

Amphenol®



Tru-Loc® Rugged Environment Connector featuring RADSOK® Contacts

Amphenol Industrial Operations offers the Tru-Loc connector series, a trusted connection solution featuring 1.5 mm socket contacts with Amphenol's exclusive RADSOK® contact technology. Designed for demanding environments like diesel engine valve covers and high-vibration sensor applications, Tru-Loc delivers reliable performance under extreme conditions.

Built with a durable thermoplastic plug body, a secure secondary latch, and a robust fluoroelastomer main joint seal resistant to diesel fuel and other harsh fluids, the Tru-Loc series includes 2-way, 4-way, and 6-way inline plugs and receptacles. Our engineering team can also customize Tru-Loc connectors to interface with devices, sensors, fuel injectors, splitters, and pass-through connectors. Special backshells for the 6-way series and temperature resistance up to 150°C are available upon request.

Fully RoHS compliant, the Tru-Loc series achieves an IP67 seal when mated and is rated for high-vibration environments up to 32 Grms, providing a robust solution for the toughest industrial applications.

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 MΩ
- 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

Tru-Loc® Rugged Environment Connector

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

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

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



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
C10-708354-00	Size 20 AWG hand crimp tool	
C10-730690-00	Size 16-18 AWG hand crimp tool	
C10-780874-000	4way plug 150°C	
C10-780875-000	4way receptacle 150°C	
C10-780109-12()	Socket 12~14AWG	
C10-780110-12()	Pin 12~14AWG	
C10-780168-12()	Pin 16~18AWG	
C10-780169-12()	Socket 16~18AWG	



- * Socket Contacts are available on reels of 4,000 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

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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