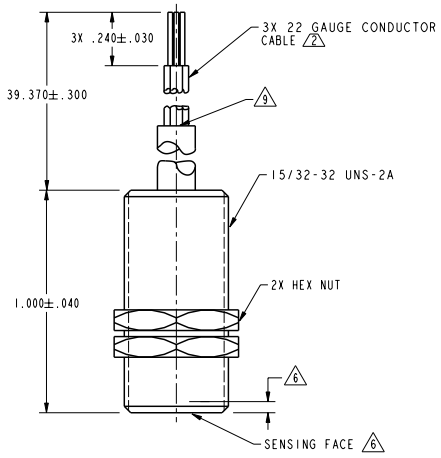
4.5 TO 24 VDC UNIPOLAR DEVICE

103SR14A-2



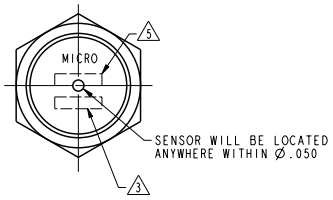
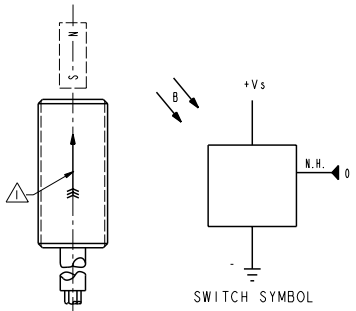


FIG. 1



SWITCH SYMBOL

FIG. 2
OPERATE

OPERATING CHARACTERISTICS 1 4

GAUSS	
OPERATE MAX	160
RELEASE MIN	5
DIFF MIN	8

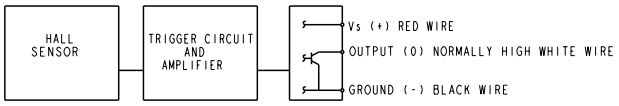
ABSOLUTE MAXIMUM RATINGS

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			0.5μ SEC	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
ESD SENSITIVITY: CLASS 3

ANSI Y14.5M-1982 APPLIES

MICRO SWITCH a Honeywell Division
FED. MFG. CODE 91929

MAGNETICALLY OPERATED CYLINDRICAL HALL SWITCH

CATALOG LISTING
103SR14A-2

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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