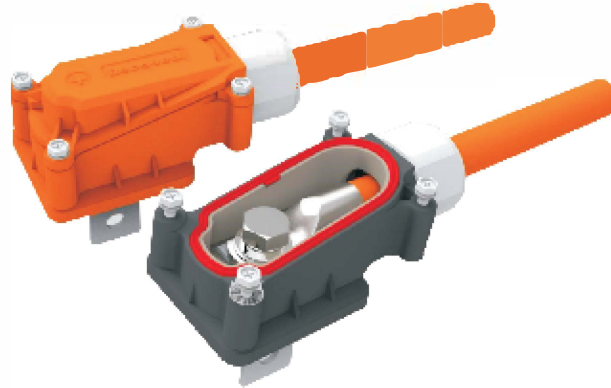


Low-cost High Voltage Metal Shell Connector (REQ4)



Features/Application

- This series connectors utilized for EV industry, offering stable high voltage, high current transmission among equipments.
- Positive and negative connectors are differentiated by color, Positive shell is orange, negative is black.
- Sealing grade can reach IP68 under mated condition.
- The cable can be easily assembled with connectors after cable was crimped.
- REQ4 connector doesn't use direct mating between male and female, instead it uses copper bars to connect both male and female contacts, which provides lower cost comparing to majority of HV connectors, and more reliable connection.
- The product has shielding properties.
- HVIL (High Voltage Interlock) is optional.

Technical Specification

Electrical Property

Voltage rating: 1000V DC
 Contact resistance: $\leq 3m\Omega$
 Withstand voltage: $\geq 3000V$ AC 1Min
 Insulation resistance: $\geq 3000M\Omega$ ($\leq 40^\circ C$, $\leq 50\% RH$)
 $\geq 300M\Omega$ ($> 95\% RH$)

Mechanical Property

Mating cycle: 20 times

Environmental Property

Working temperature: $-40^\circ C \sim +125^\circ C$
 Relative humidity: $\leq 95\%$ ($40^\circ C$)
 Sealing: IP67 (Depth of water: 1m, 48h, water tight)
 Single jack: waterproof (IP67) or aleak

