

MMC SERIES

MMC – MMCS – MMCMD

**BREAK-AWAY
COMPACT CONNECTOR
WITH LOW PROFILE**



**For a robust and ergonomic high
speed data connexion !**



BERNIER

MMC
SERIE
BREAK-AWAY
COMPACT
LOW PROFILE

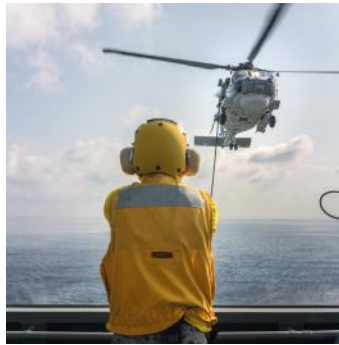
Bernier designed the MMC connectors specially for system in small spaces or wearable equipments. The design is tough in order to go over harsh environments
This series of Break-away circular connectors with EMI RFI protection is perfect for high speed data transmissions.

MMC with 24 contacts.

MMCS Small Dimension connectors with 12 contacts.

MMCM Medium Dimension connectors with 20 contacts.

Applications



Systems
tactical radios

Rugged PAD

Rugged

Computers

Intercom

Battery



EMC REINFORCEMENTS



Conductive spring 360°

MMC standard receptacles are equipped with a ground ring giving a high EMC level. This function developed by Bernier brings a better continuity between the connectors shells and a protection on 360°.



Ground pins

One or several ground pins inserted in the connector shell can be set to link the chassis ground directly to the PCB.



Conductive Orings

The receptacle Fluorosilicon Oring can be switched to a conductive version to establish a better conductivity between the connector and the panel.

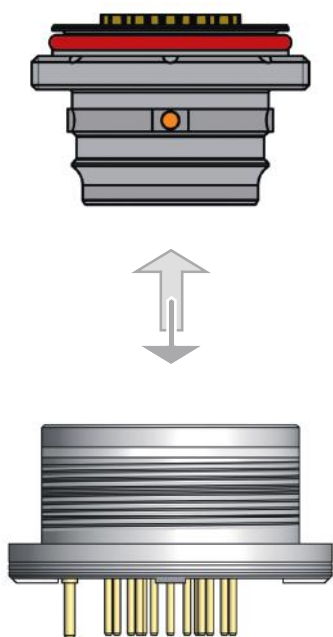
THE RIGHT SOLUTION FOR YOUR PROJECTS

MMC connectors are appreciated for their flexibility to fit customer specifications. Our Design team is able to propose versions answering to your needs. Reinforcements can be applied in case of use in harder climatic, ergonomic and electromagnetic conditions. Caps and backshells can also be improved to provide a better ergonomics for your configuration.

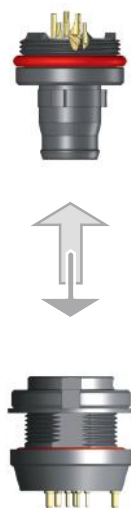
Low Profile Ergonomics Break-Away Stainless steel High Speed Data



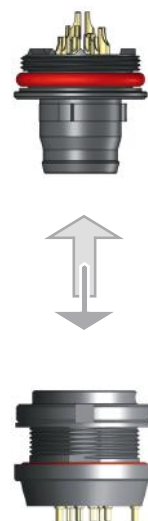
SERIE
MMC



SERIE
MMCSD



SERIE
MMCMD



6 Technical data MMC

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Items mounted on
Cable & Items
mounted on panel

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MMC SERIES

BREAK-AWAY CONNECTORS

LOW PROFILE

COMPACT

24 CONTACTS

STAINLESS STEEL | ROBUSTNESS | WATERTIGHTNESS | EMI RFI | MULTI-CONTACTS

CONTACT-US TO BE INFORMED ABOUT UPDATES

TECHNICAL DATA / MMC

CLIMATIC AND MECHANICAL CHARACTERISTICS

Unlocking system	Axial Force ($40N \leq F \leq 70N$)
Operating temperature range	-55°C to +125°C
Endurance (connect / disconnect)	5 000 Operations
Sealing performance	IP68 (connected and disconnected)
Corrosion resistance « Salt fog »	Salt fog: 96 hours (Stainless steel)
Fluids resistance	Oils and hydrocarbons

ELECTRICAL CHARACTERISTICS

Working voltage	60 V _{max}
Current rating per contact	2 A _{max}
Gauge (AWG)	24
Contact types	Soder cup / For PCB
Contact resistance	≤ 8 MOhms
Insulation resistance	>1000 MOhms
EMI RFI Protection	Yes

MATERIAL AND PLATING

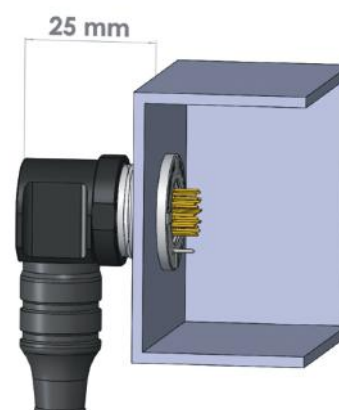
	Material	Plating
Connector shell	Stainless steel	Sandblasting
Insulator	Thermoplastic	-
Contacts	Copper alloy	Gold over nickel
Boîtier raccord	Aluminum	Black chrome

WEIGHT / MMC

Type of boxes	Weights (Max)
Plug (type 5)	7 g
Straight Backshell (MMC RDBC)	9 g
90° Elbow backshell (MMC MAI)	13 g
Receptacle (type 7)	10 g

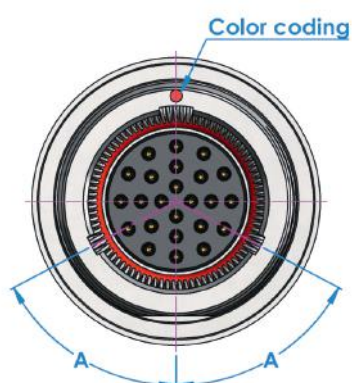


LOW PROFILE DIMENSIONS

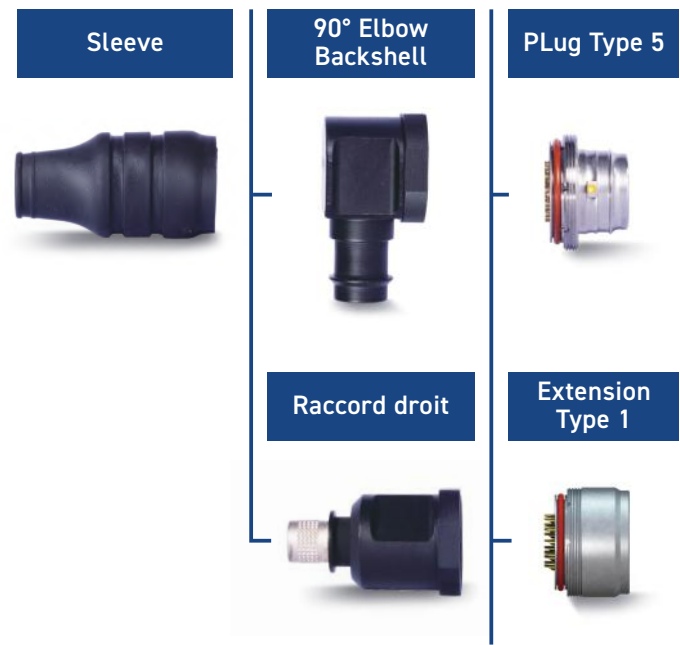


KEWAYS

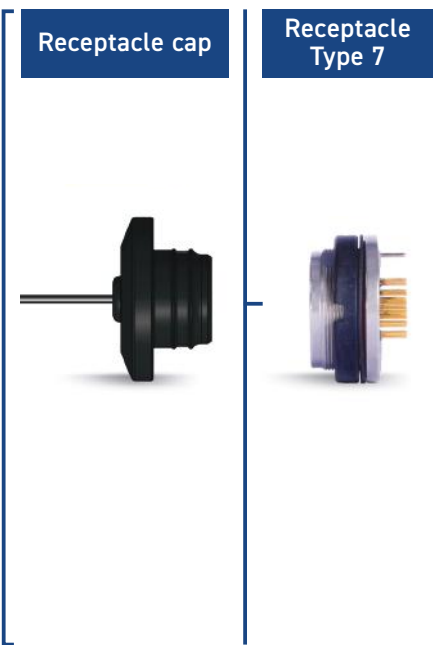
Détrompage	Angle A	Color
K	70°	Orange
N	62°	Red
W	54°	White
X	46°	Green
Y	38°	Yellow
Z	30°	Blue



■ ITEMS MOUNTED ON CABLE



■ ITEMS MOUNTED ON PANEL



PLUGS (TYPE 5) / MMC

PART NUMBERS: MMC 5 X 24 FS A

Description	Code
Series	MMC
Locking	Break-away
Connector type: Plug	5
Keyways	K, N, W, X, Y, Z, T
Contact number	24
Contact types: Solder cup	FS
Material: Stainless steel	A

PLUGS (TYPE 5) / MMC

■ PLUGS WITH SOLDER CUP CONTACTS

Male Plug MMC 5*24FSA to be soldered on wires, equipped with a thread for the mounting of a backshell. It mates all female counter parts from BERNIER MMC 24 contacts keyways K, N, X, X, Y, Z. Soldering operation on contacts can be done when insulator not mounted.

The insulator will be maintained in the plug shell with the tightening of the backshell.

