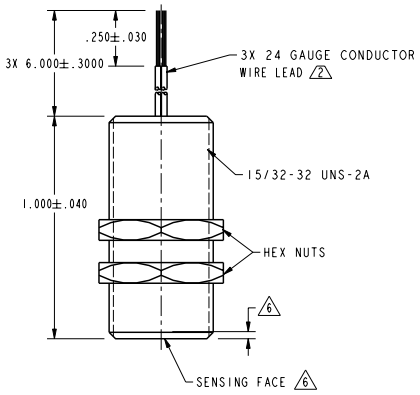
4.5 TO 24.0 VDC LATCHING DEVICE



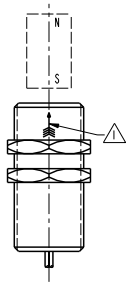


FIG. 2
OPERATE

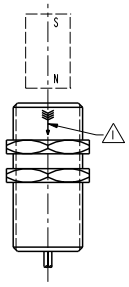


FIG. 3
RELEASE

OPERATING CHARACTERISTICS 4 8

	GAUSS
OPERATE MAX	120
RELEASE MIN	-120
DIFF MIN	40

103SR18-1

ABSOLUTE MAXIMUM RATINGS 1

SUPPLY VOLTAGE (Vs)	-.5 VDC TO +25.0 VDC
VOLTAGE EXTERNALLY APPLIED TO OUTPUT	-0.5 VOLT MAX (ON OR OFF CONDITION) +25 VOLTS MAX (OFF CONDITION ONLY)
OUTPUT CURRENT	20mA
TEMPERATURE OPERATE & 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		7.0 mA	10.0 mA	OFF CONDITION 4
OUTPUT VOLTAGE (OPERATED) #		0.15 V	0.40 V	SINKING 20 mA MAX
OUTPUT LEAKAGE CURRENT (RELEASED)			10µ A	LEAKAGE FROM SWITCH OUTPUT
OUTPUT SWITCHING TIME (SINKING 8 mA) RISE TIME			1.5µ S	10% TO 90%
FALL TIME			0.5µ S	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.

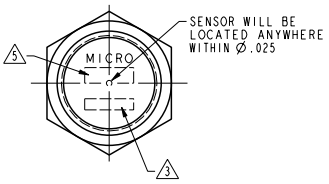
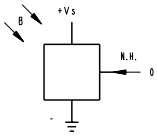
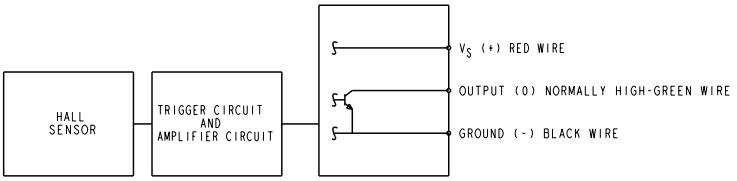


FIG. 1



SWITCH SYMBOL



BLOCK DIAGRAM SHOWING CURRENT SINKING OUTPUTS

NOTES
1. FLUX ENTERING THE SOUTH POLE OF THE MAGNET WILL OPERATE THE SENSOR WHEN THE 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. BIPOLAR DEVICES REQUIRE THE PRESENTATION OF BOTH SOUTH AND NORTH POLES IN ORDER TO INSURE SENSORS OPERATE AND RELEASE RESPECTIVELY (FIGURES 2 AND 3)
2. LEADWIRES (INDIVIDUAL WIRES) ARE 24 GAUGE STRANDED WITH XLPE INSULATION
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. HALL ELEMENT SURFACE IS LOCATED .032 NOMINAL BEHIND THE SENSING FACE
7. ABSOLUTE MAXIMUM RATINGS ARE THE EXTREME LIMITS THAT THE DEVICE WILL WITHSTAND WITHOUT DAMAGE TO THE DEVICE. HOWEVER THE ELECTRICAL AND MAGNETIC CHARACTERISTICS ARE NOT GUARANTEED AS THE MAXIMUM LIMITS (ABOVE RECOMMENDED OPERATING CONDITIONS) ARE APPROACHED NOR WILL THE DEVICE NECESSARILY OPERATE AT ABSOLUTE MAXIMUM RATINGS
8. SINKING 20mA

CAUTION ELECTROSTATIC SENSITIVE DEVICES
ESD SENSITIVITY: CLASS 3

ANSI Y14.5M-1982 APPLIES

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MAGNETICALLY OPERATED CYLIDRICAL HALL SWITCH

CATALOG LISTING
103SR18-1

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

103SR18-1 | SHEET 1 OF 1 | RELEASE NO. PR-16658 | REPLACES
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