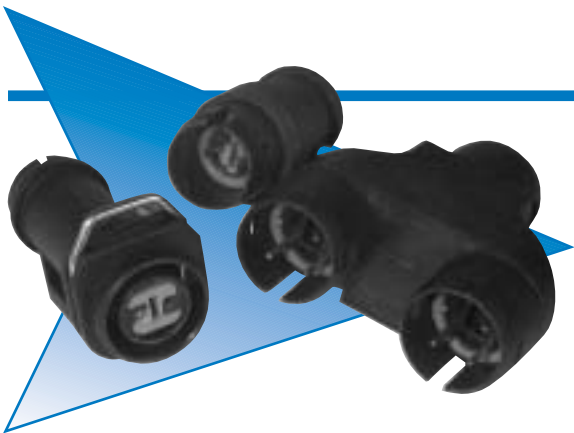


Clip Lock Circular



CLC Clip Lock Circular connectors were designed to meet the most demanding requirements of under-the-hood applications but can be used anywhere you need a small, positive locking, two or four circuit sealed connection. These connectors are very easy to assemble and maintain.

Extremely user friendly, these connector feature an audible and tactile feedback and can be unmated simply by depressing the clip and pulling back on the connector body. The contacts will handle up to five amps continuous at fully rated temperature range -40°C to +150°C (-40°F up to +302°F) and can handle wire size from 20 AWG to 16 AWG.

Applications

- Sensors
- Automotive Harnesses
- Off Highway Vehicles
- Marine
- Valves
- Transmission Sensors
- Under Hood (Bonnet) Equipment
- Control Area Networks (CAN Buss)

Features

Clip Lock

Mating connectors are securely locked together by a stainless steel clip. Connector halves simply slide together until the clip snaps into place. To unmate the connectors just depress the clip and slide the connectors apart.

Extremely Small Size

CLCs are one of the smallest connector packages available, able to installed in tight places where larger bulkier connectors cannot be used.

Terminal Position Assurance (TPA) (optional)

The TPA system was design with the automotive market in mind. Crimped on contacts are inserted and extracted from the rear of the connector by hand without having to use insertion or extraction tools. Just insert the contact into the connector body until it snaps into place then depress the bright orange TPA lock and your contacts are locked into place and cannot be removed until the

TPA lock lifted to its unlocked position, this allows the contact to be eased out the rear of the connector for repair or replacement. (Please note that the TPA lock will not permit a contact to be partially inserted.)

Strong Resistance to Environmental Contaminates

High performance thermoplastic bodies, silicone wire seals, and stainless steel clips withstand the rigors of under-the-hood contaminates including oils, fuels, greases, and salt spray along with many others contaminates.

Low Cost Design

CLCs are designed as a low applied cost connector. Several factors make this connector very cost efficient including high volume reeled contacts for use with stripper crimper machines, low per unit cost, no special insertion/extraction tools needed and they can be robotically assembled.

Technical Specifications

MATERIALS & FINISHES

Shell	High performance thermoplastic body, silicone wire seals with stainless steel locking clip
Contacts	Copper alloy
Plating	Selective gold over nickel plating on mating surface, tin/lead over nickel plating on wire crimp area.

ELECTRICAL DATA

Dielectric Withstanding Voltage	1000 Vac rms at sea level
Current Rating	5 Amps continuous at 150°C
Wire Range Sizes	20-16 AWG
Contact Resistance	10 milliohms maximum
Insulation Resistance	20 megohms minimum (USCAR)

MECHANICAL

Operating Temperature	-40°C to 150°C (-40°F to 302°F)
Sealing	2-12 inches of 5% salt solution for 24 hours
Wire Sealing Range	.078"-.130" (1.98mm - 3.30mm)
Insulation Strip Length	.210" - .220" (5.33mm - 5.59mm)
Mating Life	25 cycles minimum
Salt Spray	5% solution 96 hours
Heat	150°C +/- 3° 1000 hours
Chemical Resistance	Resistant to most common automotive contaminants
Vibration	10.2 grms 20 hours radial and longitudinal axis
Shock	100 gs 12 shocks for 6 milliseconds
Contact Type	Crimp using automatic, semi-automatic or hand tooling
Number of Circuits	2 & 4
Contact Insertion	From rear no insertion tool needed
Contact Retention	25 lbs. (111N) minimum
Polarization	Molded key and keyway

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