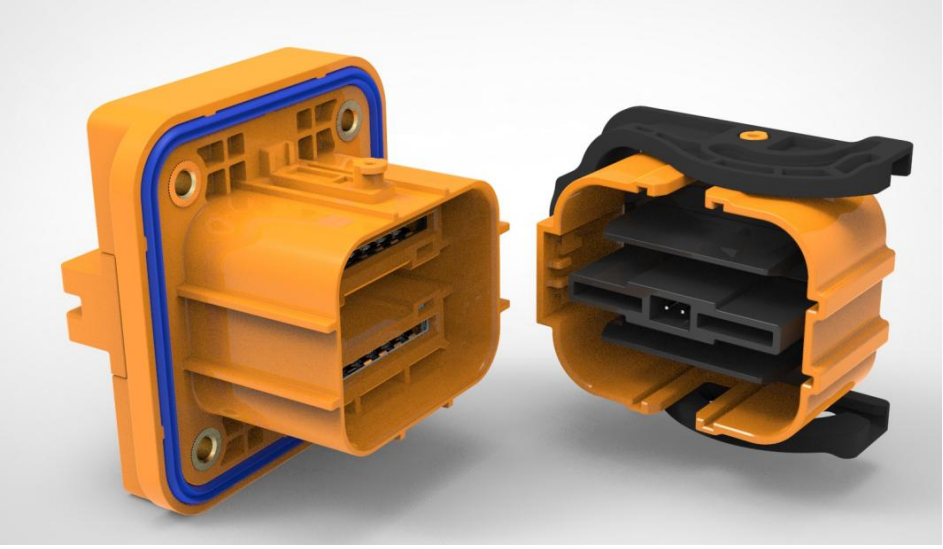
瑞可达
创新技术引领未来

Recodeal

MSD12 Maintenance Switch Technical Specification



Version Rev.	Change description/change content Change Description	Date of modification Revise. Date	Compilation Prepared By	Approve Approved By
1. 0	First release	2022. 12. 28	Zhang Liu	Li Xiaoyin
2. 0	Add material number and model without high voltage interlocking	2023. 03. 28	Zhang Liu	Li Xiaoyin
3. 0	Add the material number without primary locking	20223. 05. 08	Zhang Liu	Li Xiaoyin
4. 0	Vibration level updated from V1 to V2	2023. 05. 31	Zhang Liu	Li Xiaoyin
5. 0	Add material number with interlocking wire and add stud M8*20 socket	2023. 06. 27	Zhang Liu	Li Xiaoyin
6. 0	Update M8 locking torque	2023. 08. 08	Zhang Liu	Li Xiaoyin
7. 0	Add protective cover and finished material number, update contact resistance, and increase s	2023. 09. 04	Zhang Liu	Li Xiaoyin

Recodeal connection system co., ltd
Company Headquarters: No.998 Songjia Road, Wuzhong Economic Development Zone, Suzhou City, Jiangsu Province
Website: www.recodeal.com E-mail: sales@recodeal.com

	alt spray item			

I. Types of Commonly Used Materials (Table 1):

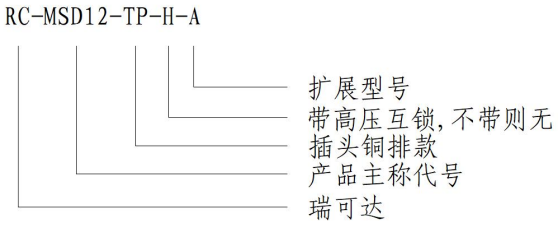
Serial number	Product name	Product material number	Product model	Remarks
1	MSD12 Plug	3.653.191084R	RC-MSD12-TP-H-A	With high voltage interlock and primary lock
2	MSD12 Plug	3.653.191084.01R	RC-MSD12-TP-A	Without high voltage interlock, with primary lock
3	MSD12 Plug	3.653.191084.02R	RC-MSD12-TP-H-A	With high voltage interlock, no primary lock
4	MSD12 Plug	3.653.191084.03R	RC-MSD12-TP-A	No high voltage interlock, no primary lock
5	MSD12 socket	3.663.191083R	RC-MSD12-Z-H-A	Parts with high voltage interlock, interlock base and interlock terminal are shipped, with output stud M8*16 and nut protruding 0.1 mm
6	MSD12 socket	3.663.191083.01R	RC-MSD12-Z-A	Without high voltage interlock, output stud M8*16, nut protruding 0.1 mm
7	MSD12 socket	3.663.191083.02R	RC-MSD12-Z-H-A	Parts with high voltage interlock, interlock base and interlock terminal are shipped, with output stud M8*20 and nut protruding 0.1 mm
8	MSD12 socket	3.663.191083.03R	RC-MSD12-Z-A	Without high voltage interlock, output stud M8*20, nut protruding 0.1 mm
9	MSD12 socket	3.663.191083.04R	RC-MSD12-Z-H-A	With high-voltage interlock, interlock wire, throw-off wire 0.3 m, output stud M8*16, nut protruding 0.1 mm
10	MSD12 socket	3.663.191083.05R	RC-MSD12-Z-H-A	With high-voltage interlock, interlock wire, throw-off wire 0.3 m, output stud M8*20, nut protruding 0.1 mm
11	MSD12 socket	3.663.191083.06R	RC-MSD12-Z-H-A	With high voltage interlock, interlock wire, wire length 0.15 m, wire end with JAE terminal, output stud M8*16, nut protruding 0.1 mm
12	MSD12 socket	3.663.191083.07R	RC-MSD12-Z-H-A	With high voltage interlock, interlock wire, wire length 0.15 m, wire end with JAE terminal, output stud M8*20, nut protruding 0.1 mm
13	MSD12 socket	3.663.191083.12R	RC-MSD12-Z-H-A	With high voltage interlock, interlock wire, wire length 0.1 m, wire end with molex terminal, output stud M8*16, nut protruding 0.1 mm
14	MSD12 Protective Cover	8.074.191082R		Place an order separately

