µCom-10Gb +

Harsh Environment 10Gb Ethernet Micro Connectors

µCom-Series is a new range of connectors designed to address the latest trends of the industry : **miniaturization** and **high speed**, with the highest resistance for use in the **harshest environments**.

µCom-10Gb + is the first product of this new range.

KEY CHARACTERISTICS

- 10Gb+ exceeds 10Gb/s Ethernet following IEEE 802.3an-2006 : **10GBase-T**
- Environmental testing based on **MIL-DTL-38999 series III** military specifications
- Miniature : **15 mm(.59˝) max** external diameter

FEATURES AND BENEFITS

- 4 pairs totally insulated throughout the connector
  ➲ minimum cross-talk between the four pairs

- Patent pending special interfacial shapes
  ➲ minimum perturbation at the interface of each pair

- Thread coupling mechanism
  ➲ 2000 mating cycles & high vibration resistance

- Machined Brass shells and RoHS compliant plating
  ➲ shell to shell continuity and 500h salt Spray resistance

- Machined & gold plated Solder and Crimp contacts
  ➲ design & performance according to the innercontact of M39029/77-429#16 M39029/76-425#16 38999 contact

- Solder contact : max AWG24
- Crimp contact : AWG 24 to 26

- IP68 sealing mated and unmated for receptacles

- 1500 Vrms Dielectric Withstanding voltage

- Temperature range : - 55°C / + 125°C

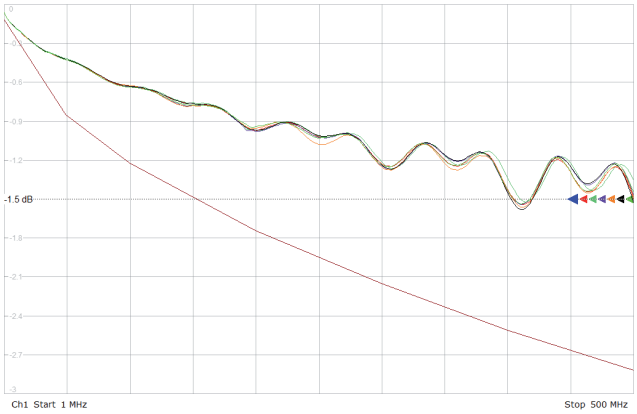
APPLICATIONS

- **DEFENSE :** C4ISR, Battlefield Communications, Shipboard, Ground Vehicles Vetronics.
- **AERONAUTICAL :** In Flight Entertainment, Avionics, Communication Systems.
- **RAIL MASS TRANSIT :** Passenger Information Systems, Communication Systems.

