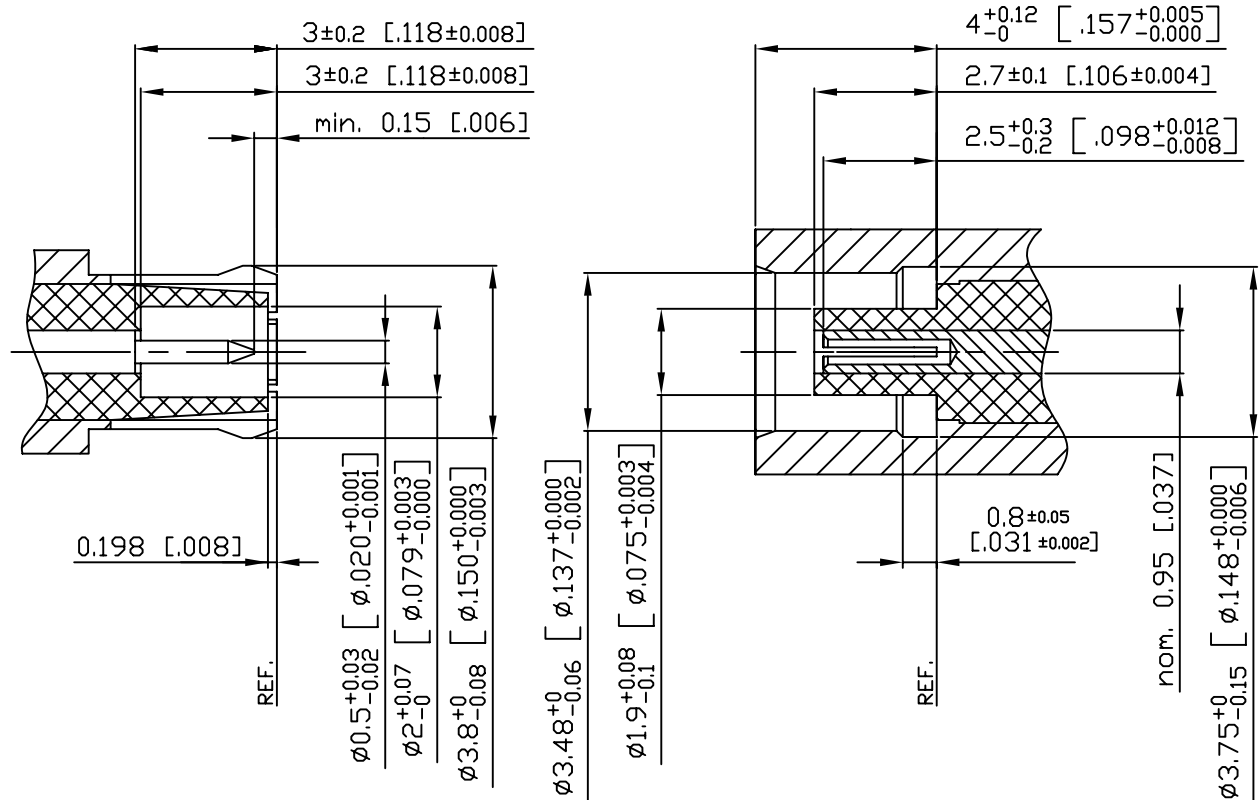


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La serie MCX corresponde a un conector miniatura, cuyo acoplamiento macho-hembra se realiza mediante sistema rápido “snap-on”. El diseño del contacto central y del aislante soporte es prácticamente idéntico al de la serie SMB, pero en la serie MCX se ha optimizado el mecanismo de acoplamiento exterior obteniendo una reducción del 30% de espacio con respecto a la serie SMB, sin renunciar a un incremento de fiabilidad.

Su impedancia característica es de 50 Ω con frecuencias efectivas de utilización por encima de 6 GHz, que los hacen adecuados para la utilización en sistemas wireless, GPS, y en general en cualquier equipo de comunicaciones o de medida donde el tamaño pequeño es un requerimiento importante.

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 61169-36

MCX series are miniature connectors, which their coupling connection is by means of snap-on system. The inner contact and insulator support design is practically identical to SMB series, but in MCX series the outer coupling mechanism has been optimized, obtaining a space reduction of 30% when compared with SMB series, without losing an increase of reliable characteristics.

