



PAM

PAM Serie

Bayonet Connector



... the good connection for
your tactical equipments !

Catalog 



◆ Description

The PAM serie is specially designed for the communication devices used on the field. These compact connectors are equipped with 07 and 10 contacts to allow the connection of accessories on Tactical or Radio equipments. The Spring contact technology of this line brings excellent contact resistance and an efficient contact self cleaning function.

PAM connectors are following the VG 96934 and VG 95351 norm and are enlisted in GAM T1.

PAM

◆ Applications



Radios



Accessories



Intercoms



Crypted Data

Bayonet

Ergonomics

Self cleaning contacts

Stainless steel

EMI RFI protection Watertightness



Optronic Devices



Weapon Systems



Ruggedized
Computers



Tactical
Equipments

◆ The Right Solution for your projects

PAM 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 bring a better ergonomics on your configuration.



◆ EMC reinforcements

Options are available in order to reinforce the EMC specifications.



Ground ring « 360° »

Some PAM 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°



Conductive O rings

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



Ground pin

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

◆ Climatic and mechanical characteristics

	PAM Version
Unlocking system	Bayonet
Operating temperature	-55°C to +85°C
Endurance	5 000 Operations
Sealing performance	IP68 (mated and unmated)
Corrosion resistance	Salt fog : 96 hours
Air Pressure	0.4 bar
Fluids resistance	Oils and hydrocarbons

◆ Electrical characteristics

	PAM 07 Version (07 contacts)	PAM 17 Version (10 contacts)	PAM 10 Version (10 contacts)
Working Voltage	42 V _{max} / 30 mV _{min}		100 V _{max} / 30 mV _{min}
Current rating per contact	500 mA _{max} / 30 µA _{min}		1,5 A _{max} / 30 µA _{min}
Gauge (AWG)	20	22	20
Contact type	Solder Buckets / For PCB		
Contact resistance	≤ 20 mOhms at 25°C		
Insulation resistance	≥ 5000 MOhms		
Crosstalk	≥ 80dB at 20 KHz		
Dielectric	500 VAC RMS, 50Hz		
EMI RFI Protection	Yes		

◆ Material and plating

	Material	Plating
Connector Shell	Stainless steel	Sandblasting or Black Chrome
Insulator	Thermosetting	-
Contacts	Copper alloy	Gold over Nickel
Ground ring	Beryllium Copper	-
Backshell shell	Aluminium	Black Chrome or Black Anodizing



◆ Connectors

Shell type	Size	Weight (Grams Max)	
Receptacle 'S'	PAM 07 /17	13 g	
	PAM 10	26 g	
Plug 'F'	PAM 07 /17	Straight backshell : 34 g	-
	PAM 10	Straight backshell : 52 g	Elbow backshell : 72 g
Extension 'P'	PAM 07 /17	34 g	
	PAM 10	46 g	
Dummy receptacle 'R'	PAM 07 /17	8 g	
	PAM 10	16 g	
Panel plug 'L'	PAM 07 /17	16 g	
	PAM 10	24 g	

Standard material

◆ Plastic cap

Type	Size	Weight (grams Max)
For plug	PAM 07 / PAM 17	3.5 g
	PAM 10	4 g
For receptacle / extension	PAM 07 / PAM 17	3 g
	PAM 10	3.5 g

◆ Metallic cap

Type	Size	Stainless steel 'G'	Aluminium alloy 'D'
		Weight (grams Max)	Weight (grams ±Max)
For plug 'A'	PAM 07 / PAM 17	14 g	4.5 g
	PAM 10	26.5 g	9 g
For receptacle / extension 'B'	PAM 07 / PAM 17	12.5 g	4 g
	PAM 10	18 g	6 g

