

HM Contact Systems

Advanced Contact Assembly for High-Current Applications

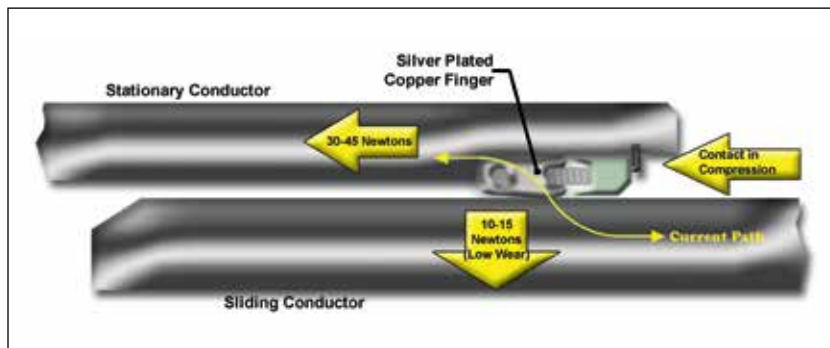


High mass for high reliability

HM Contacts™ provide a high-performance alternative to delicate contact systems for current transfer applications in power systems. Developed for high current plug-in connections, the HM Contact design ensures maximum current transfer and stability with low contact resistance.

With continuous current ratings up to 8,000 amperes, and short circuit current ratings up through 100kA, HM Contacts provide a reliable long-term solution for a variety of applications.

From low voltage distribution systems to high voltage power equipment, Avail Bus Systems can supply an HM Contact to meet your needs.



The HM concept

Featuring a High Mass (HM) design that delivers superior performance and efficiency, HM contacts are an ideal solution for joining high-current contacts. The HM contact assembly consists of a ring of spring-loaded individual silver-plated copper contacts, providing continuous low-pressure contact with the contact elements to ensure reliable, long-term operation.

The HM Contact can be customized for a variety of applications, with sizes ranging from 25mm to 150mm in diameter as well as linear and custom configurations.





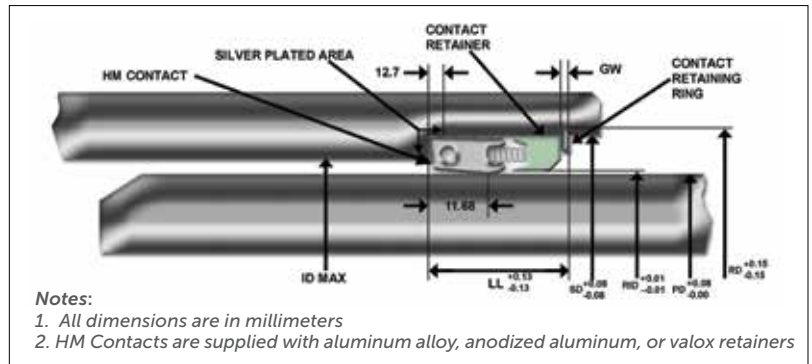
Features and benefits

Highly versatile and easy to install in a wide variety of OEM applications, the HM contact is well suited for circuit breakers and disconnects.

- Low contact resistance
- Low cost
- Minimum current flow path
- Elimination of oxidation/fretting
- Low wear ensures long service life
- Adjusts for angular misalignment/high side load forces
- Short circuit capacities through 100kA
- Continuous current ratings through 8,000 A
- Custom designs available

Applications

- High Voltage Circuit Breakers
- Medium Voltage Switchgear
- Cable Terminations
- Busbar Connectors
- Gas Insulated Switchgear (GIS)
- Live Tank Circuit Breakers



Technical Specifications

| HM Contact Model | HM Contact Specifications | | | | | | | | | | |
|------------------|---------------------------|-------|--------|--------|--------|------|-------|--------------------|-------------------|--------------------|------------------------------------|
| | Standard Dimensions (mm) | | | | | | | Electrical Ratings | | | |
| | RID | PD | SD | ID | RD | GW | LL | Contact Fingers | Rated Current (A) | Short Circuit (kA) | Contact Resistance ($\mu\Omega$) |
| HM-38 | 38.27 | 38.10 | 53.34 | 44.45 | 55.75 | 1.42 | 25.12 | 39 | 2000 | 40 | 4.5 |
| HM-44 | 44.65 | 44.40 | 59.64 | 50.80 | 62.31 | 1.42 | 25.12 | 44 | 2000 | 63 | 4.3 |
| HM-60 | 61.27 | 60.00 | 75.29 | 66.80 | 78.64 | 1.73 | 25.42 | 59 | 2500 | 63 | 3.5 |
| HM-70 | 70.87 | 70.00 | 85.29 | 76.20 | 88.37 | 1.73 | 25.43 | 69 | 3000 | 80 | 3.0 |
| HM-95 | 95.50 | 95.00 | 110.29 | 101.60 | 114.43 | 1.73 | 25.42 | 95 | 6000 | >100 | 2.5 |

Notes:

1. Plug diameter (PD) and socket diameter (SD) dimensions are after silver plating
2. Continuous and short circuit ratings are typical. Actual ratings depend on the assembled configuration
3. Contact resistance is based on silver plated aluminium contact elements
4. GW tolerances are +0.10/-0.00 for a GW of 1.42, and +0.15/-0.00 for a GW of 1.73



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