

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

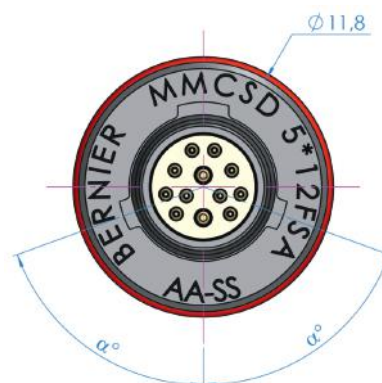
Type of boxe	Weights (Max)
Plugs MMCS D	5 g
Receptacle MMCS D	6 g
Backshell with knurling	6 g



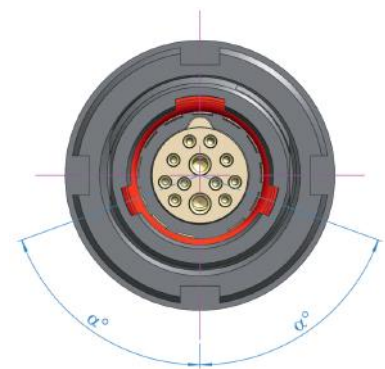
KEYWAYS

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

Plugs



Receptacles

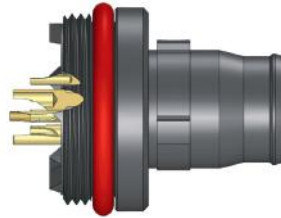


ITEMS MOUNTED ON CABLE

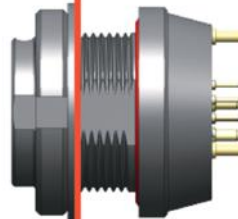
■ STRAIGHT BACKSHELL



■ PLUG TYPE 5



ITEMS MOUNTED ON PANEL



■ RECEPTACLE TYPE 7

PLUGS (TYPE 5) / MMCS D

PART NUMBERS: **MMCS D 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

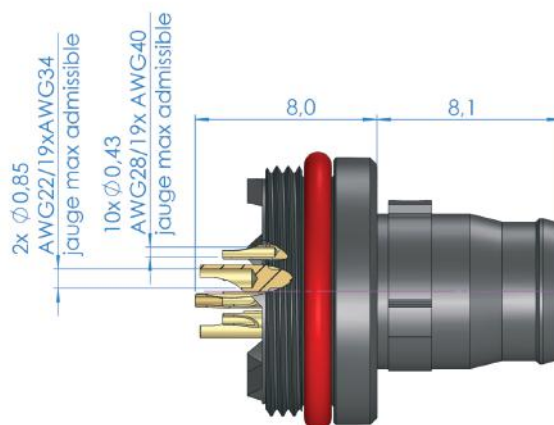
■ PLUGS WITH SOLDER CUP



Ex : MMCS D 5N12FSA



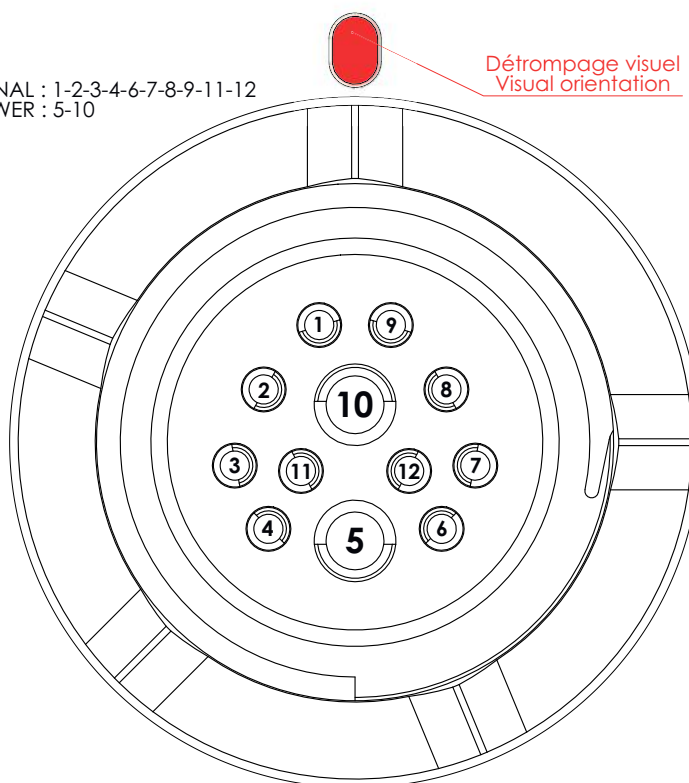
Part number	Number of contacts	ØA	L max
MMC 5 x 12 FS A	12	AWG 22 x 2 AWG28 x 10	16,1