◆ Shell sizes

PAM 07 (VG95351)
07 cts



PAM 17 (VG96934)
10 cts



PAM 10
10 cts

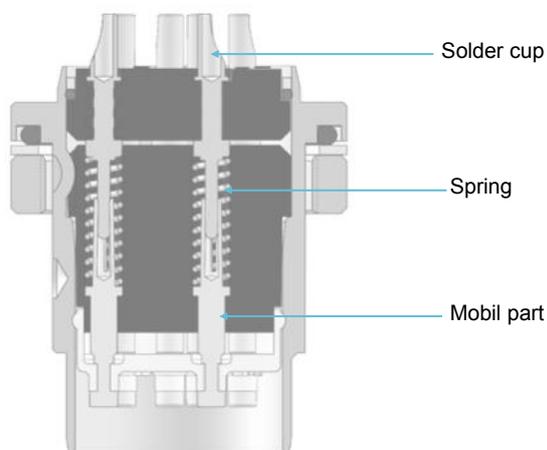


PAM

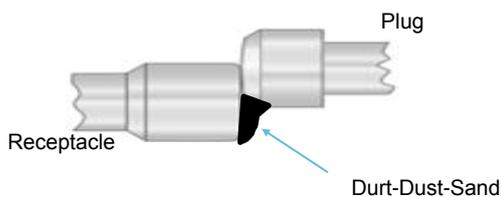
◆ Contact technologies

BERNIER Spring contact technology advantages

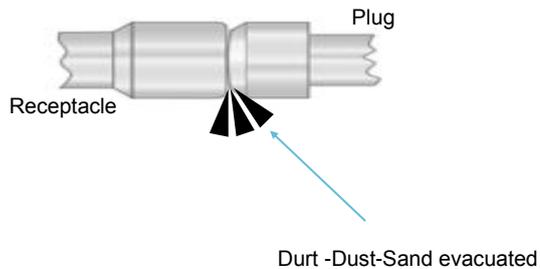
- Maximum contact reliability
- Contact quality duration
- Harsh environment resistance
- Self cleaning contact
- Good behavior in vibration and shock
- High frequencies signals endurance



Before locking



After locking



◆ Compatibility

	Extension 'P'	Dummy receptacle 'R'	Receptacle 'S'	Thermo-plastic cap for plug	Metallic cap for plug
Plug 'F'	●	●	●	●	●
Panel plug 'L'	●	-	-	●	●
Metallic and Thermoplastic cap	●	●	●	-	-



Attention : The mating connectors must have the same number of contacts and the same keyway.

Keyways



◆ Keyways

Type	A	B	C	Color
PAM 07				
Type N	150°	90°	120°	Red
Type W	150°	120°	90°	Yellow
Type X	115°	110°	135°	Green
Type Y	95°	100°	165°	Pink

Type	A	B	C	Color
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PAM 10

Type N	125°	135°	100°	Red
Type W	130°	110°	120°	White

PAM 17

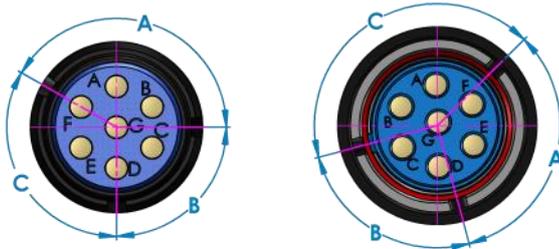
Type N	125°	95°	140°	White
Type W	160°	85°	115°	Blue
Type X	155°	100°	105°	Purple
Type Y	130°	110°	120°	Chrome
Type Z	135°	80°	145°	Red



