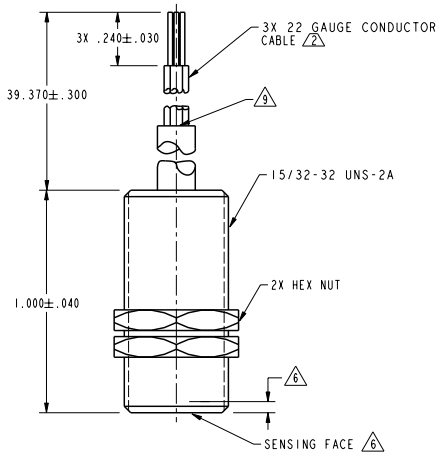
4.5 TO 24 VDC UNIPOLAR DEVICE

M 103SR13A-2



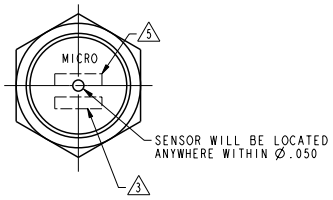
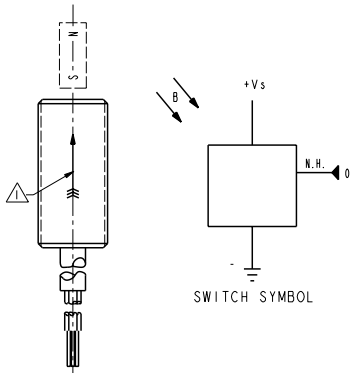


FIG. 1



SWITCH SYMBOL

FIG. 2
OPERATE

OPERATING CHARACTERISTICS 1 4

GAUSS	
OPERATE MAX	495
RELEASE MIN	200
DIFF MIN	35

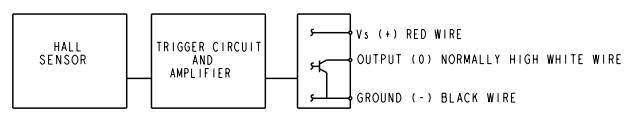
ABSOLUTE MAXIMUM RATINGS

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

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

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. 22 GAUGE PVC INSULATED CONDUCTORS WITH MOLDED PVC JACKET
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
7. AT 24±2° C
8. Vs IS THE UNREGULATED SUPPLY VOLTAGE
9. JACKET IS CUT BACK 1.37 INCHES FROM FREE END OF LEADS

CAUTION ELECTROSTATIC SENSITIVE DEVICES DO NOT OPEN OR HANDLE EXCEPT AT A STATIC FREE WORKSTATION

ESD SENSITIVITY: CLASS 3

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

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MICRO SWITCH a Honeywell Division
FED. MFG. CODE 91929

MAGNETICALLY OPERATED CYLINDRICAL HALL SWITCH

CATALOG LISTING 103SR13A-2

ANSI Y14.5M-1982 APPLIES

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