

EW-LP20 Series Waterproof Connectors Datasheet

1 Product name: EW-LP20 series waterproof connectors



Cable Mount
Male plug
Metal+Plastic



Cable Mount
Female Socket
Metal+Plastic



Panel Mount
Female Socket
Metal+Plastic



Flange Mount
Female Socket
Metal+Plastic



Cable Mount
Male plug
All Plastic



Cable Mount
Female Socket
All Plastic



Panel Mount
Female Socket
All Plastic



Flange Mount
Female Socket
All Plastic

2 Materials and Processes

Part categories	Material	Process
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 Product Overview

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 14 conductors.

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

- 4 The inner cores of the LP20 series products can be swapped between male and female configurations.



Cable Mount
Male Plug



Cable Mount
Female Socket



Flange Mount
Female Socket



Panel Mount
Female Socket



Cable Mount
Female Plug



Cable Mount
Male Socket



Flange Mount
Male Socket



Panel Mount
Male Socket

4.1 Product Coding Rules

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



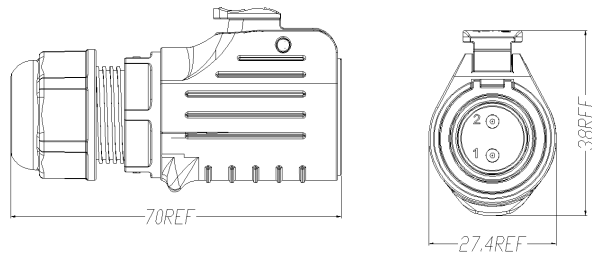
4.2 Installation Requirements

Soldering: The wire is connected to the product using a soldering method, which should be securely soldered without any cold solder joints;

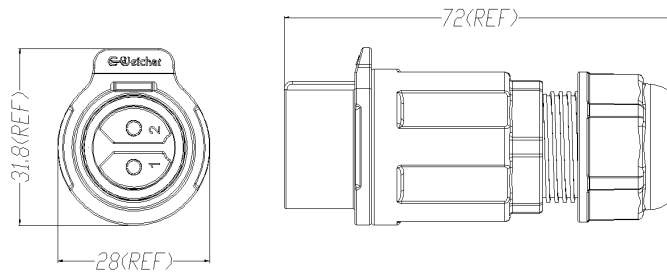
Screw Wiring: The wire is connected to the product using a screw-fastening method.

Product Outer Dimensions and Mounting Dimensions as Follows:

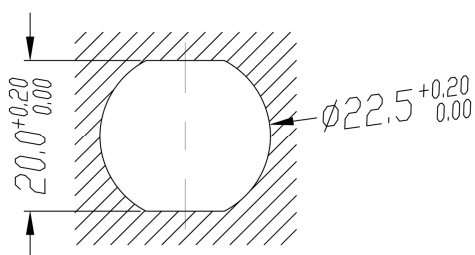
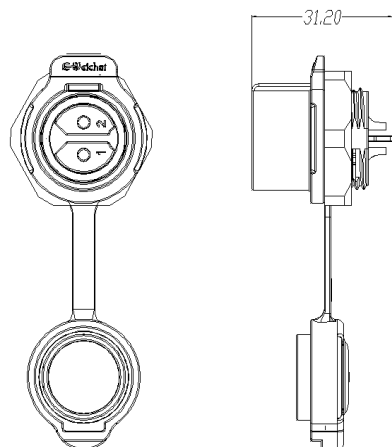
● EW-LP20S-#P



● EW-LP20L-#P

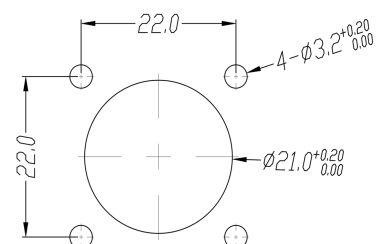
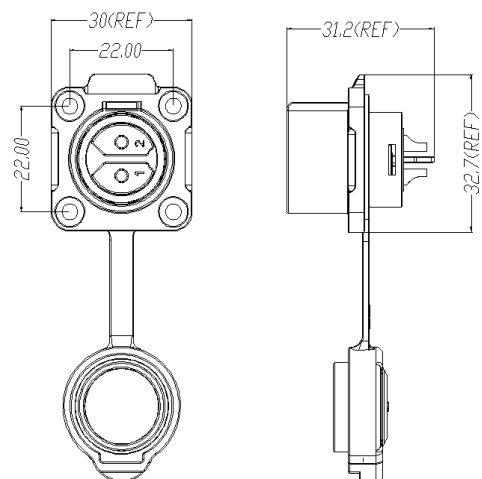