Part numbers	Clé	Color
MMC 5 K 24 FSA	K	Orange
MMC 5 N 24 FSA	N	Red
MMC 5 W 24 FSA	W	White
MMC 5 X 24 FSA	X	Green
MMC 5 Y 24 FSA	Y	Yellow
MMC 5 Z 24 FSA	Z	Blue



Part number	Number of contacts	Gauge	L max
MMC 5 x 24 FS A	24	AWG 24	12.6



Ex : MMC 5N24FSA

BACKSHELLS / MMC

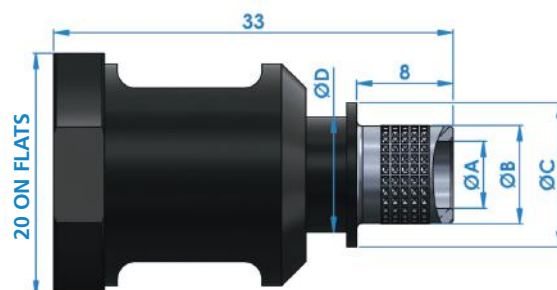


■ STRAIGHT BACKSHELL WITH KNURLING

Backshell for cable assembling with metallic collar and heat-shrink boot (not included)

Backshell also available in 90° elbow version

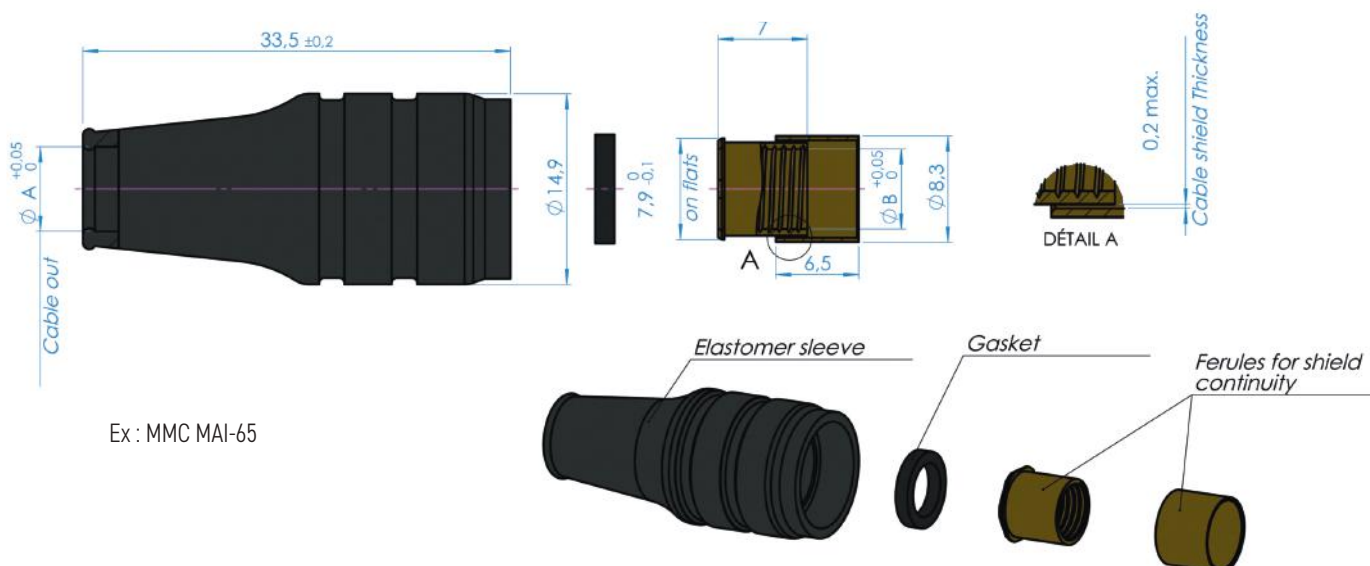
Ex : MMC RDBC - 55



MMC RDBC-xx

Part numbers	ØA
MMC RDBC-35	3,5
MMC RDBC-45	4,5
MMC RDBC-55	5,5

■ BACKSHELL ENDS MMC MAI-XX



Ex : MMC MAI-65

■ ELBOW BACKSHELL WITH CRIMPING OPERATION MMC RCBI + MANCHON "MMC MAI-XX"

MMC MAI-xx

Part numbers	Ø Cable
MMC MAI-45	4,5
MMC MAI-55	5,5
MMC MAI-65	6,5

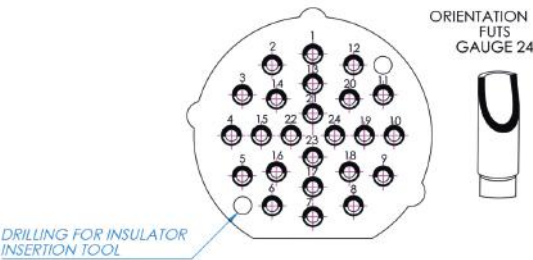
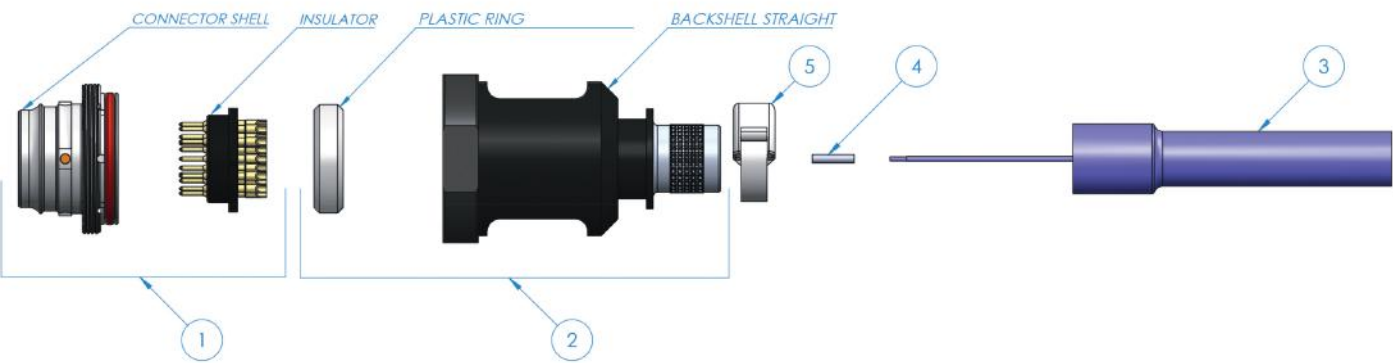


Ex : MMC RDBI + MMC MAI-65

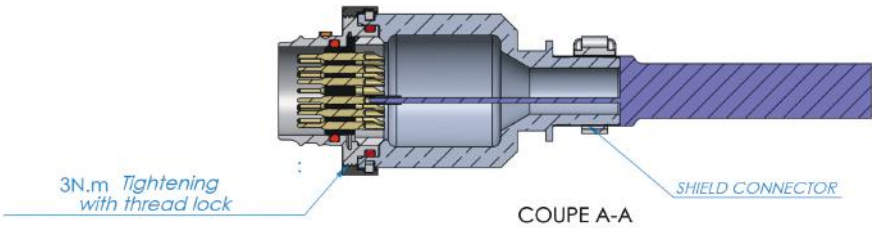


CABLING PLUGS MMC

■ MMC RDBC-XX

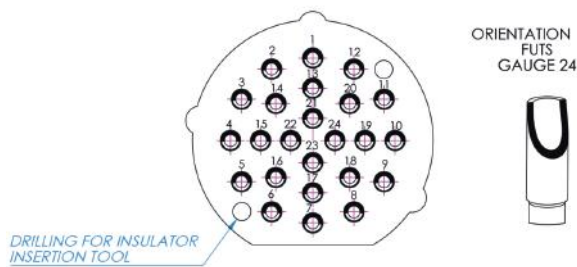
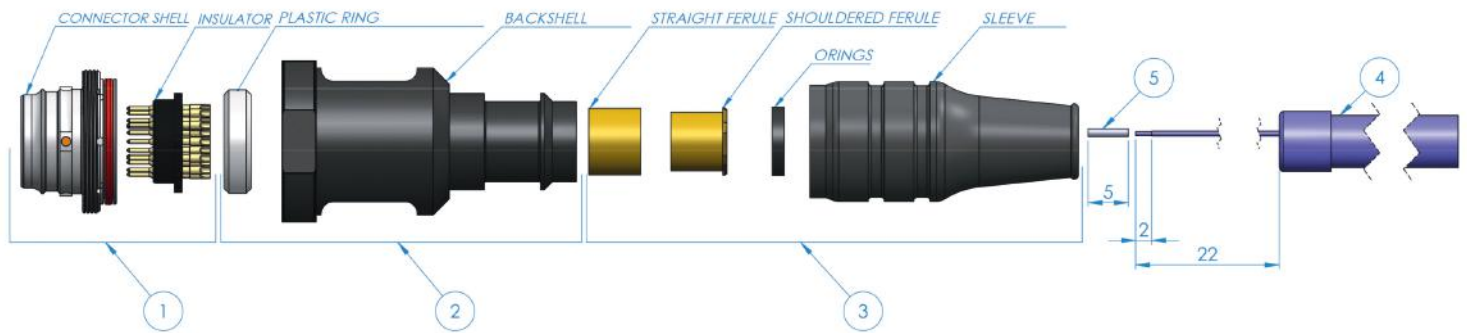


N°	QTY	DESIGNATION	PART NUMBERS
1	1	PLUG 24 CTS KEYWAY K PLUG 24 CTS KEYWAY N PLUG 24 CTS KEYWAY W PLUG 24 CTS KEYWAY X PLUG 24 CTS KEYWAY Y PLUG 24 CTS KEYWAY Z	MMC 5K24FSA MMC 5N24FSA MMC 5W24FSA MMC 5X24FSA MMC 5Y24FSA MMC 5Z24FSA
2	1	STRAIGHT BACKSHELL	MMC RDBC-35 MMC RDBC-45 MMC RDBC-55
3	1	CABLE	NOT INCLUDE
4	24	Transparent heat-shrink tubing PVDF	NOT INCLUDE
5	1	CLAMP	NOT INCLUDE

