

4.5 TO 24 VDC UNIPOLAR DEVICE

M

103SR13A-14

OPERATING CHARACTERISTICS

GAUSS	
OPERATE MAX	495
RELEASE MIN	200
DIFF MIN	35

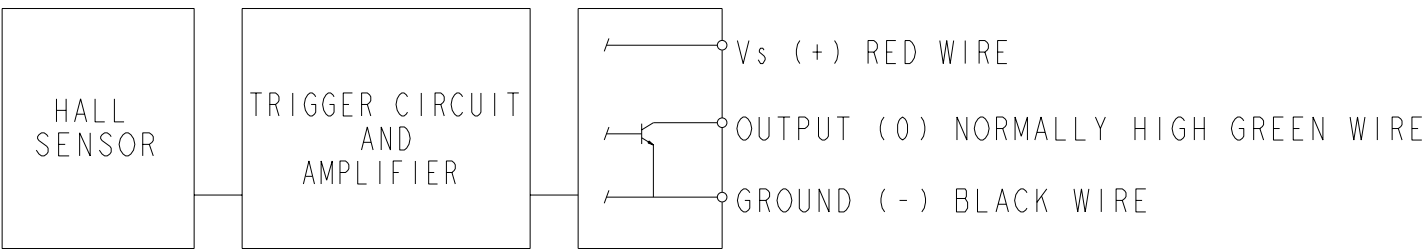
ABSOLUTE MAXIMUM RATINGS

SUPPLY VOLTAGE (V _s)	-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	20 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			10.0 mA	ON CONDITION#
OUTPUT VOLTAGE (OPERATED)			0.4 V	SINKING 20 mA PER OUTPUT
OUTPUT LEAKAGE CURRENT (RELEASED)			20μ A	LEAKAGE INTO SWITCH OUTPUT
OUTPUT SWITCHING TIME (SINKING 20 mA)				
RISE TIME			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

- 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
- LEADWIRES (INDIVIDUAL WIRES) ARE 24 GAGE STRANDED WITH IRRADIATED POLYETHYLENE INSULATION
- DATE CODE LOCATED IN THIS AREA
- FROM -40° C TO 100° C AND 4.5 TO 24 VOLTS
- CATALOG LISTING LOCATED IN THIS AREA
- SENSITIVE AREA IS LOCATED .050 BEHIND THE SENSING FACE
- AT 24° ±2° C
- V_s IS THE UNREGULATED SUPPLY VOLTAGE

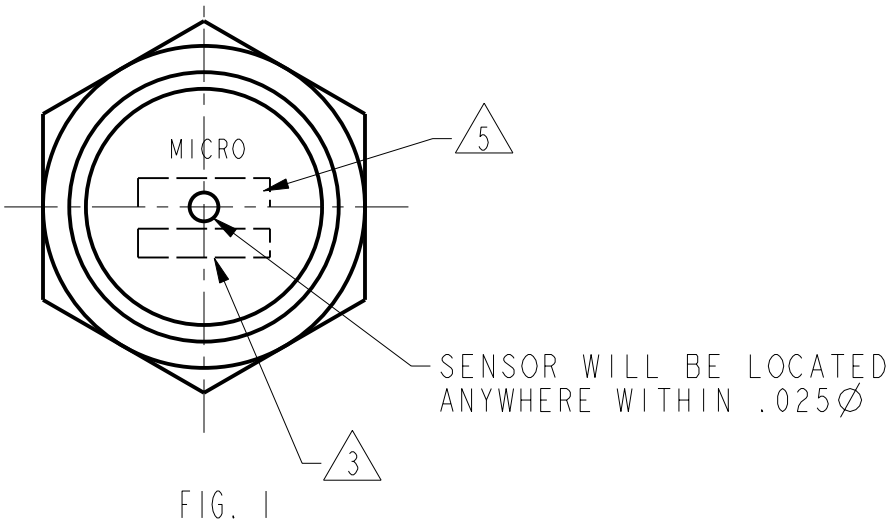
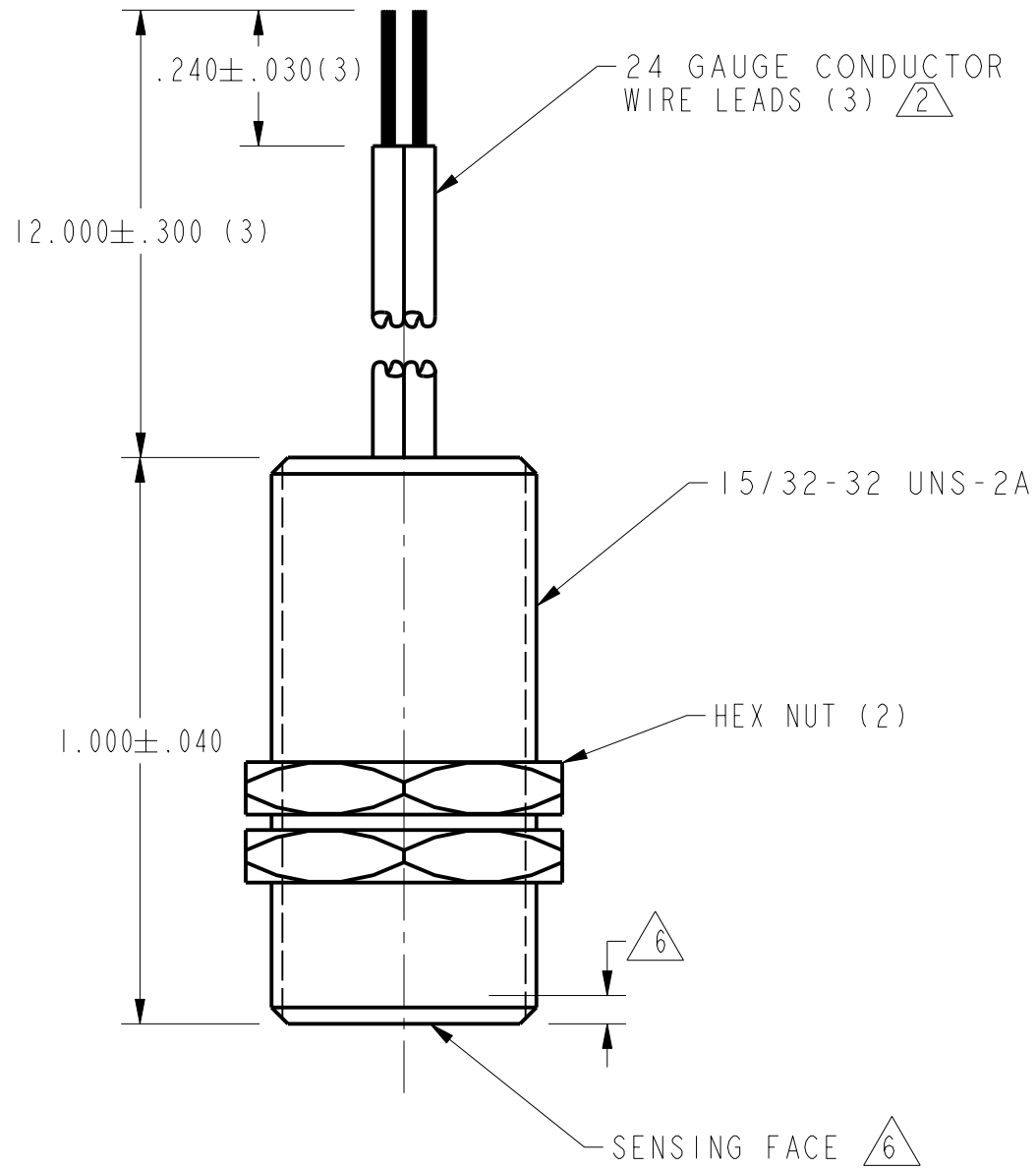