Material

Meeting the RoHS
 Shell: aluminum alloy
 Contact: copper alloy
 Seal: rubber

Ordering Information

Non-HVIL

REQ4-50P-OR-A

Extensive character

OR: orange; BK: black

P: Shield; Non-shield unmarked

Cable range: 35/50/70

Serial

HVIL

REQ4-50PH0.3-OR-A

Extensive character

OR: orange; BK: black

H: HVIL; Non-HVIL unmarked

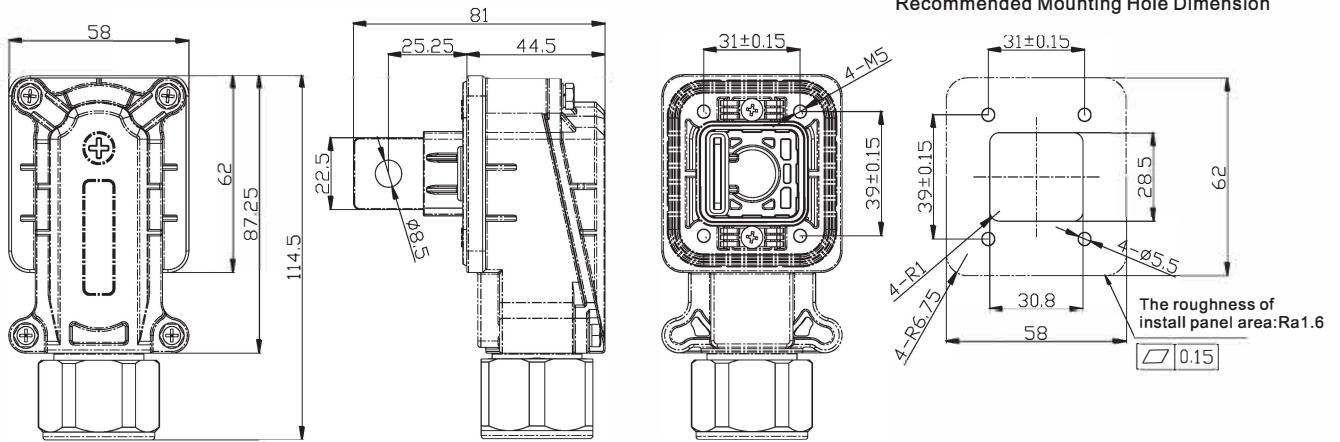
P: Shield; Non-shield unmarked

Cable range: 35/50/70

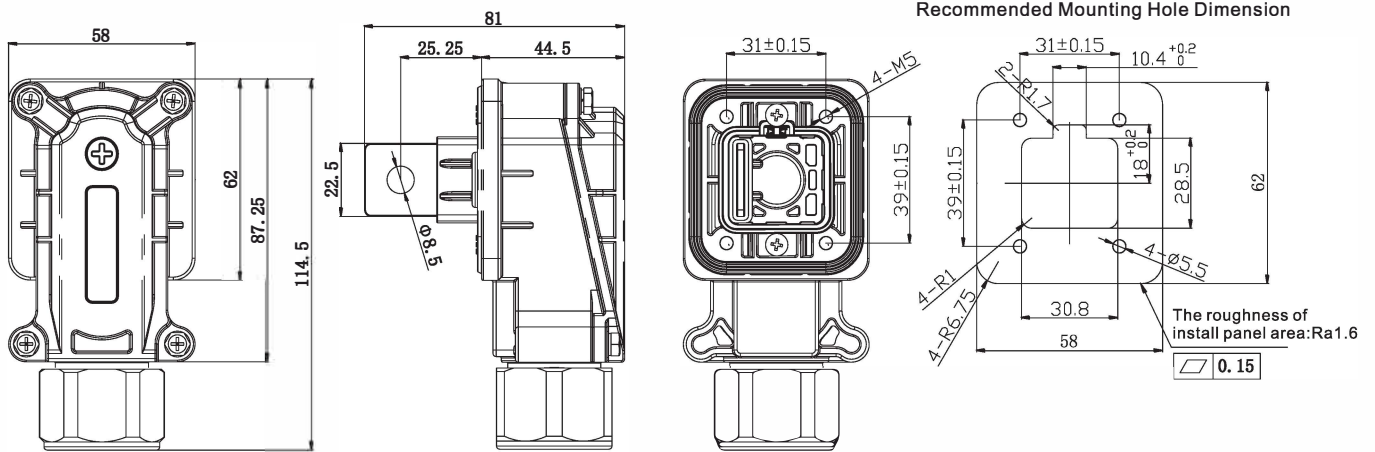
Serial

Size

Non-HVIL



HVIL



Note:

1. The product divides positive and negative type.
2. The mounting hole of the jack: M5, thickness of mounting plate: $t < 0.8\text{mm}$, panel flatness: 0.2, roughness of install panel area: $\leq \text{Ra}1.6$.
3. The recommended tightening torque of M10: $16\text{N} \cdot \text{M} \sim 18\text{N} \cdot \text{M}$; The recommended tightening torque of M8: $12\text{N} \cdot \text{M} \sim 14\text{N} \cdot \text{M}$; The recommended tightening torque of M5: $3.5\text{N} \cdot \text{M} \sim 4.5\text{N} \cdot \text{M}$; The recommended tightening torque of M4: $2\text{N} \cdot \text{M} \sim 2.5\text{N} \cdot \text{M}$.
4. The code of terminal, shield inner tube, shield tube, all of the above need to ordered separately.

Name	35 ²	50 ²	70 ²
Terminal(XX-10)	7.731.479	7.731.180051.06	7.731.180052.06
Shield inner tube	7.070.180139.01	7.070.180133.01	7.070.180134.01
Shield tube	7.070.180140.01	7.070.180135.01	7.070.193001.01

5. The length of the lead-out is 150mm

HVIL terminal: terminal8240-0447/SWS plastic shell: 6098-7898/SWS

Recommended terminal: terminal8230-5271/SWS plastic shell: 6098-7892/SWS