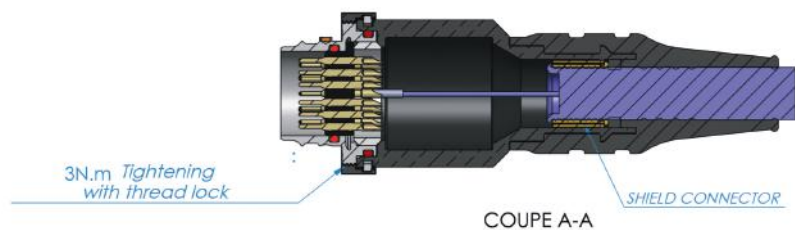


CABLING PLUGS MMC

■ MMC RDBI + MMC MAI-XX

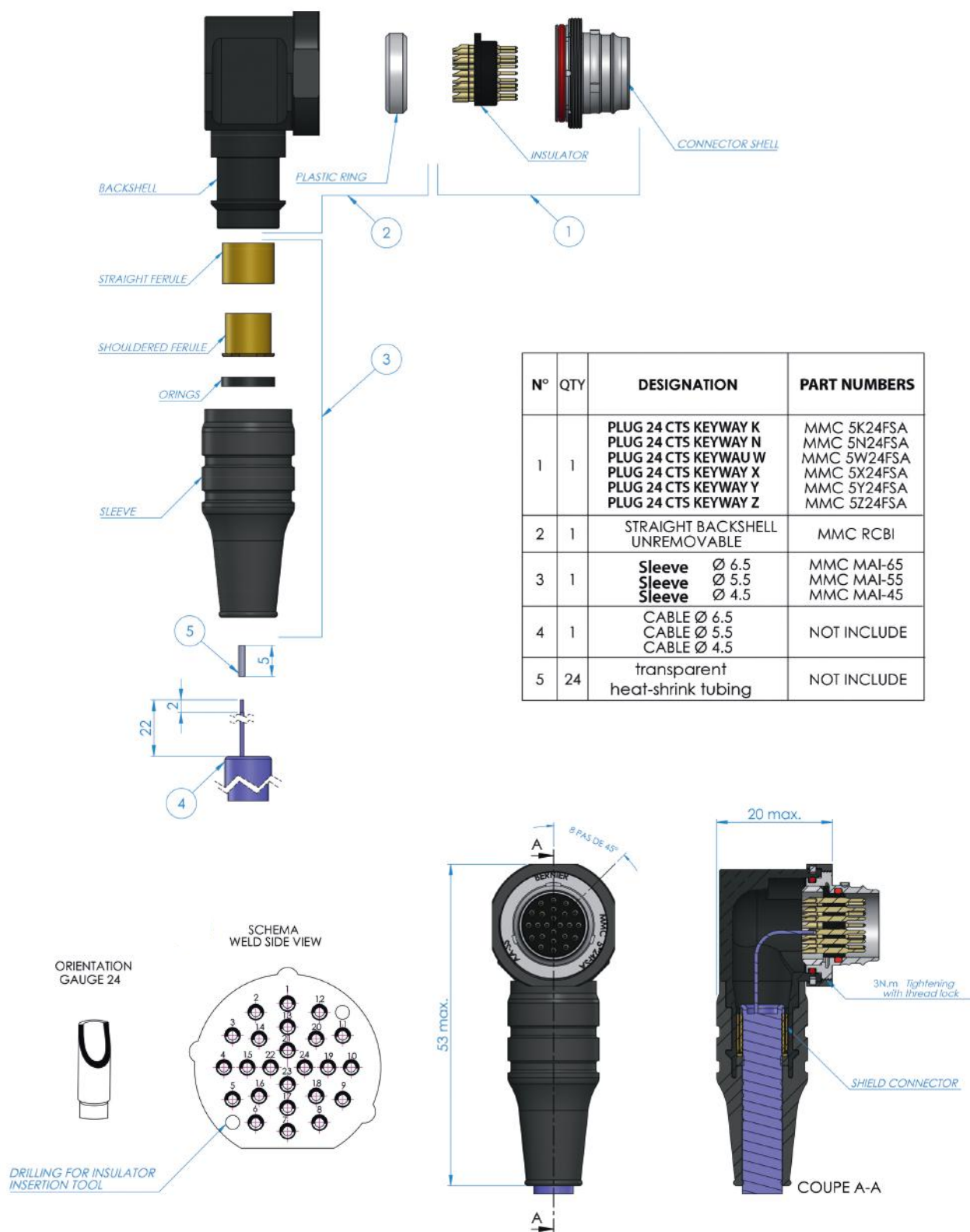


N°	QTY	DESIGNATION	PART NUMBERS
1	1	PLUG 24 CTS KEYWAY K PLUG 24 CTS KEYWAY N PLUG 24 CTS KEYWAY W PLUG 24 CTS KEYWAY X PLUG 24 CTS KEYWAY Y PLUG 24 CTS KEYWAY Z	MMC 5K24FSA MMC 5N24FSA MMC 5W24FSA MMC 5X24FSA MMC 5Y24FSA MMC 5Z24FSA
2	1	STRAIGHT BACKSHELL UNREMOVABLE	MMC RDBI
3	1	SLEEVE Ø 6.5 SLEEVE Ø 5.5 SLEEVE Ø 4.5	MMC MAI-65 MMC MAI-55 MMC MAI-45
4	1	CABLE Ø 6.5 CABLE Ø 5.5 CABLE Ø 4.5	NOT INCLUDE
5	24	transparent heat-shrink tubing PVDF	NOT INCLUDE



CABLING PLUGS MMC

■ MMC RCBI + MMC MAI-XX

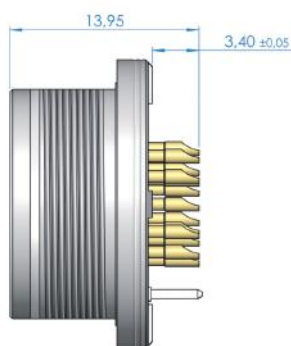


RECEPTACLES (TYPE 7) / MMC

PART NUMBERS: MMC L X X 24 XX PM A

Description	Code
Series	MMC
Locking (types 7) Break-away	L
Type of connecteur :	
Embase	7
Keyways	K, N, W, X, Y, Z, T
Number of contacts	24
Contact types:	
Solder cup	FS
Contact for PCB	P1
Ground pin (type 7 only)	PM
Material:	
Stainless steel	A

■ RECEPTACLES WITH SOLDER CUP CONTACTS /REAR MOUNTING

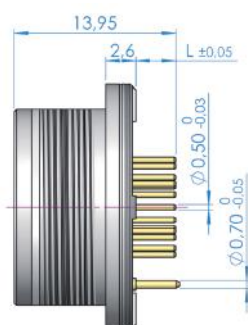


Ex : MMC L7N24FSPMA

Receptacle (type 7) MMC L 7 x 24 FS xx x

Part numbers	Keyway	Angle α	Color coding	Number of contacts
MMC L 7K24FS xx x	K	70°	Orange	24
MMC L 7N24FS xx x	N	62°	Red	24
MMC L 7W24FS xx x	W	54°	White	24
MMC L 7X24FS xx x	X	46°	Green	24
MMC L 7Y24FS xx x	Y	38°	Yellow	24
MMC L 7Z24FS xx x	Z	30°	Blue	24

■ RECEPTACLES WITH CONTACTS FOR PCB / REAR MOUNTING



Ex : MMC L7W24P1PMA

Receptacle (type 7) MMC L 7 x 24 P1 xx x

Part numbers	Keyway	Angle α	Color coding	Number of contacts
MMC L 7K24P1 xx x	K	70°	Orange	24
MMC L 7N24P1 xx x	N	62°	Red	24
MMC L 7W24P1 xx x	W	54°	White	24
MMC L 7X24P1 xx x	X	46°	Green	24
MMC L 7Y24P1 xx x	Y	38°	Yellow	24
MMC L 7Z24P1 xx x	Z	30°	Blue	24

■ ORING - WASHER NUT FOR RECEPTACLE TYPE 7

Type	Part numbers	Descriptif
Panel Oring	MMC JBFS01	Fluorosilicone Blue
Washer	MMC RMA01	Stainless steel
	MMC RNAL01	Aluminum Black plating
Nut	MMC EMA01	Stainless steel
	MMC ENAL01	Aluminum Black plating



The Oring, washer and nut are to be ordered separately



MMC JBFS01



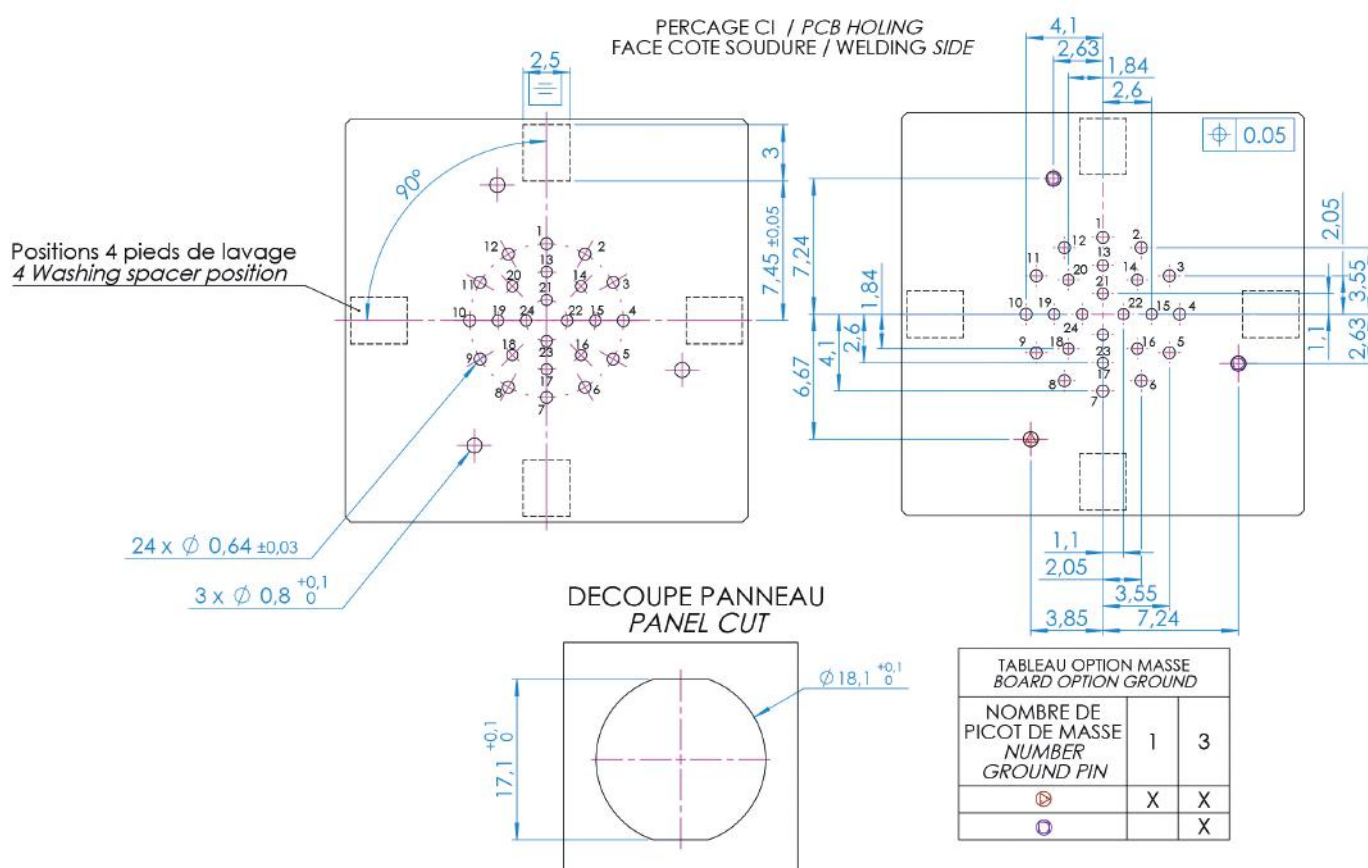
MMC RMA01



MMC EMA01

PANEL CUT & PCB HOLING / MMC

■ PANEL CUT FOR RECEPTACLES TYPES 7 AND PCB HOLING (WELDING SIDE)



CAPS / MMC

■ FOR PLUGS MMC TYPE 5

Elastomer caps with microcable and crimping ferule for MMC plugs

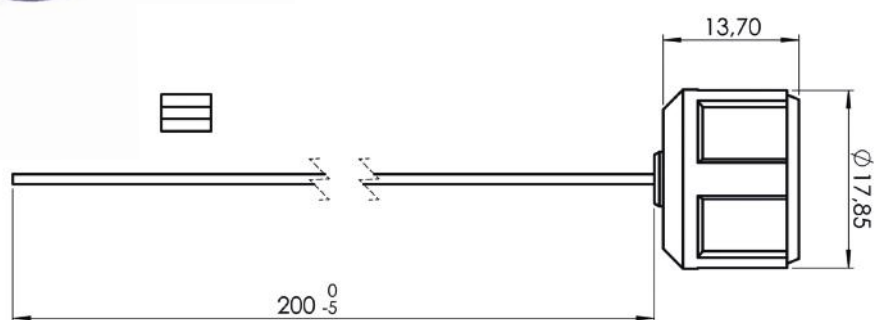
Part number: **MMC 1AEMC-200FER**

This cap is mating all plugs from the MMC BERNIER line.