Receptacle

Plug

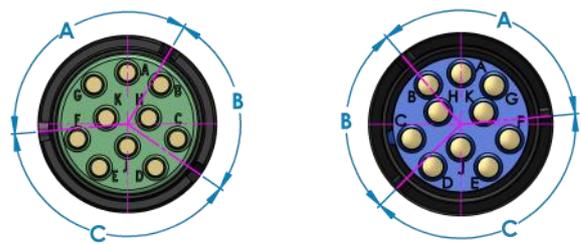
PAM 07 Front view



Receptacle—Extension

Plug

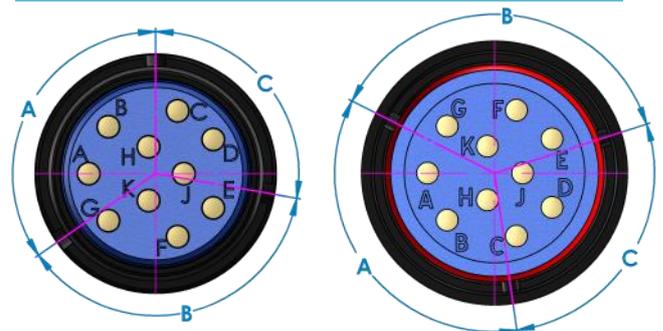
PAM 17 Front view



Receptacle—Extension

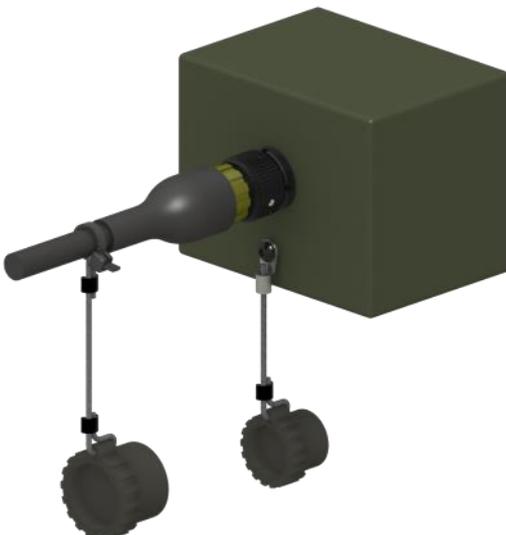
Plug

PAM 10 Front view



Receptacle—Extension

Plug



◆ **Items mounted on cable**

**Plug
Type F**



Elastomer plug cap



Bayonet metallic plug cap



**Extension
Type P**



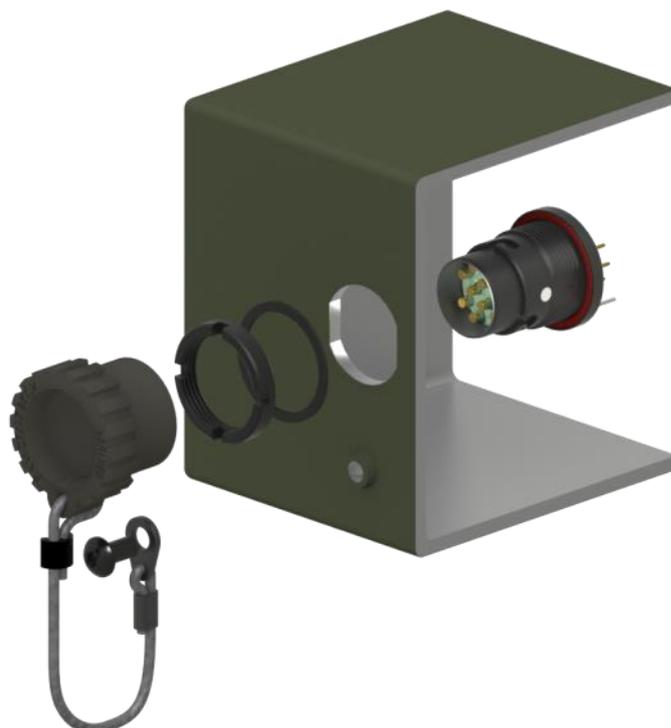
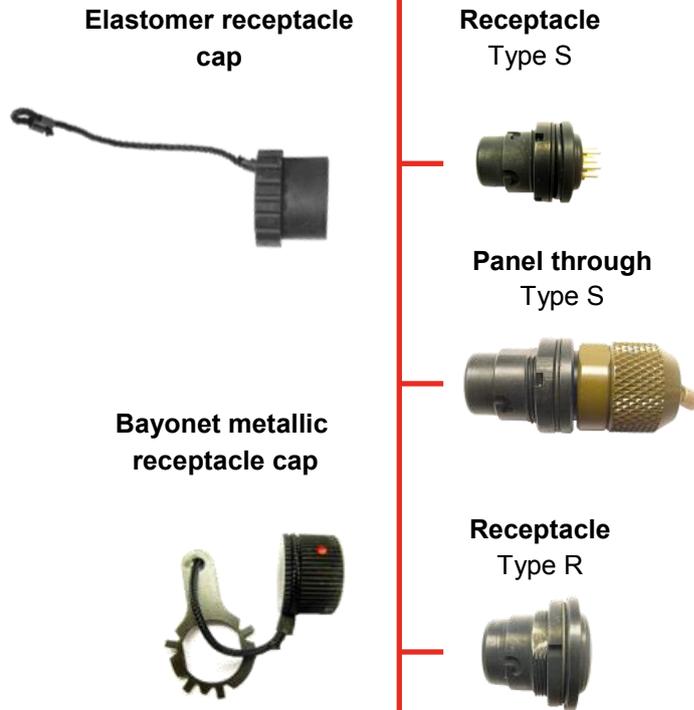
Elastomer extension cap



