

**SMC**



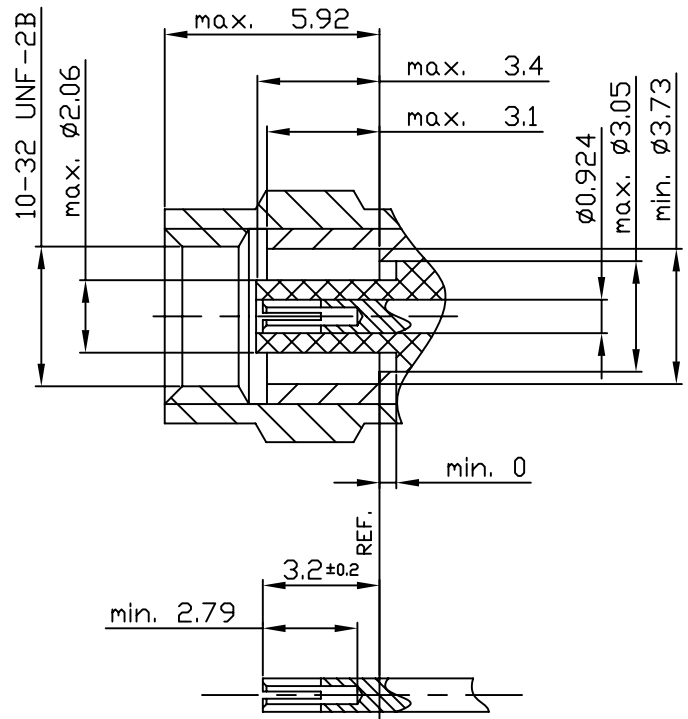
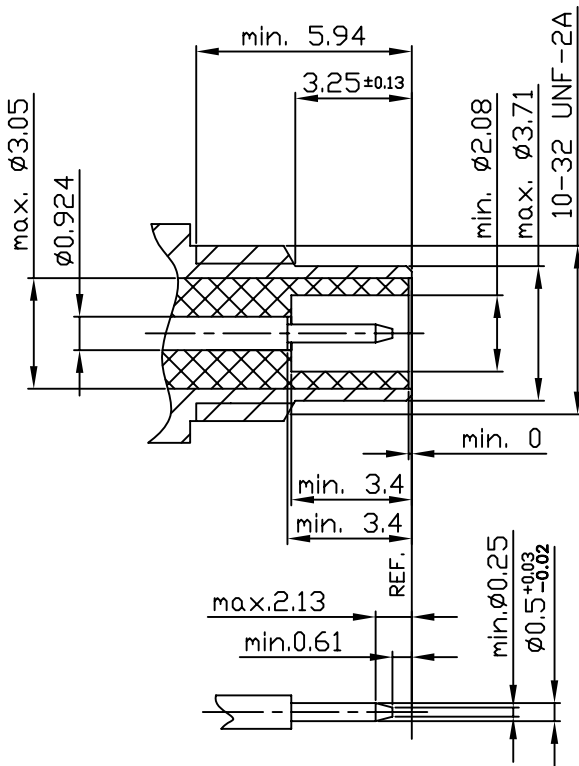
**α ALFA'R CONNECTORS**

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La SMC (SubMiniatura C) corresponden a conectores miniatura. Basados en el mismo diseño interno que la serie SMB. La única diferencia existente entre dichas series es el mecanismo de acoplamiento macho-hembra. Lo que proporcionará diferentes características mecánicas y eléctricas.

En la serie SMC, el acoplamiento macho-hembra se realiza mediante rosca. Se utiliza principalmente en conexiones para aplicaciones móviles, donde se requiere un sistema antivibraciones. Los conectores SMC pueden ser utilizados para aplicaciones de hasta 10 GHz.

Existen conectores para cables standard o especiales (flexibles, semirígidos, rígidos,...). Distintas versiones de forma: recto, acodado, montaje SMD.... Y en cuanto al montaje del cable, disponemos de versiones soldadas, prensa estopa, crimp,....

normativa: IEC 169-9

*SMC series (SubMiniature C) are miniature connectors. They are manufactured using the same internal design than SMB series. There is only a difference between both series: its male-female coupling mechanism. With this mechanism, different mechanical and electrical features are obtained.*

*In SMC series, the male-female coupling mechanism is made by means of a coupling nut system. It is used mainly in mobile systems, where a vibration-proof is required. SMC connectors can be employed up to 10 GHz.*

*There are connectors for standard and special cables (flexible, semirigid, rigid,...). Different shaped versions: straight, 90° angle, SMD mounting....About cable assembly, several types are available: soldered, clamp, crimp,....*

