

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 than 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

www.amphenol-industrial.com



Material Specification

Plug with RADSOK® Socket Contacts

Plug Body

Wire Seal

Main Joint Seal

Socket Contact

Nylon

Silicone

Fluoroelastomer

Copper Alloy w/ Stainless Steel Hood

Receptacle with Pin Contacts

Receptacle Body

Pin Contact

Nylon

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+PdNi 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 Amphe-Power® 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.

For further information on your individual application requirements, contact: Amphenol Corporation

North America:
Amphenol Industrial Operations
180 N. Freeport Drive, Plant 4
Nogales, AZ 85621
Tel: (520) 285-5130
Fax: (520) 285-5134

Email: tech@amphenol-aio.com

Europe:
Amphenol Industrial Operations Europe
Via Barbaiana 5
1-20020 Lainate (MI) Italy
Tel: +39 02 93254.204
Fax: +39 02 93254.444

Email: info@amphenol-aio.com

Middle East:
Amphenol Middle East Enterprises FZE
Office C-37 PO Box 21107
Ajman Free Zone, UAE
Tel: +9 716-7422494
Fax: +9 716-7422941

Email: jhussain@amphenol-industrial.com

Asia:
Amphenol Technology Shenzhen Ltd
Block 5 Fuan 2nd Industrial Park
Dayang Rd, Fuyong Baoan
Baoan, Shenzhen, China 518103
Tel: +86 755 2881 8389
Fax: +86 755 2991 8310
Email: enquiry@amphenol-aio.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Amphenol:

[10-707003-002](#) [10-707509-00A](#) [10-707517-001](#) [10-838275-000](#) [10-707508-02C](#) [10-707509-00B](#) [10-707508-02D](#)
[10-707516-001](#) [10-707508-02B](#) [10-707509-00D](#) [10-707508-02A](#) [10-707509-00C](#) [10-707515-002](#) [10-838351-002](#)
[10-838137-00D](#) [10-730179-002](#) [10-730605-002](#) [10-838275-002](#) [C10-708354-000](#) [C10-730690-000](#) [10-838137-01D](#)
[10-730764-002](#) [10-707509-00XD](#) [10-707509-00XC](#) [10-707509-00XB](#) [10-707509-00XA](#) [10-707517-001_](#) [10-707515-0M2](#)