**Bayonet metallic
extension cap**



◆ Items mounted on panel



PAM

◆ Connectors

PAM

Description	Code	PAM	07	S	N	E	R	1	S	PM
Serie	PAM	↑								
Version with 7 contacts and shell Following norm VG95351	07		↑							
Connector type : Extension Plug Dummy receptacle Receptacle or panel through Panel plug	P F R S L			↑	↑	↑	↑			
Keyway	N, W, X, Y				↑					
Nut (connectos R,S,L): Notched nut Hexagonal nut 'Nothing mentionned' : connectors P and F	E H					↑				
Backshell type (connectors P,F,S) : Straight backshell with cable clamp and sleeve included. Knurling integrated for heat-shrink boot Backshell for cable shield continuity and heat-shrink boot.	M R B						↑			
Plating Black Navy stainless steel Sandblasted	1 2 3							↑		
Contact type (connectors S,L) : Solder cup For PCB soldering	S C								↑	
Cable diameter for backshell type 'M' (connectors P and F) : Size (5, 6 or 7mm)	.5, .6, .7									
Ground pin (connectors S,L)	PM									↑

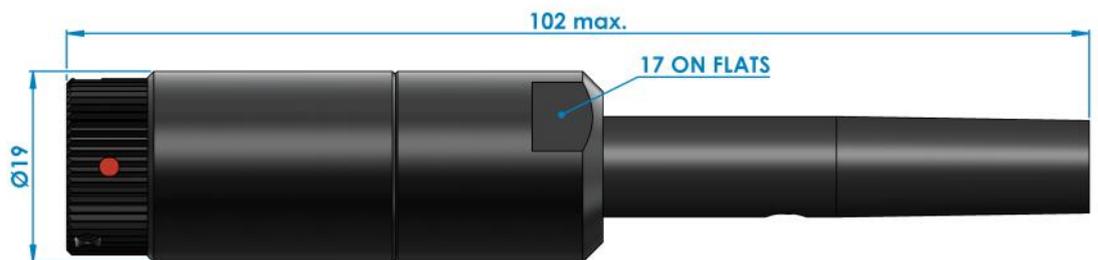
Notes : Please contact us to get more information on panel plug and panel through types.

◆ Type 'F' with straight backshell and sleeve



Key	Color
N	Red
W	Yellow
X	Green
Y	Pink

Ex: PAM 07 FNM1.7



◆ Type 'F' with backshell for heat-shrink boot and cable shield continuity



Key	Color
N	Red
W	Yellow
X	Green
Y	Pink

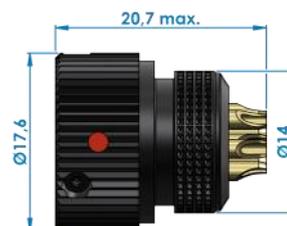


Ex: PAM 07 FNB1

◆ Type 'F' with knurling for heat-shrink boot



Key	Color
N	Red
W	Yellow
X	Green
Y	Pink



Ex: PAM 07 FNR1

◆ Type 'P' with straight backshell and sleeve



Key	Color
N	Red
W	Yellow
X	Green
Y	Pink

PAM

Ex: PAM 07 PNM1.7



The backshell of PAM 07 FNB1 can be also mounted on extension, part number : PAM 07 PNB1

◆ Type 'S' with solder cups



Key	Color
N	Red
W	Yellow
X	Green
Y	Pink

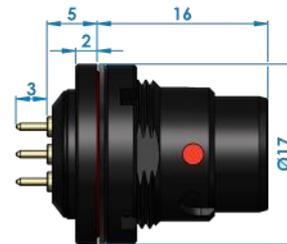


Ex: PAM 07 SNE1S

◆ Type 'S' with contact for PCB



Key	Color
N	Red
W	Yellow
X	Green
Y	Pink



Ex: PAM 07 SNE1C

◆ Type 'S' Dummy receptacle



Key	Color
N	Red
W	Yellow
X	Green
Y	Pink



Ex: PAM 07 RNE1

◆ Connectors

PAM

Description	Code	PAM	17	S	N	E	R	1	S	PM
Serie	PAM	↑								
Version with 10 contacts and shell following norm VG96934	17		↑							
Connector type : Extension Plug Dummy receptacle Receptacle and Panel through Panel plug	P F R S L			↑	↑	↑	↑	↑	↑	↑
Keyway	N, W, X, Y, Z				↑					
Nut (connectors R,S,L): Notched nut Hexagonal nut 'Nothing mentionned' : connectors P et F	E H					↑				
Backshell (connectors P,F,S) : Straight backshell with cable clamp and sleeve included. Backshell for cable shield continuity and heat-shrink boot. Long backshell for cable shield continuity and heat-shrink boot.	M R RA						↑			
Plating Black Navy Stainless steel Sandblasted	1 2 3							↑		
Contact type (connectors S,L) : Solder cup For PCB soldering	S C1, C2, C3								↑	
Cable diameter for backshell type 'M' (connectors P et F) : Size (4, 5, 6 or 7mm)	.4, .5, .6, .7									↑
Ground pin (connectors S,L)	PM									↑

Notes : Please contact us to get more information on panel plug and panel through types.

