Honeywell

Interactive Catalog Replaces Catalog Pages

Honeywell Sensing and Control has replaced the PDF product catalog with the new Interactive Catalog. The Interactive Catalog is a power search tool that makes it easier to find product information. It includes more installation, application, and technical information than ever before.



Click this icon to try the new Interactive Catalog.

Sensing and Control

Honeywell Inc. 11 West Spring Street Freeport, Illinois 61032

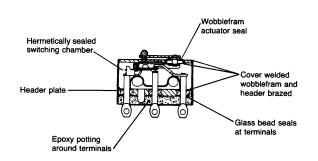
HM Series

Basic Switches Hermetically Sealed



GENERAL INFORMATION

HM switches are not generally recommended for 115 VAC, 60 Hz. If you have a 60 Hz application in the milliamp range, or applications that require the switch to function electrically during exposure to sub-freezing temperatures, contact the 800 number for special design variations that are available.



ELECTRICAL RATINGS

| Circuitry | | | Electrical Rating Code | | | |
|-----------------------------|---------------------------------------|---|--|--|--|--|
| Single-Pole Double-Throw | • • • • • • • • • • • • • • • • • • • | Н | 1 amp res., 0.25 amp ind., 28 vdc. | | | |
| Single-Pole Double-Throw | • | I | 4 amps res., 2 amps ind., 0.5 amps lamp load, 115 vac, 400 Hz. 4 amps res., 2 amps ind., 1 amp lamp load, 28 vdc | | | |
| Single-Pole Double-Throw | • • • • • • • • • • • • • • • • • • • | J | $\frac{1}{2}$ amp res., $\frac{1}{4}$ amp ind. (sea level or 70,000 ft.), 28 vdc | | | |
| Single-Pole Double-Throw | • • • • • • • • • • • • • • • • • • • | К | 3 amps res., 1 amp ind. (sea level or 70,000 ft.), 28 vdc 1 amp res. or ind. (sea level), 115 vac., 400 Hz. | | | |
| Single-Pole Double-Throw | • | L | 3 amp res., 1 amp ind., 28 vdc 1 amp res., 1 amp ind., 115 vac, 400 Hz. | | | |

APPLICATION NOTES

- Honeywell MICRO SWITCH does *not* recommend the use of silver cadmium oxide switch contacts in non-arcing loads. Non-arcing loads are generally loads less than 12 volts and/or 0.5 amp. Catalog listings in the 5, 6, 15, and 16HM Series use silver cadmium oxide contacts. If you have specific questions, contact the MICRO SWITCH Application Center at 1-800-537-6945.
- 2. For applications involving non-arcing loads, catalog listings in the 9, 10, 19 and 20HM Series are recommended.
- 3. The 1, 2, 5, and 6HM Series are recommended for use only in 3 to 4 amp range applications.

FEATURES

- Hermetically sealed per enclosure design symbol 5, MIL-S-8805
- Power load switching capability up to 4 amperes, 28 VDC and 115 VAC, 400 Hz
- Temperature tolerance from -85°F to +250°F (-65°C to +121°C)
- High temperature construction for use from -85°F to +500°F (-65°C to +260°C)
- Variety of auxiliary actuators
- Choice of terminal styles
- Gold contacts for special applications
- Military standard construction with listings on the MIL-S-8805 qualified products list.

Basic Switches

Hermetically Sealed

Characteristics: O.F. — Operating Force; R.F. — Release Force; P.T. — Pretravel; O.T. — Overtravel; D.T. — Differential Travel; O.P. — Operating Position.

ORDER GUIDE

| | | | | Operating Characteristics | | | | | |
|----------|------------------------|--|------------------------------|--------------------------------|---------------------------------------|----------------------------------|---------------------------|----------------------------------|--|
| | Catalog Listing | Recommended For | Electrical Rating Code | O.F. max. Newtons ounces | R.F. min. Newtons ounces | P.T. max. mm inches | O.T. min. mm inches | D.T. max. mm inches | O.P. mm inches ±.015 (0,38 mm) |
| NOTION D | 11HM1 (MS27216-5) | Most applications. Exceeds MIL-S-8805 requirements for shock and vibration. | К | 1,95 7 | 0,28 1 | 0,76 . 030 | 0,08 . 003 | 0,15 . 006 | 8,38 . 330 |
| Fig. 1 | 13HM1 | Applications requiring gold contacts | Н | 1,95 7 | 0,28 1 | 0,76 . 030 | 0,08 . 003 | 0,15 . 006 | 8,38 . 330 |
| | 15HM1 | Operating in temperatures to 300°F (149°C) | L | 1,95 7 | 0,28 1 | 0,76 . 030 | 0,08 . 003 | 0,15 . 006 | 8,38 . 330 |
| | 9HM1 (MS27216-6) | Bifurcated gold contacts | J | 1,95 7 | 0,28 1 | 0,76 . 030 | 0,08 . 003 | 0,15 . 006 | 8,38 . 330 |
| • • | 2HM19-1 (MS27216-2) | MIL-S-8805 application requirements 1 ft. (305mm) leads | - | 1,95 7 | 0,28 1 | 0,76 . 030 | 0,08 . 003 | 0,15 . 006 | 8,38 . 330 |
| Fig. 2 | 2HM19-5 (MS27216-4) | 5 foot (1524mm) long leads | I | 1,95 7 | 0,28 1 | 0,76 . 030 | 0,08 . 003 | 0,15 . 006 | 8,38 . 330 |
| Fig. 3 | 16HM1-1 | High temperature to 500°F (260°C) flat spring | L | 1,95 7 | 0,28 1 | 0,76 . 030 | 0,08 . 003 | 0,15 . 006 | 8,38 .330 |
| Fig. 4 | 15HM2 | Operating in temperatures to +500°F (260°C) with weld tab termination. No potting. | L | 1,95 7 | 0,28 1 | 0,76 . 030 | 0,08 . 003 | 0,15 . 006 | 8,38 . 330 |