FIG. 1

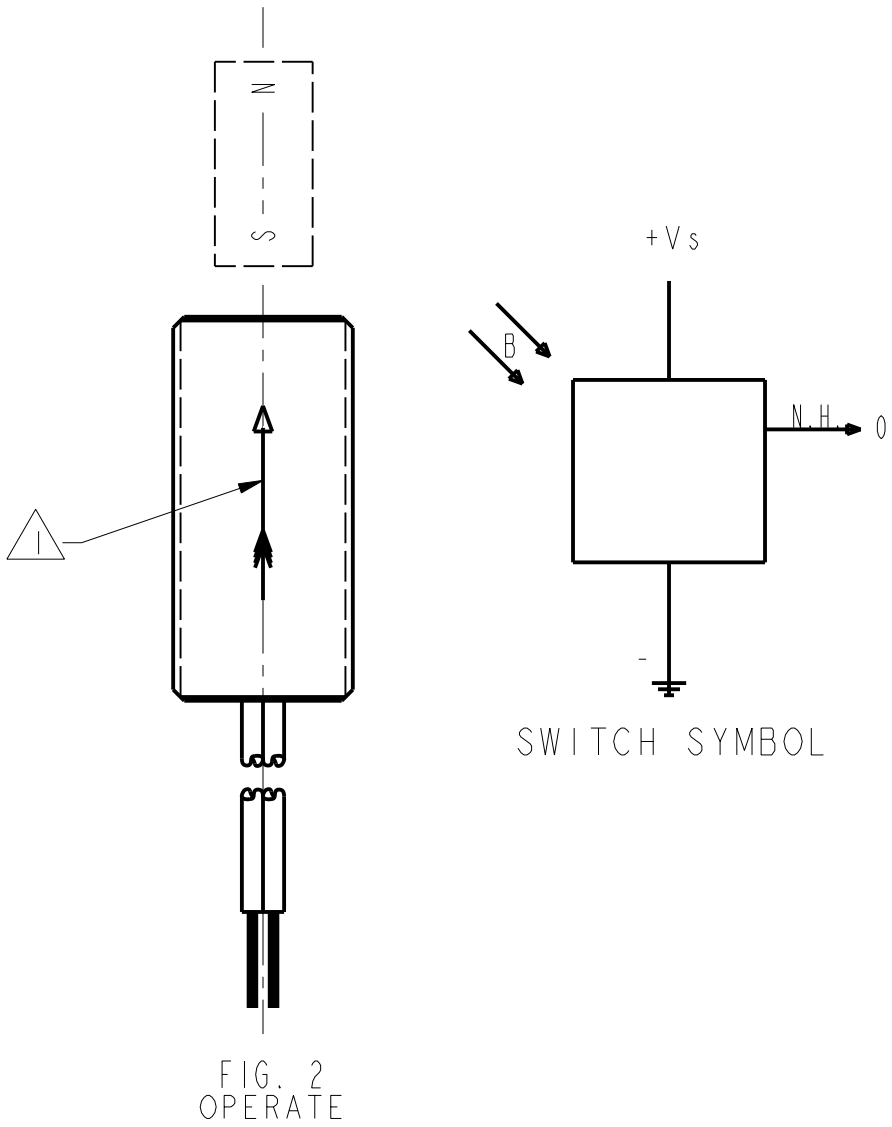


FIG. 2
OPERATE



ANSI Y14.5M-1982 APPLIES

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MICRO SWITCH a Honeywell Division	MAGNETICALLY OPERATED CYLINDRICAL HALL SWITCH	CATALOG LISTING 103SR13A-14
FED. MFG. CODE 91929		

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		