

Amphenol®



Amphenol® Tru-Loc® Rugged Environment Connector featuring RADSOK® Contacts

Amphenol Industrial Products Group introduces a connection system family with 1.5 mm socket contacts featuring Amphenol's exclusive RADSOK® contact system. The new Tru-Loc connector series is designed to perform in demanding environments, such as under valve covers on diesel engines and in high vibration sensor applications.

Tru-Loc features a molded thermoplastic main plug body with secondary latch and a fluoroelastomer main joint seal that is resistant to many fluids, including diesel fuel.

The Tru-Loc series includes 2-way, 4-way, and 6-way inline plugs and receptacles. Our engineering team can also design this series to mate to a device, sensor, fuel injector, splitter, pass through connector, and more. Special backshells can be designed for the 6-way series, and we can meet 150°C temperatures upon request. These connection systems are RoHS compliant and seal to IP67 when mated. They are rated for high vibrations at 32 Grms.

Features:

- 2, 4, or 6 pin connector with 1.5mm RADSOK® featured contacts
- Plug body with secondary latch
- Fluoroelastomer main joint seal and silicone rubber wire seals to support IP67 rating
- Dielectric withstanding voltage is 1600 Vac RMS
- 13 Amp current rating
- Insulation resistance can meet 100 M Ohms
- Mating force less then 70N
- Contact retention between 60~80N
- Operating temperature can meet -40°C to +125°C or + 150°C (depending on PN); 100 cycles, 1 hour per cycle
- Durability is 20 mating cycles

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| Material Specification | |
|-----------------------------------|--------------------------------------|
| Plug with RADSOK® Socket Contacts | |
| Plug Body | Nylon |
| Wire Seal | Silicone |
| Main Joint Seal | Fluoroelastomer |
| Socket Contact | Copper Alloy w/ Stainless Steel Hood |
| Receptacle with Pin Contacts | |
| Receptacle Body | Nylon |
| Pin Contact | Copper Alloy |

| Electrical Specifications | |
|--|----------------------------|
| Dielectric Withstanding Voltage (Test Voltage) | 1600 Vac RMS |
| Current Rating | 13 amp (DC) (16 AWG Cable) |
| Insulation Resistance | 100 M Ohms |

| Mechanical Specifications | |
|----------------------------------|--|
| Connector Mating Force | <70 N (15.7 lb) |
| Contact Retention | Primary Only: 80 N (18.0 lb) Secondary Only: 60 N (13.5 lb) |
| Vibration | 32 g RMS |
| Operating Temperature Range | -40°/+125°C or +150°C depending on PN; 100 cycles, 1 hour per cycle |
| Ingress Protection | IP67 |
| Durability (Mating Cycle) | 20 cycles |

| AIPG Part Number | Description | Additional Information |
|---------------------------|--|--|
| 10-838275-000 | 2way Plug (Plug Body, Locking Collar, and Main Joint Seal) | 125°C |
| 10-838275-002 | 2way Plug (Plug Body, Locking Collar, and Main Joint Seal) | 150°C |
| 10-707003-002 | 4way Plug (Plug Body, Locking Collar, and Main Joint Seal) | 150°C |
| 10-707508-02X(X: A,B,C,D) | 6way Plug (Plug Body, Locking Collar, and Main Joint Seal) | 4 indexes available, 150°C |
| 10-707516-001 | 2way receptacle | 150°C |
| 10-707517-001 | 4way receptacle | 150°C |
| 10-707509-00X(X: A,B,C,D) | 6way receptacle | 4 indexes available, 150°C |
| 10-838137-00D | Wire seal (silicone) | To be used with insulated wires with insulation between 1.8-2.5 mm |
| 10-838137-01D | Wire seal (silicone) | To be used with insulated wires with insulation between 1.2-1.8 mm |
| 10-730605-002 | Stamped and formed female socket, Au+PdNi plating | Crimps to wire from 0.8-1.3 sq. mm |
| 10-707515-002 | Stamped and formed male pin, Au+ PdNi plating | Crimps to wire from 0.8-1.3 sq. mm |
| 10-707515-0M2 | Machined male pin, Au+PaNi plating | Crimps to wire from 0.8-1.3 sq. mm |
| 10-730179-002 | Stamped and formed female socket, Au+PdNi plating | Crimps to wire from 0.5-0.8 sq. mm |
| 10-730764-002 | Stamped and formed male pin, Au+ PdNi plating | Crimps to wire from 0.5-0.8 sq. mm |
| C10-708354-000 | Size 20 AWG hand crimp tool | |
| C10-730690-000 | Size 16-18 AWG hand crimp tool | |

- * Socket Contacts are on reels of 4,200 pieces and pin contacts are on reels of 4000 pieces
- * For Crimp Information please contact factory
- * Cable seals are sold separately and must be used in all cavities and on both sides of the connection system



For additional information on the Amphenol® family of connectors with RADSOK® Technology, please ask for our RADSOK® Catalog (SL-391) or download it from the Catalogs section of our website.

Notice: Specifications are subject to change without notice. Contact your nearest Amphenol Corporation Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements of suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all connectors.

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