



# FLH Series Mini Sealed 2.50mm Pitch Connectors

## IP67 SEALED WATERPROOF WIRE-TO-WIRE CONNECTOR

FLH Series Mini Sealed 2.50mm pitch connectors provide a wire-to-wire IP67 sealing in mated conditions. Its waterproof characteristics make it ideal for applications in harsh environments. These connectors can generally be used in industrial, lighting appliances, HVAC and smart home. The compact design of FLH series is suitable for space-saving applications.

- Wire-to-wire IP67 sealing in mated conditions
- Compact design
- Easy installation
- RoHS compliant
- High current capabilities up to 7A with 18AWG wire gauge



### TARGET MARKETS



### FEATURES

- Wire-to-Wire IP67 sealing in mated conditions
- Compact design
- High current design options (7A - 18AWG; 5A - 20AWG; 3A - 22AWG)
- Offer connector system with header and receptacle counterparts
- RoHS compliant

### BENEFITS

- Ensure waterproof and reliable connections in harsh environment
- PCB space saving
- Allows design flexibility and meets various power expectations
- Ease of design and assembly
- Meets environmental, health and safety requirements

## TECHNICAL INFORMATION

### MATERIAL

- Contacts: Phosphor bronze with 2.54µm (100µ") min. tin over 1.27µm (50µ") min. nickel
- Other Options: 0.38µm (15µ") and 0.76µm (30µ") gold available
- Housing: High temperature thermoplastic, UL94V-0 rated, black
- Seals: Silicon rubber

### MECHANICAL PERFORMANCE

- Thermal Shock: 25 cycles @ - 40°C to +105°C
- Physical Shock: Per EIA364-27, condition H (11ms 30G)
- Humidity: Per EIC512-6 / EIA364-11A
- Vibration: Per EIA364-28, condition 5A
- Salt Spray: Per EIA364-26, 240 Hrs
- Mating Cycles: 50
- Operating Temperature: -40°C to +105°C

### ELECTRICAL PERFORMANCE

- Voltage: 400V AC max.
- Current Rating: 7A - 18AWG; 5A - 20AWG; 3A - 22AWG
- Contact Resistance:  $\Delta$ 20mΩ max.
- Insulation Resistance: 500MΩ min.
- Dielectric Withstanding Voltage: 1800V AC @ sea level

### PACKAGING

- Box
- Tape & Reel

### SPECIFICATION

- Amphenol Specification: S6147C

### ENVIRONMENTAL

- RoHS compliant per EU directive 2011/65/EU and amendments

### TARGET MARKETS/APPLICATIONS



Lighting appliances



HVAC



Harsh Environment Application

## PART NUMBERS

Description	Part Numbers
PIN Housing Assembly, 2pin, waterproof when mated	FLHP2100
PIN Housing Assembly, 3pin, waterproof when mated	FLHP3100
Socket Housing Assembly, 2pin, waterproof when mated	FLHS2100
Socket Housing Assembly, 3pin, waterproof when mated	FLHS3100
PIN Crimp Contact	FLHPC136T01
Socket Crimp Contact	FLHSC136T01
PIN Housing Assembly, 4pin, waterproof when mated	FLHP4100
PIN Housing Assembly, 6pin, waterproof when mated	FLHP6100
SOCKET Housing Assembly, 4pin, waterproof when mated	FLHS4100
SOCKET Housing Assembly, 6pin, waterproof when mated	FLHS6100
Hand Crimp Tool	FLH-CT-001