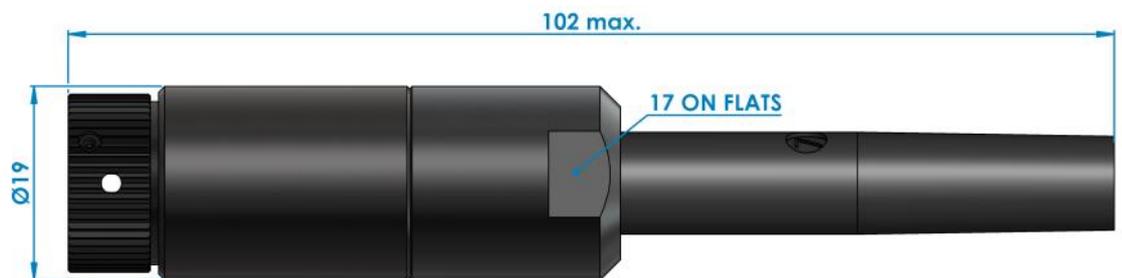
Plugs PAM 17

◆ Type 'F' with straight backshell and sleeve



Key	Color
N	White
W	Blue
X	Purple
Y	Chrome
Z	Red

Ex: PAM 17 FNM1.7



◆ Type 'F' with backshell for cable shield continuity and heat-shrink boot



Key	Color
N	White
W	Blue
X	Purple
Y	Chrome
Z	Red

Ex: PAM 17 FNR1



◆ Type 'F' with long backshell for cable shield continuity and heat-shrink boot



Key	Color
N	White
W	Blue
X	Purple
Y	Chrome
Z	Red

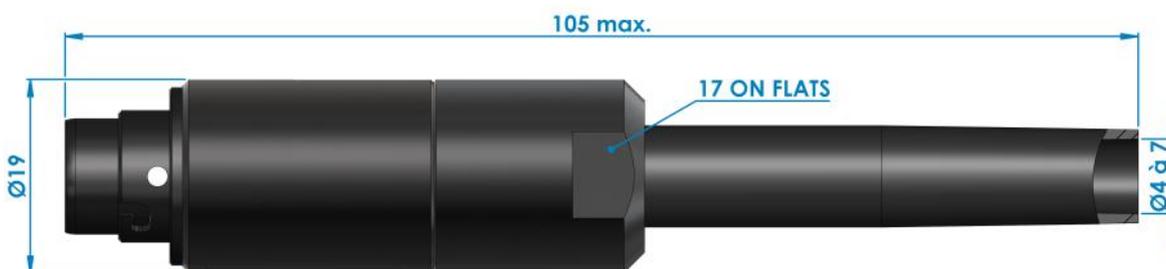
Ex: PAM 17 FNRA1



◆ Type 'P' with straight backshell and sleeve



Ex: PAM 17 PNM1.7



◆ Type 'P' with backshell for cable shield continuity and heat-shrink boot



Ex: PAM 07 PNR1



Receptacles PAM 17

◆ Type 'S' with solder cup



Key	Color
N	White
W	Blue
X	Purple
Y	Chrome
Z	Red



Ex: PAM 17 SNE1S

◆ Type 'S' with contacts for PCB



Length	L	A	ØB
C1	4.30	3.5	0.53
C2	8.95	3	0.5
C3	5	3.5	0.53



Ex: PAM 17 SNE1C1PM

◆ Type 'S' dummy receptacle



Key	Color
N	White
W	Blue
X	Purple
Y	Chrome
Z	Red



Ex: PAM 17 RNE1

◆ Connectors

PAM

Description	Code	PAM	10	S	N	E		1	C	PM
Serie	PAM	↑								
Version with 10 contacts	10		↑							
Connector type :										
Extension	P									
Plug	F									
Dummy receptacle	R									
Receptacle and panel through	S									
Panel plug	L									
Keyway	N, W									
Nut (connectors R,S,L):										
Notched nut	E									
Hexagonal nut	H									
Backshell (connectors P,F,S) :										
Straight backshell with cable clamp and sleeve included	M									
Knurling integrated for heat-shrink boot	R									
Backshell for cable shield continuity and heat-shrink boot.	B									
Backshell for cable shield continuity and heat-shrink boot.	RA03-10									
Plating										
Black	1									
Navy Stainless steel	2									
Sandblasted	3									
Contact type (connectors S,L) :										
Solder cup	S									
For PCB soldering	C, C2									
Cable diameter for backshell type 'M' (connectors P et F) :										
Size (5, 6 ou 7mm)	.5, .6, .7									
Ground pin (connectors S,L)	PM									