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



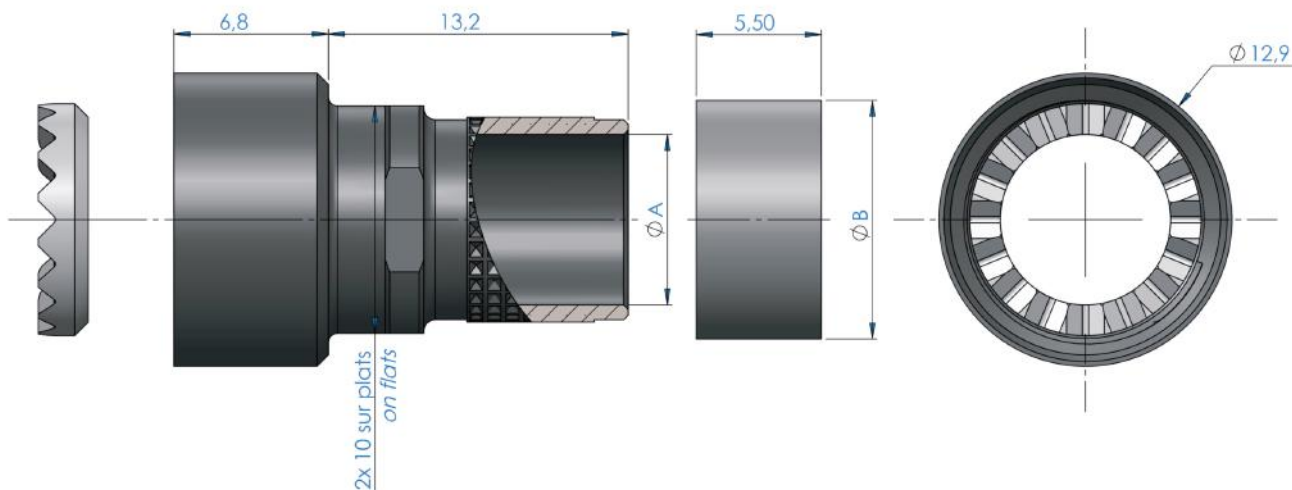
MMCS RA85-64



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

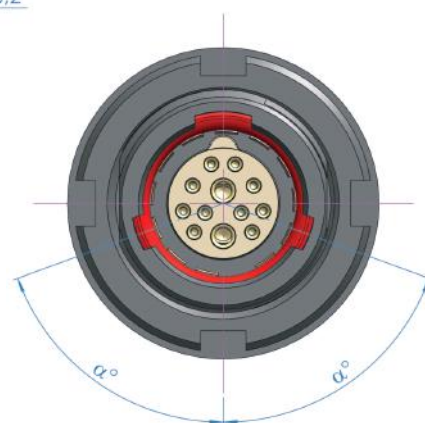
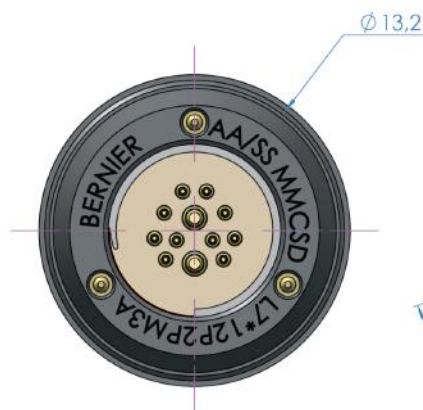
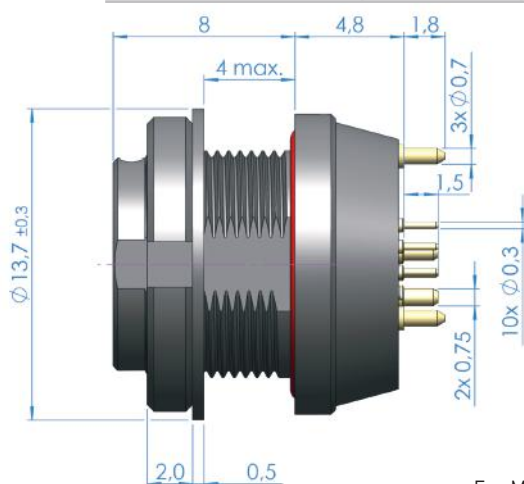
Receptacle for panel MMCS D L7*12P*PM to be brazed on PCB. It is designed with system of quick release and mates on all male connectors of the BERNIER MMCS D line for version K, N, W, X, Y, Z, 12 contacts. Releasable system and ground continuity by spring. The Oring, washer and nut are to be ordered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



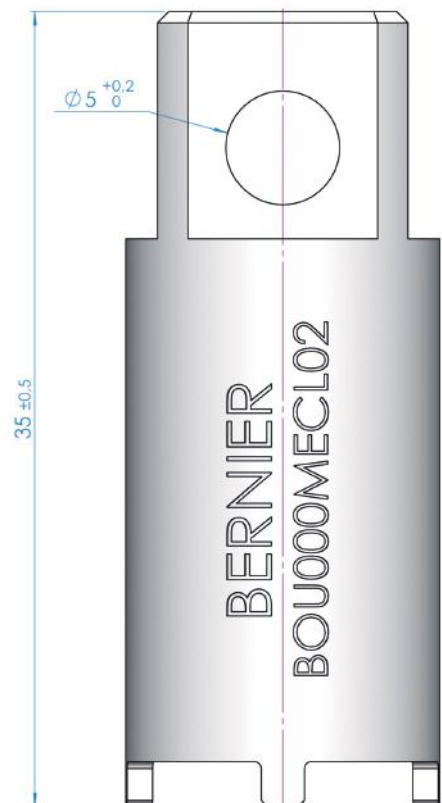
Ex : MMCS D L7N12P2PM3A

MMCS D

Technical drawing of a circular part with a flat top. The drawing shows a circle with a horizontal centerline and a vertical centerline. The top of the circle is flat. Dimension lines indicate a diameter of 10.1 with a tolerance of +0.10/0.00 and a width of 9.1 with a tolerance of +0.1/0.0.

[illegible]

BOARD OPTION GROUND		
NUMBER GROUND PIN	1	3
	X	X
		X





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