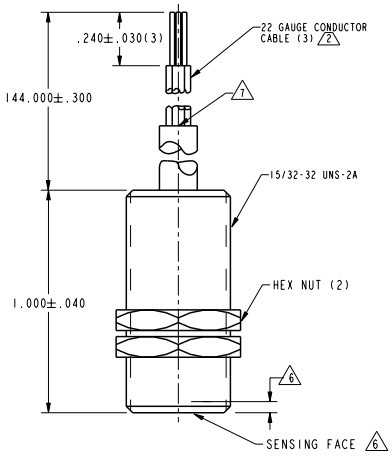
6 TO 24 VDC UNIPOLAR SOURCING DEVICE

M 103SR12A-7



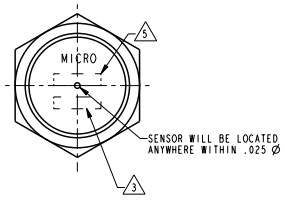
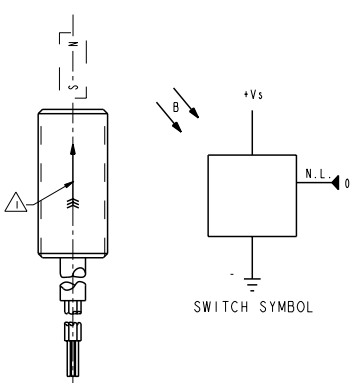


FIG. 1



SWITCH SYMBOL

FIG. 2
OPERATE

OPERATING CHARACTERISTICS 1 4

GAUSS	
OPERATE MAX	495
RELEASE MIN	120
DIFF MIN	40

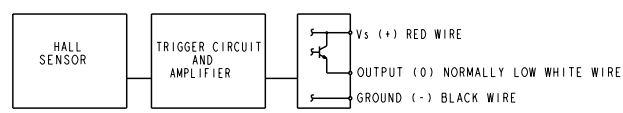
ABSOLUTE MAXIMUM RATINGS

SUPPLY VOLTAGE (Vs)	-1.2 VDC +24.0 VDC
VOLTAGE EXTERNALLY APPLIED TO OUTPUT	+6.5 VOLTS DC MAX WITH SWITCH IN "OFF" CONDITION ONLY (Vs+4) VOLTS MAX WITH SWITCH IN "ON" CONDITION
OUTPUT CURRENT	40 mA (SOURCE 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 4		3mA 5mA	6.5mA 10.0mA	Vs=6V OFF CONDITION 8 Vs=16V
OUTPUT VOLTAGE (OPERATED)	Vs-2V	Vs-1.5V		SOURCING 20 mA PER OUTPUT 8
OUTPUT LEAKAGE CURRENT (RELEASED)			20μA	LEAKAGE INTO SWITCH OUTPUT
OUTPUT SWITCHING TIME (SOURCING 20 mA) RISE TIME 4 FALL TIME		 0.2μ SEC 0.1μ SEC	 1.5μ SEC 0.5μ SEC	 10% TO 90% 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 SOURCING 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 A MOLDED PVC JACKET
3. DATE CODE LOCATED IN THIS AREA
4. FROM -40°C TO 100°C AND 6 TO 24 VOLTS
5. CATALOG LISTING LOCATED IN THIS AREA
6. SENSITIVE AREA IS LOCATED .050 BEHIND THE SENSING FACE
7. JACKET IS CUT BACK 1.375 INCHES FROM FREE END OF LEADS
8. Vs IS THE UNREGULATED SUPPLY VOLTAGE

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 103SR12A-7

~~ANSI Y14.5M-1982 APPLIES~~

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REPLACES -

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