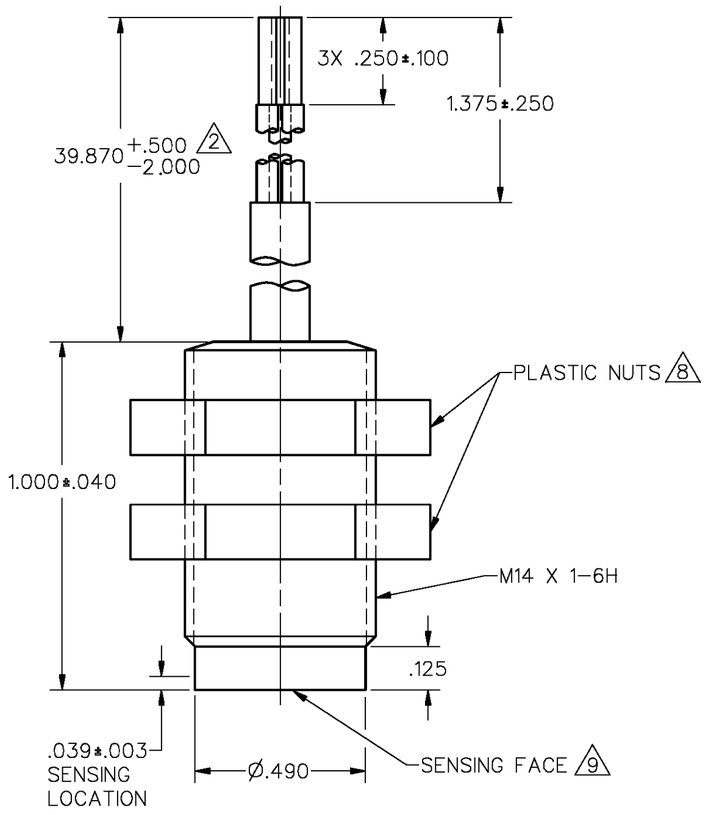


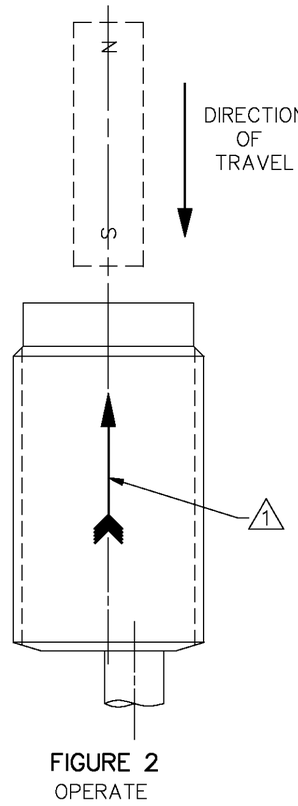




FIGURE 2
OPERATE

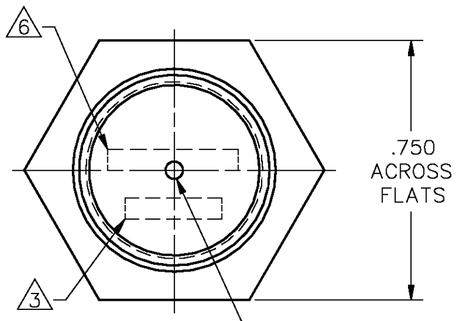
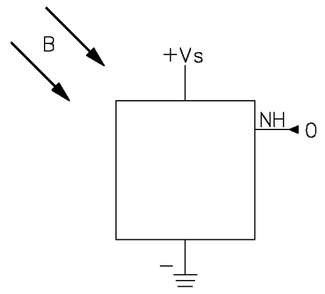



FIGURE 1




SWITCH SYMBOL

**3.8** TO **30** VDC UNIPOLAR DEVICE

## MAGNETIC CHARACTERISTICS 1 5

| | |
|---|---|
| TEMPERATURE RANGE | −40°C TO 85°C |
| OPERATE MAX | 190 |
| RELEASE MIN | 60 |
| DIFFERENTIAL MIN | 10 |

