

FIG. 2 OPERATE

OPERATING CHARACTERISTICS

| | |
|-------------|-----|
| GAUSS | |
| OPERATE MAX | 495 |
| RELEASE MIN | 200 |
| DIFF. MIN | 35 |

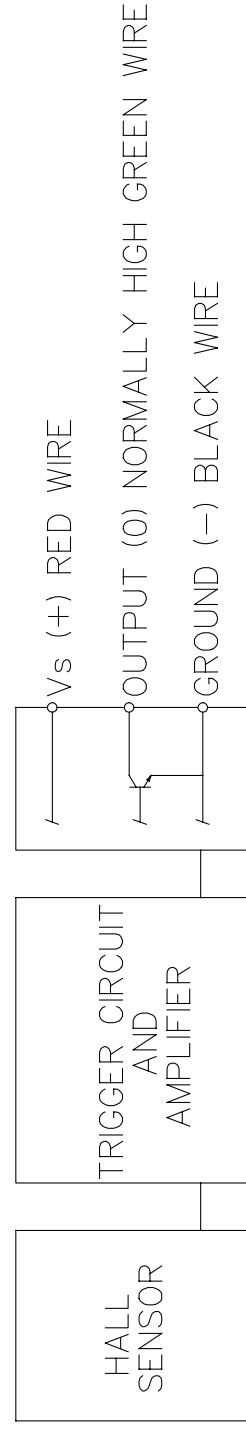
ABSOLUTE MAXIMUM RATINGS

| | |
|--------------------------------------|---|
| SUPPLY VOLTAGE (Vs)/8 | -1.0 VDC TO +25.0 VDC |
| VOLTAGE EXTERNALLY APPLIED TO OUTPUT | +25 VOLTS DC MAX WITH SWITCH IN "OFF" CONDITION ONLY -0.5 VOLTS MAX WITH SWITCH IN "OFF" OR "ON" CONDITION |
| OUTPUT CURRENT | 40 mA (SINK PER OUTPUT) |
| TEMPERATURE OPERATE AND STORAGE | -40°C TO 100°C |
| MAGNETIC FLUX | NO LIMIT, THE CIRCUIT CANNOT BE DAMAGED BY MAGNETIC OVERDRIVE |

ELECTRICAL CHARACTERISTICS

| SUPPLY CURRENT | MIN | TYP | MAX | REMARKS |
|---------------------------------------|-----|-----|------------------|--|
| OUTPUT VOLTAGE (OPERATED) | | | 10.0 mA 0.4 V | ON CONDITION SINKING 20 mA PER OUTPUT |
| OUTPUT LEAKAGE CURRENT (RELEASED) | | | 20µ A | LEAKAGE INTO SWITCH OUTPUT |
| OUTPUT SWITCHING TIME (SINKING 20 mA) | | | 1.5 µSEC | 10% TO 90% |
| RISE TIME | | | 0.5 µSEC | 90% TO 10% |
| FALL TIME | | | | |

NOTE: THIS DEVICE IS NOT PROTECTED AGAINST HIGH ELECTRICAL NOISE. IF ERRATIC OPERATION OCCURS AFTER INSTALLATION, INSTALL A CAPACITOR ACROSS THE INPUT TERMINALS (0.1 MFD). IF ERRATIC OPERATION CONTINUES, YOU MAY HAVE TO USE THE INDUSTRIAL DEVICES THAT MICRO SWITCH MANUFACTURES. PLEASE CONTACT YOUR LOCAL FIELD REPRESENTATIVE FOR INFORMATION.



BLOCK DIAGRAM SHOWING CURRENT SINKING OUTPUTS

- NOTES
- 1 FLUX ENTERING THE SOUTH POLE OF THE MAGNET WILL OPERATE THE SENSOR WHEN 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
 - 2 LEADWIRES (INDIVIDUAL WIRES) ARE 24 GAGE STRANDED WITH IRRADIATED CROSS-LINKED POLYETHYLENE INSULATION (XLPE)
 - 3 DATE CODE LOCATED IN THIS AREA
 - 4 FROM -40°C TO 100°C AND 4.5 TO 24 VOLTS
 - 5 CATALOG LISTING LOCATED IN THIS AREA
 - 6 SENSITIVE AREA IS LOCATED .050 BEHIND THE SENSING FACE AT 24 ± 2°C
 - 7 Vs IS THE UNREGULATED SUPPLY VOLTAGE
 - 8

