: 2003 (2500V / 60 s /

### Compact DM4

(Harsh environment)



Compact DM4



DM4 (Multipurpose Termini)

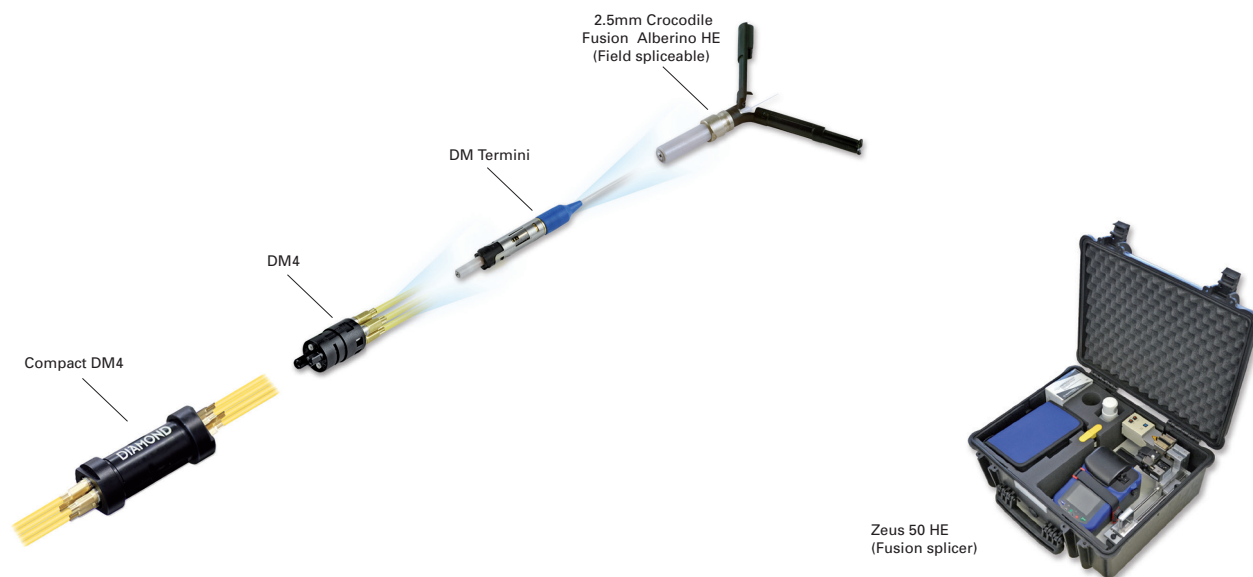


DM Termini (Optical - electrical termini)

## MECHANICAL AND ENVIRONMENTAL CONDITIONS

Change of temperature	-40 / + 85 °C	IEC 61300-2-22 ( $\lambda$ =1310 / 1550 nm)
Low temperature	-40 °C (96h)	IEC 61300-2-17 ( $\lambda$ =1310 / 1550 nm)
High temperature	+85 °C (96h)	IEC 61300-2-18 ( $\lambda$ =1310 / 1550 nm)
Vibration	10/2000 Hz (3h)	MIL-STD-202G ( $\lambda$ =1310 / 1550 nm)
Mating durability	500 cycles	IEC 61300-2-2 ( $\lambda$ =1310 / 1550 nm)

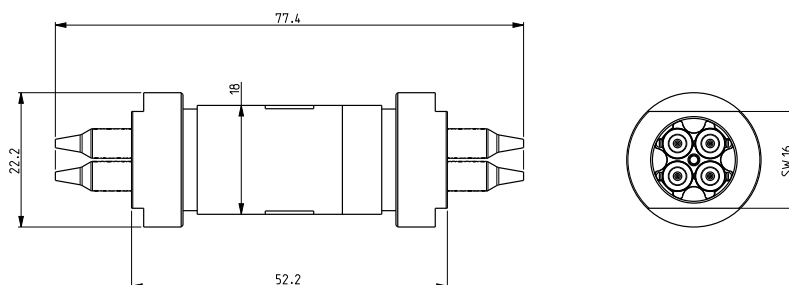
## DIAMOND Zeus D50 HE FUSION SPLICER FOR FIELD INSTALLATION AND REPAIR



## CONNECTOR TYPES AND DIMENSIONS

### Compact DM4

Housing material: Anodized aluminum (black)



**NOTE** Other configuration available upon request.

## ORDER INFORMATION

Please contact your nearest local Diamond representative or fill in the contact form available on the [www.diamond-fo.com](http://www.diamond-fo.com) website.