CARACTERISTICS	
Body	Black Elastomer
Microcable	Stainless steel with black cover
Ferule	Aluminum alloy black plated
Weight	3 g

Body	Black Elastomer
Microcable	Stainless steel with black cover
Ferule	Aluminum alloy black plated
Weight	3 g

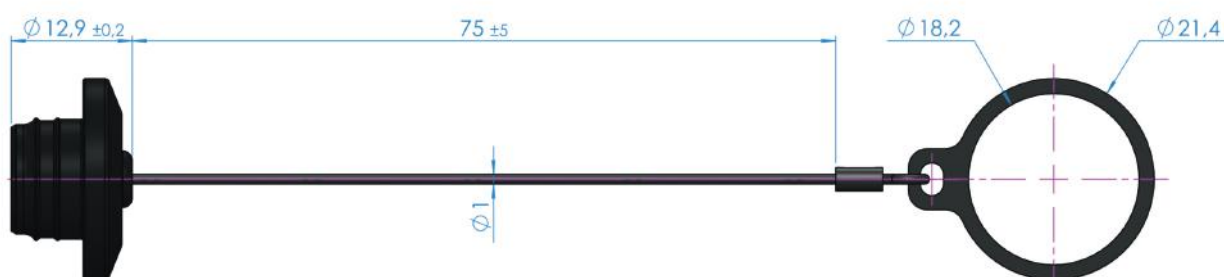


■ FOR RECEPTACLES MMC TYPE 7

Thermoplastic caps with microcable and metallic ring for receptacle MMC

Part number: **MMC 1BTMC-75EM**

This cap is mating all receptacle from the MMC BERNIER line. It is held with the help of the receptacle spring



CARACTERISTICS	
Body	Black thermoplastic
Microcable	Stainless steel with a black cover
Ferule and ring	Aluminum alloy black plated

Body	Black thermoplastic
Microcable	Stainless steel with a black cover
Ferule and ring	Aluminum alloy black plated

CLIMATIC AND MECHANICAL SPECIFICATIONS	
Temperature range	-40°C +85°C
Tear off limit force for	120N
Protection rating	IP68
Weight	4 g max

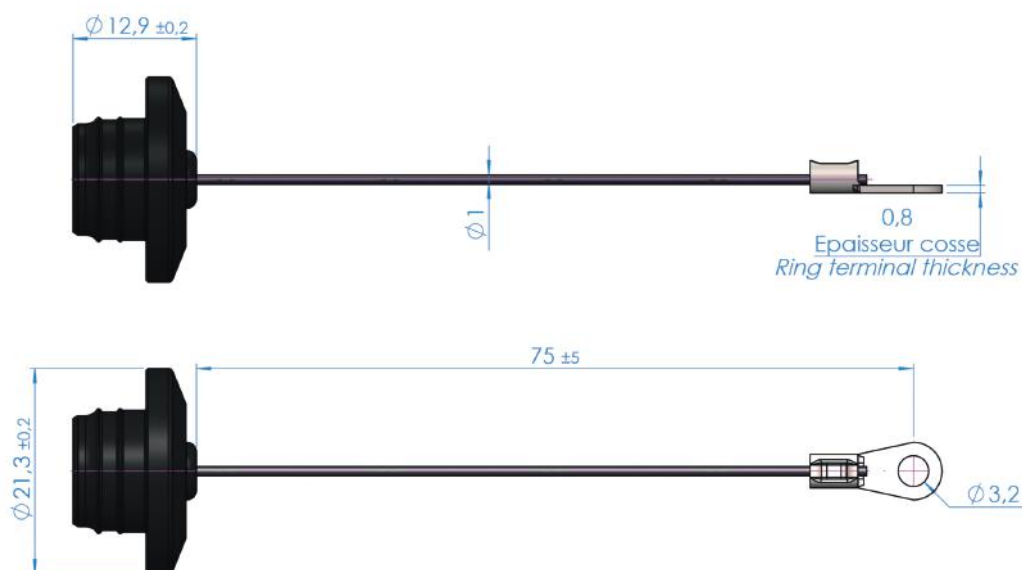
Temperature range	-40°C +85°C
Tear off limit force for	120N
Protection rating	IP68
Weight	4 g max

■ FOR RECEPTACLES MMC TYPE 7

Thermoplastic caps with microcable and eyelet for M3 screw for receptacles MMC

Part number: **MMC 1BTMC-75M3**

This cap is mating all receptacle from the MMC BERNIER line.



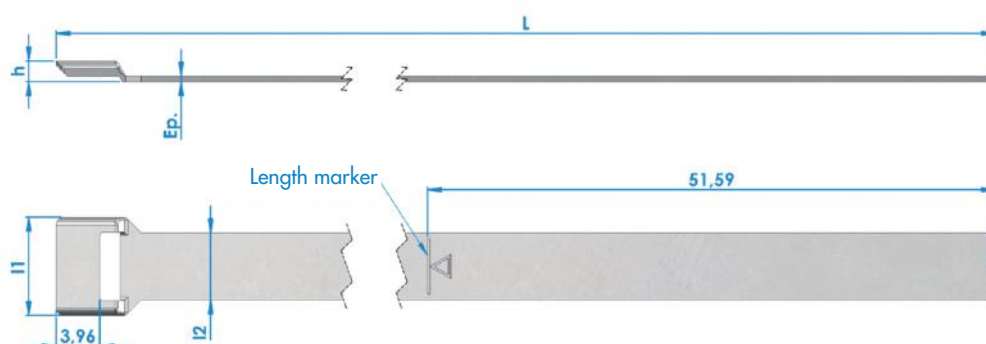
CARACTERISTICS	
Body	Black thermoplastic
Microcable	Stainless steel with a black cover
Microcable	Copper alloy tin-plated

CLIMATIC AND MECHANICAL SPECIFICATIONS	
Copper alloy tin-plated	-40°C +85°C
Tear off limit force for	120N
Protection rating	IP68
Weight	4 g max

ACCESSORIES AND TOOLS

■ METALLIC CLAMP FOR BACKSHELL

Description	Part numbers	L (mm)	h (mm)	l1 (mm)	L2 (mm)	Ep (mm)
Metallic clamp width 6.1mm	B593	362,1	1,88	8,9	6,1	0,51
Metallic clamp width 3.17mm	B452	206,4	1,35	5	3,1	0,4



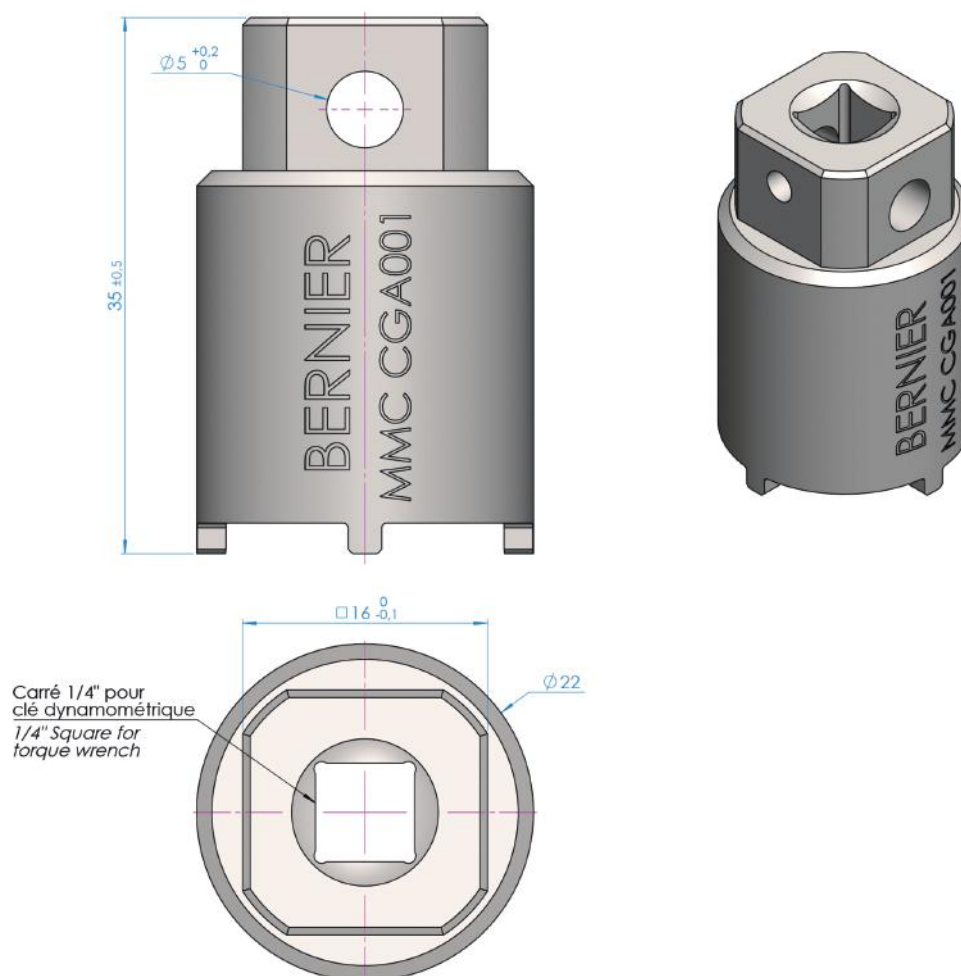
TOOLING

■ TIGHTENING KEY FOR MMC NUT

Part number: MMC CGA001

Material : Nickel plated hardened steel

Tightening torque with stainless steel nut : 9 N.m max



■ KEY FOR THE TIGHTENING OF THE BACKSHELL RING

Part number: RMMC CGA02



MMCS

**For a robust
and ergonomic high speed
data connexion !**

**CSMALL
BREAK-AWAY
CONNECTOR
COMPACT
LOW PROFILE**

**SMALL DIMENSION
WITH 12 CONTACTS**



BREAK-AWAY | COMPACT | LOW PROFILE | STAINLESS STEEL | ROBUSTNESS | WATERTIGHTNESS | EMI RFI



BERNIER

TECHNICAL DATA / MMCS D

MATERIALS AND FINISH

Body	Passivated and sand-blasted stainless steel
Contacts & ground pin	Copper alloy with gold over nickel plating
Insulator	Thermoplastic