*standard: IEC 169-9*

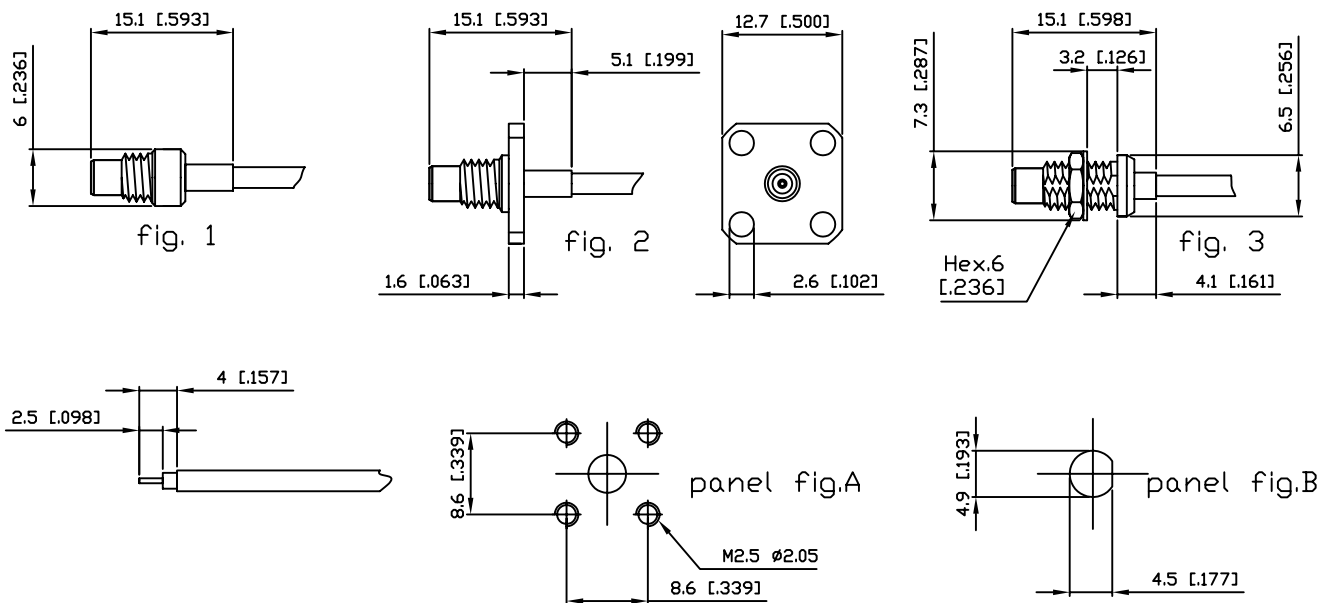
características eléctricas / <i>electrical characteristics</i>	
impedancia característica / <i>characteristic impedance</i>	50 Ω
margen de frecuencia utilizable (recomendado) / <i>useful frequency range (recommended)</i>	0...10 GHz
VSWR (depende de la frecuencia, del cable utilizado para el test y del tipo de conector / <i>depends on frequency, cable used for testing and connector type</i> )	Conector recto / <i>straight connector</i> : < 1.11 (1 GHz) < 1.25 (10 GHz) Conector acodado / <i>Right angle connector</i> : < 1.15 (1 GHz) < 1.35 (10 GHz)
pérdida de inserción / <i>insertion loss</i>	<0.1 dB (1 GHz)
RF-leakage	>55 dB
resistencia del aislante / <i>insulator resistance</i>	> 1 GΩ
resistencia del contacto interior / <i>inner contact resistance</i>	< 5 mΩ
resistencia del contacto exterior / <i>outer contact resistance</i>	< 2 mΩ
voltaje de trabajo / <i>working voltage</i>	200 Vrms
voltaje de pico / <i>peak voltage</i>	800 Vrms

características mecánicas / <i>mechanical characteristics</i>	
durabilidad / <i>durability</i>	> 500 ciclos conexión / > 500 matings
par aplicable al racord / <i>coupling nut torque</i>	0.7 Nm máx. 0.25 Nm recom.
material aislante / <i>insulator material</i>	PTFE
material contactos interiores / <i>inner contacts material</i>	macho / <i>male</i> : CuZn39Pb3 hembra / <i>female</i> : CuBe2
material cuerpos exteriores / <i>outer bodies material</i>	CuZn39Pb3
juntas estanqueidad / <i>gaskets</i>	silicona / <i>silicone</i>
acabados / <i>finish plating</i>	Au 1μ

características ambientales / <i>environmental characteristics</i>	
margen de temperatura / <i>temperature range</i>	-65°C...+165°C
categoría climática IEC / <i>IEC climatic category</i>	55/155/21
choque térmico / <i>thermal shock</i>	MIL-STD-202/107-B
resistencia a la humedad / <i>moisture resistance</i>	MIL-STD-202/106-B
resistencia a la corrosión / <i>corrosion resistance</i>	MIL-STD-202/101-B
resistencia a la vibración / <i>vibration resistance</i>	MIL-STD-202/204-B