Its characteristic impedance is 50 Ω and is suitable to use up to 6 GHz applications. Typical uses of MCX connectors are wireless systems, GPS systems and in general, in any communication and test equipment, where small sizes are an important feature.

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 61169-36

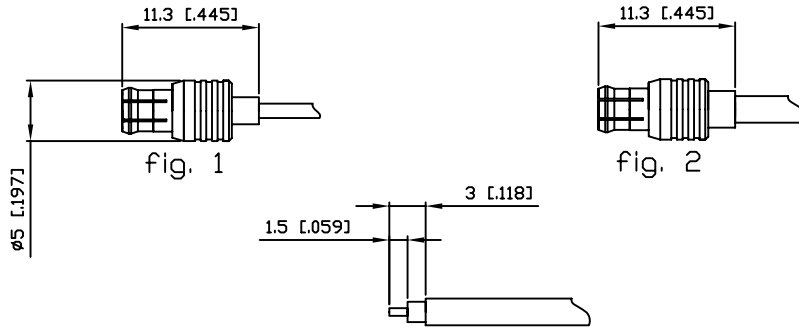
| características eléctricas / electrical characteristics | |
|---|---|
| impedancia característica / <i>characteristic impedance</i> | 50 Ω |
| margen de frecuencia utilizable (recomendado) / <i>useful frequency range (recommended)</i> | 0...6 GHz |
| VSWR (depende de la frecuencia, del cable utilizado 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> : < 1.10 (1 GHz) < 1.30 (6 GHz) Conector acodado / <i>Right angle connector</i> : < 1.12 (1 GHz) < 1.35 (6 GHz) |
| pérdida de inserción / <i>insertion loss</i> | <0.1 dB (1 GHz) |
| RF-leakage | >60 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> | 300 Vrms |
| voltaje de pico / <i>peak voltage</i> | 800 Vrms |

| características mecánicas / mechanical characteristics | |
|---|---|
| durabilidad / <i>durability</i> | > 500 ciclos conexión / > 500 <i>matings</i> |
| presión de conexión-desconexión / <i>engagement-disengagement force</i> | 8...20 N |
| 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 / environmental characteristics | |
|--|-------------------|
| 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

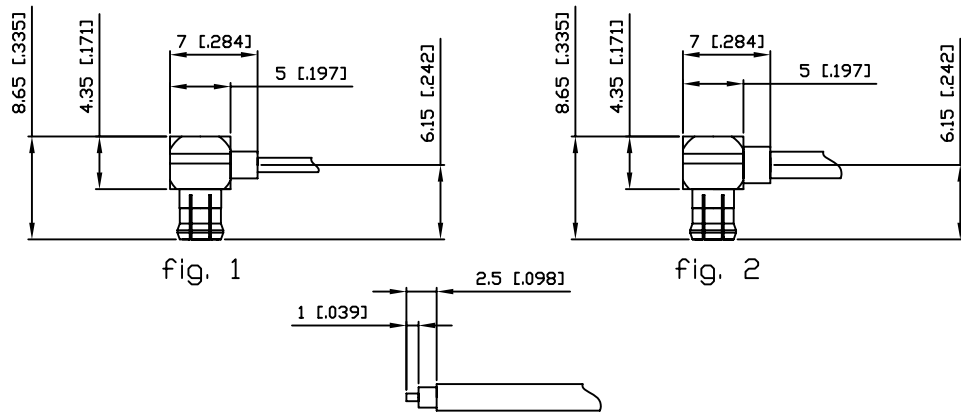
Connectors for semi-rigid cable
straight solder type plug



| CABLE CABLE | INSTRUC. INSTRUC. | ALFA'R CODE CÓDIGO ALFA'R | FIG. FIG. |
|----------------|----------------------|------------------------------|--------------|
| UT-47 | INS 3 | A-MCX-10S12X-50 | 1 |
| UT-86 (RG-405) | | A-MCX-10S22X-50 | 2 |

