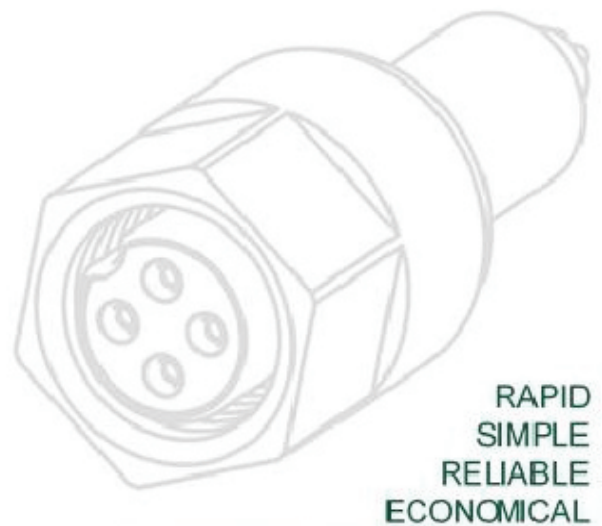


MicroCom

Circular Connector



Product overview



The MicroCom line meets the need for ultra miniature high reliable connectors that can be assembled simply and rapidly. Our design concept makes possible special features and preassembled parts that assure the user of unbelievable simple, rapid and economical assembly. The coaxial connectors require only a single operation to attaché the connector and cable. With the crimping of the cable, the separation force between the cable and the connector approaches the average breaking strengths of the shield.

The multipin connectors and correspondingly simple to assemble, with a minimum of loose parts and minimum of assembly operation to perform.

This technique resulting a tremendous saving for tooling and labor costs.

The result of our special design is an extremely high EMC shielding, highest reliability even in very harsh environment

Typical Specification

Electrical

Insulation resistance	10.000 MΩ	per MIL-C-22557
Rated working voltage	400V @ sea level	
Dielectric withstanding	1.000 V @ sea level	per MIL-C-22557
Contact voltage drop	4 mV @ 1 amp	per MIL-C-22557
Contact resistance	4 mΩ @ 1 amp	per MIL-C-22557
Contact current rating	3 amp	per MIL-C-22557

Environmental

Vibration	Mil Std. 202A, method 204 test condition B (15g's) No discontinuity in excess of 1 microsecond
Shock	Mil Std. 202, method 202, 200g's. No evidence of damage
Temperature Cycling	Mil Std. 202, method 102 condition C
Corrosion (Salt Spray)	Mil Std. 202, mthod 10, condition B 5% salt solution
Moisture resistance	Mil Std. 202C, method 106B, omitting steo 7b and hogh humidity tests

Mechanical

Contacts	contacts are constrained in both directions
Engaging force	0,8N per contact
Coupling retention torque	60Nmm
Contact durability	5000 cycles with contact resistance within min. Mil-C-22557
Cable retention	separation force equal to breaking strengths of shield of The cable per Mil-C-22557
Temperature range	-55°C to 250°C

General

Standard shell	Brass per QQ-B-626
Insulators	PEEK per Mil-P-46183
Plating	Gold per Mil-G-45204, Typ 2, Class 1
Gasket	Silicone rubber per AMS 3304

How to order

Part:

CMR - Standard
CMRM - Ultra miniature
CMRH - Heavy duty
CMREH - Extra heavy duty

CMR-XX-X-XXX-X

Performance:

- Without is standard
IP67 - Waterproof (IP68 possible)
GH - Hermetic sealed
PCB - PCB accelerometers compatible
GND - Extra PCB ground pin

Materials and finishes:

O2 - Brass, Gold plated
N1 - Brass, Nickel plated
B1 - Brass, Black Nickel plated
S1 - Stainless steel
S2 - Stainless steel
T1 - Titan
Further on request

Gender:

S - plug (female)
P - receptacle (male)

Shell style plug:

B - Cable connector, standard nut
BS - Cable connector, hexagon nut
BC - Cable connector, crimp contacts
G - Cable connector, 90° offset, hexagon nut
GS - Cable connector, 90° offset, hexagon nut

No of contacts:

04
07
12
Further on request

Shell style receptacle:

B - Cable connector
BC - Cable connector, crimp contacts
C - PCB mounting
D - Device mount
DB - Device mount, cable connector
E - Solder mount
F - PCB mount, 90° offset
K - PCB mount, flange

Part:

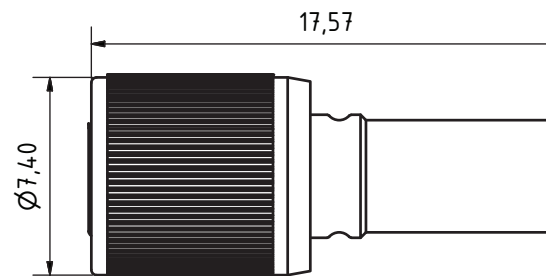
CMR - Standard

CMRM - Ultra miniature

CMRH - Heavy duty

CMREH - Extra heavy duty

Dimensions in mm



CMR - Standard

TECHNICAL SPECIFICATIONS:

Current rating: 3 A max. per contact

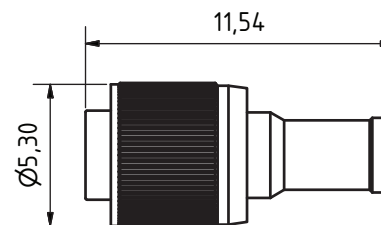
Dielectric resistance: 1000 VDC

Insulation resistance: 10000 MΩ

Rated working voltage: 400V

Contact resistance: 4 mΩ

Operating temperature: -55°C to +250°C



CMRM - Ultra miniature

TECHNICAL SPECIFICATIONS:

Current rating: 2 A max. per contact

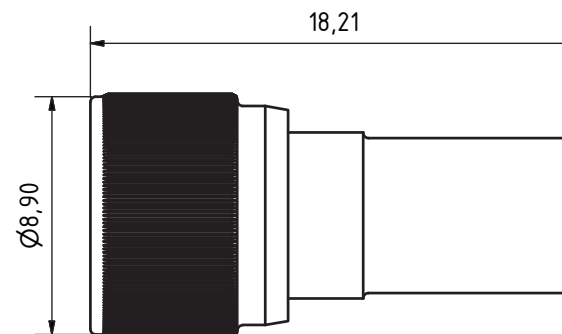
Dielectric resistance: 500 VDC

Insulation resistance: 5000 MΩ

Rated working voltage: 250V

Contact resistance: 4 mΩ

Operating temperature: -55°C to +250°C



CMRH - Heavy duty

TECHNICAL SPECIFICATIONS:

Current rating: 4 A max. per contact

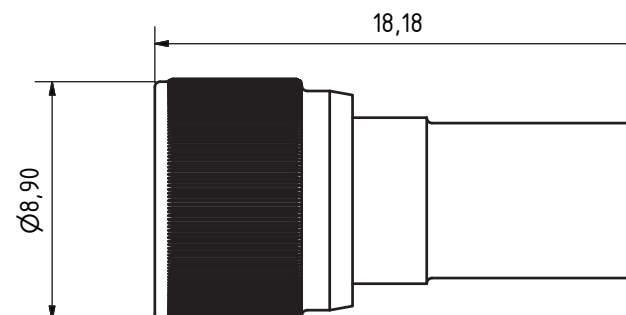
Dielectric resistance: 1000 VDC

Insulation resistance: 10000 MΩ

Rated working voltage: 400V

Contact resistance: 4 mΩ

Operating temperature: -55°C to +250°C



CMREH - Extra heavy duty

TECHNICAL SPECIFICATIONS:

Current rating: 5 A max. per contact

Dielectric resistance: 1000 VDC

Insulation resistance: 10000 MΩ

Rated working voltage: 400V

Contact resistance: 4 mΩ

Operating temperature: -55°C to +250°C

Materials and finishes

O2 - Brass, Gold plated
N1 - Brass, Nickel plated
B1 - Brass, Black Nickel plated
S1 - Stainless steel
S2 - Stainless steel
T1 - Titan
Further on request

O2 - Brass Gold plated

Brass per QQ-B-626.
Surface Au plated acc. to
MIL-G-45204 type "II", class "I",
1,27µ Au by 3µ Ni.

N1 - Brass, Nickel plated

Brass per QQ-B-626
Surface Ni plated acc. to
AMS 2404 grade "B", class "4",
(MIL-C-26074) 5µ.

B1 - Brass, Black Nickel plated

Brass per QQ-B-626
Surface Nickel black, 1µ-3µ Zn/Ni.

S1 - Stainless steel

Stainless steel (1.4305)

S2 - Stainless steel

Stainless steel (1.4301)

T1 - Titan

Titan Grade 1 (3.7025 / ASTM B338)

On request

Yellow chromated, SurTec650, Olive drab, Ni PTFE, aso.