CLIMATIC AND MECHANICAL SPECIFICATIONS

Temperature range	-55°C +125°C.
Watertightness	IP68 20m during 2h
Salt spray	96h
Mechanical endurance	5 000 operations

ELECTRICAL SPECIFICATIONS

Working voltage	28 V _{max}
Rating current signal contact	1 A
Rating current power contact	5 A
Contact resistance	≤20 mΩ
Insulation	> 100 MΩ à 100VDC
Dielectric rigidity	500 Veff à 50 Hz

Solderability according J-STD-002 test A1

WEIGHTS / MMCS D

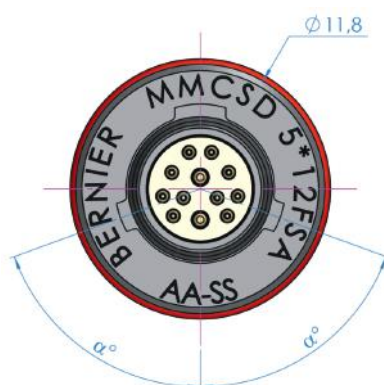
Type of boxe	Weights (Max)
Plugs MMCS D	5 g
Receptacle MMCS D	6 g
Backshell with knurling	6 g



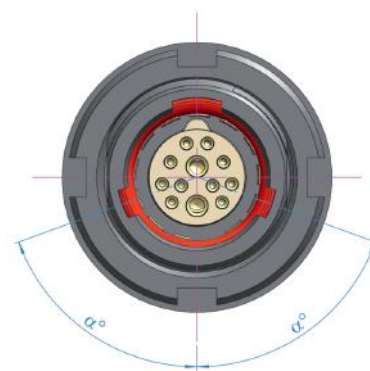
KEYWAYS

Keways	Angle A	Color
K	70°	Orange
N	62°	Red
W	54°	White
X	46°	Green
Y	38°	Yellow
Z	30°	Blue

Plugs



Receptacles



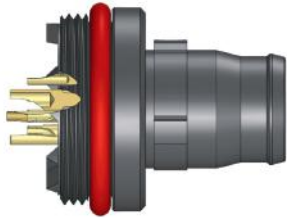
ITEMS MOUNTED ON CABLE

MMCS

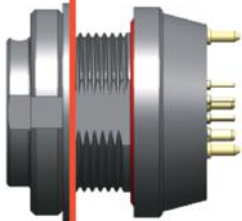
STRAIGHT BACKSHELL



PLUG TYPE 5



ITEMS MOUNTED ON PANEL



RECEPTACLE TYPE 7

PLUGS (TYPE 5) / MMCS

PART NUMBERS: **MMCS 5 X 12 FS A**

Description	Code
Series	MMC
Locking system	Break-away
Type of connector:	
Plug	5
Keways	K, N, W, X, Y, Z, T
Number of contacts	12
Contacts type:	
Solder cup	FS
Material:	
Stainless steel	A

PLUGS (TYPE 5) / MMCS D

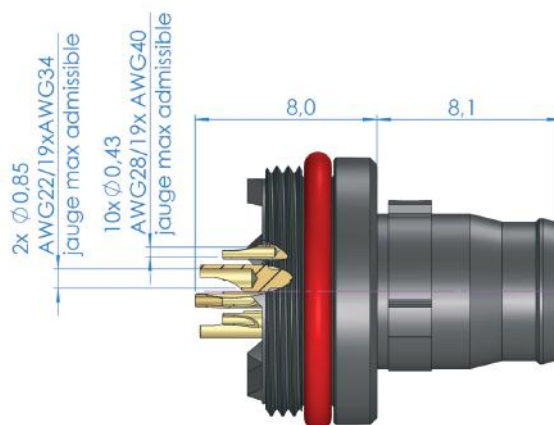
■ PLUGS WITH SOLDER CUP



Ex : MMCS D 5N12FSA



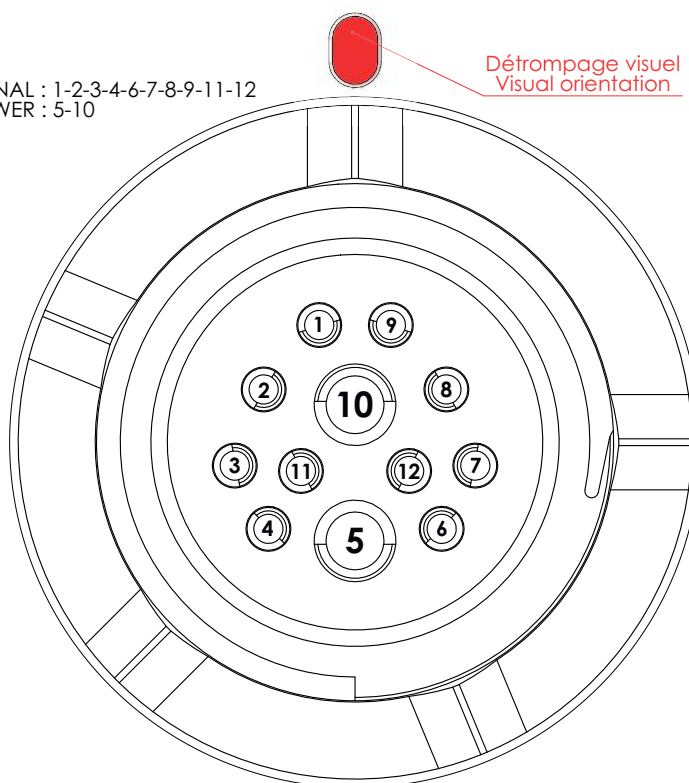
Part number	Number of contacts	ØA	L max
MMC 5 x 12 FS A	12	AWG 22 x 2 AWG28 x 10	16,1



SIGNAL : 1-2-3-4-6-7-8-9-11-12
POWER : 5-10

Détrompage visuel
Visual orientation

IMPLANTATION GENERAL USB3.2 GEN 2x1		IMPLANTATION/ TYPE C USB3.2 GEN 2x1	
1	D+	1	D+
2	GND RX	2	CC
3	RX-	3	RX-
4	RX+	4	RX+
5	GND	5	GND
6	TX+	6	TX+
7	TX-	7	TX-
8	GND TX	8	VConn
9	D-	9	D-
10	VBUS	10	VBUS
11	GND RX	11	GND RX
12	GND TX	12	GND TX



BACKSHELLS / MMCS

STRAIGHT BACKSHELL ON KNURLING

MMCS RA85-xx

Straight backshell on knurling MMCS RA85, requiring crimping of the ring. The backshell can be finished with heat-shrink tubing (not supplied) or overmolding. It can mate on all plugs, cable extensions and panel trough BERNIER MMCS line.

MATERIALS AND FINISH

Shell and tightening ring	Passivated and sand-blasted stainless steel
Toothed ring	Aluminum alloy nickel-plated
Weight	6 g max
Locking torque	6N.m

EXAMPLES OF PART NUMBERS



MMCS RA85-52



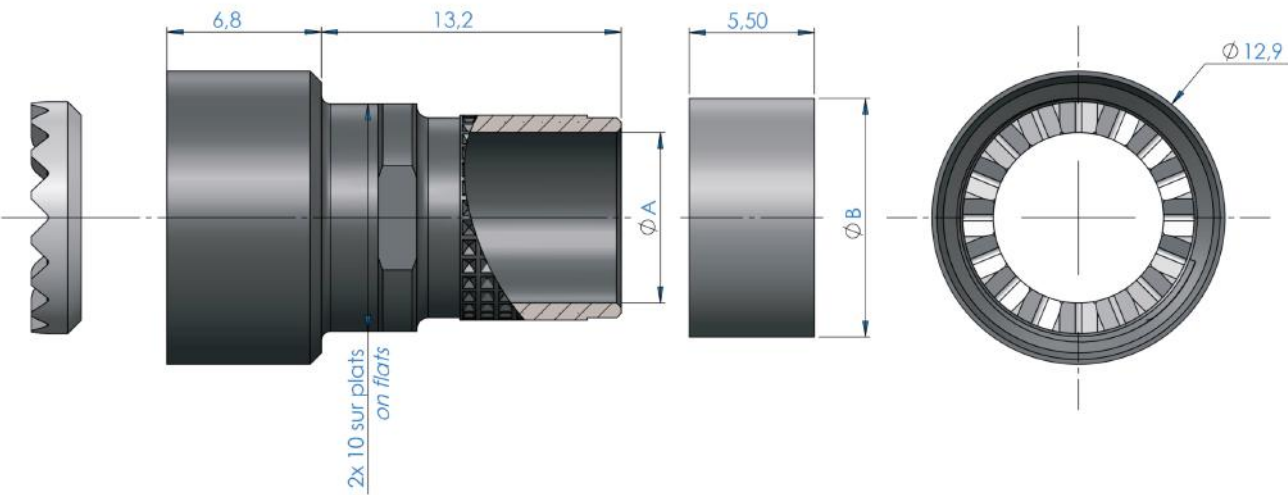
MMCS RA85-64



MMCS RA85-75

MMCS RA85-xx

Part numbers	ØA	ØB
MMCS RA85-52	5,2	8,2
MMCS RA85-64	6,4	9,4
MMCS RA85-75	7,5	10,5



RECEPTACLES (TYPE 7) / MMCS D

MMCS D

PART NUMBERS: **MMCS D L 7 X 12 P2 PM A**

Description	Code
Series	MMC
Locking system Break-away	L
Type of connector: Receptacle	7
Keways	K, N, W, X, Y, Z, T
Contact number	12
Type of contacts: For PCB	P2
Ground pin Type 7 only	PM PM3 (recommended)
Material :	A
Stainless steel	

