FED. MFG. CODE 91929 MICRO SWITCH a Honeywell Division ANSI YI4.5M-1982 APPLIES

HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF MICRO SWITCH. CATALOG LISTING SWITCH - TOGGLE 29ET16-3B-B

(MAGNETIC HOLE-IN)

DO NOT SCALE PRINT UNLESS OTHERWISE SPECIFIED TOLERANCES ARE THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF MICRO SWITCH. A DIVISION OF ONE PLACE (.0) +.030 TWO PLACE (.00) +.015 THREE PLACE (.000) +.005

ANGLES

THIRD ANGLE PROJECTION **⊕ ─ □** -

N/A

N/A

≈ 60 Hz FOR 5 SEC)

N/A

YES 29

20-29 VDC

I5 VDC

0-15 VDC

7 lbf (31, 1 N) MAX

15 lbf-IN (1,7 NM) MAX

SEA LEVEL TO 65,000 FT

25 lbf (III,2N) PER MIL-S-5594 PARA.3.8 & 4.9.4.A 15 lbf (66,7N) PER MIL-S-5594 PARA.3.8 & 4.9.4.B

40,000 CYCLES MIN PER MIL-S-5594 PARA.3.10 & 4.9.

20,000 CYCLES MIN PER MIL-S-5594 PARA.3.11 & 4.9.

-85° F (-65° C) TO +160° F (+71° C)

PER MIL-S-5594 PARA. 3.14 & 4.9.10

PER MIL-S-5594 PARA. 3.13 & 4.9.9

PER MIL-S-5594 PARA. 3.17 & 4.9.13

PER MIL-S-5594 PARA. 3.15 & 4.9.11

PER MIL-S-5594 PARA. 3.16 & 4.9.12

PER MIL-S-5594 PARA. 3.18 & 4.9.14

PER MIL-S-5594 PARA. 3.19 & 4.9.15

220 OHMS MIN

10 lbf (44, 5 N) MAX

1000V RMS, 1000μA (MAX LKG)

1000V RMS, 1000μA (MAX LKG)

IOOOV RMS, IOOOДА (MAX LKG)

INFORMATION ON LOW ENERGY LOADS IS REQUIRED OR FOR HELP WITH SPECIFIC APPLICATIONS 10 - CUSTOMER PART NUMBER 5PTV0505-1

/9\ CONTACT HONEYWELL-MICRO SWITCH IF ADDITIONAL

- 8 THE DIODES ARE JANTXV TYPE AND LIMIT THE EMI: SPIKES (TRANSIENTS OF DURATION LESS THAN 500 MICRO SECONDS) GENERATED BY THE SWITCH COIL SHALL NOT EXCEED 42 VOLTS
- 7 SWITCHES DO NOT NECESSARILY OPERATE SIMULTANEOUSLY
- MIL-S-5594
- /5\ CIRCUIT IDENTIFICATION IS SHOWN ON SWITCH HARDWARE MAY BE FURNISHED UNASSEMBLED PER
- 4 CIRCUITS CAN BE TRANSFERRED MANUALLY. ENERGIZING THE COIL WILL NOT CAUSE TRANS-FER OF CIRCUITS
- TAGE AT WHICH THE LEVER WILL REMAIN ACTUATED. HOLD IN MAY OCCUR AT A LOWER VALUE. DROP OUT VOLTAGE: THE VOLTAGE RANGE IN WHICH THE LEVER WILL BE RELEASED
- BLUE EPOXY BASED ENAMEL COLOR NO. 25184 PER FEDERAL STANDARD 595 2 - SWITCH SEALED PER MIL-S-5594 /3\ HOLD IN VOLTAGE: THE MINIMUM SPECIFIED VOL-

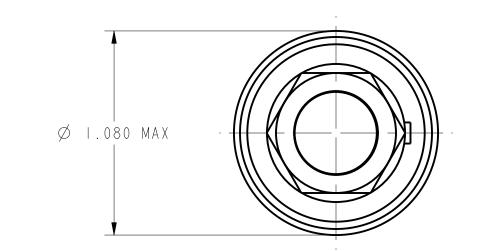
NOTES I - EXPOSED PARTS ARE OF CORROSION RESISTANT MATERIAL OR ARE SUITABLY PROTECTED TO PRE-VENT CORROSION, ENCLOSURE FINISHED WITH

