

Product specification

1. Scope

This specification applies to the metal shells of heavy-duty connectors, and defines the product performance requirements, test procedures and acceptance criteria.

Applicable Product Models: FH03A/FH10A/FH16A/FH32A/FH06B/FH10B/FH16B/FH24B/FH32B/FH48B series.

2. Applicable Standards

The following documents form a part of this specification. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

2.1 EN 61984: Connectors - Safety requirements and tests

2.2 IEC 60512: Connectors for electronic equipment -Test and measurement

2.3 IEC 60529: Degrees of Protection Provided by Enclosures (IP Code)

2.4 GB/T5095: Electromechanical components for electronic equipment — Basic testing procedures and measuring methods

2.5 GB/T2423: Environmental testing for electric and electronic products

3. Parameter Range

See drawing for details.

4. Appearance and Dimensions

4.1 Appearance: The product surface shall be free from defects, dirt, cracks and mechanical damage. Contacts shall be free from rust, oxidation or plating peeling.

4.2 Appearance and dimensions shall comply with the requirements of product drawings.

4.3 Exchangeable: Exchangeable with same specification products.

5. Materials

See drawing for details.

6. Test Requirements and Procedures Summary

Serial No.	Item	Test Method	Technical Requirements
1	Examination of Product	Visual inspection (IEC 60512-1-1/-2, Test 1a and 1b 6.2 of EN 61984)	Meet the drawing requirements, no damage or abnormality in visual appearance

2	IP Code	IP6X: Negative pressure evacuation 2kPa Duration: 8 hours IPX5: Nozzle diameter 6.3mm, distance 2.5–3m Water flow rate (12.5±0.625) L/min Duration: Minimum 3 minutes (IEC 60529)	No dust ingress, water ingress or condensation is found inside the product. The sealing structure remains intact, and the protection performance complies with requirements.
3	Salt Spray Test	Sodium chloride concentration: (5±1) % pH value of solution: 6.5~7.2 Test temperature: (35±2) °C Test duration: 24 h (GB/T2423.17)	After the test, the sample shows no severe corrosion, blistering or coating peeling. Electrical performance and mechanical structure remain normal, complying with standard requirements.
4	Low temperature test	Test temperature: -40°C Test duration: 2 h After test, recover for 2 h under ambient conditions before inspection. (GB/T 5095.6-1997 Test 11j)	Appearance: No damage; Contact resistance shall comply with drawing requirements.
5	High temperature test	Test temperature: 125°C. Test duration: 168 h. After test, recover for 2 h under ambient conditions before inspection. (GB/T 5095.6-1997 Test 11i)	