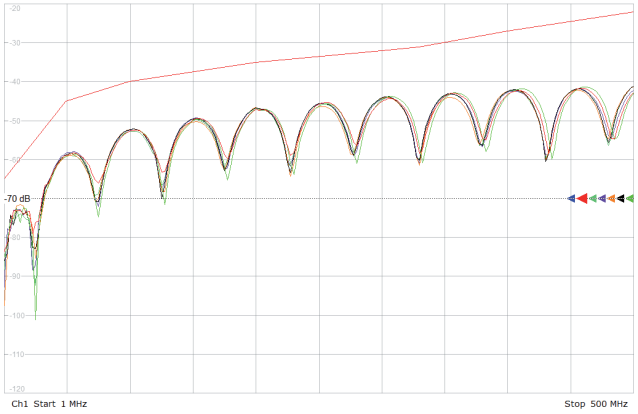
Amphenol Socapex

TRANSMISSION DATA

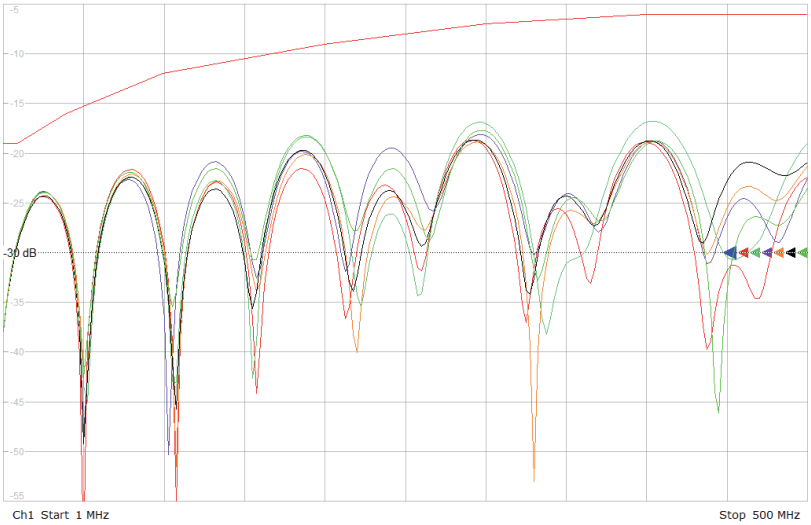
Insertion Loss



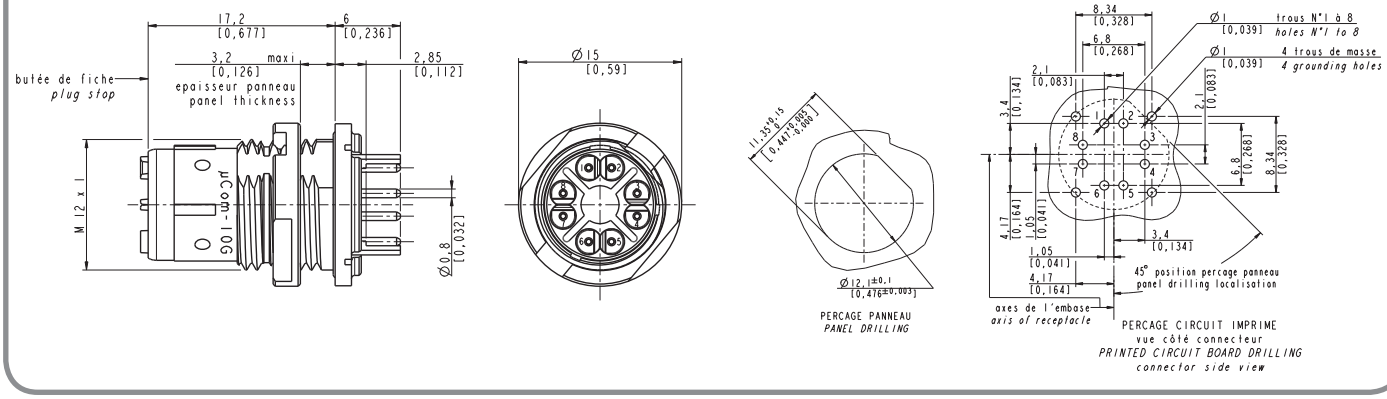
Next 1-2



Return Loss

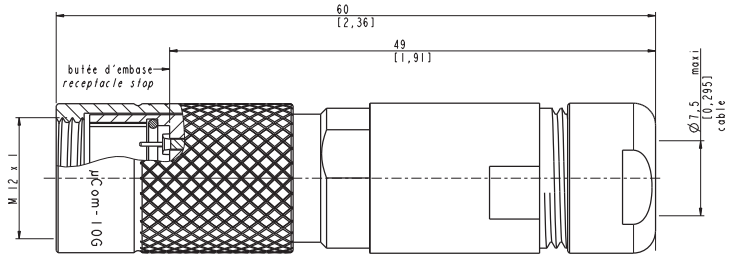


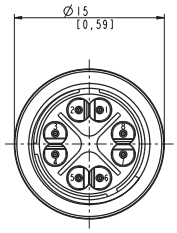
RECEPTACLE



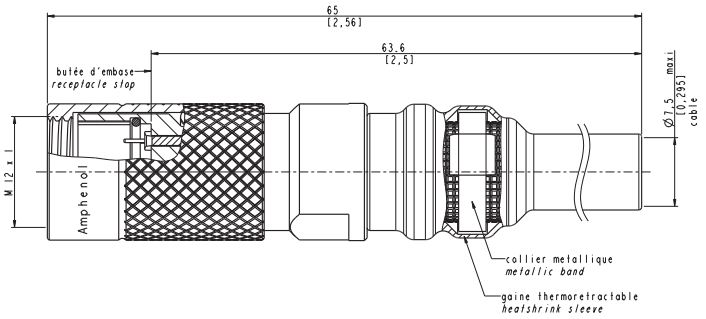
PLUGS & CORDSETS

Plug with Gland Backshell

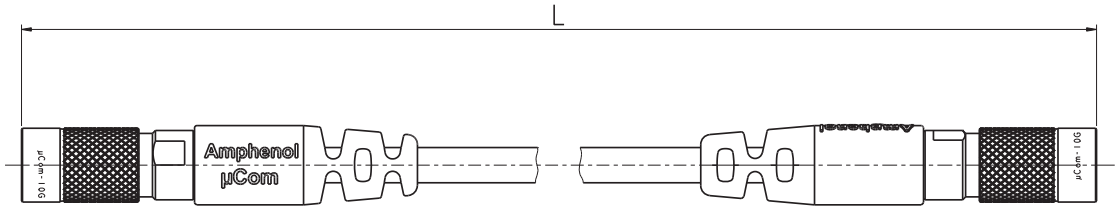


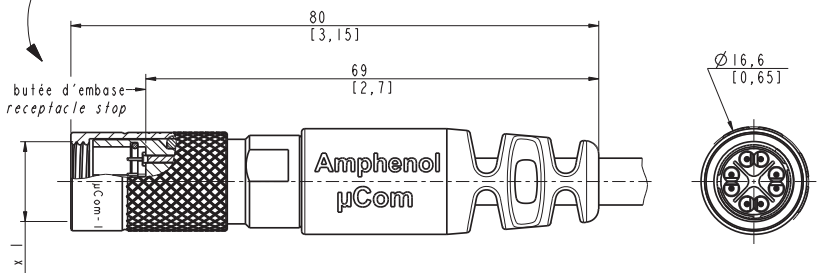


Plug with Band Backshell



Plug - Plug Cordsets





longueurs L disponibles en mètres [pouces]:

available lengths L in meters [inches] :

0.50 m	[19.68]
1.00 m	[39.37]
1.50 m	[59.05]