RECEPTACLES WITH CONTACTS FOR PCB / REAR MOUNTING

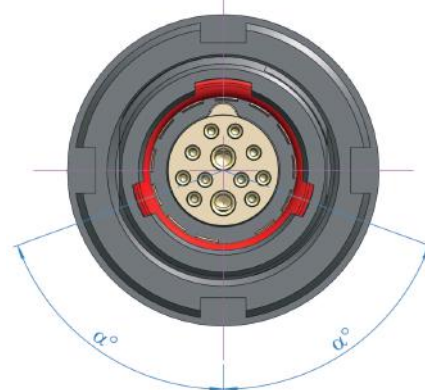
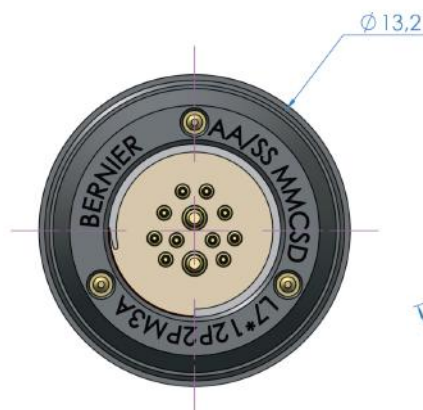
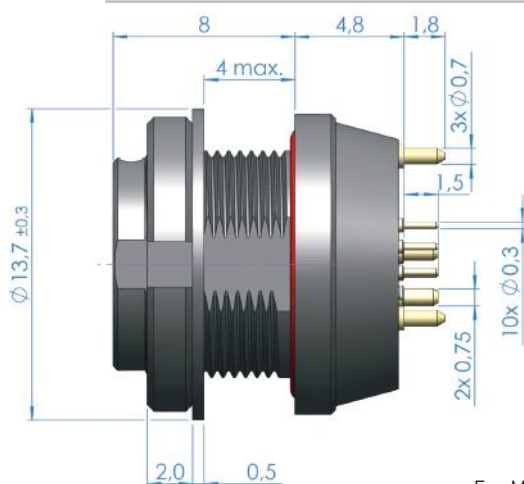
Receptacle for panel MMCS D L7*12P*PM to be brazed on PCB. It is designed with system of quick release and mates on all male connectors of the BERNIER MMCS D line for version K, N, W, X, Y, Z, 12 contacts. Releasable system and ground continuity by spring. The Oring, washer and nut are to be ordered unassembled.

Receptacle (type 7) MMCS D L 7 x 12 P2 xx A

Part numbers	Keways	Angle α	Color coding	Number of contacts
MMCD L 7 K 12 P2 xx A	K	70°	Orange	12
MMCD L 7 N 12 P2 xx A	N	62°	Red	12
MMCD L 7 W 12 P2 xx A	W	54°	White	12
MMCD L 7 X 12 P2 xx A	X	46°	Green	12
MMCD L 7 Y 12 P2 xx A	Y	38°	Yellow	12
MMCD L 7 Z 12 P2 xx A	Z	30°	Blue	12



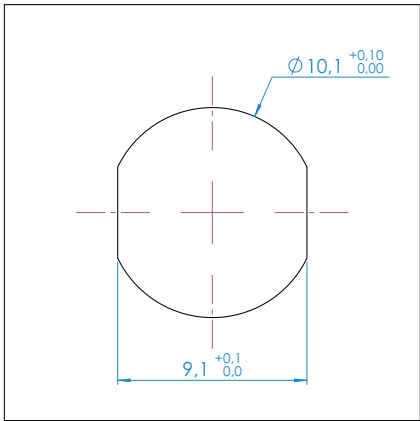
The Oring, washer and nut are delivered unassembled.



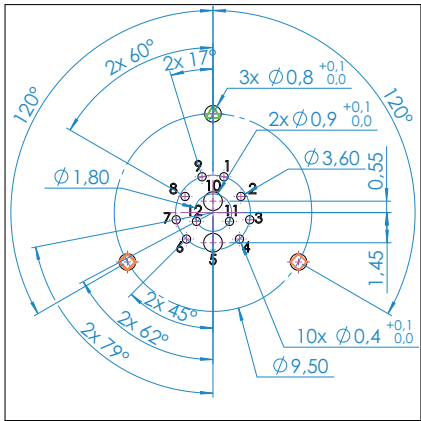
Ex : MMCS D L7N12P2PM3A

PANEL CUT & PCB HOLING / MMCS

■ PANEL CUT AND PCB HOLING FOR RECEPTACLES TYPES 7



PANEL CUT



WELDING SIDE

BOARD OPTION GROUND		
NUMBER GROUND PIN	1	3
	X	X
		X

IMPLANTATION GENERAL USB3.2 GEN 2x1		IMPLANTATION/ TYPE C USB3.2 GEN 2x1	
1	D+	1	D+
2	GND RX	2	CC
3	RX-	3	RX-
4	RX+	4	RX+
5	GND	5	GND
6	TX+	6	TX+
7	TX-	7	TX-
8	GND TX	8	VConn
9	D-	9	D-
10	VBUS	10	VBUS
11	GND RX	11	GND RX
12	GND TX	12	GND TX

TOOLS

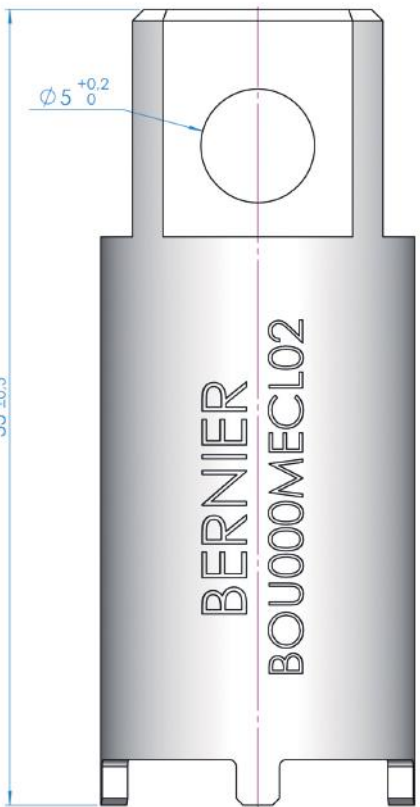
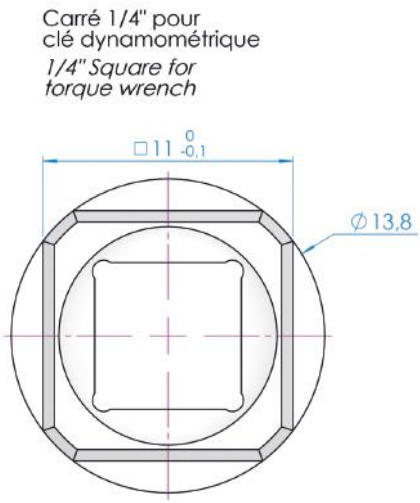
■ TIGHTENING KEY FOR NUT FOR MMCS RECEPTACLE TYPE 7

Tightening key for CMASD line types 7 notched nut.

Part number: **BOU000MECL02**

Material: Nickel plated hardened steel

Tightening torque: 9 N.m max



MMCMD

MINIATURE
BREAK-AWAY
CONNECTOR
COMPACT
LOW PROFILE
20 CONTACTS

**High-speed data
transmission** in a robust,
ergonomic medium-sized
dimensions !



MMCMD Miniature Connector with Medium Dimension and 20 contacts.

BREAK-AWAY | COMPACT | LOW PROFILE | STAINLESS STEEL | ROBUST | WATERTIGHT | EMI RFI PROTECTION



BERNIER

TECHNICAL DATA / MMCMD

MATERIALS AND FINISH

Body	Sandblasted stainless steel
Contacts & ground pin	Copper alloy with gold over nickel plating
Insulator	Thermoplastique

CLIMATIC AND MECHANICAL CHARACTERISTICS

Temperature range	-55°C +125°C.
Watertightness	IP68 20m during 2h
Salt spray	96h
Mechanical endurance	5 000 operations

ELECTRICAL SPECIFICATIONS

Working voltage	28 V _{max}
Rating current signal contact	1 A
Rating current power contact	5 A
Contact resistance	≤20 mΩ
Insulation	> 100 MΩ à 100VDC
Dielectric rigidity	500 Veff at 50 Hz.

Solderability according J-STD-002 test A1



WEIGHTS / MMCMD

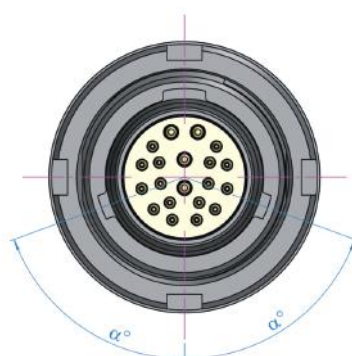
Connectors	Weight
Plugs MMCMD	5 g
Receptacles MMCMD	8 g
Panel plugs MMCMD	12 g

Backshells	Weight
Straight backshell on knurling	6 g

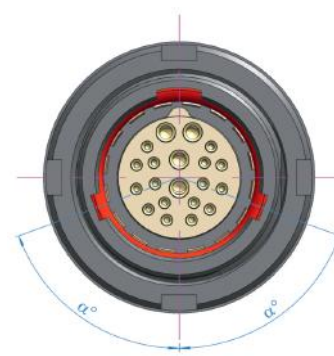
KEYWAYS

Keyway	Angle A	Color
K	70°	Orange
N	62°	Red
W	54°	White
X	46°	Green
Y	38°	Yellow
Z	30°	Blue