Shell style plug:

B - Cable connector, standard nut

BS - Cable connector, hexagon nut

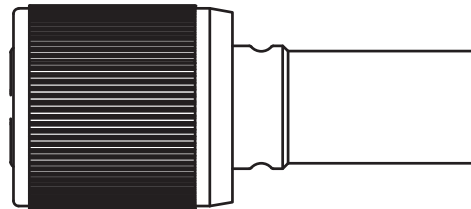
BC - Cable connector, crimp contacts

G - Cable connector, 90° offset, hexagon nut

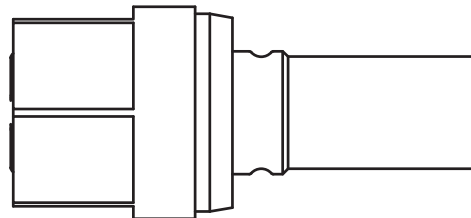
GS - Cable connector, 90° offset, hexagon nut

All drawings and 3D models are available on request

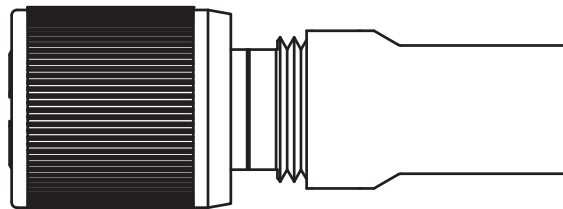
B - Cable connector, standard nut



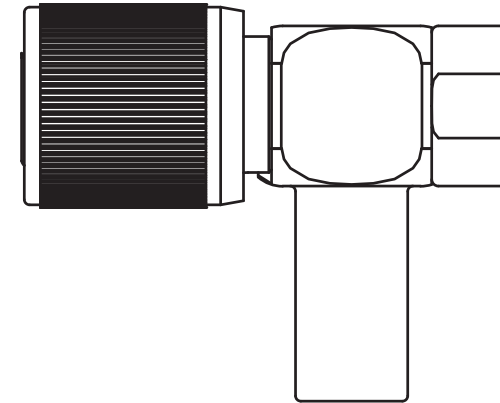
BS - Cable connector, hexagon nut



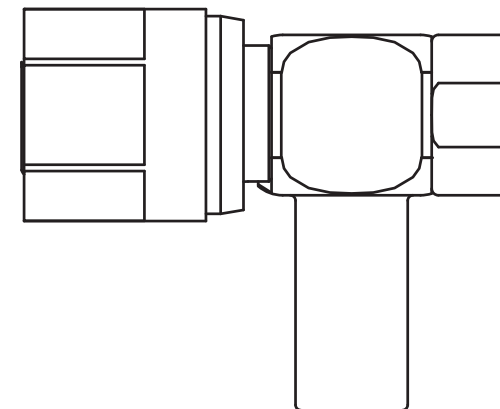
BC - Cable connector, crimp contacts



G - Cable connector, 90° offset, hexagon nut



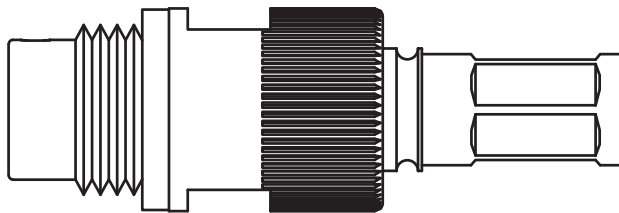
GS - Cable connector, 90° offset, hexagon nut



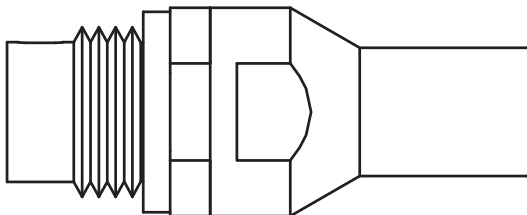
Shell style receptacle:

B - Cable connector
BC - Cable connector, crimp contacts
C - PCB mounting
D - Device mount
DB - Device mount, cable connector
E - Solder mount
F - PCB mount, 90° offset
K - PCB mount, flange
All drawings and 3D models are available on request