macho 90° soldar

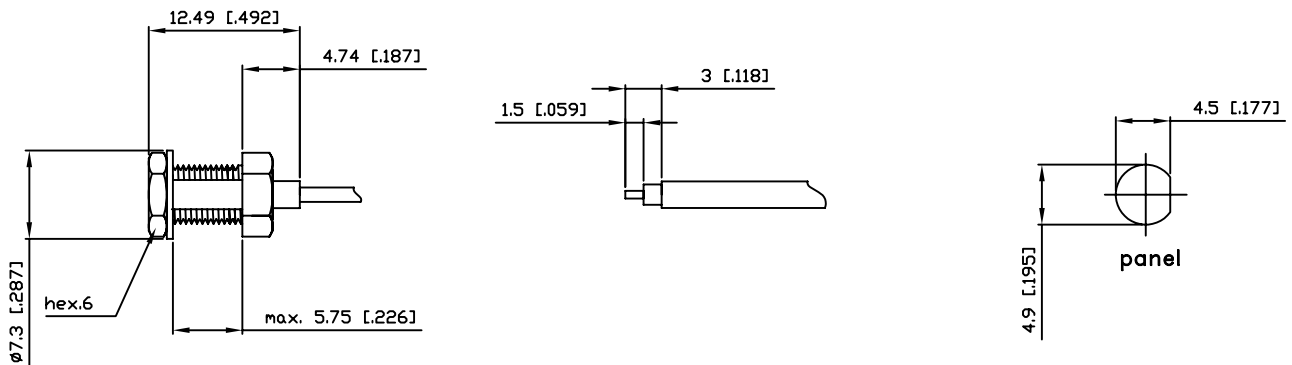
90° solder type plug



| CABLE CABLE | INSTRUC. INSTRUC. | ALFA'R CODE CÓDIGO ALFA'R | FIG. FIG. |
|----------------|----------------------|------------------------------|--------------|
| UT-47 | INS 6 | A-MCX-11S12X-50 | 1 |
| UT-86 (RG-405) | | A-MCX-11S22X-50 | 2 |

hembra recta panel soldar

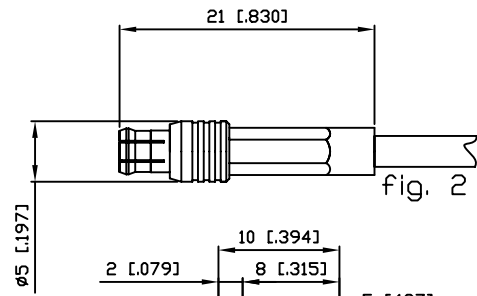
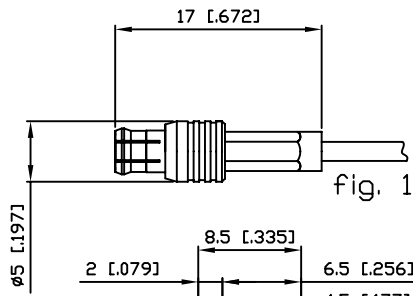
straight solder type jack receptacle



| CABLE CABLE | INSTRUC. INSTRUC. | ALFA'R CODE CÓDIGO ALFA'R | NOTE NOTA |
|----------------|----------------------|------------------------------|-----------------|
| UT-47 | INS 3 | A-MCX-26S12X-50 | rear mounting |
| UT-86 (RG-405) | | A-MCX-26S22X-50 | montaje trasero |

Conectores para cable flexible
macho recto crimp

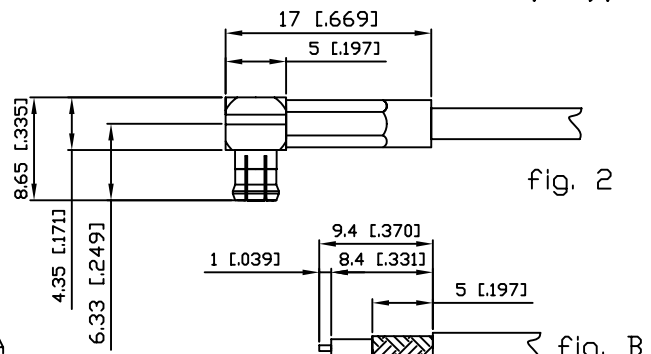
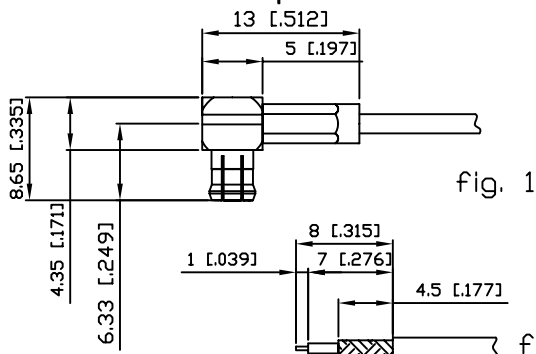
Connectors for flexible cable
straight crimp type plug