**Conectores para cable semi-rígido**  
macho recto soldar

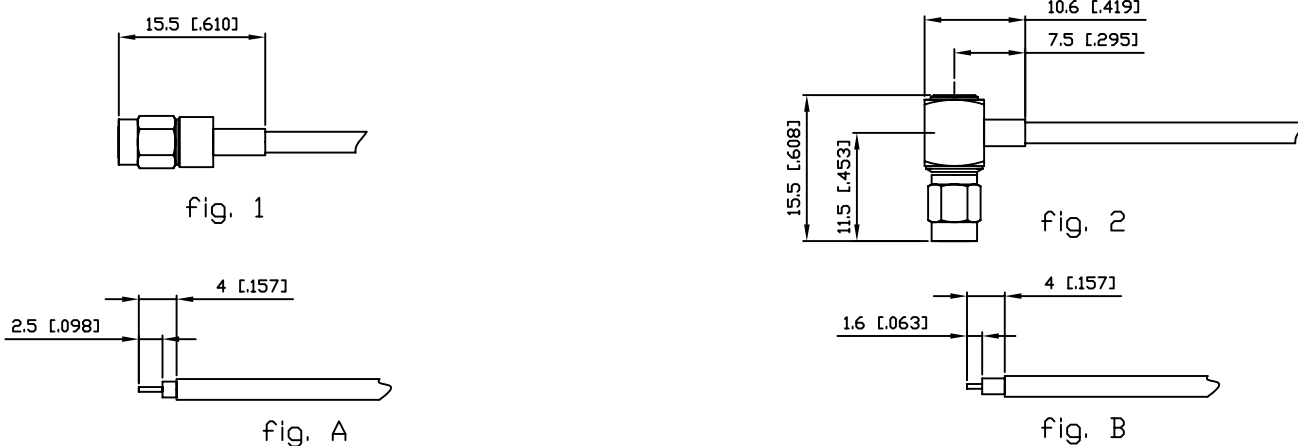
*Connectors for semi-rigid cable*  
*straight solder type plug*



CABLE CABLE	INSTRUC. INSTRUC.	ALFA'R CODE CÓDIGO ALFA'R	FIG. FIG.	
UT-86 (RG-405)	INS 3	A-SMC-10S22X-50	1	
		A-SMC-12S22X-50	2	A
		A-SMC-16S22X-50	3	B

**hembra soldar**

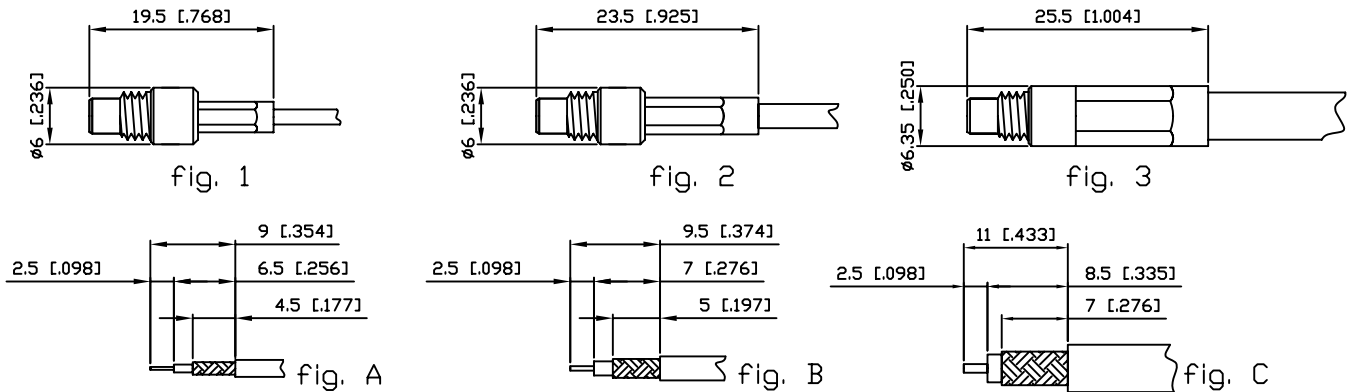
*solder type jack*



CABLE CABLE	INSTRUC. INSTRUC.	ALFA'R CODE CÓDIGO ALFA'R	FIG. FIG.	NOTE NOTA
UT-86 (RG-405)	INS 3	A-SMC-20S22X-50	1	A <i>straight type jack</i> hembra recta
	INS 6	A-SMC-21S22X-50	2	B <i>90° type jack</i> hembra 90°