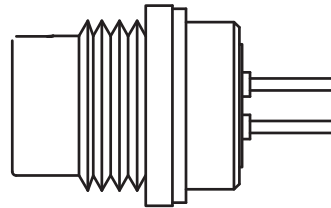
B - Cable connector



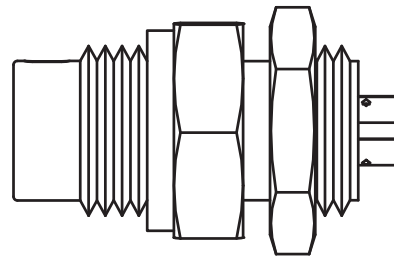
BC - Cable connector, crimp contacts



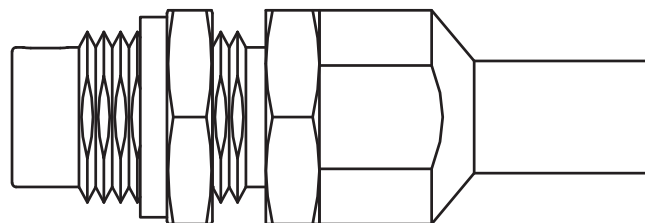
C - PCB mounting



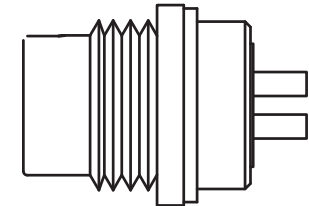
D - Device mount



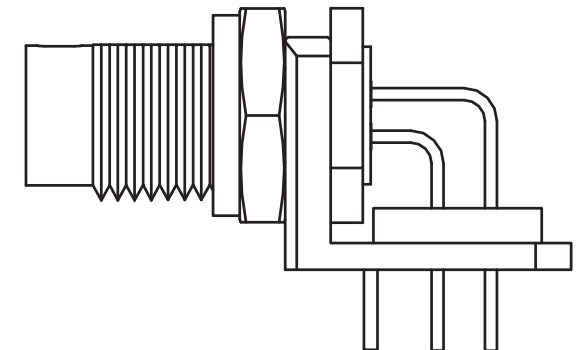
DB - Device mount, cable connector



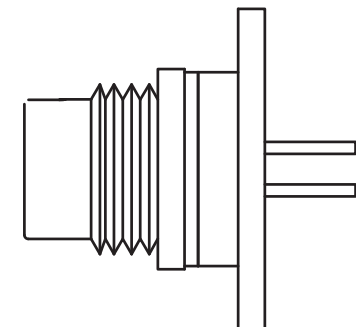
E - Solder mount



F - PCB mount, 90° offset

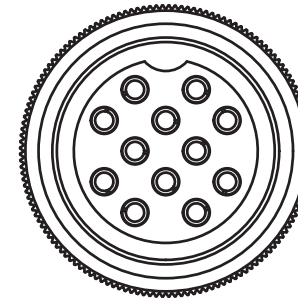
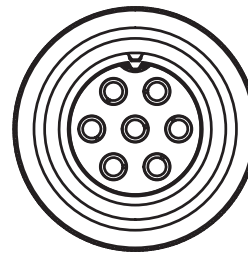
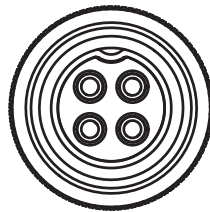


K - PCB mount, flange

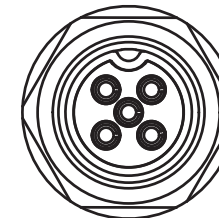
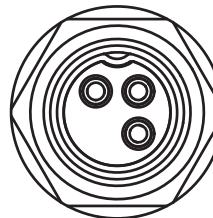
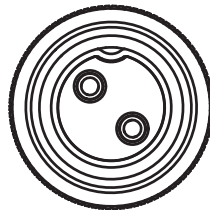


No of contacts:

04
07
12
Further on request



02, 03, 05 on request

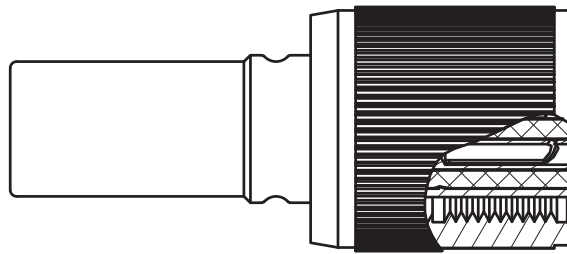


Gender:

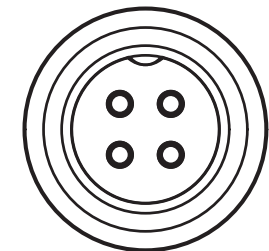
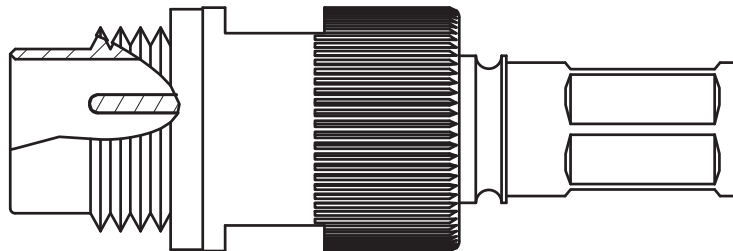
S - plug (female)

P - receptacle (male)

S - plug (female), socket contacts



P - receptacle (male), pin contacts



Performance:

- Without is standard
- IP67 - Waterproof (IP68 possible)
- GH - Hermetic sealed
- PCB - PCB Sensors compatible
- GND - Extra PCB ground pin

IP67 - waterproof
Tested 1 hour at 2 bar

GH - Hermetic sealed
Helium leak $<1 \times 10^{-8}$ cc/sec. at 1 ATM ambient

PCB - PCB accelerometers compatible
Special for PCB accelerometers

GND - Extra PCB ground pin
Possible in shell style receptacle C and K