



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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 **harshesht environments**.

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

MAIN FEATURES

- 10Gb+ exceeds 10Gb/s Ethernet following IEEE 802.3an-2006 : **10GBase-T**
- Cat.6A connector according to TIA568C.2 and ISO/IEC11801 standard
- Environmental testing based on **MIL-DTL-38999 series III** military specifications
- Miniature : **15 mm(.59") max** external diameter

FEATURES AND BENEFITS

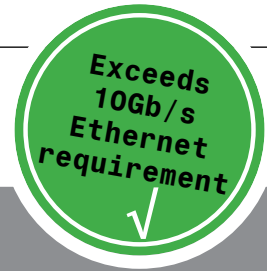
- 4 pairs totally insulated throughout the connector
 - ➔ minimum cross-talk between the four pairs
- Patent pending special interfacial shapes
 - ➔ minimum perturbation at the interface of each pair
- Thread coupling mechanism
 - ➔ 2000 mating cycles & high vibration resistance
- Machined Brass shells 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

MARKETS & APPLICATIONS

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



TRANSMISSION DATA



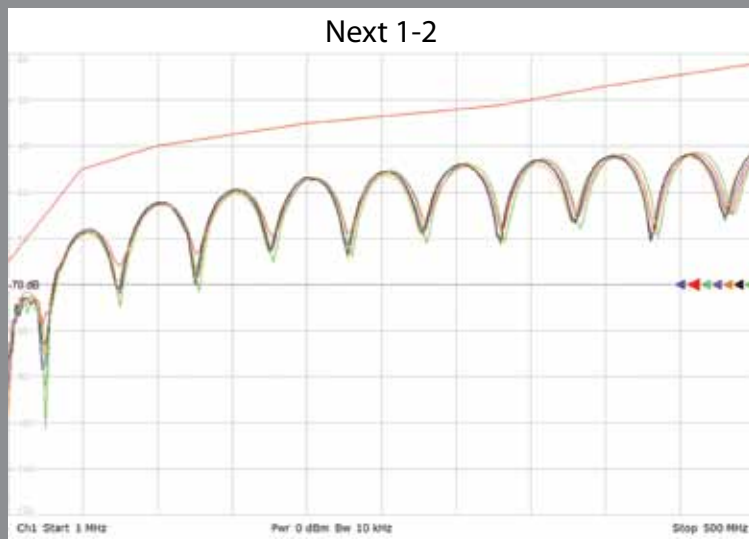
Insertion loss



← Amphenol performance

← IEEE 802.3an Standard requirement

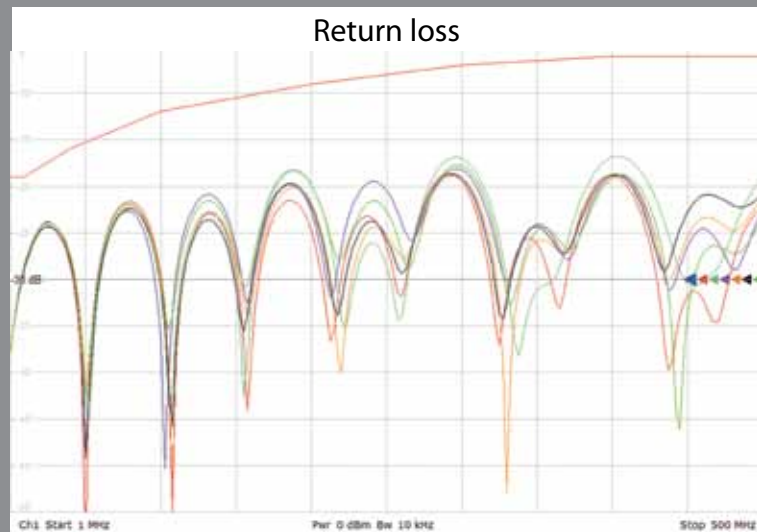
Next 1-2



← IEEE 802.3an Standard requirement

← Amphenol performance

Return loss



← IEEE 802.3an Standard requirement

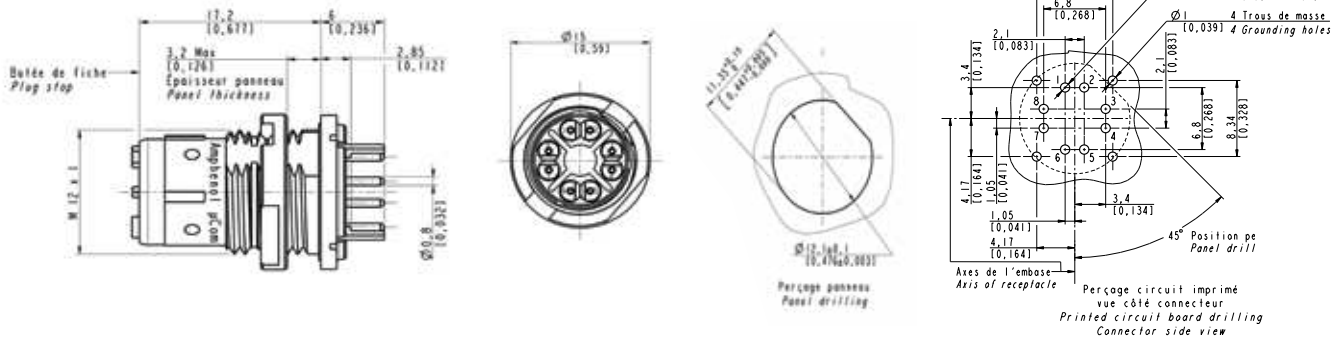
← Amphenol performance

FEMALE RECEPTACLES



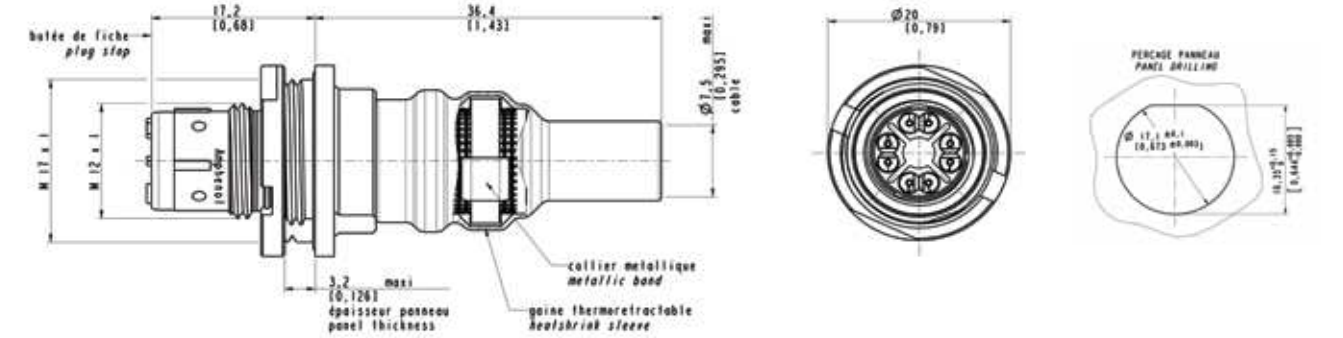
Female receptacle for printed circuit board

Part number: UCOM-10G+ R P X
 X: see the 'How to order' below to complete your part number



Panel mount female receptacle with metallic band backshell

Part number: UCOM-10G+ R X X
 X: see the 'How to order' below to complete your part number



HOW TO ORDER Female receptacles

UCOM - 10G+ R P B

Shell

R: receptacle (push pull or thread)

Contacts termination

P: PCB

S: solder

C: crimp

Shell plating

B: black nickel

G: olive drab cadmium

U: unplated brass

NOTA:

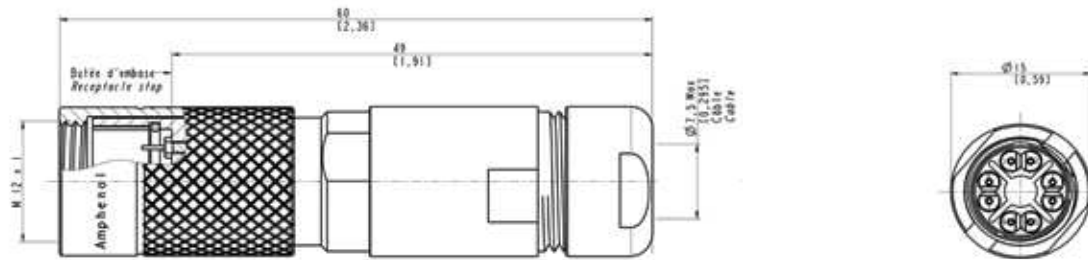
- UCOM for order designation
- µCom for marking on connectors