**Conectores para cable flexible**  
macho recto crimp

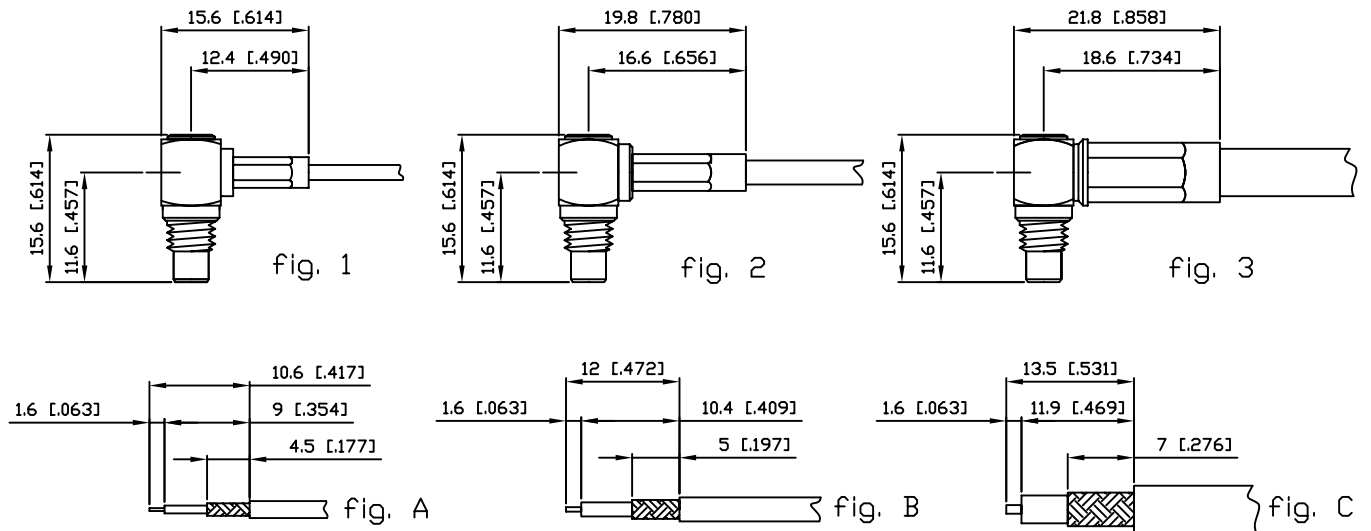
*Connectors for flexible cable*  
*straight crimp type plug*



CABLE CABLE	INSTRUC. INSTRUC.	ALFA'R CODE CÓDIGO ALFA'R	FIG. FIG.	CRIMPING TOOL HERRAMIENTA CRIMP
RG-178; RG-196	INS 9	A-SMC-10C18-50	1 A	A-EIN-C-1-C61
RG-316		A-SMC-10C25A-50	2 B	A-EIN-C-1-641
RG-174; RG-188		A-SMC-10C26-50		
RG-58; RG-141; RG-303		A-SMC-10C50-50	3 C	A-EIN-C-1-931

macho 90° crimp

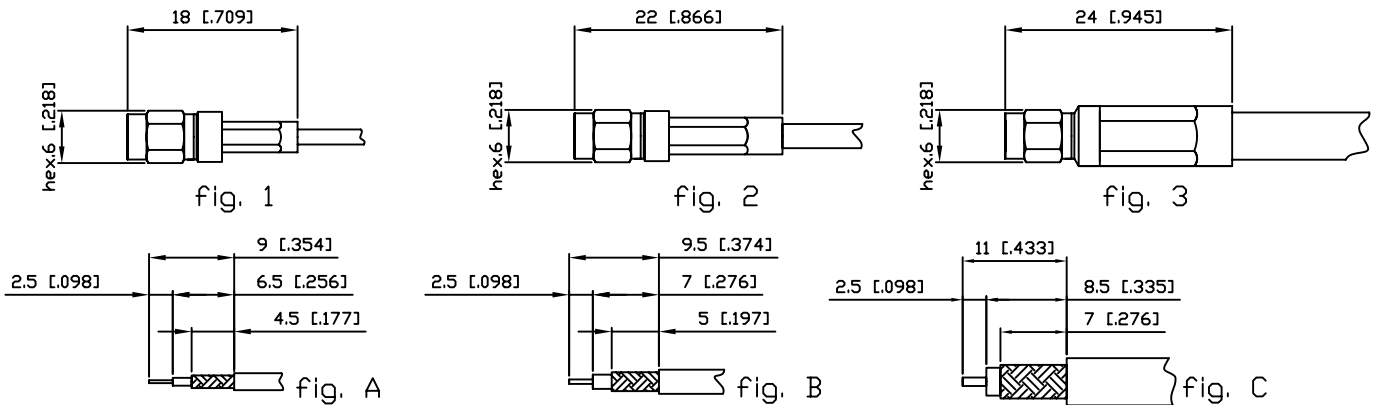
*90° crimp type plug*



CABLE CABLE	INSTRUC. INSTRUC.	ALFA'R CODE CÓDIGO ALFA'R	FIG. FIG.	CRIMPING TOOL HERRAMIENTA CRIMP
RG-178; RG-196	INS 11	A-SMC-11C18-50	1 A	A-EIN-C-1-C61
RG-316		A-SMC-11C25A-50	2 B	A-EIN-C-1-641
RG-174; RG-188		A-SMC-11C26-50		
RG-58; RG-141; RG-303		A-SMC-11C50-50	3 C	A-EIN-C-1-931

