

# MC4

## Duplex Fibre Optic Connectors

The MC4 Duplex optical fibre connector is based upon shell size 9 Mil-C 38999 Series III making this an extremely compact environmentally sealed 2-way connector. The MC4 is suitable for use with most multimode fibres with core diameters of 50 to 200pm. Simplex and duplex cable constructions can be accommodated with suitable connector backshells.

Precision ceramic ferrules and alignment sleeves ensure optimum performance and reliability over an extended service life.

The optical ferrules are sprung loaded in both the plug and receptacle shells. This provides an axial load equalisation ensuring that butt joint contact is maintained even when the connector is subjected to vibration levels in excess of 30g.

The coupling nut has a built in antivibration clicker mechanism to prevent inadvertent uncoupling under adverse vibration conditions.

## COMPANY QUALITY APPROVALS

- Civil Aviation Authority A8-1
- BS EN ISO 9001
- Military Spec Approvals 38999
- BS9000 and CECC
- Underwriters Laboratories

With 30 years experience in designing and manufacturing at its own facilities Deutsch UK can provide interconnection solutions for the most demanding of environments



## GENERAL SPECIFICATIONS

### Optical

Attenuation:	Less than 0.4dB (50/125pm)
Repeatability:	Better than 0.2dB
Fibre types:	50, 62.5, 85/125pm 100/140pm 200/280pm

### Cable Types

Tight jacket 2.5mm dia  
Duplex 4.5mm OD  
For other cable sizes consult Technical Sales

### Materials

Shell:	Aluminium alloy. Nickel plated
Ferrule:	Zirconia Alignment sleeve: Zirconia
Seals:	Fluorosilicone
Backshells:	Aluminium alloy. Nickel plated Mechanical
Temperature range:	-65°C to +155°C*

\*Cable and epoxy dependant

Mechanical endurance: Not less than 500 matings

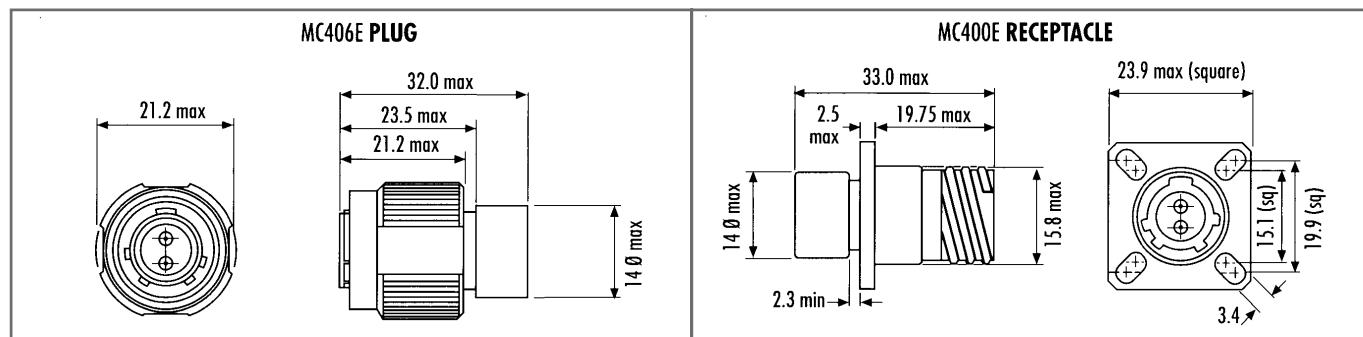
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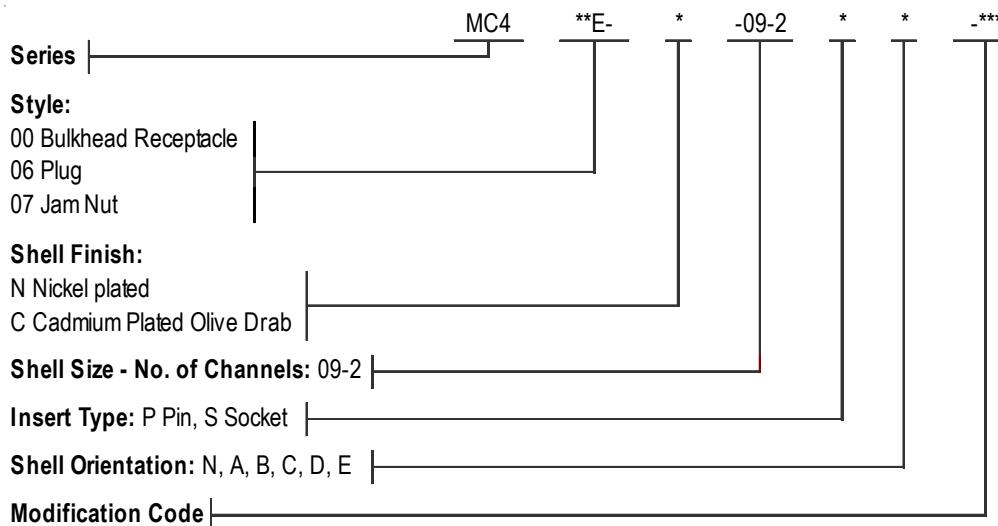


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## DIMENSIONAL SPECIFICATIONS



## HOW TO ORDER



Example Part Number: Bulkhead Receptacle MC400E-C-09-2SN, Plug MC406E-C-09-2PN

### MC4 Essential Tooling

Part No.	Description and Use	Notes
<b>Connector Assembly Tooling</b>		
454335	Fibre stripping tool	Hozan
453228	Fibre cleaving tool	
454342	Crimp tool	
Polishing Tools and Materials		
454899	Polishing jig	
454539	Rubber pads	2 required
454539	<b>Lapping film set comprises:</b>	
454481	Coarse disk (10 off)	available separately
454482	DR diamond disc	available separately
454483	DM diamond disc	available separately
454484	Polishing disc (10 off)	
<b>Consumable Materials</b>		
454257	Epoxy kit (353ND)	
450490	Spatula	
454297	Syringe (x6)	
<b>Ferrules</b>		
454900-126	Fibre size 125pm	not supplied with connector
454900-141	Fibre size 140pm	not supplied with connector
454900-145	Fibre size 140pm	not supplied with connector
454900-283	Fibre size 280pm	not supplied with connector

Note: Additional tooling may be required specific to cable types (consult technical sales)  
For comprehensive tooling and consumable listing refer to technical sales