EW-LP16 Series Waterproof Connectors Datasheet

1 Product name：EW-LP16 series waterproof connectors

Terminal
Male plug
Plastic

Terminal
Female Socket
Plastic

Panel Mount
Female Socket
Plastic

Flange Mount
Female Socket
Plastic

Flange Mount
Female Socket
Metal

2 Materials and Processes

Part categories	Material	Processes
Contact	Male Pin: Copper Alloy	Gold-Plated
	Female Pin: Copper Alloy	
Housing	PBT/Zinc Alloy	Injection Molding/Die Casting
Insulator	PBT	Injection Molding
Seal	Silicone	Solid State Pressing

3 Materials and Processes

This product's technical performance complies with international standards such as UL, TUV; it features a one key pluggable metal latch design for plugging and unplugging, which ensures secure locking and smooth mating and demating, with the number of repeat mating and demating exceeding 1900 times; the shell is made of high-performance PBT engineering plastic, ensuring stable electrical performance of the product, as well as excellent physical and chemical properties such as high-temperature resistance and corrosion resistance; at the same time, the conductive parts are processed with a gold plating surface treatment, offering excellent conductivity and meeting the product's temperature rise requirements even in high-temperature environments.

This series of products offers a variety of models, providing a choice of 2 to 9 conductors.

Compliance standards: Meets UL, TUV, and other standards.

4 The inner cores of the LP12 series products can be swapped between male and female configurations.

Terminal Male Plug | Terminal Female Socket | Panel Mount Female Socket | Flange Mount Female Socket | Flange Mount Female Socket (Zinc Alloy)

Terminal Female Plug | Terminal Male Socket | Panel Mount Male Socket | Flange Mount Male Socket | Flange Mount Male Socket (Zinc Alloy)

4.1 Product Coding Rules

EW-LP##X-XX X X X X X XX

- Wire Clamping Gasket Diameter (0/2 digits):
- Color of Wire Clamping Gasket or Waterproof Boot: C - Gray; B - Black
- Conductive Part Configuration (1-letter code): M - Male Pin; F - Female Pin
- Intermediate Housing Color: B - Black; Y - Yellow; L - Blue
- Main Body Material (1-digit code): 0 - Zinc Alloy; 5 - PBT
- Wiring Method: 1 - Screw Wiring; 2 - Solder ; 4 - Crimping
- Number of Conductors: 02 - 2 Core; 03 - 3 Core; 04 -4 Core...
- Interface Type: S - Plug; L - Straight Terminal Socket/Panel Mount Socket; P - Flange Mount Socket
- Models:12/16/20/24/28……
- Product Series: LP
- Abbreviation for Company Name: E-Weichat

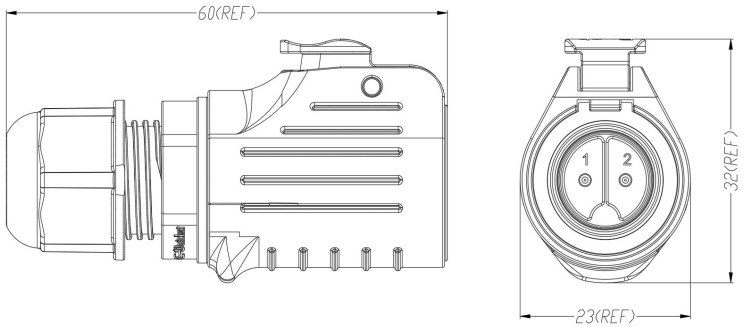
4.2 Installation Requirements

Soldering: Thewireisconnectedtotheproductusing a soldering method, which should be securely soldered without any cold solder joints;

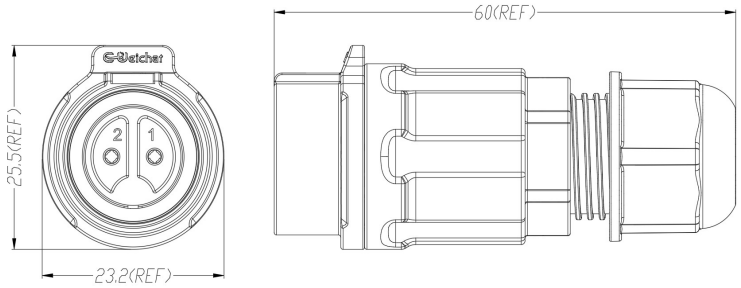
Screw Wiring: Thewireisconnectedtotheproductusing a screw-fastening method.