hembra recta crimp

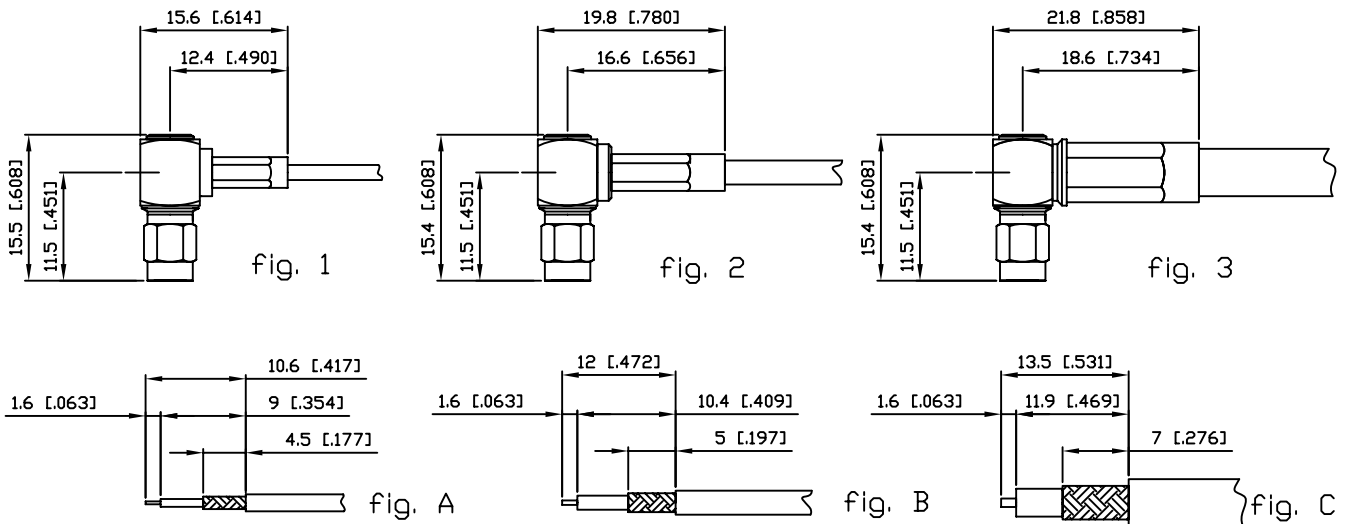
straight crimp type jack



CABLE CABLE	INSTRUC. INSTRUC.	ALFA'R CODE CÓDIGO ALFA'R	FIG. FIG.	CRIMPING TOOL HERRAMIENTA CRIMP
RG-178; RG-196	INS 9	A-SMC-20C18-50	1 A	A-EIN-C-1-C61
RG-316		A-SMC-20C25A-50	2 B	A-EIN-C-1-641
RG-174; RG-188		A-SMC-20C26-50		
RG-58; RG-141; RG-303		A-SMC-20C50-50	3 C	A-EIN-C-1-931