Notes : Please contact us to get more information on panel plug and panel through types.

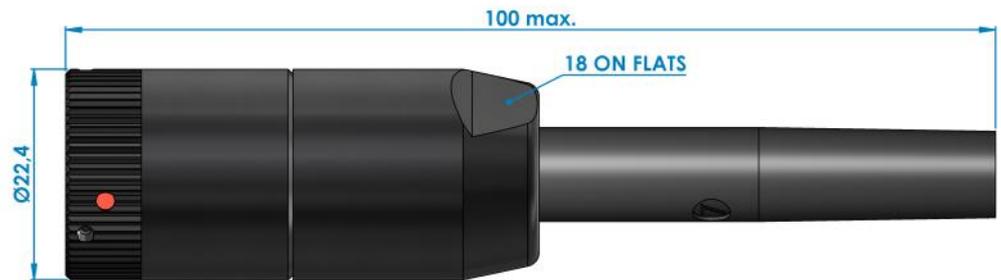
Plugs PAM 10

◆ Type 'F' with straight backshell and sleeve



Key	Color
N	Red
W	White

Ex: PAM 10 FNM1.7



PAM

◆ Type 'F' with backshell for cable shield continuity and heat-shrink boot



Key	Color
N	Red
W	White

Ex: PAM 10 FNB1



◆ Type 'F' with integrated knurling for heat-shrink boot



Key	Color
N	Red
W	White

Ex: PAM 10 FNR1



◆ Type 'F' with backshell for cable shield continuity and heat-shrink boot

PAM



Clé	Couleur
N	Rouge
W	Blanc



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

◆ Type 'P' with backshell and sleeve



Key	Color
N	Red
W	White

Ex: PAM 10 PNM1.7



The plug backshells can be mounted on the extension exemple : PAM 10 PNRA03-10

Receptacles PAM 10

◆ Type 'S' with solder cup



Key	Color
N	Red
W	white



Ex: PAM 10 SNE1S

◆ Type 'S' with contacts for PCB



Length	L	A	ØB
C	5.7	3	0.7
C2	9.6	4.4	0.7



Ex: PAM 10 SNE1C

◆ Type 'S' Dummy receptacle



Key	Color
N	Red
W	White

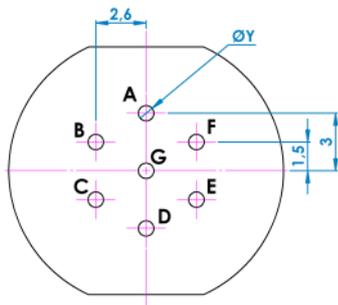


Ex: PAM 10 RNE1

◆ PCB holings, welding side, through pins

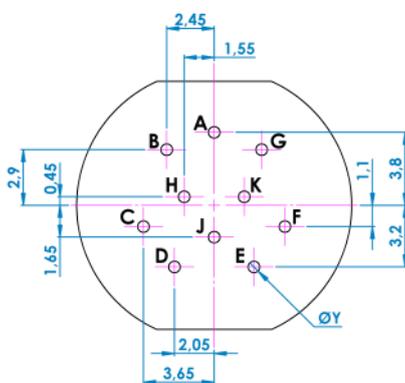
PAM

PAM
07



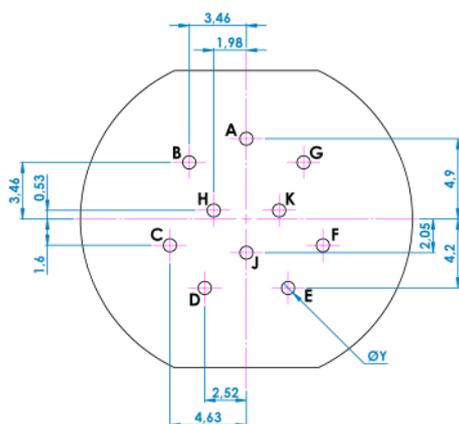
Contact	$\varnothing Y^{+0,1}$
C	0.8

PAM
17



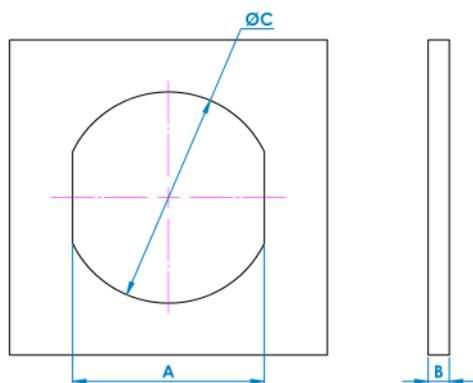
Contact	$\varnothing Y^{+0,1}$
C1	0.6
C2	
C3	

PAM
10



Contact	$\varnothing Y^{+0,1}$
C	0.8
C2	

◆ Panel cut



Version	A	B mini	B maxi	$\varnothing C$
PAM 07/17	12.9	1	3	14.2
PAM 10	18.1	1	3.5	20.1