Product Outer Dimensions and Mounting Dimensions as Follows:

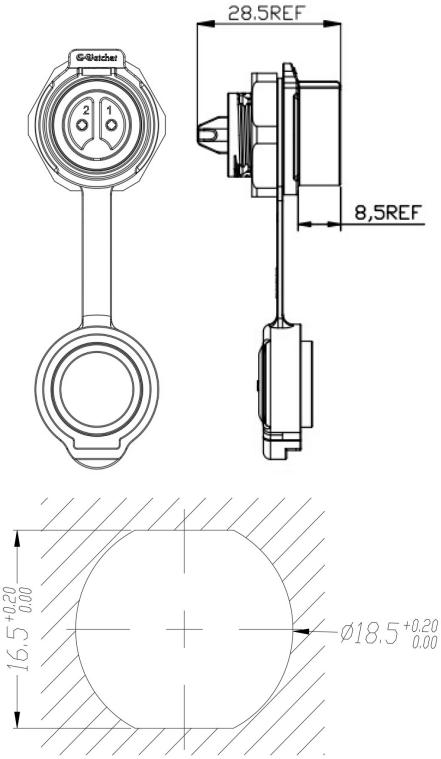
● EW-LP16S-#P



● EW-LP16L-#P

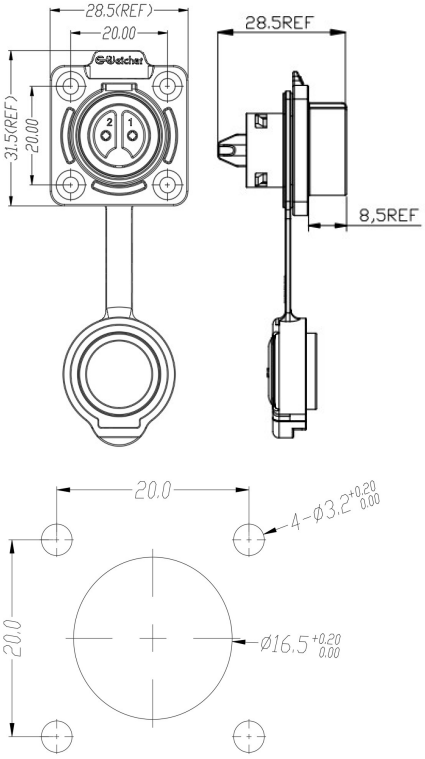


● EW-LP16L-#P



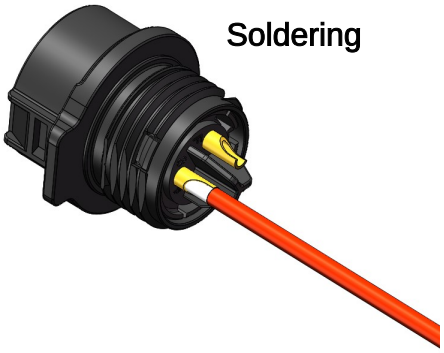
Mounting Hole Dimensions

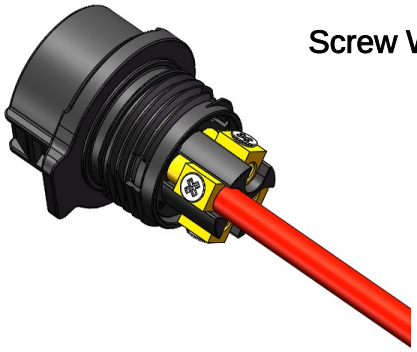
● EW-LP16P-#P

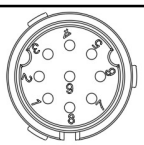


Mounting Hole Dimensions

5 Product Performance





Part Number		EW-LP16-2P	EW-LP16-3P	EW-LP16-4P	EW-LP16-5P	EW-LP16-7P	EW-LP16-8P	EW-LP16-9P
Image								
		2 Cores	3 Cores	4 Cores	5 Cores	7 Cores	8 Cores	9 Cores
Wiring Method	Solder	√	√	√	√	√	√	√
	Wiring Screw	√	√	√	√	×	×	×
Con-tact	Solder	Φ1.5*2	Φ1.5*3	Φ1.5*4	Φ1.0*5	Φ1.0*7	Φ1.0*8	Φ1.0*9
	Screw Wiring	Φ1.5*2	Φ1.5*3	Φ1.5*4	Φ1.0*5	×	×	×
Wire Gauge		1.5 mm²/16 AWG			0.5 mm²/20 AWG			
Rated Current		10A			5A			
Operating Voltage		400V AC			250V AC			
Withstand Voltage		2000V AC			1500V AC			
Resistance Contact		＜ 3 mΩ			＜ 5 mΩ			
Temperature Rise		10A ≤45K			5A ≤45K			
Insulation Resistance		≥ 1000 MΩ						
Mechanical Life		≥1900 times						
Temperature Ambient		-40～+85 ℃						
High-Temperature Aging		85 ℃ / 168 H						
Salt Spray Test		PH6.5-7.2, NaCl, 5% 48H						
IP Rating		IP67 (Option: IP68 1m/2H)						
(OD)		Power Supply Φ7～9 mm Signal Supply Φ4～6.5 mm						