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

macho 90° crimp

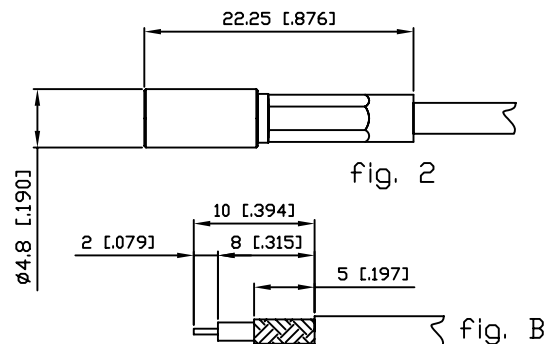
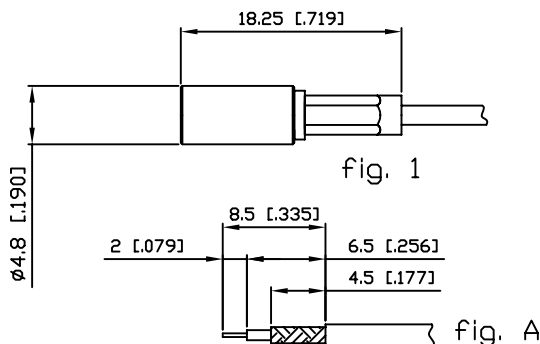
90° crimp type plug



| CABLE | INSTRUC. | ALFA'R CODE | FIG. | CRIMPING TOOL |
|----------------|----------|-----------------|------|-------------------|
| CABLE | INSTRUC. | CÓDIGO ALFA'R | FIG. | HERRAMIENTA CRIMP |
| RG-178; RG-196 | INS 11 | A-MCX-11C18-50 | 1 A | A-EIN-C-1-C61 |
| RG-316 | | A-MCX-11C25A-50 | 2 B | A-EIN-C-1-641 |
| RG-174; RG-188 | | A-MCX-11C26-50 | | |

hembra recta crimp

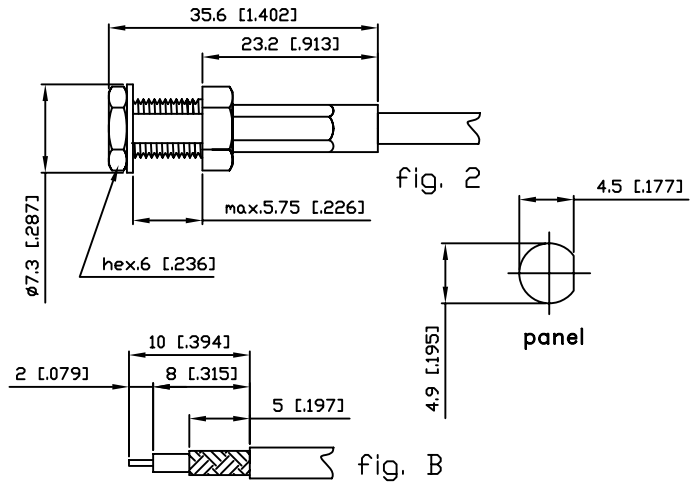
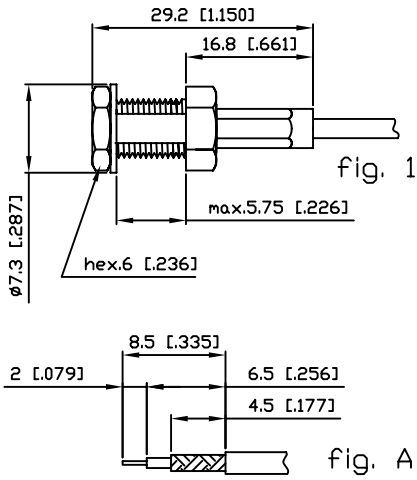
straight crimp type jack



