

# TE Connectivity DEUTSCH

## 2 or 4 Way Module EN4165 Connectors



### INHERENT FLEXIBILITY ALLOWS FOR NEW AEROSPACE APPLICATIONS

The DMC-M has set the modular connector standard in the Aerospace & Military industries since the 1980's, and is now standardized by European Specification EN4165.

The DMC-M 2 or 4 Way Module is a rectangular modular connector that continues to attract new users and applications because of its inherent flexibility, space/weight savings and robustness. In addition, this product range has increased to offer composite housings, aluminum wire capability and shunting configurations. The modularity of the DMC-M allows you to configure and build your own part numbers from a set of standard elements. You are also able to customize and develop designs for special applications by modifying housing. DMC-M housings are available in aluminum alloy or composite, and nickel or cadmium plating finishes to resist severe environments. Screening and electromagnetic protection is guaranteed 360 degrees around. Designed with a lightweight material and metal plating, the 2 or 4 Way Module DMC-M is ideal for weight and mass saving.

### APPLICATIONS

- Cabin and avionic systems
- High-performance military aircraft
- Commercial airlines
- Communications equipment
- Missiles
- Military
- Railway
- Medical

### FEATURES

- Light weight composite
- Modularity
- Color and mechanical coded
- Push-pull coupling
- Aluminum cable contact compliant

**MATERIALS AND FINISHES**

Housing Material	Aluminum alloy or Composite
Plating Finish	Black nickel (F) Olive drab cadmium (W) Nickel on composite (M) Olive drab on composite (J)
Module Material	Thermoplastic and fluorinated silicone
Gasket Material	Conductive silicone (only for shielded versions)
Contact	Copper alloy
Contact Plating Finish	Gold over nickel

**ELECTRICAL DATA**

Withstanding Voltage At Sea Level	Service Rating I - 1300V 50Hz (R.M.S.) module size 22 Service Rating II - 1500V 50Hz (R.M.S.) modules sizes 20, 16, 12, and 8
Withstanding Voltage Altitude Immersion to 121 hPa	Service Rating I - 1000V 50Hz (R.M.S.) module size 22 Service Rating II - 1000V 50Hz (R.M.S.) modules sizes 20, 16, 12, and 8
Insulation Resistance At Sea Level	≥ 5000MΩ
Insulation Resistance Altitude Immersion to 121 hPa	≥ 1000MΩ
Contact Maximum Current Sealed Version	Size 22 - 5.0A Size 20 - 7.5A Size 16 - 13.0A Size 12 - 23.0A Size 8 - 46.0A (up to 90A with specific contacts)

(Characteristics as per EN4165 &amp; EN3155)

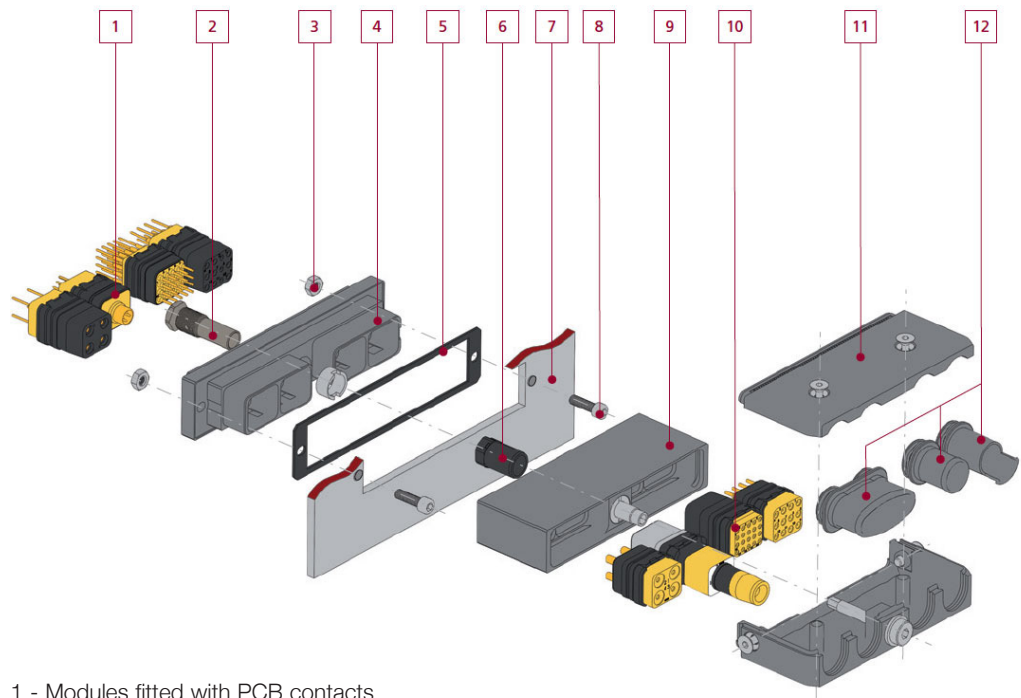
## EMI Shielding Performance

FREQUENCY (MHz)	MINIMUM ATTENUATION (dB)	
	MODELS F - W	MODELS J - M
100	80	65
200	78	60
300	78	55
400	77	55
800	75	45
1000	75	45
1500	59	43
2000	55	40
3000	51	37
4000	48	35
6000	45	33
10000	40	30

**MECHANICAL DATA**

Module Retention	In housing - $\geq 25.4\text{daN}$
Contact Retention In Module	Size 22 - 4.5daN
	Size 20 - 9.0daN
	Size 16 - 11.0daN
	Size 12 - 13.0daN
	Size 8 - 15.6daN
Coupling Endurance	500 mating cycles
Vibration	20 g
Shock	100 g
Salt Spray	96 hours (class F)
	500 hours (class W, M, J)
Service Temperature	$-55^{\circ}\text{C}$ to $+175^{\circ}\text{C}$

(Characteristics as per EN4165)



- 1 - Modules fitted with PCB contacts
- 2 - Receptacle keying component
- 3 - Fixing panel nuts
- 4 - Receptacle housing
- 5 - Conductive flat gasket
- 6 - Plug keying component
- 7 - Panel
- 8 - Fixing panel screws
- 9 - Plug housing
- 10 - Modules fitted with crimped contacts
- 11 - Accessory in 2 halves
- 12 - Chimneys