THIRD ANGLE PROJECTION

SCALE 3:1

DO NOT SCALE PRINT

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE

ONE PLACE (.) ± .030

TWO PLACES (.00) ± .015

THREE PLACES (.000) ± .005

ANGLES

WEIGHT

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MICRO SWITCH
a Honeywell Division

MAGNETICALLY OPERATED CYLINDRICAL HALL SWITCH

CATALOG LISTING
103SR13A-10

REVISIONS

| | | |
|----|----------|--|
| A | 10064722 | |
| 4 | DEC 80 | |
| B | 072441 | |
| 19 | MAY 92 | |
| C | 074092E | |
| 23 | FEB 93 | |
| D | 081554 | |
| 15 | DEC 95 | |

CHECK

REPLACES

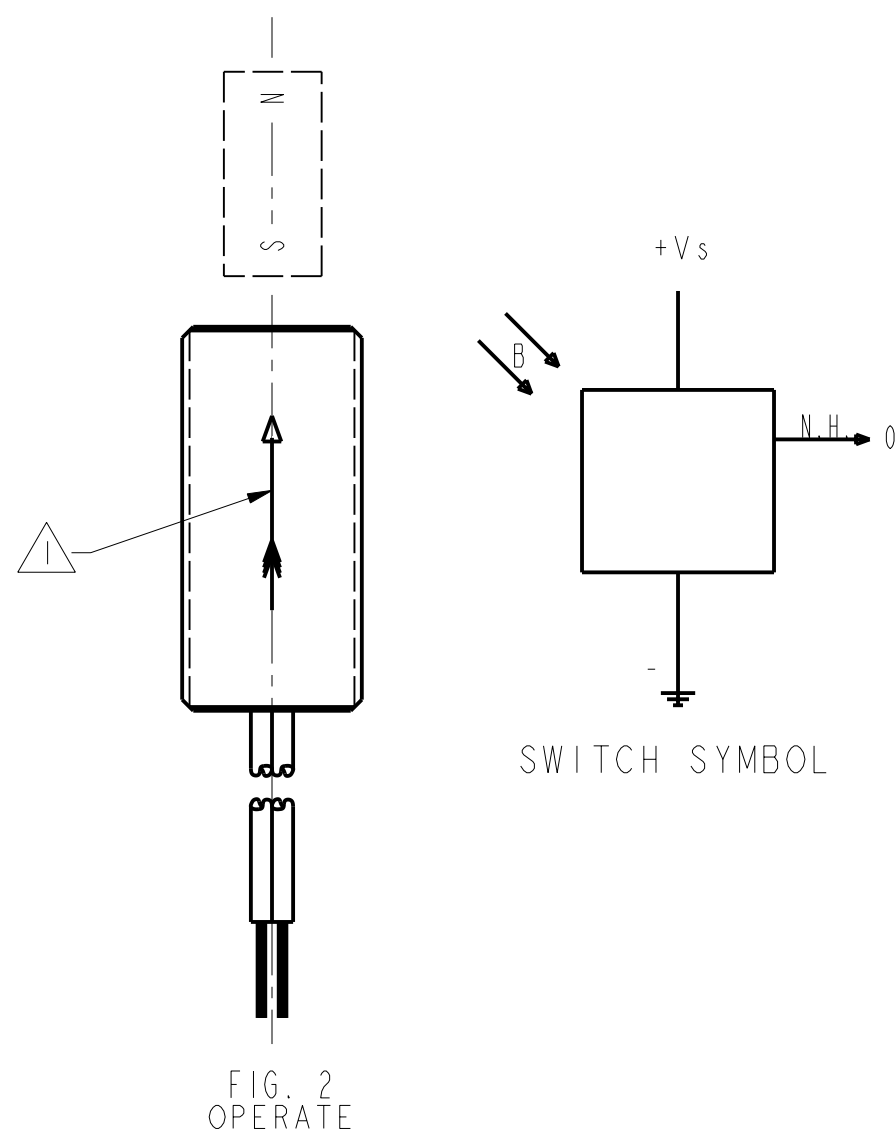
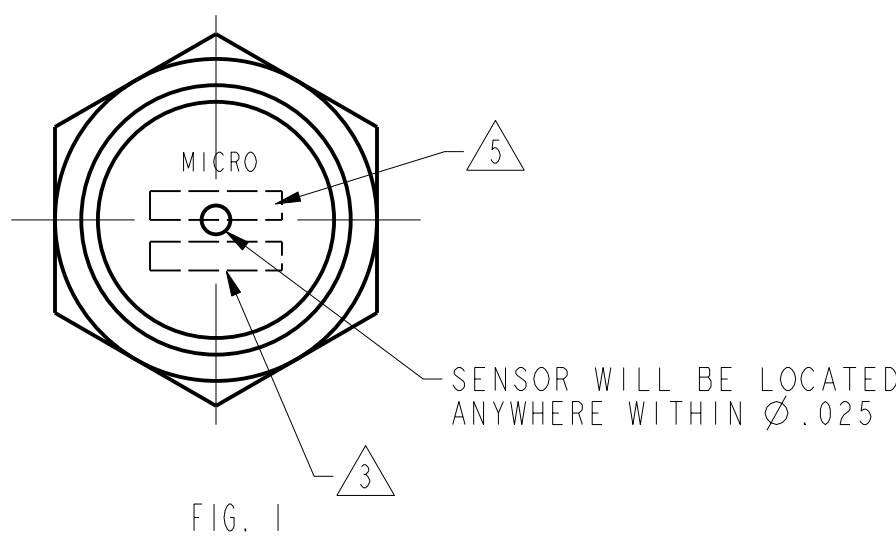
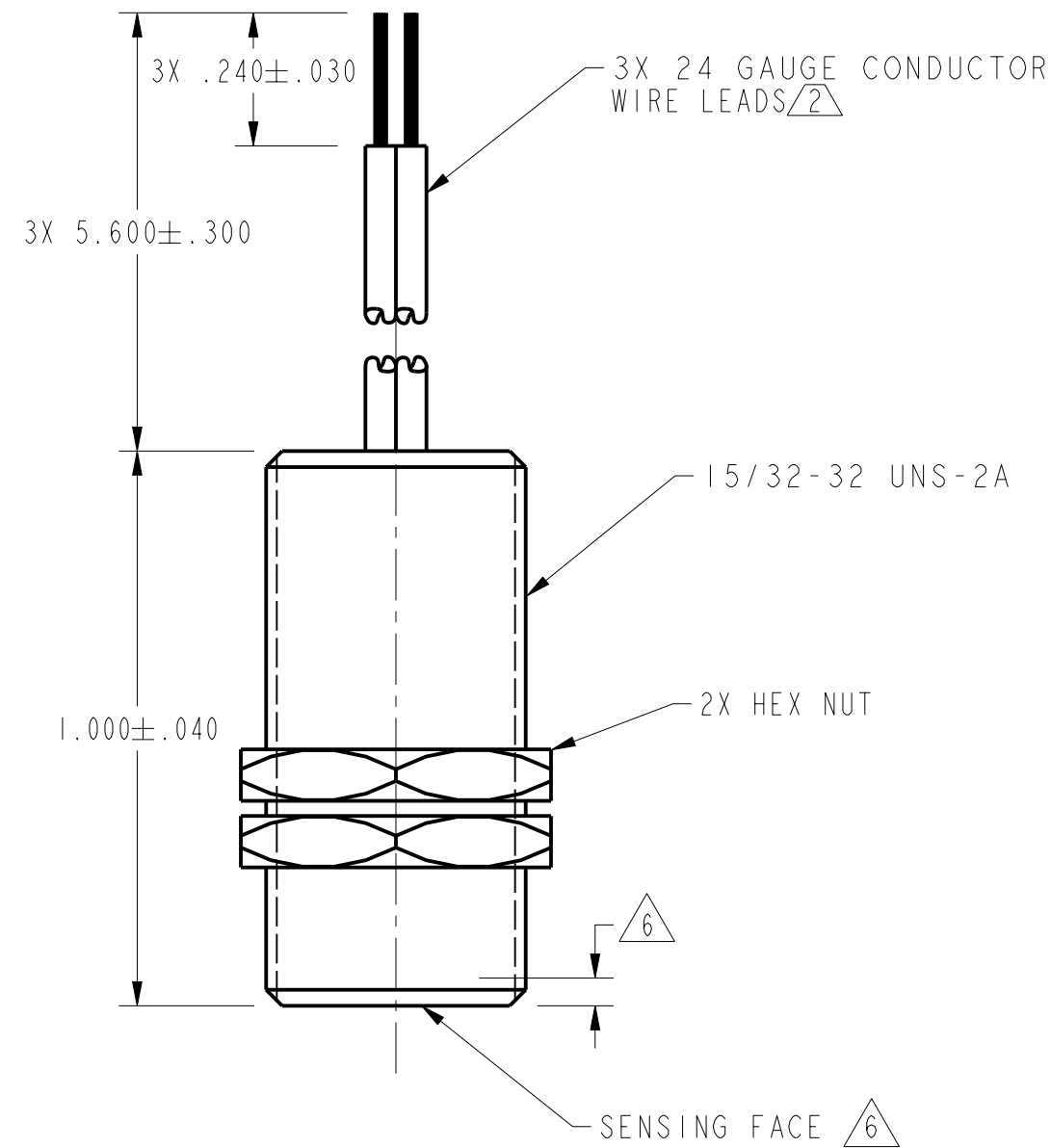
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ISSUE