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

hembra recta panel crimp

straight crimp type jack receptacle



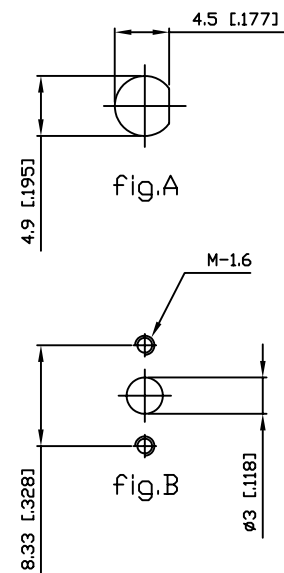
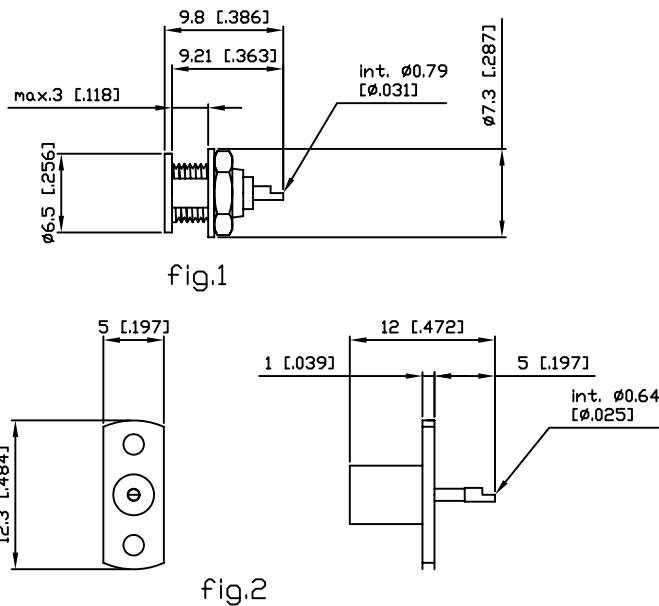
| CABLE CABLE | INSTRUC. INSTRUC. | ALFA'R CODE CÓDIGO ALFA'R | FIG. FIG. | CRIMPING TOOL HERRAMIENTA CRIMP |
|----------------|----------------------|------------------------------|--------------|------------------------------------|
| RG-178; RG-196 | INS 9 | A-MCX-26C18-50 | 1 A | A-EIN-C-1-C61 |
| RG-316 | | A-MCX-26C25A-50 | 2 B | A-EIN-C-1-641 |
| RG-174; RG-188 | | A-MCX-26C26-50 | | |

Conectores panel con contacto central soldable

Receptacle connectors with solder inner contact

hembra panel

jack receptacle



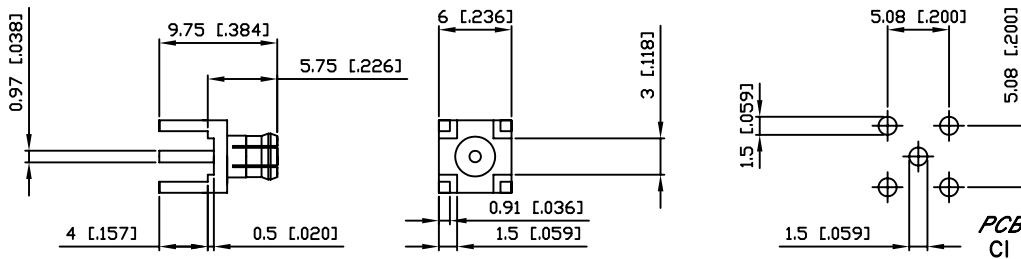
| NOTE NOTA | ALFA'R CODE CÓDIGO ALFA'R | FIG. FIG. |
|---|------------------------------|--------------|
| front mounting montaje frontal | A-MCX-25TF-50 | 1 A |
| narrow flange (2 hole) pletina estrecha (2 taladros) | A-MCX-22TF-50 | 2 B |