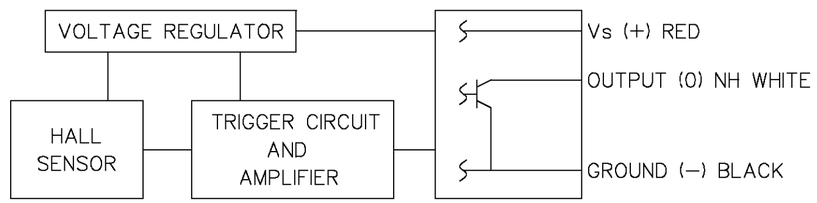
## ABSOLUTE MAXIMUM RATING 9

| | |
|---|---|
| SUPPLY VOLTAGE (Vs) 7 | **3.8** TO **30** VDC |
| VOLTAGE EXTERNALLY APPLIED TO OUTPUT | +28.0 VDC MAX WITH SWITCH IN "OFF" CONDITION ONLY<br>−0.5 VOLTS MIN WITH SWITCH IN "OFF" OR "ON" CONDITION |
| OUTPUT CURRENT | 20mA |
| TEMPERTURE | −40°C TO 85°C |
| MAGNETIC FLUX | NO LIMIT, THE CIRCUIT CANNOT BE DAMAGED BY MAGNETIC OVERDRIVE |

## ELECTRICAL CHARACTERISTICS

| | MIN | TYP | MAX | |
|---|---|---|---|---|
| SUPPLY CURRENT 4 | | 14mA | 19.0mA | "OFF" CONDITION 4<br>Vs = 4.5 − 24V |
| OUTPUT VOLTAGE 5 (OPERATED) | | 0.2V | 0.4V | SINKING 10mA MAX |
| OUTPUT LEAKAGE 5 CURRENT (RELEASED) | | 1 μA | 10 μA | LEAKAGE INTO SWITCH OUTPUT |
| OUTPUT SWITCHING 5 TIME (SINKING) | | | | |
| RISE TIME | | 0.2 μS | 1.5 μS | 10% to 90% |
| FALL TIME | | 0.5 μS | 1.0 μS | 90% to 10% |

## BLOCK DIAGRAM CURRENT SINKING OUTPUT




NOTES
1. FLUX ENTERING THE SOUTH POLE OF THE MAGNET WILL OPERATE THE SENSOR WHEN THE MAGNET IS POSITIONED AS SHOWN IN FIGURE 2. THIS ASSUMES THE CONVENTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF THE MAGNET. (FIGURE 2)
2. CABLE IS PVC JACKETED 3 CONDUCTOR CROSSLINKED POLYETHYLENE INSULATED 22 GAGE WIRES
3. DATE CODE LOCATED IN THIS AREA
4. AT 24° TO 2°C
5. AT SUPPLY VOLTAGE OF 4.5 TO 24 VOLTS AND FULL TEMPERATURE RANGE
6. CATALOG LISTING LOCATED IN THIS AREA
7. Vs IS THE UNREGULATED SUPPLY VOLTAGE
8. TORQUE ON PLASTIC NUTS MUST NOT EXCEED 12 INCH POUNDS
9. ABSOLUTE MAXIMUM RATINGS ARE THE EXTREME LIMITS THAT THE DEVICE WILL WITHSTAND WITHOUT DAMAGE TO THE DEVICE. HOWEVER, THE ELECTRICAL AND MAGNETIC CHARACTERISTICS ARE NOT GUARENTEED AS THE MAXIMUM LIMITS (ABOVE RECOMMENDED OPERATING CONDITIONS) ARE APPROACHED, NOR WILL THE DEVICE NECESSARILY OPERATE AT ABSOLUTE MAXIMUM RATING

CAUTION ELECTROSTATIC SENSITIVE DEVICES DO NOT OPEN OR HANDLE EXCEPT AT A STATIC FREE WORKSTATION
ESD SENSITIVITY: CLASS 3

MASTER REDUCED
ANSI Y14.5M-1982 APPLIES



MICRO SWITCH a Honeywell Division
FED. MFG. CODE 81029

MAGNETICALLY OPERATED CYLINDRICAL HALL SWITCH

CATALOG LISTING
SR3C-A2

THIRD ANGLE PROJECTION
SCALE 3 : 1
DO NOT SCALE PRINT
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE

| | | |
|---|---|---|
| ONE PLACE | (.0) | ±.030 |
| TWO PLACES | (.00) | ±.015 |
| THREE PLACES | (.000) | ±.005 |
| ANGLES | | ± |

WEIGHT

FORMTEK
DRAWN DCS 23 MAR 99
CHECK JAF 23 MAR 99
CHECK
CHECK
ISSUE 4
DRAWING NUMBER M SR3C-A2 PAGE 1 OF 1
RELEASE NO. PR-23917 REPLACES

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