

ITT Cannon SLE Series Snap Lock Environmental Connectors



HARSH-ENVIRONMENT SNAP LOCK RECTANGULAR CONNECTORS

The ITT Cannon Snap Lock Environmental series (SLE) is an environmentally-sealed, rectangular connector created for printed circuit board (PCB), cable-to-cable or bulkhead applications. SLE connectors are suitable for demanding under-the-hood applications and are user-friendly and easy to assemble, with audible and tactile feedback. SLE connector contacts will handle up to 5 amps continuous at a fully-rated temperature range of -40°C to +125°C. SLE is available as a 19 pin connector and a 28 pin connector. For full details on ITT Cannon SLE series connectors, see the product specifications below.

APPLICATIONS

- Engine electronics
- Instrumentation
- Automotive CPUs

FEATURES

RECTANGULAR CONNECTOR BODIES

The SLE connector's rectangular design is ideally suited for easy printed circuit board (PCB) layouts for both straight off-the-board and right angle applications, since the contacts are precisely arranged in rows.

KEYABLE CONNECTOR BODIES

Four simple, slotted keys and keyways are supplied with the connectors to allow the user to key connector halves. This prevents connectors of the same shell size, mounted in close proximity to each other, from being mated with the incorrect connector and damaging the sophisticated electronic control modules.

CLAMSHELL-STYLE PLUG CABLE CLAMPS FOR ANY CABLE ORIENTATION

Plug cable clamps are ordered as part of the connector and are available in five different styles: up, down, right, left and straight cable exits. This saves space and allows for easy mating in crowded under-the-hood environments. See Create Part Number for more details.

STRONG CONNECTOR SNAP LOCKS

Snap locks are located at either end of the SLE connector. These locks are molded into the connector bodies and lock the halves together when mated. To unmate, just depress the snap locks simultaneously and pull the halves apart.

MATERIALS & FINISHES

Shell	High-performance thermoplastic body, silicone wire seals
Contacts	Copper alloy
Platings	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 125°C
Wire Range Sizes	20 - 16 AWG
Contact Resistance	10 milliohms maximum
Insulation Resistance	20 megaohms minimum (USCAR)

MECHANICAL

Operating Temperature	-40°C to 125°C (-40°F to 257°F)
Sealing	2-12 inches of 5% salt solution for 24 hours
Wire Sealing Range	.095" - .120" (2.42mm - 3.05mm)
Insulation Strip Length	.210" - .220" (5.33mm - 5.59mm)
Mating Life	25 cycles minimum
Salt Spray	5% solution 96 hours
Heat	125°C +/- 3° 1000 hours
Chemical Resistance	Resistant to most common automotive contaminants
Vibration	10.2 grms 20 hours minimum
Shock	100 g's 18 shocks for 6 milliseconds
Contact Type	Crimp using automatic, semi-automatic or hand tooling, printed circuit
Number of Circuits	19 & 28
Contact Insertion	From rear, with no insertion tool needed
Contact Removal	From rear, with low cost hand tool
Contact Retention	25 lbs. (111N) minimum
Polarization	Moveable molded keys and keyways