**→** Ø . 42 — LEVER (MATTE FINISH) -.072±.004 WIDE X ▼.031 KEYWAY TO WITHIN .250 OF SHOULDER - 15/32-32 UNS THREAD TO WITHIN .090 OF SHOULDER — 2X HEX NUT .62 ACROSS FLATS X .125 THICK 6 CORROSION RESISTANT STEEL INTERNAL TOOTH LOCKWASHER  $\emptyset$ .60 X (.018) THICK (MS 35333-136)  $\boxed{6}$ KEYING WASHER Ø.72 X .031 THICK, TAB .110 WIDE/6

**⊸** Ø .280 MAX

CIRCUIT DIAGRAM

MOVEABLE CONTACT MOVES OPPOSITE TO DIRECTION OF TOGGLE HANDLE



30°±4° TOTAL TRAVEL

-POSITION "B"

\_\_\_.050

NO CIRCUIT MADE

CIRCUITS 1-2 AND 4-5 MADE

(MECHANICALLY MAINTAINED)

(MECHANICALLY MAINTAINED)

──8X NO. 22 GAGE WIRE LEADS PER

MIL-W-22759/34 MARKED WITH

CIRCUIT IDENTIFICATION AND WIRE

GAGE (1-22, 2-22 ETC) PER

MIL-W-5088

POSITION "A" —

CIRCUITS 1-3 AND 4-6 MADE

(ELECTRICALLY

MAINTAINED)

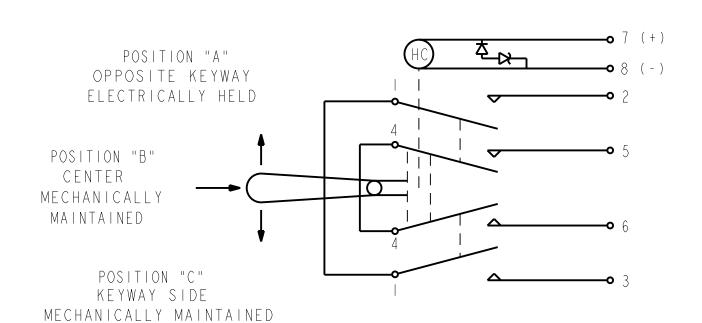
Ø.047 HOLE FOR

WIRE LOCKING

2.900 MAX

.300 MAX

36.000 MIN



	29ET16-3B-B
SPECIFICATION DETAILS:	
STANDARD:	CONFORMS TO MIL-S-5594
CONSTRUCTION:	
ENCLOSURE DESIGN	SEALED TO 1 X 10-6 ATM*CC/S PER MIL-S-5594 PARA.3.12 & 4.9.8
SEAL MATERIAL	SILICONE RUBBER
CONTACT MATERIAL & CONFIGURATION	GOLD BIFURCATED CONTACTS 5
CIRCUIT CONFIGURATION	4X S P D T
TERMINATION	BOTTOM EXIT LEADWIRES
WEIGHT	10 ozf (2.8N) MAX
EXPOSED METALS	CORROSION RESISTANT OR SUITABLY PROTECTED TO PREVENT CORROSION
ENCLOSURE PAINT	BLUE EPOXY BASED ENAMEL COLOR NO. 25184 PER FEDERAL STANDARD 595
ELECTRICAL CHARACTERISTICS:	
ELECTRICAL RATINGS	VOLTAGE INDUCTIVE RESISTIVE
-SEA LEVEL	28 VDC . 5 A I A
-65,000 FEET	28 VDC . 5 A I A
DIELECTRIC STRENGTH & INSULATION RES	<u>DIELECTRIC STRENGTH</u> <u>INSULATION RESISTANCE</u>

-BETWEEN ALL TERMINALS AND EXPOSED

-BETWEEN ALL TERMINALS OF MUTUALLY

INSULATED CIRCUITS, INCLUDING BETWEEN

-BETWEEN ALL UNCONNECTED TERMINALS

RECOMMENDATION OR USE IN APPL LESS

THAN .5 amps AND/OR 12 volts MECHANICAL CHARACTERISTICS: 3

OPERATING FORCE AT 30 VDC

OVERRIDE FORCE AT 30 VDC

SOLENOID RESISTANCE AT 30 VDC

ELECTRICAL LIFE AT FULL RATED LOAD

NON-CURRENT CARRYING METAL OR

GROUNDED PARTS

OF THE SAME POLE

STEADY STATE LIMITS

HOLD IN VOLTAGE

DROP OUT VOLTAGE

AND 68°F (20°C)

MOUNTING STRENGTH

MECHANICAL LIFE

FNVIRONMENTAL:

ALTITUDE RANGE

ACCELERATION

SAND AND DUST

SALT SPRAY

EXPLOSION

SHOCK

VIBRATION

TEMPERATURE RANGE

MOISTURE RESISTANCE

ACTUATING STRENGTH

SWITCH RESISTANCE

POLES