Conectores para montar en circuito impreso

Connectors for printed circuit board mounting

macho base

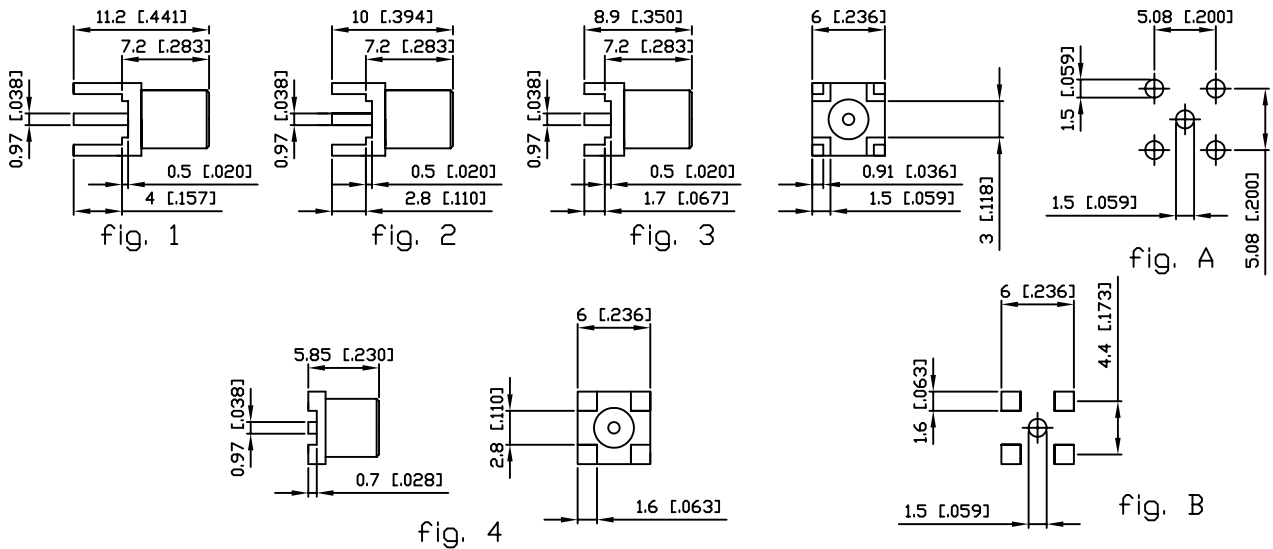
plug receptacle



| | | |
|--|-------------------------------------|--|
| | <i>ALFA'R CODE</i> CÓDIGO ALFA'R | |
| | A-MCX-12CI-50 | |

hembra base

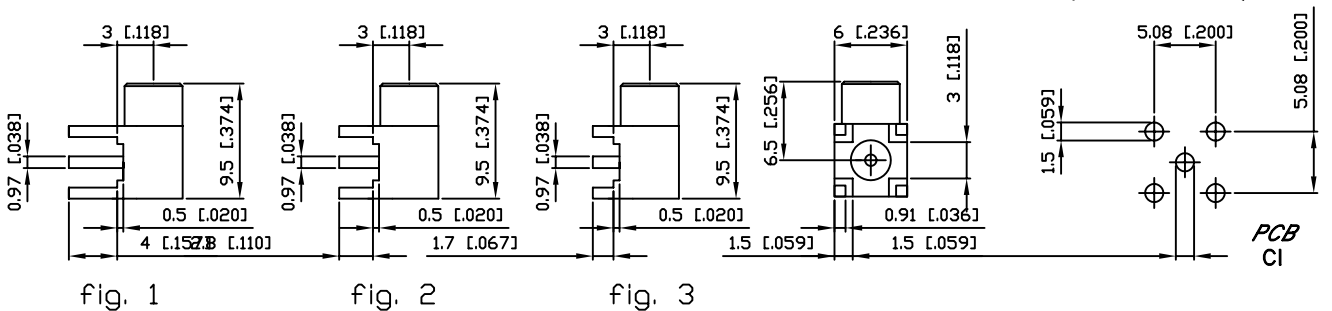
jack receptacle



| | | | |
|--|-------------------------------------|---------------------|---|
| <i>NOTE</i> NOTA | <i>ALFA'R CODE</i> CÓDIGO ALFA'R | <i>FIG.</i> FIG. | |
| | A-MCX-22CI-50 | 1 | A |
| | A-MCX-22CI-50-A | 2 | A |
| | A-MCX-22CI-50-B | 3 | A |
| <i>surface mounting</i> montaje de superficie | A-MCX-22SPM-50 | 4 | B |