hembra 90° crimp

90° crimp type jack

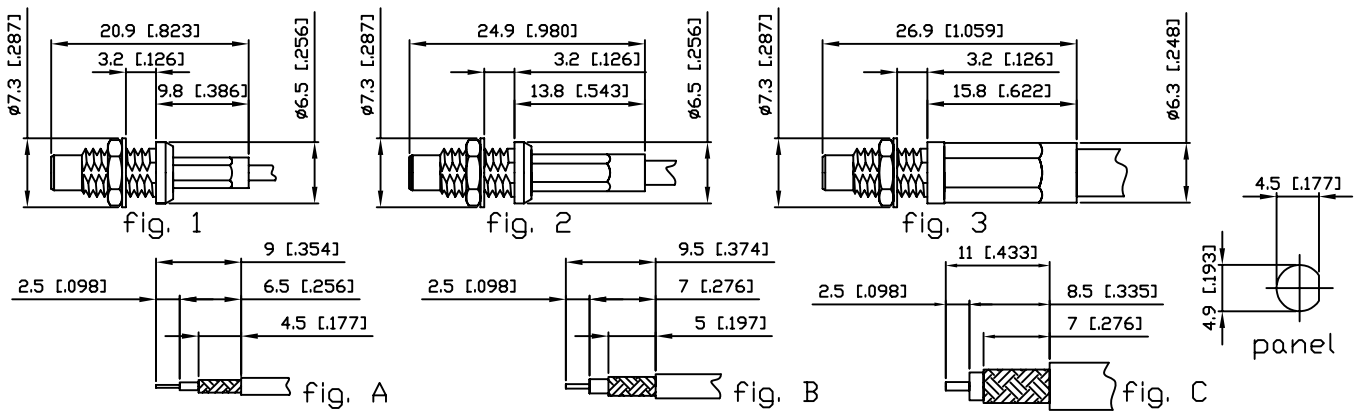


CABLE CABLE	INSTRUC. INSTRUC.	ALFA'R CODE CÓDIGO ALFA'R	FIG. FIG.	CRIMPING TOOL HERRAMIENTA CRIMP
RG-178; RG-196	INS 11	A-SMC-21C18-50	1 A	A-EIN-C-1-C61
RG-316		A-SMC-21C25A-50	2 B	A-EIN-C-1-641
RG-174; RG-188		A-SMC-21C26-50		
RG-58; RG-141; RG-303		A-SMC-21C50-50	3 C	A-EIN-C-1-931



macho recto panel crimp  
(montaje trasero)

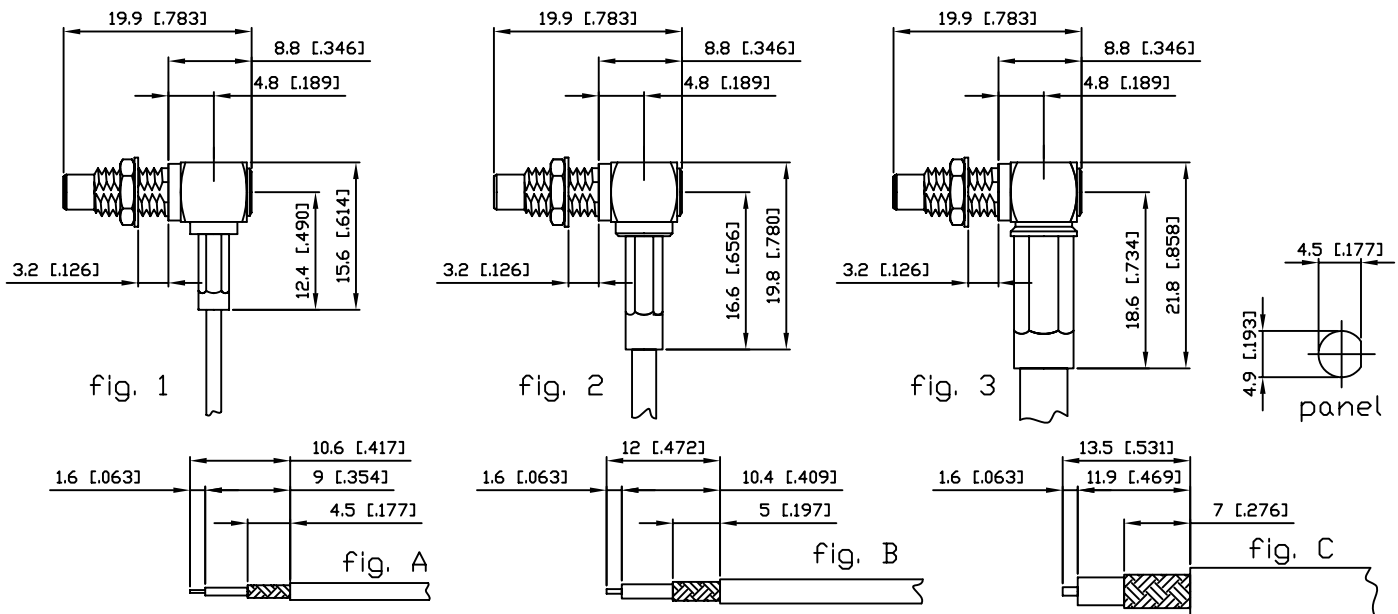
straight crimp type plug receptacle  
(rear mounting)



CABLE CABLE	INSTRUC. INSTRUC.	ALFA`R CODE CÓDIGO ALFA`R	FIG. FIG.	CRIMPING TOOL HERRAMIENTA CRIMP
RG-178; RG-196	INS 9	A-SMC-16C18-50	1 A	A-EIN-C-1-C61
RG-316		A-SMC-16C25A-50	2 B	A-EIN-C-1-641
RG-174; RG-188		A-SMC-16C26-50	3 C	A-EIN-C-1-931
RG-58; RG-141; RG-303		A-SMC-16C50-50		

macho 90° panel crimp  
(montaje trasero)

