



Micro Rectangular Composite

The Micro Rectangular Composite Connector has been specifically designed for applications where space and weight-saving are key design-in considerations. The connectors provide high quality interconnections which are able to withstand the severe environmental conditions required by military and aerospace applications. The connectors are fully featured including interfacial sealing between contacts and at point of wire entry. There are six keyway orientations to prevent mis-mating which are conveniently colour coded for easy identification. They are quick and easy to install with features to provide alignment with adjacent connectors. The connectors are fully maintainable with high quality rear release contacts each rated at 5 amp current. Contacts can be supplied in both crimp and PCB formats. The highly durable latching mechanism provides rapid interconnection and positive audible feedback when fully mated.



Features

- Rugged composite housings in military approved materials
- Ultra compact and lightweight design
- 6 size 22 contacts
- Gold plated solid crimp contacts
- PCB contact option
- Rear removable contacts
- Positive Locking Low Profile Coupling Mechanism
- Interfacial and wire sealing
- Boot termination feature
- Environmentally sealed to IP67
- 6 keyway orientations
- Scoop proof interface

Benefits

- Minimum space envelope
- Weight saving
- Quick release coupling mechanism
- Visual indication of connector keyway orientation
- Standard contact extraction tooling
- No backshell required for boot termination
- Close stacking with alignment features on 3 sides
- Suitable for blind mating
- Cable tie slot for mounting and latch security suits Thomas & Betts part number TY24 or equivalent

General Specification

Dielectric Withstanding Voltage

Current leakage less than 2 milliamps at 1500 VAC

Temperature

Operating temperature from -55°C to +175°C

Durability

>300 cycles of engagement or disengagement

Contact Current Rating

5 amps max.

Fluid Resistance

No damage when exposed to most aerospace fluids

Wire Sealing

Insulation diameters within the following range:

Min. (mm): 0.60

Max. (mm): 1.37

Conductor diameter

0.790mm (0.031in) max.

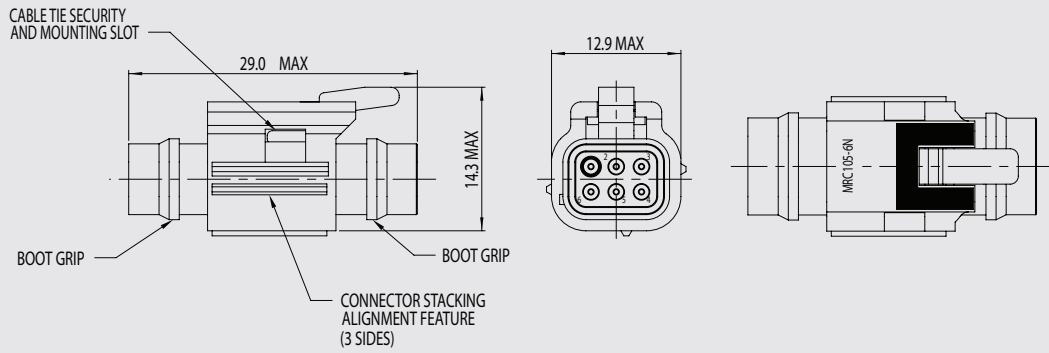
Vibration

Random on random 60g RMS in 3 axes

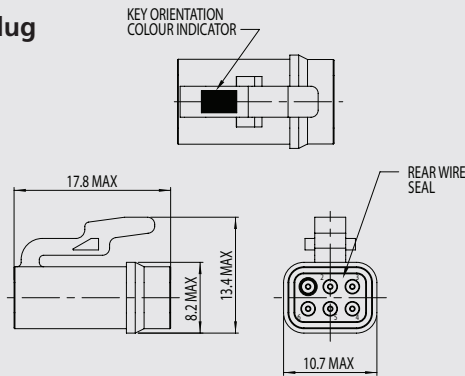
Endurance test - random 57g RMS in 2 axes for 8 hours each axis.

Sinusoidal resonance to over 75g.

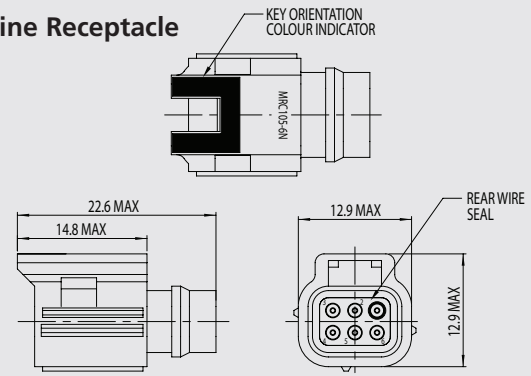
Mated Plug and Receptacle



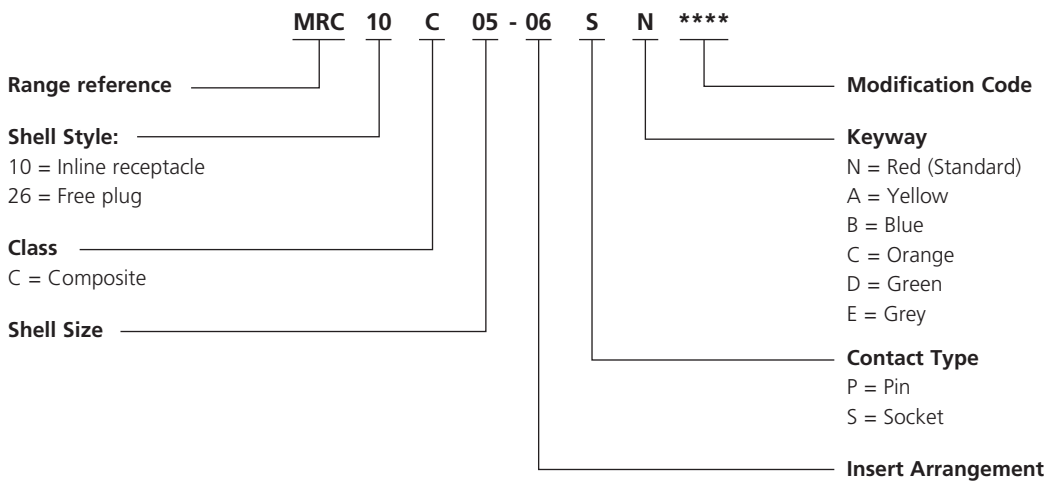
Free Plug



In-line Receptacle



Ordering Information



Notes:
Plug only available in pin arrangement, receptacle in socket arrangement
Contacts and insertion/extraction tooling supplied with connectors as standard.
Part number marking on connectors omits 'Class', 'Contact Type' and '0' from 'Shell Size' and 'Insert Arrangement'. (example: MRC10C05-06SN marked MRC105-6N)

Deutsch 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)
- NADCAP Approval

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