



1HM1



Actual product appearance may vary.

**HM Series Hermetically Sealed Basic Switch, Single Pole Double Throw Circuitry, 5 A at 28 Vdc, Integral Lever Actuator, Solder Termination**

**Features**

- Hermetically sealed per MIL-S-8805, design symbol 5
- Broad temperature tolerance range of -65 °C to 121 °C [-85 °F to 250 °F]
- High temperature construction for use in a range of -65 °C to 260 °C [-85 °F to 500 °F]
- MIL-PFR-8805 qualified listing
- Not sensitive to changes in altitude or pressure
- Compact size, light weight
- Gold contacts available
- Choice of actuation and termination

**Potential Applications**

- Adverse gas or vapor environments
- Oil drilling installations
- Marine environments
- Submarines and stationary undersea equipment
- Refrigeration units
- Aircraft and spacecraft
- Earth moving machinery
- Desert vehicles
- Cement mills

**Description**

MICRO SWITCH™ HM Series hermetically sealed basic switches contain contacts in a sealed chamber. A gas-tight seal is maintained while transmitting force and motion to the switch mechanism through a metal diaphragm. HM Series Hermetically Sealed Switches are not generally recommended for 115 Vac, 60 Hz. If you have a 60 Hz application in the mA range, or applications that require the switch to function electrically during exposure to sub-freezing temperatures, contact us for special design variations that are available.

Product Specifications	
Switch Type	MICRO SWITCH™ Subminiature 12,7 mm H x 6,35 mm W x 20,3 mm L [0.5 in H x 0.25 in W x 0.8 in L]
Sealed	Yes, Hermetic
Ampere Rating	5 A
Circuitry	Single Pole Double Throw (SPDT)
Actuator	Integral Lever
Termination	Solder
Operating Temperature Range	-184 °C to 121 °C [-300 °F to 250 °F]
Voltage	28 Vdc

Contact Type	Silver
Operating Force (O.F.)	1,95 N [7 oz] max.
Release Force (R.F.)	0,28 N [1.0 oz] min.
Pretravel (P.T.)	0,76 mm [0.030 in] max.
Overtravel (O.T.)	0,08 mm [0.003 in] min.
Differential Travel (D.T.)	0,15 mm [0.006 in] max.
Operating Position (O.P.)	8,38 mm [0.33 in]
Housing Material	Stainless Steel
Mounting Screw Size	22,1 mm [0.087 in]
Mounting Centers	9,53 mm $\pm$ 0,05 mm [0.375 in $\pm$ 0.002 in]
Maximum Tightening Torque	0,16 N m [1.5 in lb]
Weight	6,35 g [0.22 oz] max.
Package Height	18,29 mm [0.72 in]
Package Width	6,35 mm [0.25 in]
Package Length	22.35 mm [0.88 in]
Recommended For	Most applications
Availability	Global
UNSPSC Code	30211905
UNSPSC Commodity	30211905 Snap switches
Series Name	HM

# MICRO SWITCH

FREEPORT ILLINOIS, U S A  
A DIVISION OF HONEYWELL

FED. MFG. CODE 91929

## SWITCH - BASIC

CATALOG LISTING

1HM1

1HM1

M

DRAWING  
NUMBER

15

ISSUE

15

REPLACES

RELEASE NO.