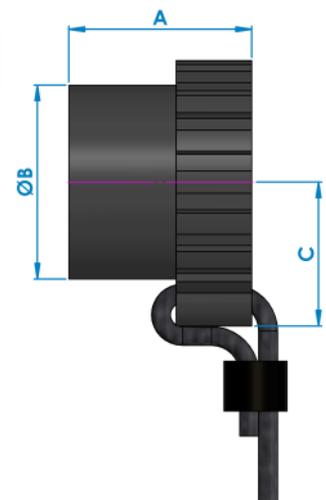
◆ Elastomer caps

Description	Code	PAM	07/17	B	K	C	V	MC
Serie	PAM	↑	↑	↑	↑	↑	↑	↑
Version	07/17, 10		↑					
Type : Plug and panel plug Receptacle, extension and panel through	A B			↑	↑	↑	↑	↑
Keyway : All	K				↑	↑	↑	↑
Material Elastomer	C					↑	↑	↑
Fixing : Flange for screw Tyrap Simple metallic ring	V T EM						↑	↑
Attachment: Nothing mentioned : Nylon cord Black covered stainless steel microcable	MC							↑

PAM



Type	Version	A	ØB	C
Plug 'A'	PAM 07 / PAM 17	15	20.4	14.1
	PAM 10	15	25	16.1
Receptacle 'B'	PAM 07 / PAM 17	14.5	15.5	11.5
	PAM 10	15	20.4	14.1



◆ Metallic caps

Description	Code	PAM	07	B	N	G	1	AF	MC
Serie	PAM	↑							
Version	07, 17, 10		↑						
Type : Plug and panel plug Receptacle, extension and panel through	A B			↑	↑	↑	↑	↑	↑
Keyway : Following mating connector	N, W, X, Y, Z				↑				
Material : Stainless steel Aluminium	G D					↑			
Plating : Black Sandblasted Brass	1 3 4						↑		
Fixing : Flange for screw Tyrap Simple metallic ring	V T EM							↑	
Attachment : Nothing mentioned : Nylon cord Black covered stainless steel microcable	MC								↑

PAM



Plug 'A'	A Max	ØB Max
PAM 07 / PAM 17	18.7	17.7
PAM 10	18.7	23



Receptacle 'B'	A Max	ØB Maxi	C
PAM 07 / PAM 17	12.5	18	18.8
PAM 10	12.5	23	19.8



◆ Fixing terminals

Some rings can receive several caps.

Plastic clamp



Ferule



Metallic ring



Eyelet for M3 screw



Crimped eyelet for M3 screw



90° crimped eyelet for M3 screw



Nylon cord is nearing obsolescence ! (Microcable is recommended for new projects)