90° crimp type plug receptacle  
(rear mounting)



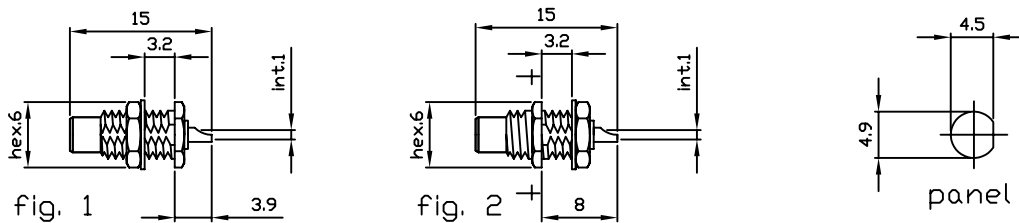
CABLE CABLE	INSTRUC. INSTRUC.	ALFA`R CODE CÓDIGO ALFA`R	FIG. FIG.	CRIMPING TOOL HERRAMIENTA CRIMP
RG-178; RG-196	INS 11	A-SMC-18C18-50	1 A	A-EIN-C-1-C61
RG-316		A-SMC-18C25A-50	2 B	A-EIN-C-1-641
RG-174; RG-188		A-SMC-18C26-50		
RG-58; RG-141; RG-303		A-SMC-18C50-50	3 C	A-EIN-C-1-931

**Conectores panel con contacto central soldable**

*Receptacle connectors with solder inner contact*

**macho recto panel**

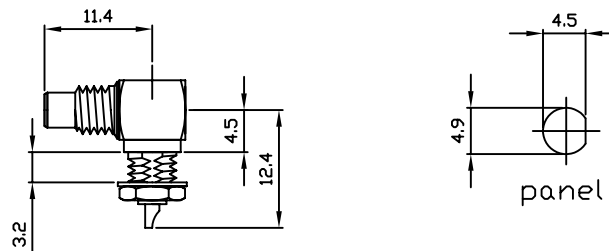
*straight plug receptacle*



NOTE NOTA	ALFA`R CODE CÓDIGO ALFA`R	FIG. FIG.	SOLDER TAG TERMINAL MASA
rear mounting montaje trasero	A-SMC-16TF-50	1	
front mounting montaje frontal	A-SMC-15TF-50	2	A-ACC-TM-050

**macho 90° panel**

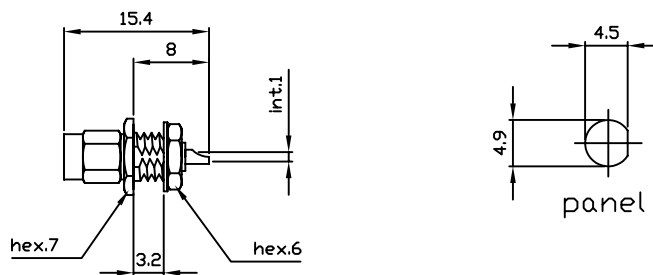
*90° plug receptacle*



	ALFA`R CODE CÓDIGO ALFA`R	SOLDER TAG TERMINAL MASA
	A-SMC-14TF-50	A-ACC-TM-050

**hembra recta panel**

*straight bulkhead jack receptacle*



NOTE NOTA	ALFA`R CODE CÓDIGO ALFA`R	SOLDER TAG TERMINAL MASA
front mounting montaje frontal	A-SMC-25TF-50	A-ACC-TM-050

macho base

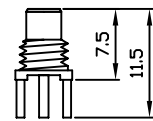
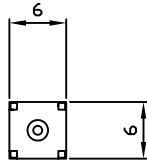


fig. 1

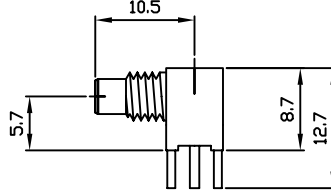
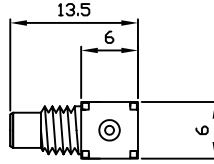
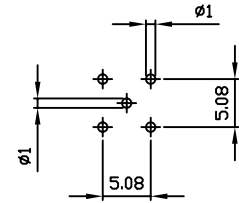


fig. 2

plug receptacle



PCB  
CI  
fig. A

NOTE NOTA	ALFA`R CODE CÓDIGO ALFA`R	FIG. FIG.	
straight plug macho recto	A-SMC-12CI-50	1	A
right angle plug (90°) macho en ángulo recto (90°)	A-SMC-13CI-50	2	

hembra base

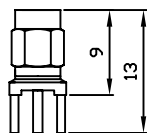
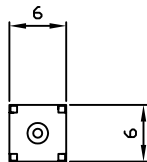