2.00 m	[78.74]
5.00 m	[196.85]
10.00 m	[393.70]

Type of Cable used : CAT 7 HFFR
According to EN 50288-4-2

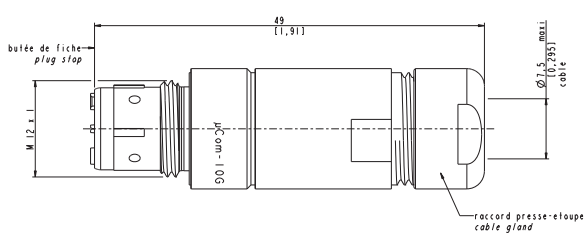
- Stranded bare copper wire (26 AWG)
- 4 Screened twisted pairs: 2 wires twisted to a pair, Alulaminate foil overlapped
- Shield braiding of tinned copper wires, about 80% coverage
- Strain member of Kevlar

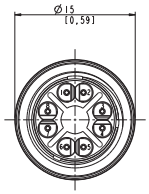
- Jacket in black Polyurethane (PUR), glossy finish, acc to DIN VDE 0282
- External diameter 7.0 +/-0.3 mm
- UV & Hydrolysis resistant, Halogen free, RoHS compliant
- Max Pull force: 800 N, Weight : about 54 kg/km
- Temperature : - 40°C / + 85°C

