



OPERATING CHARACTERISTICS

GAUSS	
OPERATE MAX	495
RELEASE MIN	200
DIFF MIN	35

ABSOLUTE MAXIMUM RATINGS

SUPPLY VOLTAGE (V <sub>s</sub> )	-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			10.0 mA	ON CONDITION
OUTPUT VOLTAGE (OPERATED)			0.4 V	SINKING 20 mA PER OUTPUT
OUTPUT LEAKAGE CURRENT (RELEASED)			20 μA	LEAKAGE INTO SWITCH OUTPUT
OUTPUT SWITCHING TIME (SINKING 20 mA)				
RISE TIME			1.5 μSEC	10% TO 90%
FALL TIME			0.5 μSEC	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

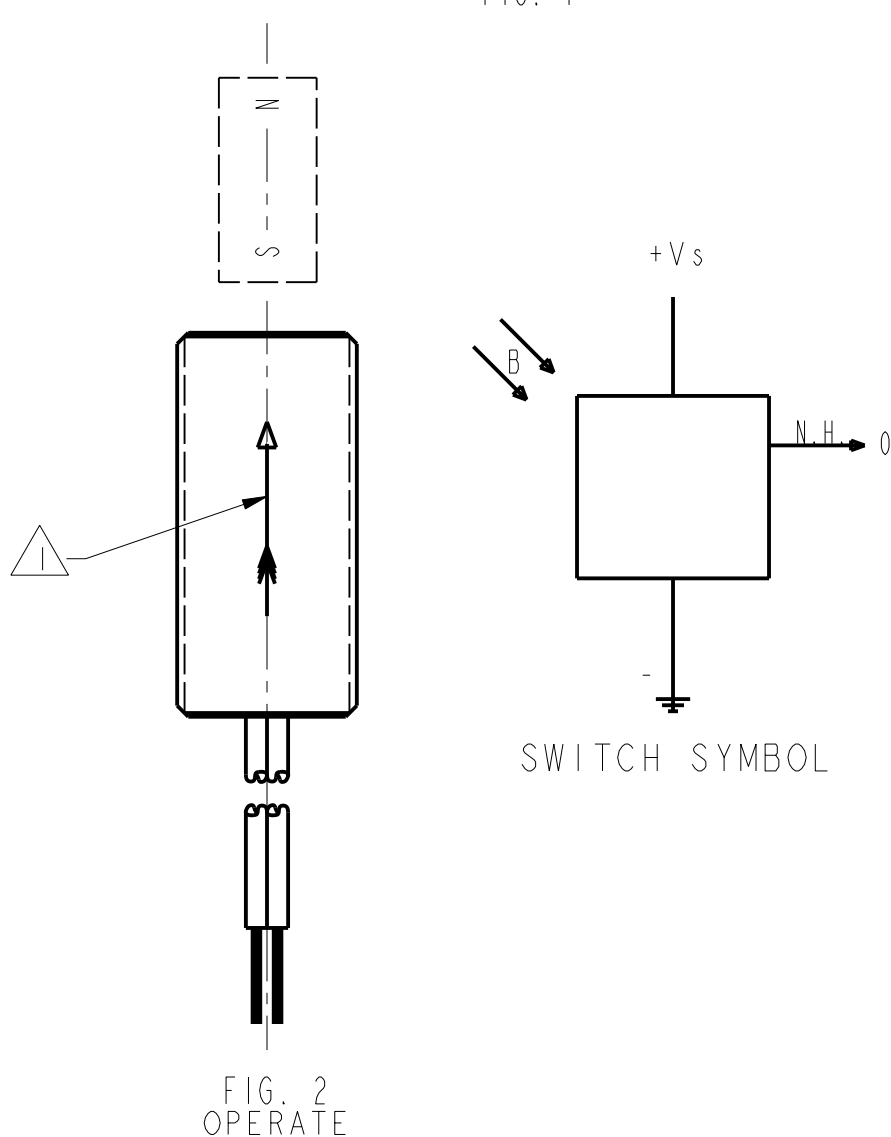
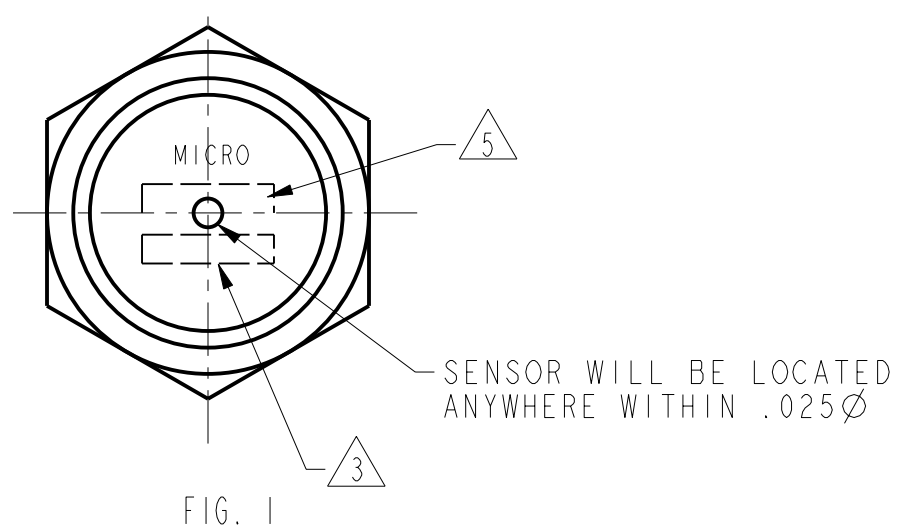
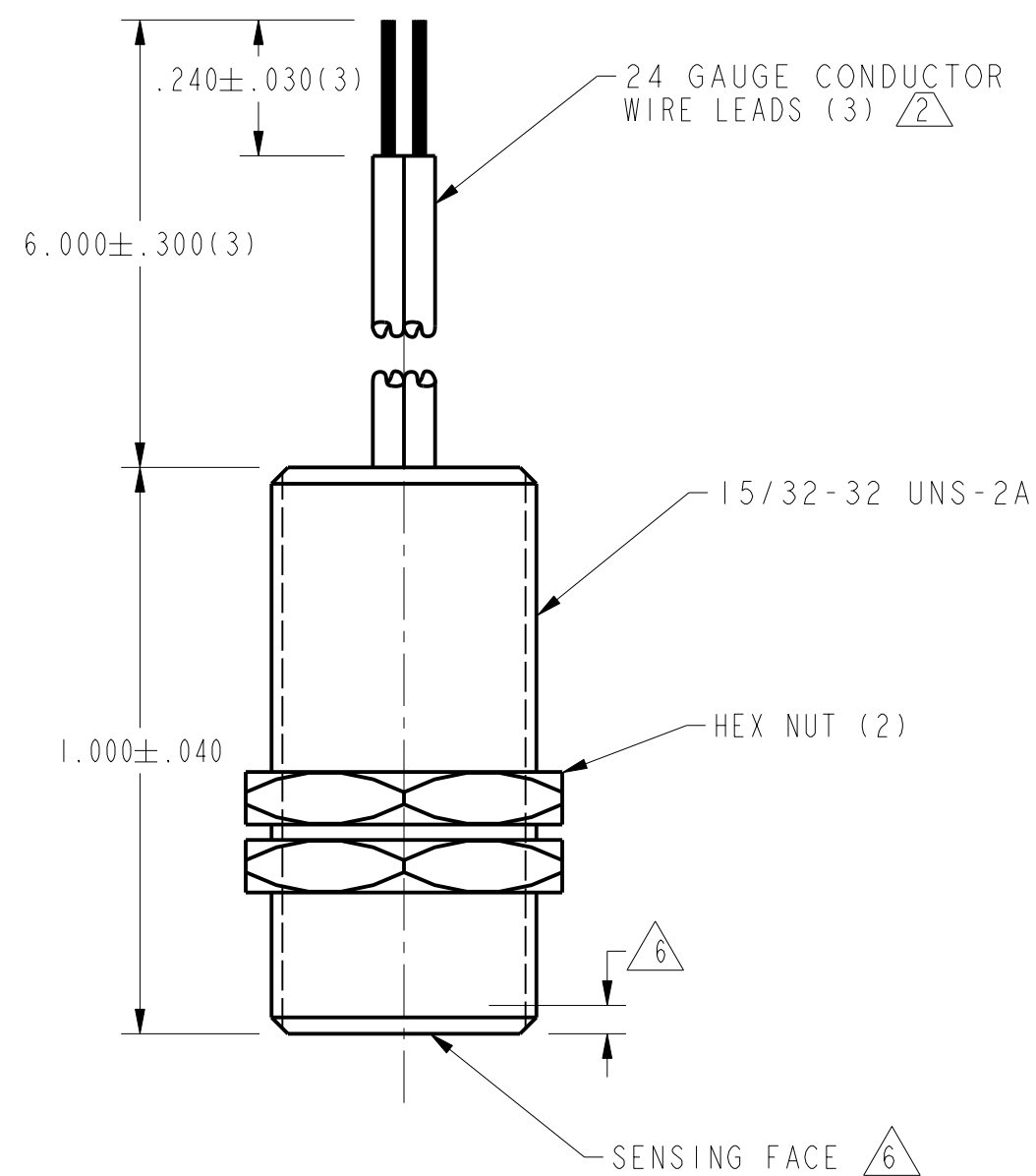
- 1 FLUX ENTERING THE SOUTH POLE OF THE MAGNET WILL OPERATE THE SENSOR WHEN MAGNET IS POSITIONED AS SHOWN IN FIGURE 2. THIS ASSUMES THE CONVENTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF THE MAGNET
- 2 LEADWIRES (INDIVIDUAL WIRES) ARE 24 GAGE STRANDED WITH IRRADIATED POLYETHYLENE 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 SENSITIVE AREA IS LOCATED .050 BEHIND THE SENSING FACE
- 7 AT 24 ± 2°C
- 8 V<sub>s</sub> 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		

THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF MICRO SWITCH, A DIVISION OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF MICRO SWITCH.