MALE PLUGS



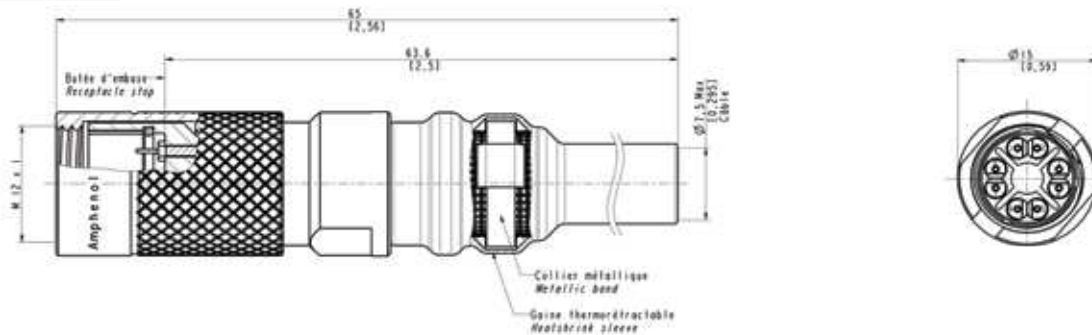
Plug with cable gland backshell

Part number: UCOM-10G+ PT x x G x
x: see the 'How to order' below to complete your part number



Plug with metallic band backshell

Part number: UCOM-10G+ PT x x B
x: see the 'How to order' below to complete your part number



HOW TO ORDER Male plugs

	UCOM - 10G+	P	T	C	B	G	A
Shell							
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 7.5mm							
B: to be defined							

NOTA:

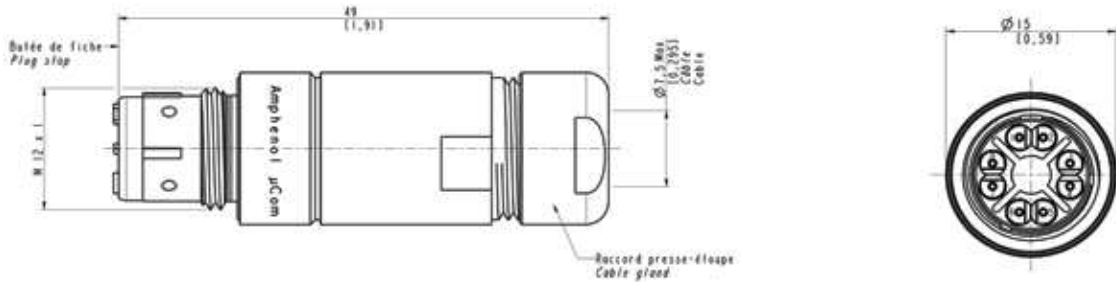
- UCOM for order designation
- μCom for marking on connectors

FEMALE IN-LINE RECEPTACLES



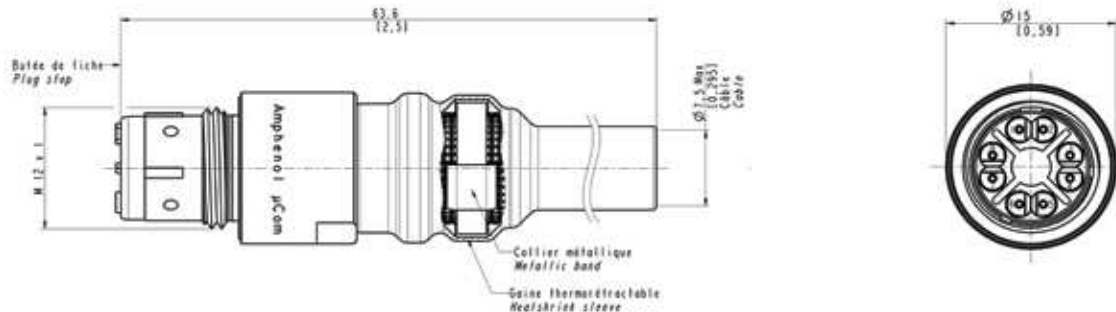
Female in-line receptacle with cable gland backshell

Part number: UCOM-10G+ L x x G x
 x: see the 'How to order' below to complete your part number



Female in-line receptacle with metallic band backshell

Part number: UCOM-10G+ L x x B
 x: see the 'How to order' below to complete your part number



HOW TO ORDER Female in-line receptacles

UCOM - 10G+	L	S	B	G	A
Shell					
L: in line receptacle					
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 7.5mm					
B: to be defined					

NOTA:

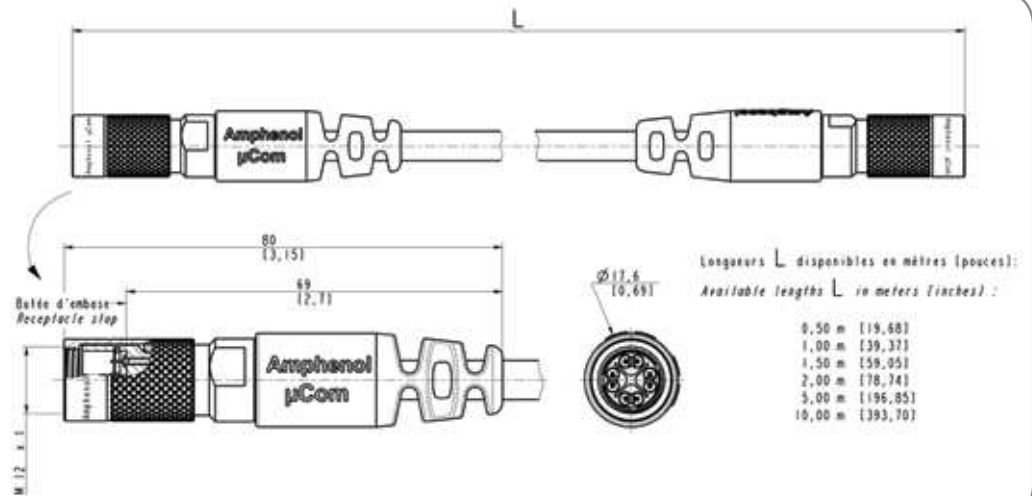
- UCOM for order designation
- μCom for marking on connectors

CORDSETS

μCom plug - μCom plug cordset

Part number:
UCOM-10G+ **C** x x x xxx

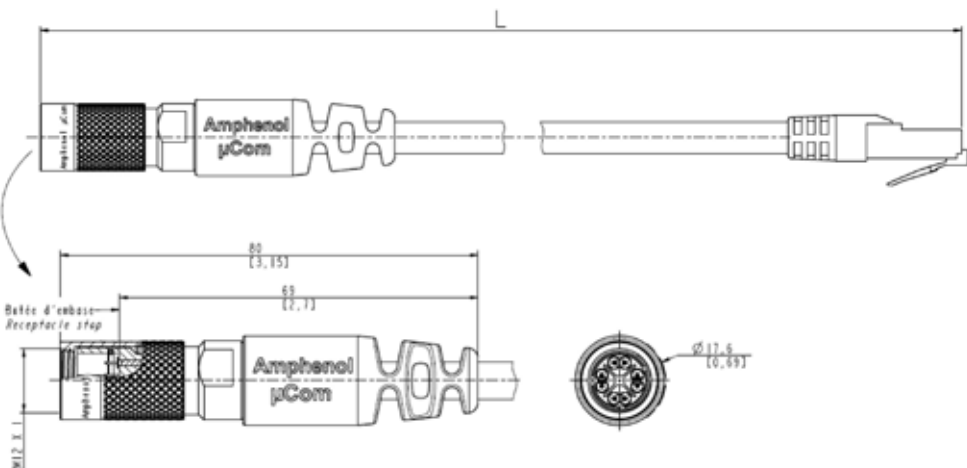
x: see the 'How to order' on the next page to complete your part number



μCom plug - RJ45 plug cordset

Part number:
UCOM-10G+ **D** x x x xxx

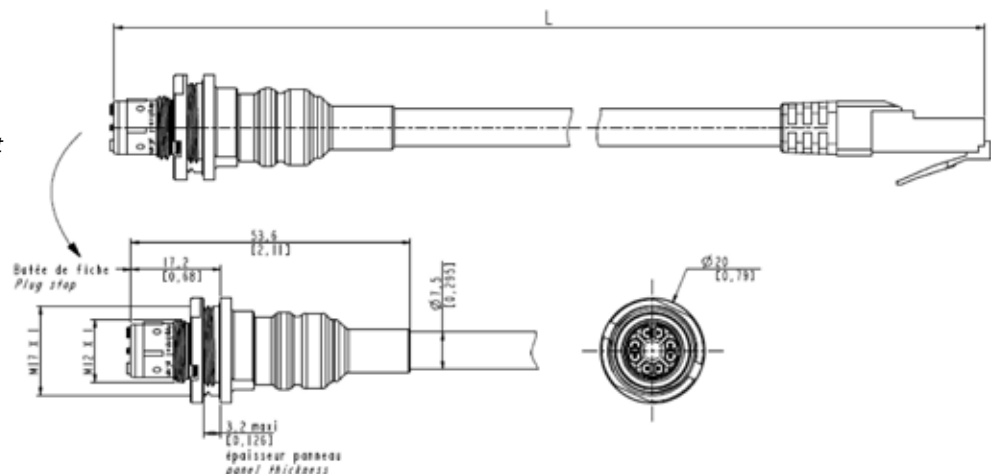
x: see the 'How to order' on the next page to complete your part number