HM MOUNTING

A force spreading plate is recommended to reduce the chance of product damage due to excessive mounting force.

MOUNTING PLATE

19PA137-HM



ealed/High emperature

Basic Switches Hermetically Sealed

Characteristics: O.F. — Operating Force; R.F. — Release Force; P.T. — Pretravel; O.T. — Overtravel; D.T. — Differential Travel; O.P. — Operating Position; F.P. — Free Position.

| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | F.P. mm nches 12,2) approx . |
|--|--|
| Fig. 5 JS-151 Roller leaf 500°F (260°C) 9 2 — .030 .030 .340 approx. .480 Image: Fig. 5 JS-151 Roller leaf 500°F (260°C) 9 2 — .030 .030 .340 approx. .480 Image: Fig. 5 JS-151 Roller leaf 500°F (260°C) 9 2 — 0.76 0.76 .030 .14 .690 Image: Fig. 5 Image: Fig. 5 Image: Fig. 5 Image: Fig. 5 1 Image: Fig. 5 Image: Fig. 5 1 .690 Image: Fig. 5 .690 Image: Fig. 5 .690 Image: Fig. 5 .690 Image: Fig. 5 .690 Image: Fig. 5 I |) approx. |
| JS-151 Roller leaf 500°F (260°C) 9 2,50 0,56 2 - 0,76 0,76 14 Soller leaf 500°F (260°C) 9 2 - 0,56 2 - 0,76 0,76 14 Soller leaf 500°F (260°C) 9 2,50 0,56 2 - 0,76 0,76 0,76 0,76 0,76 0,76 0,76 0,76 | 17,5) approx . |
| | |
| Fig. 6 JS-307 Straight lever 500°F (260°C) 0,42 1.5 0,03 .11 3,18 .125 0,64 .025 1,42 .056 10,3 .406 approx. | |
| Fig. 7 | |
| JS-308 Roller lever 500°F (260°C) 0,42 0,03 3,18 .0,64 1,42 14,3 .125 approx. 025 .056 .562 approx. | |

AUXILIARY ACTUATORS FOR HM SWITCHES ORDER GUIDE (Switches are not included)

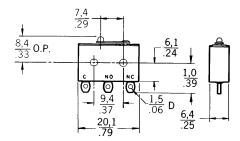
MOUNTING TORQUE:

JS-254 2.5 inch pounds all others 1.5 inch pounds See optional mounting plate – previous page. All standard JS actuators in the SM Section of Catalog 10 can be used with the HM line. However, hardware, insulator, and oil impregnated roller supplied with these actuators may not provide the required service at temperatures above $250^{\circ}F$ ($121^{\circ}C$).

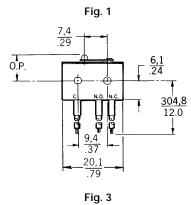
Basic Switches

Hermetically Sealed

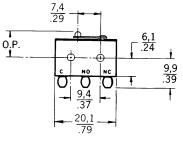
MOUNTING DIMENSIONS (For reference only)



MOUNTING HOLES WILL ACCEPT PINS OR SCREWS OF 1,9/.08 DIA

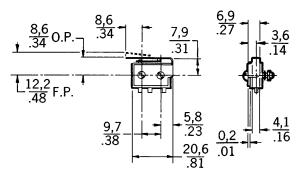


<u>7,4</u> .29 0.P. 10,6 N.O. 9,4 .37 304,8 ğ 12 20,1 .79 Fig. 2

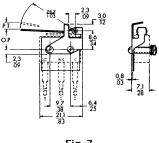




AUXILIARY ACTUATORS









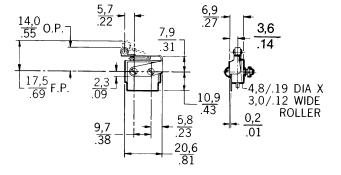
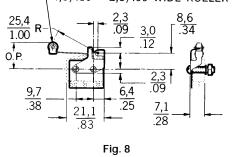


Fig. 6 $74,8/.19 \times 2,3/.09$ WIDE ROLLER



0,0 = mmKey: 0.00 = inches /High

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Honeywell: 16HM4