CHECK

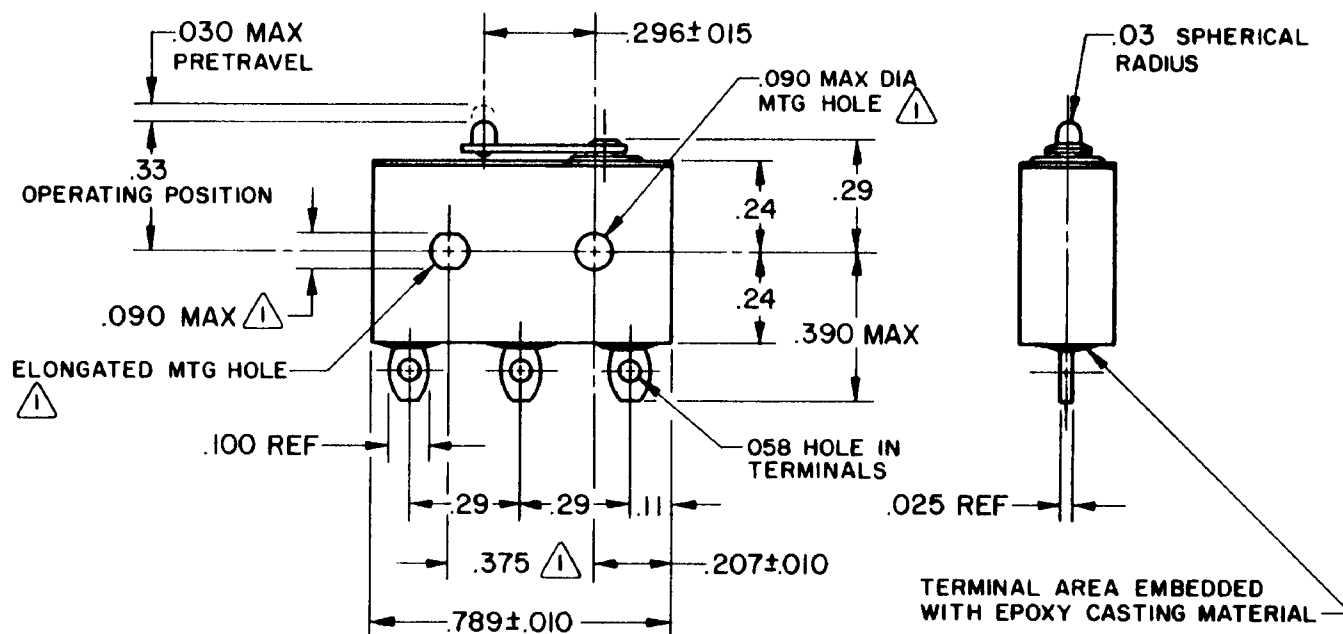
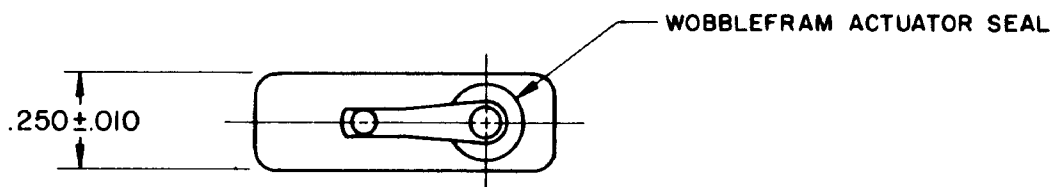
CHECK

CHECK

FO-52848  
DRAWN  
S R H 10 AUG 73

### REVISIONS

A	C032230
S R H	10 AUG 73
B	C071228
DAW	1 NOV 91
C	C082984
DLT	17 MAY 96



### NOTE -

- 1 - MOUNTING HOLES WILL ACCEPT PINS OR SCREWS OF .087 MAX DIA ON .375 ± .002 CENTERS
- 2 - FOR USE IN TEMPERATURE RANGE -300°F TO +250°F
- 3 - HERMETICALLY SEALED (METAL-TO-METAL, GLASS-TO-METAL)
- 4 - ALL EXPOSED PARTS ARE OF CORROSION RESISTANT MATERIALS
- 5 - TERMINALS ARE TINNED FOR SOLDERING
- 6 - DO NOT APPLY MORE THAN 1 1/2 INCH-LBS OF TORQUE WHEN TIGHTENING MOUNTING SCREWS

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CHARACTERISTICS	ELECTRICAL DATA			SCALE 2 TO 1
OPERATING FORCE ----- 7 OZ MAX	CONTACT ARRANGEMENT S P D T			DO NOT SCALE PRINT
RELEASE FORCE ----- 1 OZ MIN	LINE VOLTAGE	INDUCTIVE LOAD	RESISTIVE LOAD	UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES <b>TOLERANCES ARE</b>
DIFFERENTIAL TRAVEL ----- .006 MAX	28 VDC	3 AMP	5 AMP	ONE PLACE (.01) ± .030
OVERTRAVEL ----- .003 MIN	115 VAC (400 CYCLE)	2 AMP	2 AMP	TWO PLACE (.00) ± .015
				THREE PLACE (.000) ± .005
				ANGLES ±
				WEIGHT .014 LB MAX