For full dimensions, please ask for Customer Drawing

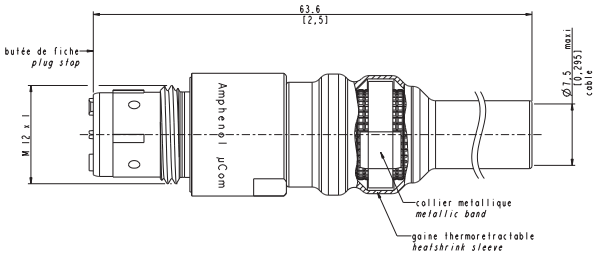
IN LINE RECEPTACLES

In line receptacle with Gland Backshell



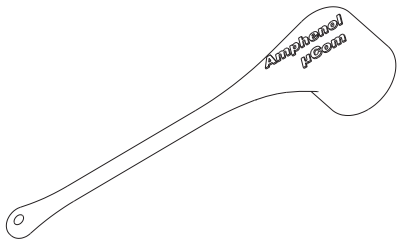


In line receptacle with Band Backshell



TOOLS AND ACCESSORIES

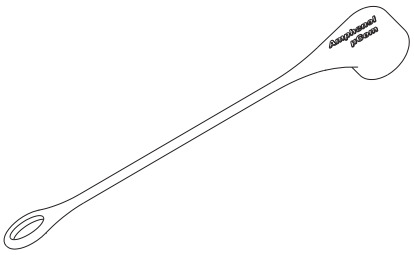
Receptacle Caps
Neoprene Version P/N : 31091



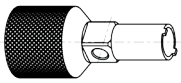
Nota : plan a type M3 hole on the panel

Metal Version P/N : 31057

Plug Caps
Neoprene Version P/N : 31092



Receptacle Nut Clamping tool
P/N : 31055



Crimp Contact insertion tool
P/N : 31056

Contact positioner
For M22520/2-01 crimping tool

P/N : 31095

HOW TO ORDER

Receptacles

µ C o m - 1 0 G + R P B

- **Shell**
  - R Receptacle (push-pull or thread)
- **Contacts Termination**
  - P PCB
  - S Solder
- **Shell Plating**
  - B Black Nickel
  - G Olive drab Cadmium
  - U Unplated Brass

Plugs & In Line Receptacles

µ C o m - 1 0 G + P T C B B A

- **Shell**
  - L In Line Receptacle
  - P Plug
- **Mating (for plugs only)**
  - T Thread
- **Contacts Termination**
  - C Crimp
  - S Solder
- **Shell Plating**
  - B Black Nickel
  - G Olive drab Cadmium
  - U Unplated Brass
- **Backshell Type**
  - G Gland
  - B Band
- **Cable Diameter (For Gland Backshell Only)**
  - A: for cable diam 7,5 mm
  - B: TBD

Plugs-Plugs Cordsets
with Cat7 HFFR Cable, Outdoor PUR jacket

µ C o m - 1 0 G + C T C B 0 1 5

- **Shell**
  - C Plug - Plug Cordset
  - F Plug Cordset-open
- **Mating (for plugs only)**
  - T Thread
- **Contacts Termination**
  - C Crimp
  - S Solder
- **Shell Plating**
  - B Black Nickel
  - G Olive drab Cadmium
  - U Unplated Brass
- **Total Length**
  - 005 : 50 cm [19,68]
  - 010 : 1,0 m [39,37]
  - 015 : 1,5 m [59,05]
  - 020 : 2,0 m [78,74]
  - 050 : 5,0 m [196,85]
  - 100 : 10,0 m [393,70]

The information contained in this document should be used **as a guideline only**.
We reserve the right to **modify our products** in any way we deem necessary.
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Edited by **AMPHENOL SOCAPEX**- January 2013

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For more information, you can contact us on our website www.amphenol-socapex.com or by calling on **+33 (0)4 50 89 28 00.**