● EW-LP20L-#P



Mounting Hole Dimensions

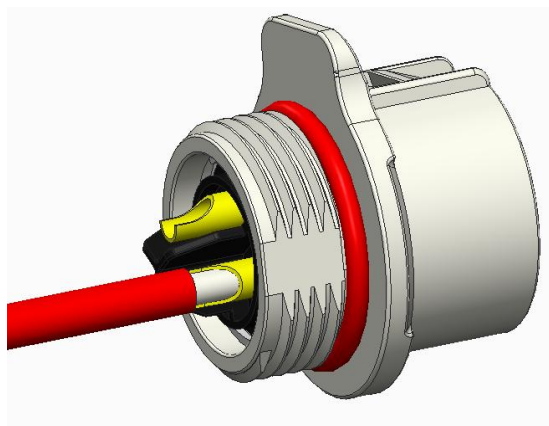
● EW-LP20P-#P



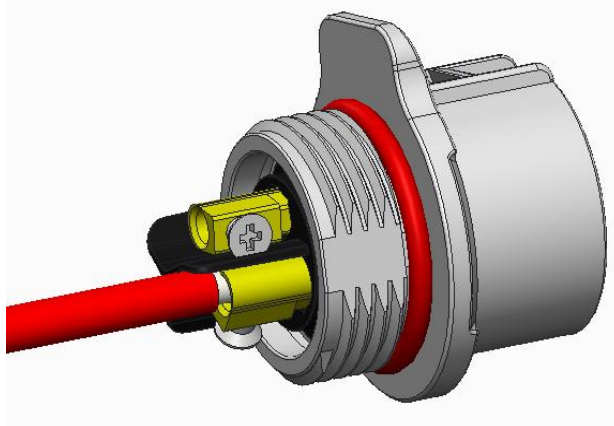
Mounting Hole Dimensions














5 Product Performance

●Soldering



●Screw Wiring



Part Number		EW-LP20-2P	EW-LP20-3P	EW-LP20-4P	EW-LP20-5P	EW-LP20-6P	EW-LP20-7P	EW-LP20-9P	EW-LP20-12P	EW-LP20-14P
Soldering						/				
Screw Wiring								/	/	/
		2 Cores	3 Cores	4 Cores	5 Cores	6 Cores	7 Cores	9 Cores	12 Cores	14 Cores
Wiring Method	Solder	√	√	√	√	×	√	√	√	√
	Screw Wiring	√	√	√	√	√	√	×	×	×
	Crimp	×	×	×	×	×	×	×	×	×
Contact	Solder	φ 2.7*2	φ 2.7*3	φ 2.7*4	φ 1.8*5	×	φ 1.8*7	φ 1.0*9	φ 1.0*12	φ 1.0*12
	Screw Wiring	φ 2.7*2	φ 2.7*3	φ 2.7*4	φ 1.8*5	φ 1.8*6	φ 1.8*7	×	×	×
	Crimp	×	×	×	×	×	×	×	×	×
Wire Gauge		2.5~4 mm ² 14~12 AWG			1~1.5 mm ² 18~16 AWG			0.34~0.75 mm ² 22~20 AWG		
Rated Current		20A (Stamping Terminal: 30A)			10A			5A		
Operating Voltage		500V AC			500V AC			250V AC		
Withstand Voltage		2500V AC			2000V AC			1500V AC		
Resistance Contact		< 1 mΩ			< 3 mΩ			< 5 mΩ		
Temperature Rise		20A ≤30K; 25A ≤40K; 30A ≤50K			10A ≤30K; 15A ≤40K; 20A ≤50K			5A ≤30K; 7A ≤40K; 10A ≤50K		
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		Wire Diameter φ9~12 mm Single Hole φ12 mm				Wire Diameter φ5~6.5 mm Single Hole φ6.5 mm				