Plugs



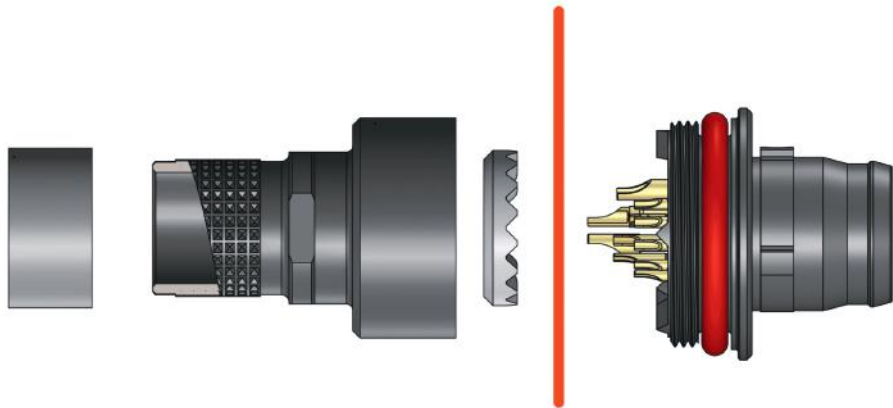
Receptacles



ITEMS MOUNTED ON CABLE

STRAIGHT BACKSHELL ON KNURLING

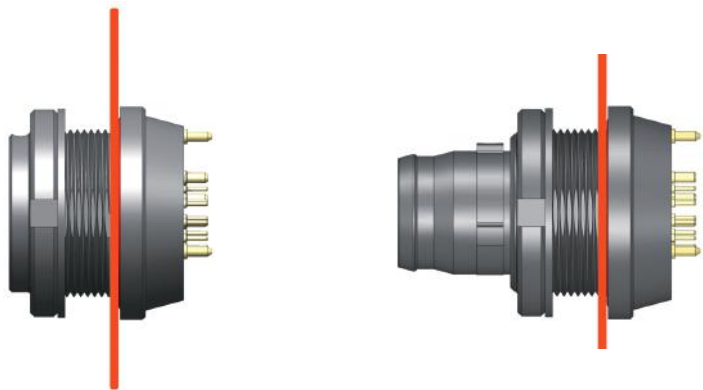
PLUG TYPE 5



ITEMS MOUNTED ON PANEL

RECEPTACLE TYPE 7

PANEL PLUG TYPE 4



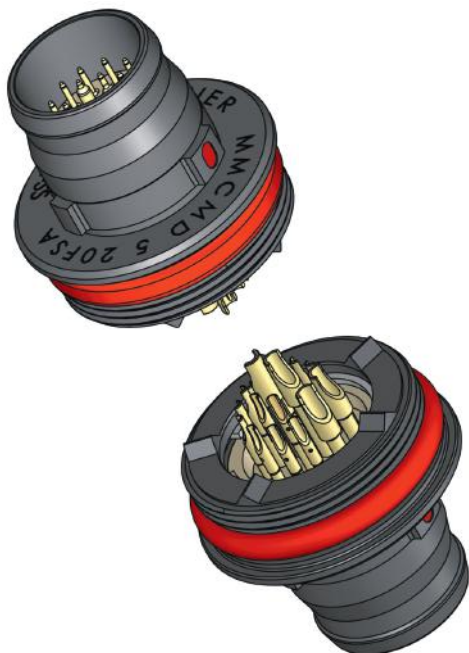
PLUGS (TYPE 5) / MMCMD

PART NUMBERS: MMCMD 5 X 20 FS A

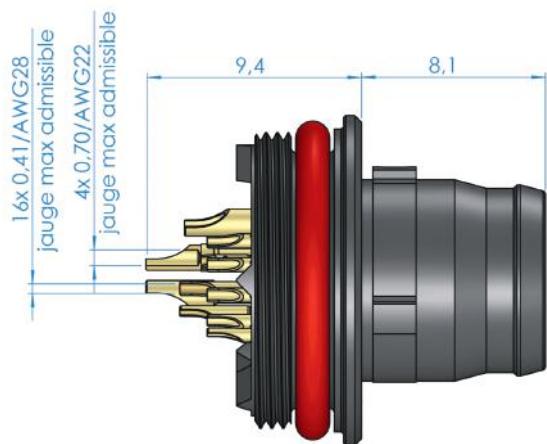
Description	Code
Series	MMC
Locking system	Break-away
Type of connector:	
Plug	5
Keyways	K, N, W, X, Y, Z, T
Number of contacts	20
Contacts type:	
Solder cup	FS
Material:	
Stainless steel	A

PLUGS (TYPE 5) / MMCMD

■ PLUGS WITH SOLDER CUP



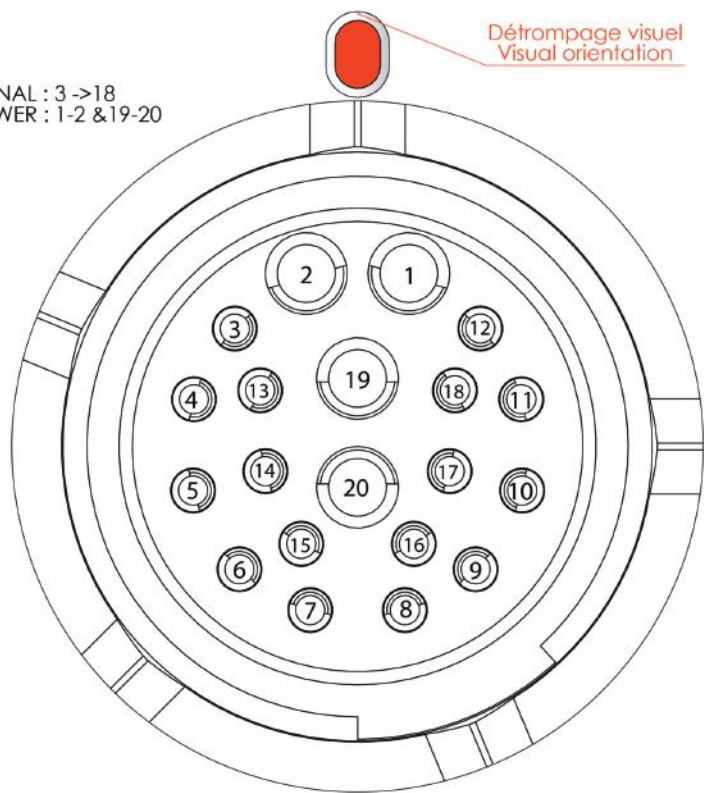
Ex : MMCS D 5N20FSA



Part number	Number of contacts	ØA	L max
MMC 5 x 20 FS A	20	AWG 22 x 4 AWG28 x 16	17,5

IMPLANTATION USB3.2 GEN 2x2	
1	POWER
2	POWER
3	RX1-
4	RX1+
5	D+
6	RX2-
7	RX2+
8	TX2+
9	TX2-
10	V CONN
11	TX1-
12	TX1+
13	GND RX1
14	D-
15	GND RX2
16	GND TX2
17	CC
18	GND TX1
19	VBUS
20	GND

SIGNAL : 3 ->18
POWER : 1-2 &19-20



BACKSHELLS / MMCMD

STRAIGHT BACKSHELL ON KNURLING

MMCMD RA87-xx

Straight backshell on knurling MMCMD RA87-XX, requiring crimping of the metal ring and heatshrink tubing or overmolding (not supplied). It can mate on all plugs, cable extensions and panel trough BERNIER MMCMD line.

MATERIALS AND FINISH

Shell and tightening ring	Stainless steel
Toothed ring	Aluminum alloy nickel-plated
Weight	7 g max
Locking torque	6N.m

EXAMPLES OF PART NUMBERS



MMCMD RA87-52



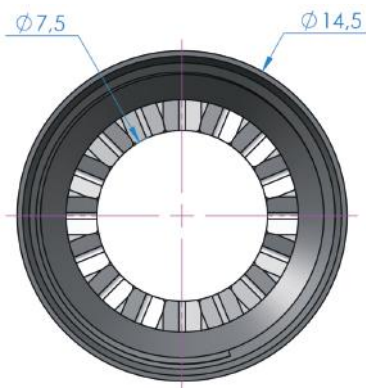
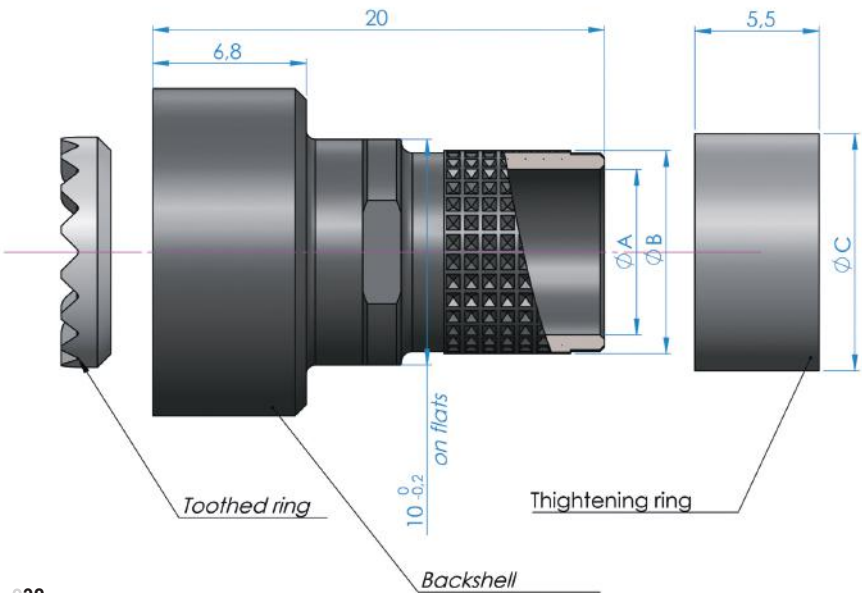
MMCMD RA87-64



MMCMD RA87-75

MMCMD RA87-xx

Part numbers	ØA	ØB	ØC
MMCMD RA87-52	5,2	6,7	8,2
MMCMD RA87-64	6,4	7,9	9,4
MMCMD RA87-75	7,5	9,0	10,5



RECEPTACLES (TYPE 7) / MMCMD

PART NUMBERS: **MMCMD L 7 X 20 P2 PM A**

Description	Code
Series	MMC
Locking system Break-away	L
Type de connector : Receptacle	7
Keyways	K, N, W, X, Y, Z, T
Number of contacts	20
Type of contacts : For PCB	P2
Ground pin Type 7 only	PM PM3 (recommended)
Material: Stainless steel	A

RECEPTACLES WITH CONTACTS FOR PCB / REAR MOUNTING

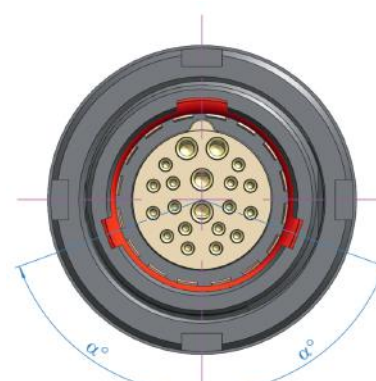
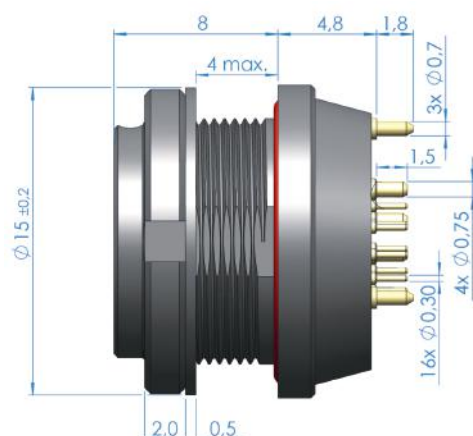
Receptacle for panel MMCMD L7*20P*PM to be brazed on PCB. It is designed with break-away system and mates on all male connectors of the BERNIER MMCSD line for version K, N, W, X, Y, Z, 12 contacts. Releasable system and ground continuity by spring. The Oring, washer and nut are to be ordered unassembled.