<b>MICRO SWITCH</b> a Honeywell Division	<b>MAGNETICALLY OPERATED CYLINDRICAL HALL SWITCH</b>	CATALOG LISTING <b>103SR13A-1</b>
	FEDERAL MANUFACTURING CODE 91929	

P.T.C./CAD [20] DRAWN 27 JUL 99 CHECK JAF  
 TSM 27 JUL 99 CHECK JAF  
 REVISIONS  
 A CO95082A TSM 27 JUL 99  
 ISSUE 11  
 DRAWING NUMBER 103SR13A-1  
 PAGE 1 OF 1  
 RELEASE NO. PR-4252  
 REPLACES



OPERATING CHARACTERISTICS 1 4

GAUSS	
OPERATE MAX	495
RELEASE MIN	200
DIFF MIN	35

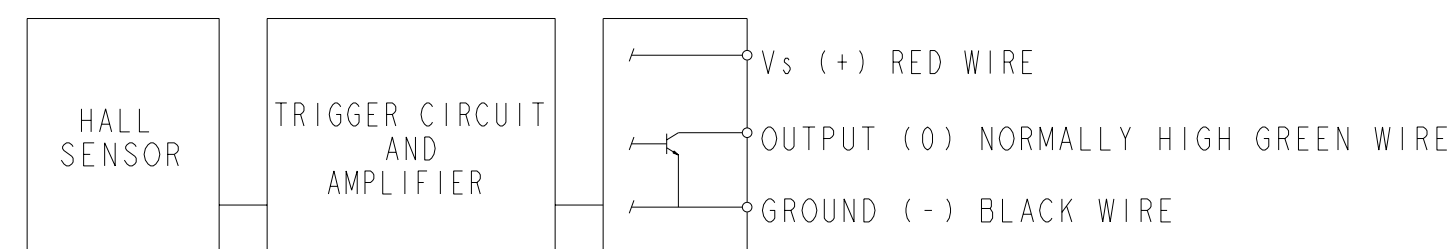
ABSOLUTE MAXIMUM RATINGS

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)			0.4 V	SINKING 20 mA PER OUTPUT
OUTPUT LEAKAGE CURRENT (RELEASED)			20 μA	LEAKAGE INTO SWITCH OUTPUT
OUTPUT SWITCHING TIME (SINKING 20 mA)				
RISE TIME 4			1.5 μSEC	10% TO 90%
FALL TIME			0.5 μSEC	90% TO 10%

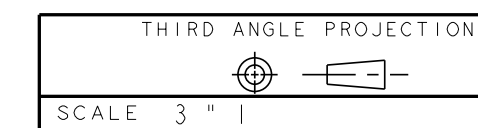
NOTE: THIS DEVICE IS NOT PROTECTED AGAINST HIGH ELECTRICAL NOISE. IF ERRATIC OPERATION OCCURS AFTER INSTALLATION, INSTALL A CAPACITOR ACROSS THE INPUT TERMINALS (0.1 MFD). IF ERRATIC OPERATION CONTINUES, YOU MAY HAVE TO USE THE INDUSTRIAL DEVICES THAT MICRO SWITCH MANUFACTURES. PLEASE CONTACT YOUR LOCAL 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 LEADWIRES (INDIVIDUAL WIRES) ARE 24 GAGE STRANDED WITH IRRADIATED POLYETHYLENE 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 SENSITIVE AREA IS LOCATED .050 BEHIND THE SENSING FACE
- 7 AT 24 ± 2°C
- 8 Vs IS THE UNREGULATED SUPPLY VOLTAGE



DO NOT SCALE PRINT

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE

ONE PLACE	(.0)	± .030
TWO PLACES	(.00)	± .015
THREE PLACES	(.000)	± .005
ANGLES		±
WEIGHT		

THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF MICRO SWITCH, A DIVISION OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF MICRO SWITCH.

**MICRO SWITCH**  
a Honeywell Division

**MAGNETICALLY OPERATED CYLINDRICAL HALL SWITCH**

CATALOG LISTING  
**103SR13A-1**

103SR13A-1  
PAGE 1 OF 1  
RELEASE NO. PR-4252

12  
CHECK  
CHECK

REVISIONS  
A CO95082A  
TSM  
27 JUL 99  
B 201747  
JEL  
DEC 00

CHECK  
CHECK

27 JUL 99  
CHECK  
JAF

PTC/CAD 20  
DRAWN  
27 JUL 99  
TSM

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9