

## MC6 - Fiber Optic Ribbon Cable Connector

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#### Product Facts

- **Insert-to-insert keying assists precision alignment**
- **Individually rear insertable/removable optical contacts enable easy assembly**
- **Backshells and adaptors available for most single and multifiber cable types**

#### Fiber Type:

**Channels** – 2 to 72

**Cable size** – Telecom grade cable  
Aerospace grade cable

#### Materials

**Shell** – Composite (MIL-C-38999)

**Contact body** – Nickel/cadmium plated composite polymer

**Ferrule** – Thermoplastic

#### Alignment Pin:

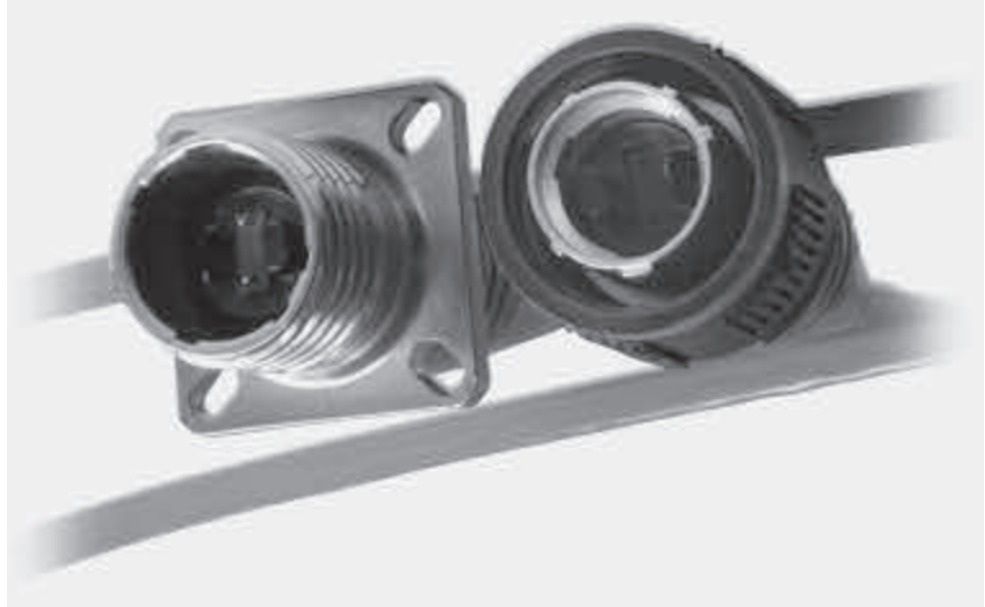
**Seals** – Fluorosilicone

**Plating** – Nickel

The MC6 high density, fiber optic connector series is now further enhanced with the option for industry standard MT Ferrule inserts. The insert accommodates 2 to 72 channels and can be supplied pre-terminated if required. The MC6 uses the

compact MIL-C-38999 Series III, shell size 11 body, also used on the proven MC5 connector. It has a lightweight, corrosion resistant, metal-plated composite shell which provides high strength and durability, combined with EMC shielding.

The result is a very compact, rugged, environmentally sealed solution for a wide range of applications, such as avionics, data bus and in-flight entertainment systems.



#### Key Features

- Common contact single or multimode MT ferrules MIL-C-38999 Series III anti-vibration coupling with tri-start thread
- Easily accessible Angled Physical Contact (APC) and Physical Contact (PC) faces for cleaning and maintenance
- Rear release contact using size 8 extraction tools Retrofit triple rear seal available
- Color band indicating full mating
- The use of industry standard MT interface and a variety of housing options ensures integration into new and existing systems
- Interchangeable with MIL-C-38999 Series III

**MC6 - Fiber Optic Ribbon Cable Connector (Continued)**

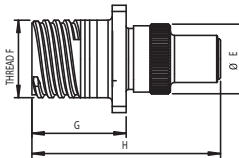
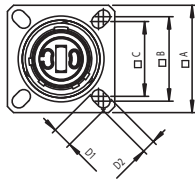
**Optical Performance**

For more information contact technical sales on +44 (0) 1424 858358 or fiber@deutsch.net

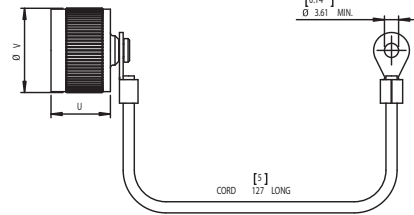
**Dimensional Information**

All dimensions in millimeters unless otherwise stated. To complete part number for ordering see Ordering Information.