fig. 1

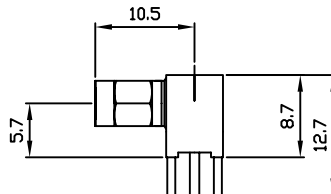
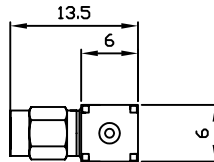
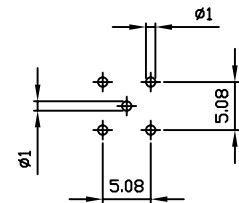


fig. 2

jack receptacle



PCB  
CI  
fig. A

NOTE NOTA	ALFA`R CODE CÓDIGO ALFA`R	FIG. FIG.	
straight jack hembra recto	A-SMC-22CI-50	1	A
right angle jack (90°) hembra en ángulo recto (90°)	A-SMC-23CI-50	2	

## Adaptadores

### prolongación

## Adapters

### prolongation

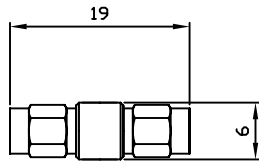


fig. 1

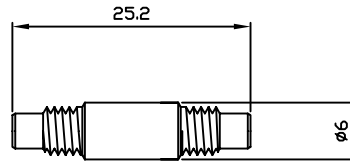


fig. 2

NOTE NOTA	ALFA'R CODE CÓDIGO ALFA'R	FIG. FIG.
jack-jack hembra-hembra	A-SMC-00-50	1
plug-plug macho-macho	A-SMC-03-50	2

### pasamuros

### bulkhead

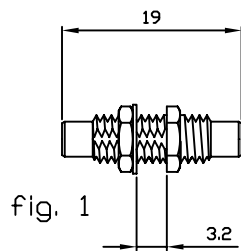


fig. 1

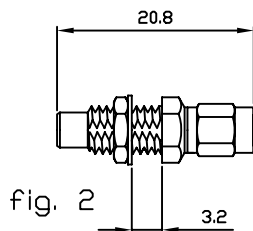
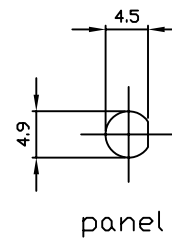


fig. 2

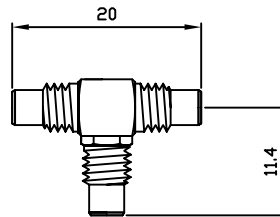


panel

NOTE NOTA	ALFA'R CODE CÓDIGO ALFA'R	FIG. FIG.
plug-plug macho-macho	A-SMC-05-50	1
plug-jack macho-hembra	A-SMC-09-50	2

adaptador en T

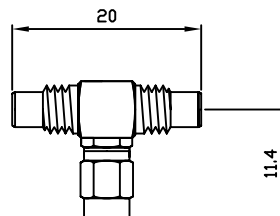
*T adapter*



<i>NOTE</i> NOTA	<i>ALFA`R CODE</i> CÓDIGO ALFA`R	
<i>plug-plug-plug</i> macho-macho-macho	A-SMC-45-50	

adaptador en T

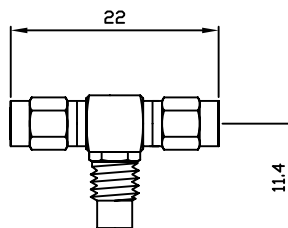
*T adapter*



<i>NOTE</i> NOTA	<i>ALFA`R CODE</i> CÓDIGO ALFA`R	
<i>plug-jack-plug</i> macho-hembra-macho	A-SMC-42-50	

adaptador en T

*T adapter*



<i>NOTE</i> NOTA	<i>ALFA`R CODE</i> CÓDIGO ALFA`R	
<i>jack-plug-jack</i> hembra-macho-hembra	A-SMC-40-50	

## Terminaciones

macho y hembra

## Terminations

plug and jack

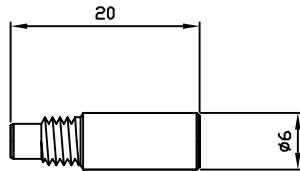


fig. 1

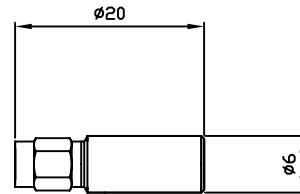


fig. 2

NOTE NOTA	IMPEDANCE IMPEDANCIA	POWER POTENCIA	ALFA`R CODE CÓDIGO ALFA`R	FIG. FIG.	VSWR	
					300MHz	1000MHz
plug macho	50Ω ±1Ω	0.5 Watt	A-SMC-54-50	1	≤1.05	≤1.1
jack hembra			A-SMC-55-50	2		