◆ Special connectors

Plug 07 contacts with ground ring



PAM 07 FW1 MBLE

PAM

◆ Connector system with easy maintenance operation

Receptacle



PAM 07 SBASE

PAM 07 SMODUR1CR

Plug



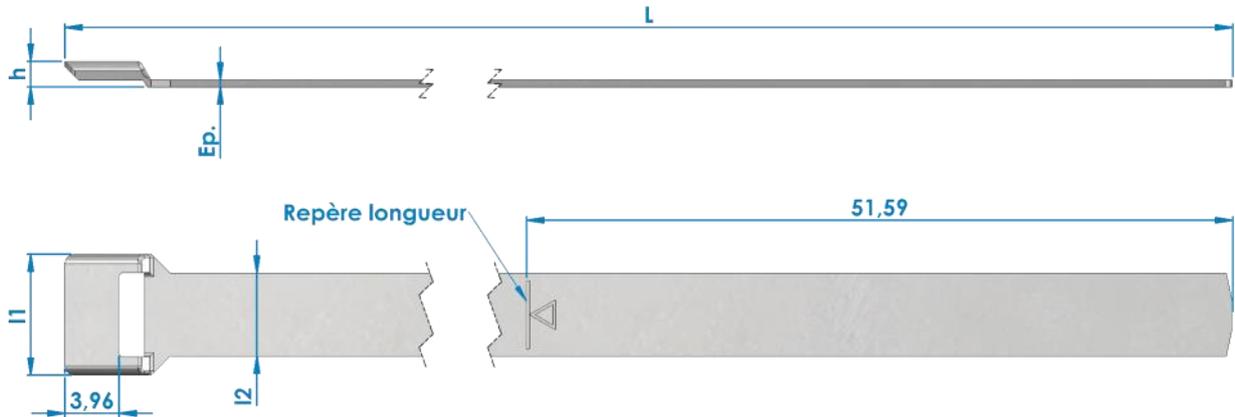
PAM 07 FBASES PAM 07 FMODU

Receptacle set composed of a base equipped with contacts to be soldered and a special spring contacts module which can be easily removed and replaced.

Plug set composed of a base equipped with contacts to be soldered and a flat contacts module which can be easily removed and replaced.

◆ Accessories

Metallic clamp for backshells	Part number	L (mm)	h (mm)	l1 (mm)	l2 (mm)	Ep. (mm)
Width 6.1mm	B593	362.1	1.88	8.9	6.1	0.51
Width 3.17mm	B452	206.4	1.35	5	3.1	0.4



◆ Tightening tools

Tools for receptacle mounting	Part numbers
Tightening key for receptacles PAM 07/17	B703
Tightening key for receptacles PAM 10	90006



97002



90006

◆ Tightening torque

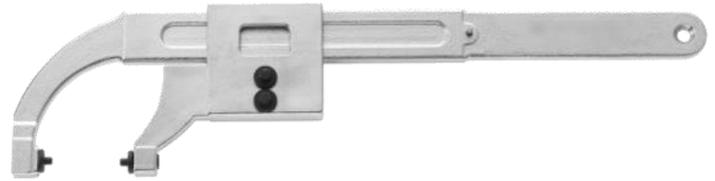
Material	Torque for nut 'S' and 'R' types receptacles		Torque for nut type 'L' panel plug		Torque for backshell type 'M'	
	PAM 07/17	PAM 10	PAM 17	PAM 10	PAM 07/17	PAM 10
Standard : Stainless steel	9 N.m	13N.m	6N.m	9N.m	6N.m	9N.m

◆ Assembly tools

Tools for backshell mounting	Part numbers
Tool to crimp the metallic clamp width 6.10mm	BOU000MESE02
Tool to crimp the metallic clamp width 3.17mm	BOU000MESE03
Tightening tool for CMA RA02-XX backshell	B704
Strap tool for RA1 backshells	B574



BOU000MESE02



B704



B574

CMA Serie
Push-Pull / Quick-Releaseable Connector

... For an optimum data transfer in harsh environments !

Catalogue

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CMASD Serie
Push-Pull Connector

... Toughness and reliable high speed data transfer in small dimensions !

Catalogue

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CMALD Serie
Push-Pull and Quick-Releaseable Connector

... Toughness and Ergonomics allied with a high contact density configuration !

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... for a robust and ergonomic high speed data connection !

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Bayonet Connector

... the good connection for your tactical equipments !

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55116 Serie
Bayonet Connector

... The Crypto and Audio communication standard !

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221 Serie
Quick-Releaseable Connector

... Easy use and communication reliability in operation !

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Power Connector

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360L6 Serie
Avionic Connector

... the best connection for On Board communications !

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B600 Serie
Quick-Releaseable Connector

... Secure connection for light vehicles !

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JCC Serie
Jack Connector

... For a basic but secured connection on communication equipments !

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... The toughest solution for audio applications !

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CCF700 Serie
Coaxial connector

... the suitable connector for cockpit equipments !

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MH Serie
Hexagonal Connector

... suitable for command signals !

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