DRAWING NUMBER



OPERATING CHARACTERISTICS $\triangle 1 \triangle 4$

| | |
|-------------|-----|
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| RELEASE MIN | 200 |
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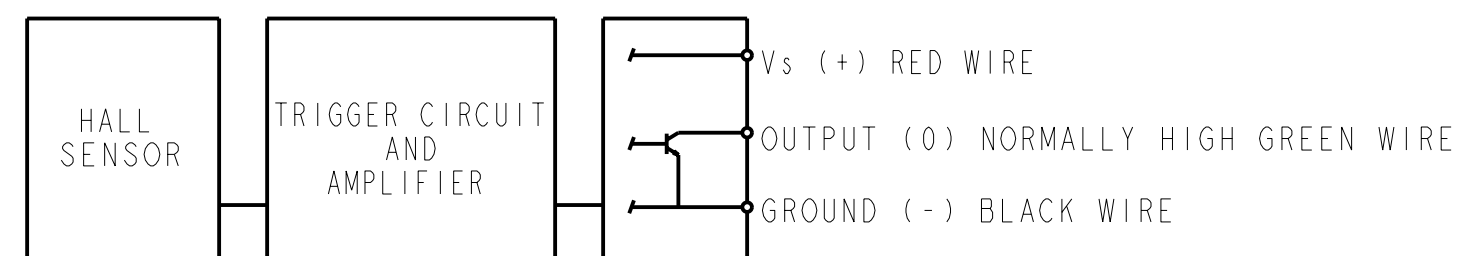
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ELECTRICAL CHARACTERISTICS

| | MIN | TYP | MAX | REMARKS |
|---------------------------------------|-----|-----|---------------|----------------------------|
| SUPPLY CURRENT $\triangle 7$ | | | 10.0 mA | ON CONDITION |
| OUTPUT VOLTAGE (OPERATED) | | | 0.4 V | SINKING 20 mA PER OUTPUT |
| OUTPUT LEAKAGE CURRENT (RELEASED) | | | 20 μ A | LEAKAGE INTO SWITCH OUTPUT |
| OUTPUT SWITCHING TIME (SINKING 20 mA) | | | | |
| RISE TIME $\triangle 4$ | | | 1.5 μ SEC | 10% TO 90% |
| FALL TIME | | | 0.5 μ SEC | 90% TO 10% |

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| | |
|---|---------------|
| THIRD ANGLE PROJECTION | |
| SCALE 3:1 | |
| DO NOT SCALE PRINT | |
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| ONE PLACE | (.0) ± .030 |
| TWO PLACES | (.00) ± .015 |
| THREE PLACES | (.000) ± .005 |
| ANGLES | ± |
| WEIGHT | |

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|---|--|---------------------------------------|
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|---|--|---------------------------------------|

FED. MFG. CODE 91929

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