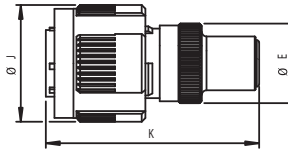
**MC6 Receptacle**



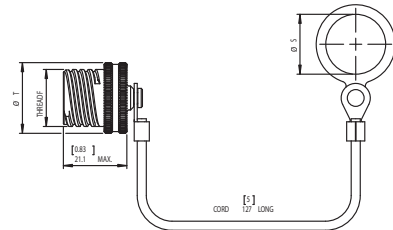
**Protective Cap Receptacle MC640E-N-11**



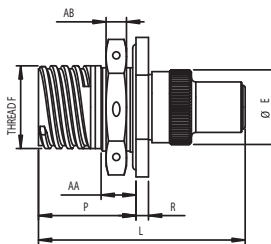
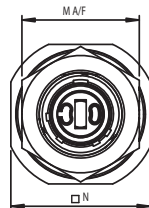
**MC6 Plug**



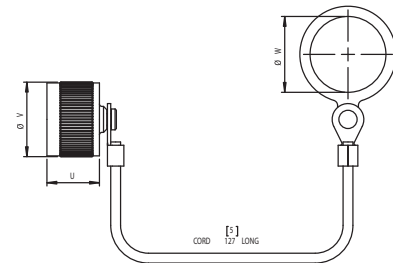
**Procap Plug MC620E-N-11**



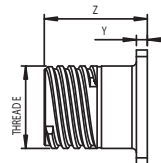
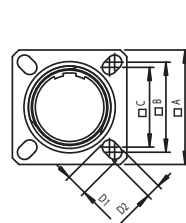
**Jam Nut**



**Protective Cap Receptacle**



**Dummy Receptacle MC630E-N-11**



**MC6 - Fiber Optic Ribbon Cable Connector** (Continued)

**Contact and Tooling Information**

A Max	B Nom	C Nom	D1 Min	D2 Min	ØE Max	Thread F Tri-start (inches)	G Max	H Max	ØJ Max	K Max	L Max
26.40	20.62	18.26	4.84	3.16	17.10	0.7500"	23.20	46.50	24.95	46.00	47.50

M A/F	N Max	P Max	R Max	ØS Min	ØT Max	U Max	ØV Max	ØW Min	ØX Max	Y Max	Z Max	AA Max	AB Max
27	32.00	22.30	2.96	19.55	23.46	16.16	22.96	22.86	8.01	2.76	23.76	7.80	4.81

**Ordering Information**

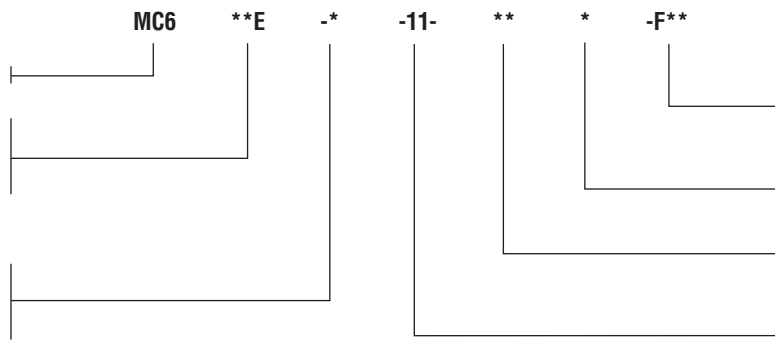
**Series:**

**Style:**

- 00 = Bulkhead receptacle
- 06 = Plug
- 07 = Jam nut

**Shell finish:**

- N Nickel plated
- C = Cadmium plated



**Modification code:**

See above

**Shell orientation:**

N,A,B,C

**No. of MT Ferrules:**

01 for size 11

**Shell size:**

11

**Optical Termini**



MC6 MT contact

**MC6 - 12 SM - 01 - P**

**Contact type**

**No. Channels**

**Ferrule Type**

- SM - Singlemode
- MM - Multimode

**Ferrule Type**

- P - Pin (With Pins)
- S - Socket (No Pins)

See Table

**Cable Types Ref. Table**

Part No.	Cable	
	Description	Jacket Size
MC6 - ** ** - 01*	Ruggedized Aerospace Oval Multi Fiber Cable	3.95mm x 1.60mm Max.
MC6 - ** ** - 02*	Round Multi Fiber Cable	Ø3.96mm Max.

**Accessories / Essential Tooling Information**

MC6 Fiber Optic Module for DMC-M Connectors

The MC6 DMC-M high performance fiber optic modules are manufactured from a high performance material for corrosion resistance and features a rugged construction. The common MC6 optical contact is rigid or sprung loaded and common to both plug and receptacle to maintain physical contact even under severe shock or vibration.

**Quality Approvals**

- Civil Aviation Authority A8-1
- BS EN ISO 9001
- Military Spec Approvals 38999
- BS9000 and CECC
- Underwriters Laboratories
- BS EN ISO9001:2000 (BSI)
- BS/EN 9100:2003 (BSI)
- AS9100 Rev B (BSI)
- AS9120:2002 (BSI)
- EASA Part 21 Subpart G (CAA)
- BS9000 (BSI)
- Underwriters Laboratories (UL)
- Military Spec Approvals 38999 (DSCC).