μCom panel mount receptacle - RJ45 plug

Part number:
UCOM-10G+ **E** x x xxx

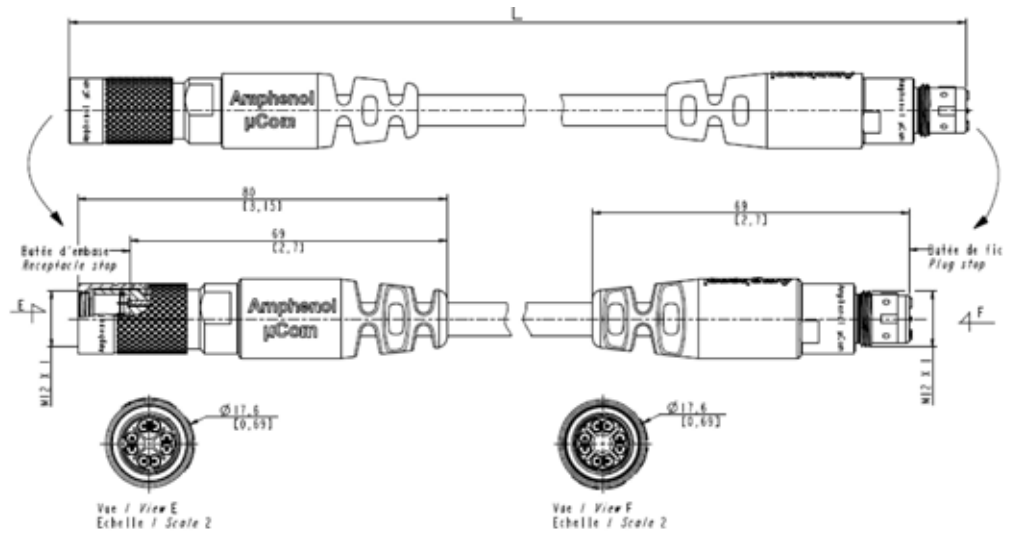
x: see the 'How to order' on the next page to complete your part number



μCom plug - μCom inline receptacle

Part number:
UCOM-10G+ F x x x xxx

x: see the 'How to order' below
to complete your part number



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, Alulaminated 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

HOW TO ORDER Cordsets

	UCOM - 10G+	C	T	C	B	015
Shell						
C:	μCom plug - μCom plug cordset					
D:	μCom plug - RJ45 plug cordset					
E:	μCom panel mount receptacle - RJ45 plug cordset					
F:	μCom plug - μCom inline receptacle cordset					
Open versions:						
G:	μCom plug - no connector at the end					
H:	μCom panel mount receptacle - no connector at the end					
J:	μCom inline receptacle - no connector at the end					
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 - For other lengths, please consult us						
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]					

NOTA:

- UCOM for order designation
- μCom for marking on connectors

ACCESSORIES

CAPS for receptacles

IP68 metallic cap

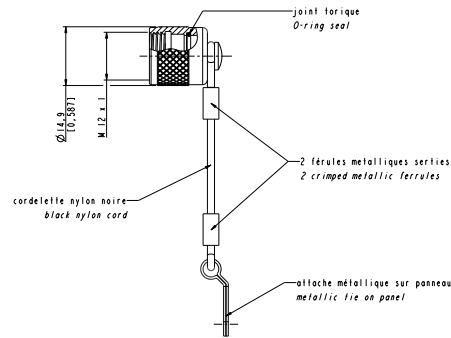
Part number: **31057** **X**

X to be replaced by

B for Black nickel plating

G for Olive drab cadmium plating

U for Unplated brass



IP68 neoprene cap - Part number: **31091**

Nota: plan a type M3 hole on the panel



CAPS for plugs

Cap in neoprene

Part number: **31092**



CAPS for in line receptacles

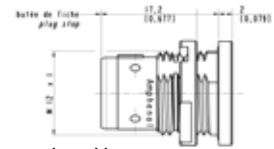
Cap in neoprene

Part number: **31093**



Dummy female receptacle

Part number: **31131** **X**



X to be replaced by

B for Black nickel plating

G for Olive drab cadmium plating

U for Unplated brass

TOOLS



Nut clamping tool for receptacle
Part number: **31055**



Insertion tool for crimp contacts
Part number: **31056**



Contact positioner
for M22520/2-01 crimping tool
Part number: **31095**

Other tools:

Brazing tool for receptacle
Part number: **31132**

Brazing tool for plug
Part number: **31133**