II. Brief introduction of materials:

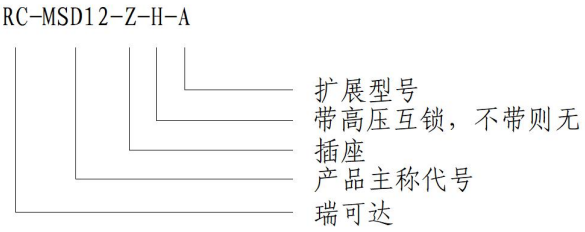
- This series of products are mainly used for large current transmission in the field of energy storage.
- The plug of this series is equipped with rotatable handle and secondary lock structure. The locking adopts the handle to lock, which is easy to operate and labor-saving, and has the functions of secondary lock and secondary unlock.
- This series of products is compatible with a pair of high-voltage interlocking contact pairs, or without high-voltage interlocking.
- The installation mode of this series of products is post-installation.

III. Naming rules:

Plug



Socket



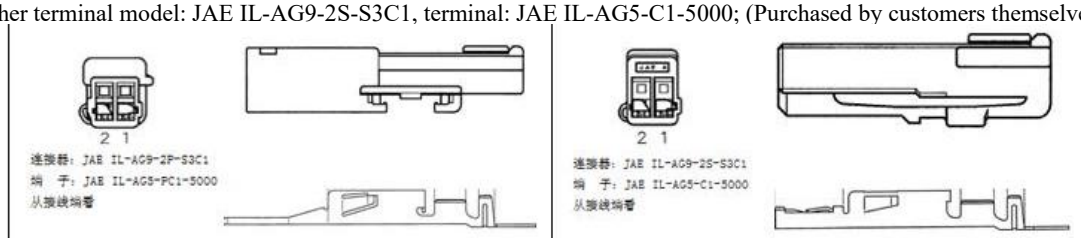
Remarks:

1. Plugs and sockets need to be equipped with high-voltage interlocking at the same time to meet the functional requirements, and the high-voltage interlocking is one group;

If the high voltage interlock requires strip line and adapter JAE terminal, the terminal model is as follows:

Public terminal model: JAE IL-AG9-2P-S3C1, terminal: JAE IL-AG5-PC1-5000; (Connected to the socket by our company)

Mother terminal model: JAE IL-AG9-2S-S3C1, terminal: JAE IL-AG5-C1-5000; (Purchased by customers themselves)



If the high voltage interlock requires strip line and adapter Molex terminal, the terminal model is as follows:

Public terminal model: 43020-0200, matching terminal: 43031-0001; (Connected to the socket by our company)

Mother terminal model: 43025-0200, matching terminal: 43030-0001; (Purchased by customers themselves)

IV. Technical parameters:

1. Electrical characteristics:

- Rated voltage: 1500V DC
- Current rating: 350A
- Contact resistance: ≤ 0.25 m Ω
- Withstand voltage: 4200V DC (socket: between contact parts, between power contact parts and signal contact parts; After closing: between contact and mounting panel, between power contact and signal contact) leakage current ≤ 1mA (60s)
- Insulation resistance: 5000M Ω (normal temperature and humidity); 200M Ω (damp heat)

2. Mechanical characteristics:

- Vibration shock: in accordance with V2 level in USCAR 2-6 2013
- Mechanical life: 200 times

3. Working environment:

- Working temperature: -40 ℃ ~ + 125 ℃;
- Humidity: below 5% ~ 95% (40 ℃);
- Protection level: IP68 (plugs and sockets are plugged in, 1m water depth, soaked for 48h, watertight)
- Salt spray: 720H (5% neutral NaCl solution， outer parts)

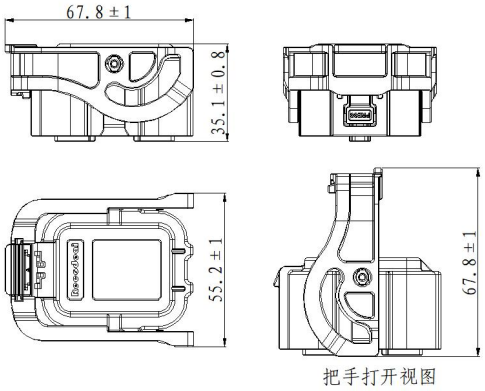
4. Material:

- Shell: thermoplastic engineering plastics (ROHS standard, flame retardant grade UL94-V0, main color orange);
- Contact parts: copper alloy silver plating;
- Seals: Silicone rubber (ROHS standard, flame retardant grade UL94 HB);

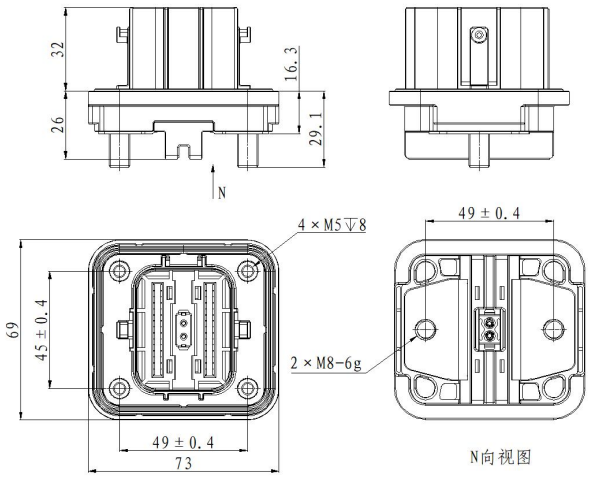
V. Outline Dimension Drawing:

1. Overall dimensions:

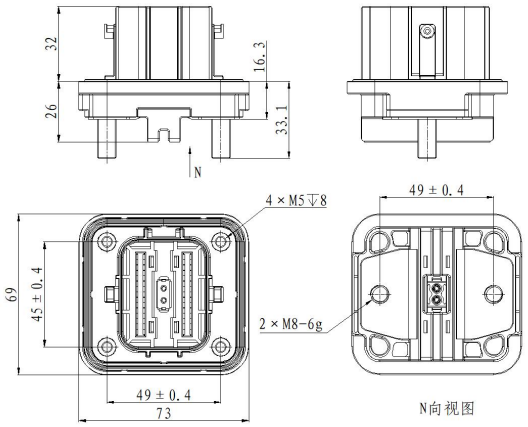
Plug:



Socket-Output Stud M8*16:

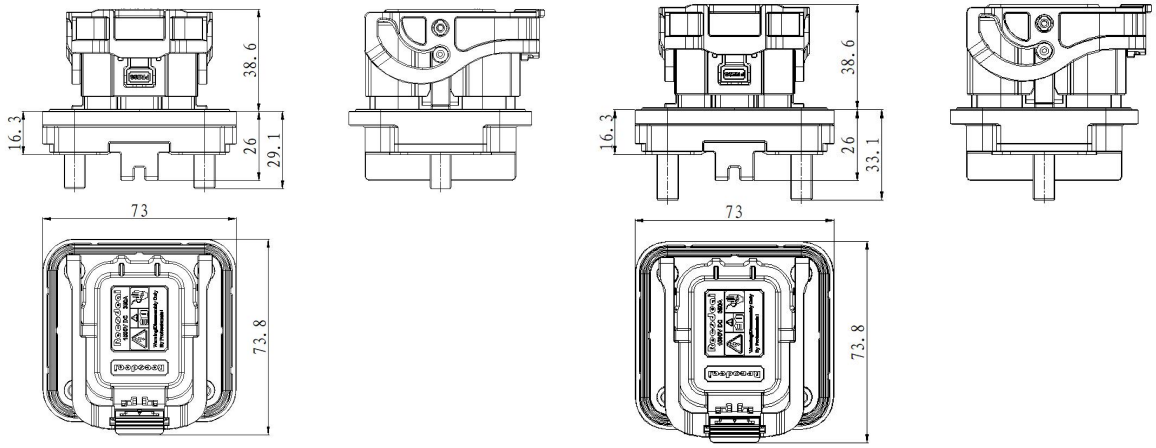


Socket-Output Stud M8*20:

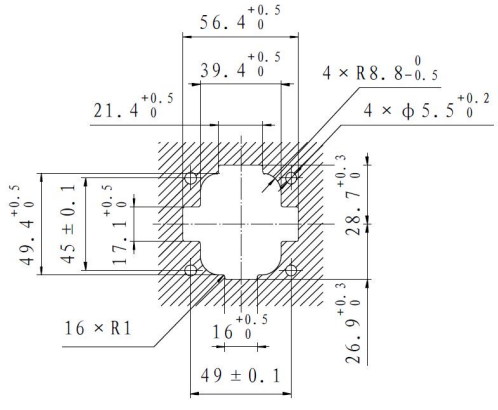


After the head seat is inserted:

Output Stud M8*16 Output Stud M8*20



2. Recommended mounting holes:



（推荐面板安装厚度：≤4mm 表面
粗糙度：3.2 表面平面度：0.2）

Remarks:

1. The screw for installing copper bar is M8 screw, and the recommended locking torque is (15±1) N.m;

2. The nut for mounting the panel is M5 nut, and the recommended locking torque is (5 ± 1) N.m

3. Drawings of protective cover