Receptacle (type 7) MMCMD L 7 x 20 P2 xx A

Part numbers	Keyways	Angle α	Color coding	Number of contacts
MMCMD L 7 K 20 P2 xx A	K	70°	Orange	20
MMCMD L 7 N 20 P2 xx A	N	62°	Red	20
MMCMD L 7 W 20 P2 xx A	W	54°	White	20
MMCMD L 7 X 20 P2 xx A	X	46°	Green	20
MMCMD L 7 Y 20 P2 xx A	Y	38°	White	20
MMCMD L 7 Z 20 P2 xx A	Z	30°	Blue	20



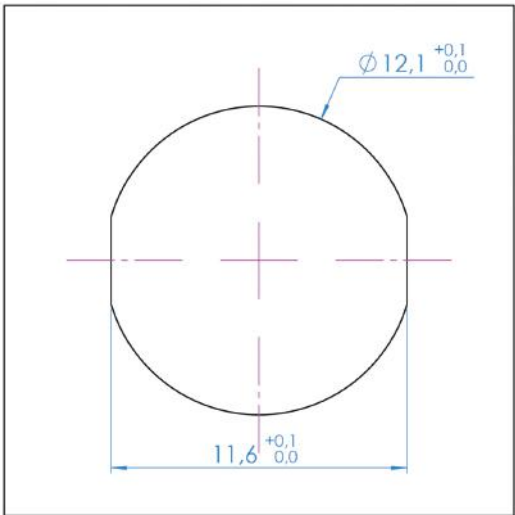
The Oring, washer and nut are delivered unassembled.



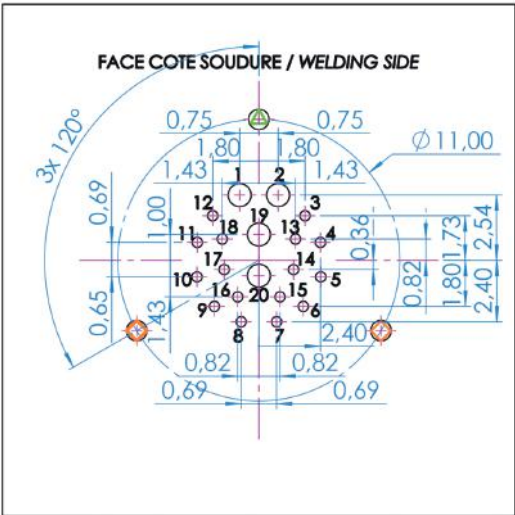
Ex : MMCMD L7N20P2PM3A

PANEL CUT AND PCB HOLING / MMCMD

PANEL CUT AND PCB HOLING FOR RECEPTACLES TYPES 7



PANEL CUT



WELDING SIDE

BOARD OPTION GROUND		
NUMBER GROUND PIN	1	3
	X	X
		X

IMPLANTATION USB3.2 GEN 2x2	
1	POWER
2	POWER
3	RX1-
4	RX1+
5	D+
6	RX2-
7	RX2+
8	TX2+
9	TX2-
10	V CONN
11	TX1-
12	TX1+
13	GND RX1
14	D-
15	GND RX2
16	GND TX2
17	CC
18	GND TX1
19	VBUS
20	GND

PANEL PLUG (TYPE 4) / MMCMD

PART NUMBERS: **MMCMD 4 X 20 P2 PM A**

Description	Code
Series	MMC
Locking system Break-away	4
Type of connector : (types 4) Panel plug	
Keyways	K, N, W, X, Y, Z, T
Number of contacts	20
Type of contacts : For PCB	P2
Ground pin Type 7 only	PM PM3 (recommended)
Material: Stainless steel	A

MMCMD

■ PANEL PLUG WITH CONTACTS FOR PCB / REAR MOUNTING

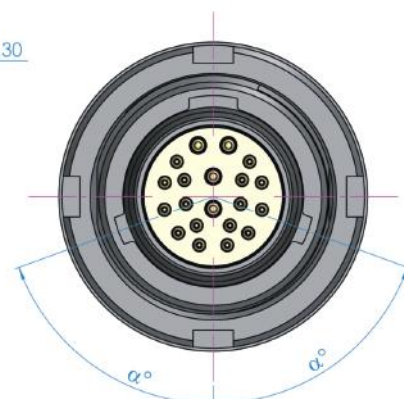
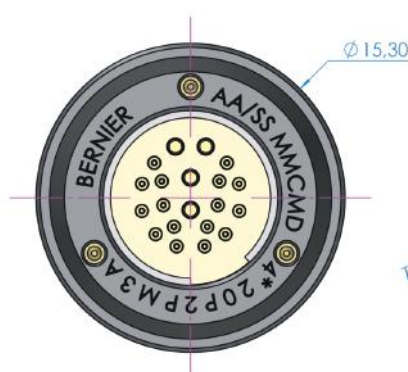
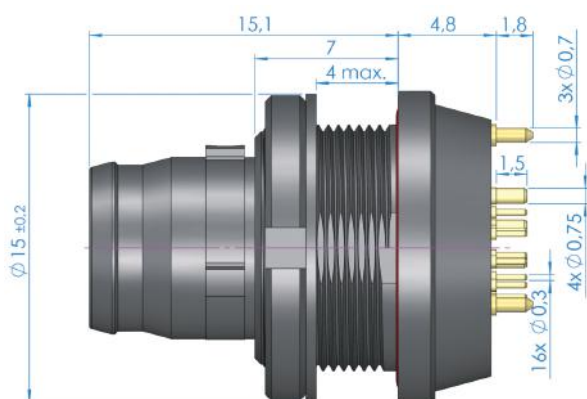
Plug receptacle for panel MMCMD 4*20P*PM to be brazed on PCB. It is designed with break-away system and mates on all female connectors of the BERNIER MMCMD line for version K, N, W, X, Y, Z, 20 contacts. Releasable system and ground continuity by spring. The Oring, washer and nut are to be ordered unassembled.

Panel plug (type 4) MMCMD 4 x 20 P2 xx A

Part numbers	Keyways	Angle α	Color coding	Number of contacts
MMCMD 4 K 20 P2 xx A	K	70°	Orange	20
MMCMD 4 N 20 P2 xx A	N	62°	Red	20
MMCMD 4 W 20 P2 xx A	W	54°	White	20
MMCMD 4 X 20 P2 xx A	X	46°	Green	20
MMCMD 4 Y 20 P2 xx A	Y	38°	Yellow	20
MMCMD 4 Z 20 P2 xx A	Z	30°	Blue	20



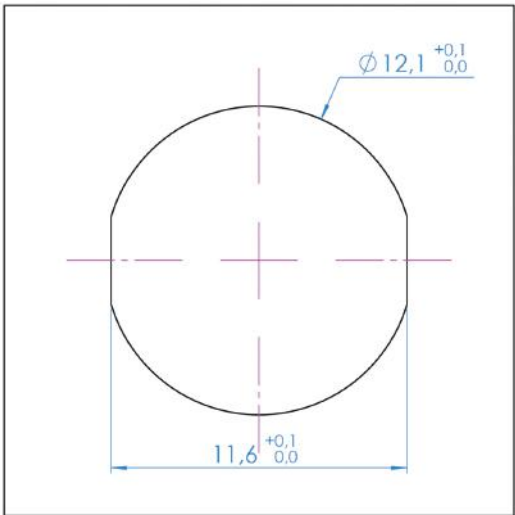
The Oring, washer and nut are delivered unassembled.



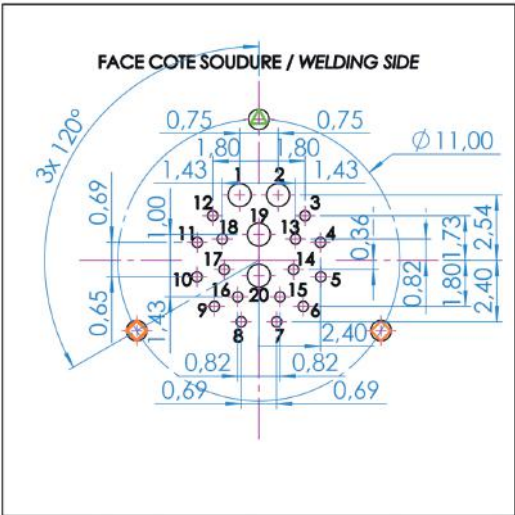
Ex : MMCMD 4N20P2PM3A

PANEL CUT AND PCB HOLING / MMCMD

PANEL CUT AND PCB HOLING FOR PANEL PLUG TYPES 4.



PANEL CUT



WELDING SIDE

BOARD OPTION GROUND		
NOMBRE DE PICOT DE MASSE NUMBER GROUND PIN	1	3
	X	X
		X

IMPLANTATION USB3.2 GEN 2x2	
1	POWER
2	POWER
3	RX1-
4	RX1+
5	D+
6	RX2-
7	RX2+
8	TX2+
9	TX2-
10	V CONN
11	TX1-
12	TX1+
13	GND RX1
14	D-
15	GND RX2
16	GND TX2
17	CC
18	GND TX1
19	VBUS
20	GND

TOOLS

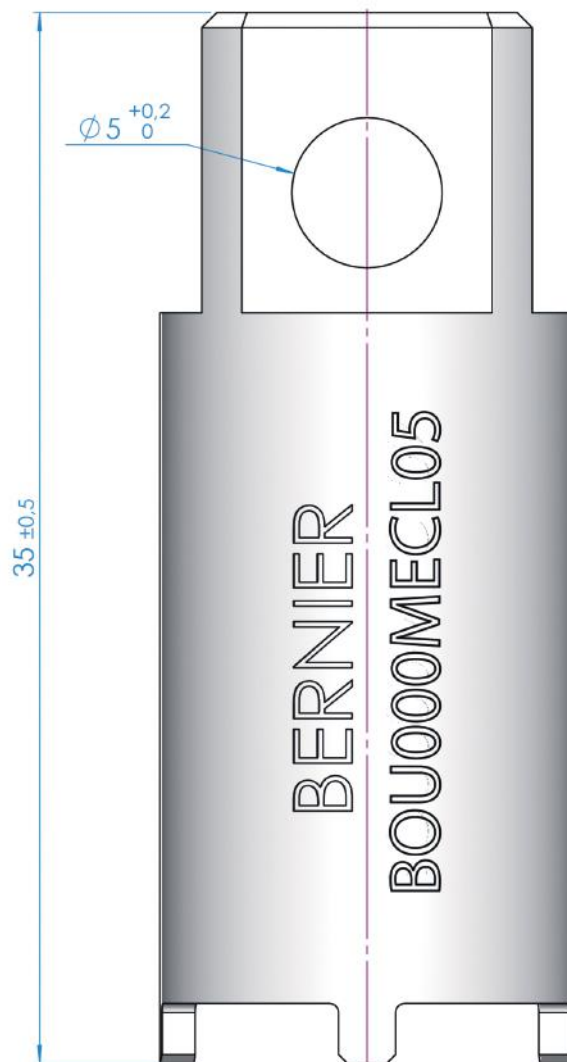
■ TIGHTENING TOOLS FOR MMCMD PANEL PLUG TYPE 4 NUT

Part number: **BOU000MECL05**

Material : Nickel plated hardened steel

Tightening torque : 9 N.m max

MMCMD





BERNIER

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