hembra 90° base

90° jack receptacle



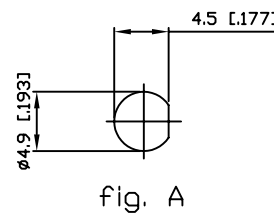
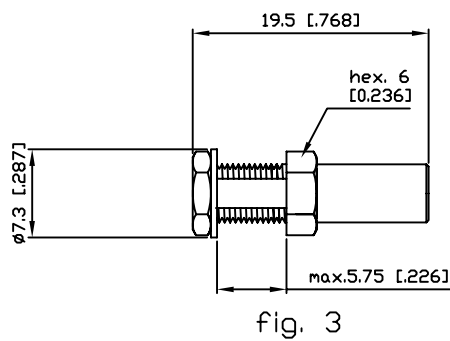
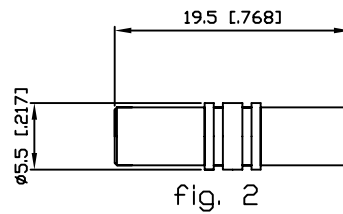
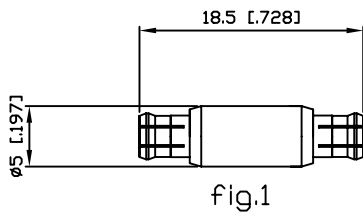
| | | | |
|--|-------------------------------------|---------------------|--|
| | <i>ALFA'R CODE</i> CÓDIGO ALFA'R | <i>FIG.</i> FIG. | |
| | A-MCX-24CI-50 | 1 | |
| | A-MCX-24CI-50-A | 2 | |
| | A-MCX-24CI-50-B | 3 | |

Adaptadores

Adapters

prolongación

prolongation



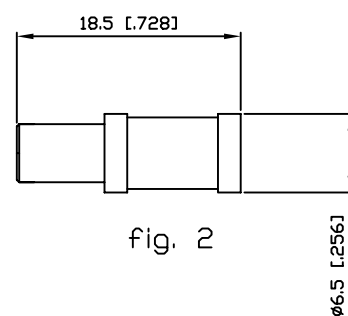
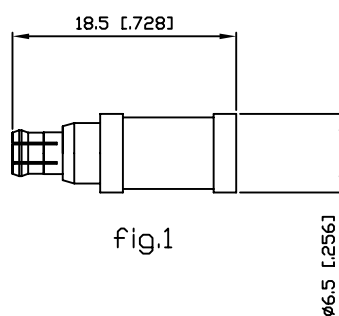
| NOTE NOTA | | ALFA'R CODE CÓDIGO ALFA'R | FIG. FIG. | |
|---------------------------|-------------------------|------------------------------|--------------|---|
| <i>plug-plug</i> | macho-macho | A-MCX-03-50 | 1 | |
| <i>jack-jack</i> | hembra-hembra | A-MCX-00-50 | 2 | |
| <i>bulkhead jack-jack</i> | pasamuros hembra-hembra | A-MCX-02-50 | 3 | A |

Terminaciones

Terminations

macho y hembra

plug and jack



| NOTE NOTA | IMPEDANCE IMPEDANCIA | POWER POTENCIA | ALFA'R CODE CÓDIGO ALFA'R | FIG. FIG. | VSWR | |
|--------------------|-------------------------|-------------------|------------------------------|--------------|--------|---------|
| | | | | | 300MHz | 1000MHz |
| <i>plug</i> macho | 50 Ω ±1Ω | 0.5 Watt | A-MCX-54-50 | 1 | ≤1.05 | ≤1.1 |
| <i>jack</i> hembra | | | A-MCX-55-50 | 2 | | |