

## MAGNETIC PROXIMITY SWITCH - RESPONDS TO FERROUS METALS & REQUIRES NO EXTERNAL POWER & RUGGED, FOR HOSTILE ENVIRONMENTS



### DESCRIPTIONS

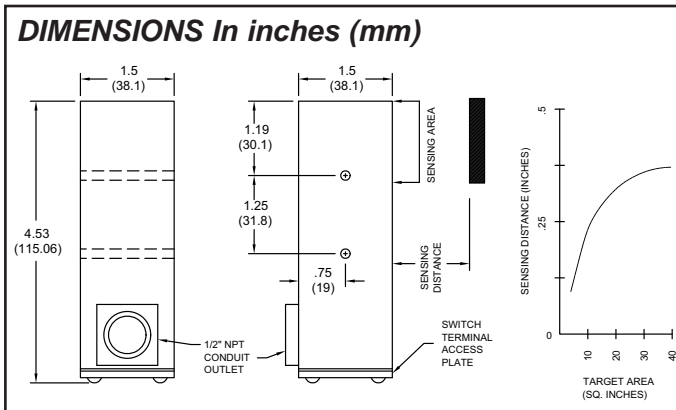
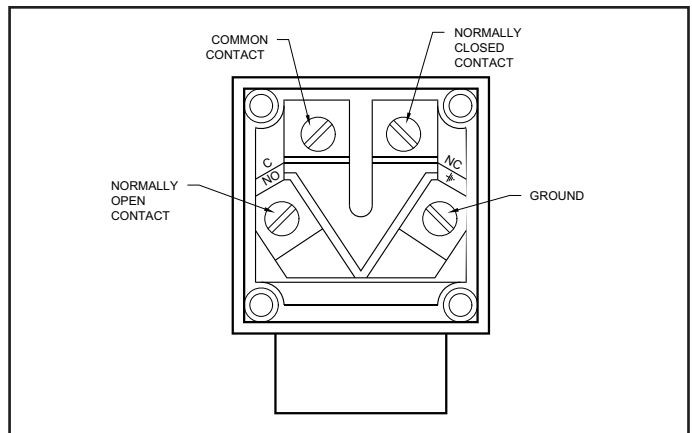
This sensor is ideal for generating switch-contact count signals from passing steel or iron castings, weldments, stampings, "Tin-cans", pulley spokes, etc. A flux-field, generated by internal permanent magnets is arranged to hold the SPDT switch contact in the N.C. position. When an external mass of magnetic material (*target*) approaches the sensing area, it shunts away a part of this field, causing the switch contact to transfer to the N.O. position. The distance, at which this occurs, is called the "Sensing Distance" and it depends on the size, shape and thickness of the ferrous target. The curve below shows variation of sensing distance with target area of steel plate, 0.1" or more in thickness. For very thin sheet steel (0.01" to 0.02") derate sensing distance by 50%. Once the N.O. switch transfer is made, the target must move away approximately 2 times the sensing distance to re-establish the original N.C. contact closure.

These switches can be operated at speeds up to 60 counts/sec and have a life rating of 2-billion operations when used in low-current, low-voltage electronic counting applications. Operating temperature range is -50 ° to +120 °C.

### SPECIFICATIONS

- \*SWITCH CONTACT RATING:** 1250 watts max.; 120, 240, 480, 600 VAC; 10 cps resistive load.
- RESPONSE TIME:** 8 msec.
- REPEATABILITY:** 0.002" Typical
- LIFE:** Tested to mechanical and electrical life of over 2 billion cycles. (Actual life varies with electrical load.)
- OPERATING TEMPERATURE RANGE:** -50 °C to +120 °C (-60 °F to +250 °F)

\* - Derate at higher cycle rates, inductive loads and for DC uses.



### ORDERING INFORMATION

MODEL NO.	DESCRIPTION	PART NUMBER
MPS	Magnetic Proximity Switch	4100600

Note: The MPS is also available in an explosion-proof version with certain agency approvals on a special order basis. Contact your distributor for prices and delivery.

### **LIMITED WARRANTY**

The Company warrants the products it manufactures against defects in materials and workmanship for a period limited to two years from the date of shipment, provided the products have been stored, handled, installed, and used under proper conditions. The Company's liability under this limited warranty shall extend only to the repair or replacement of a defective product, at The Company's option. The Company disclaims all liability for any affirmation, promise or representation with respect to the products.

The customer agrees to hold Red Lion Controls harmless from, defend, and indemnify RLC against damages, claims, and expenses arising out of subsequent sales of RLC products or products containing components manufactured by RLC and based upon personal injuries, deaths, property damage, lost profits, and other matters which Buyer, its employees, or sub-contractors are or may be to any extent liable, including without limitation penalties imposed by the Consumer Product Safety Act (P.L. 92-573) and liability imposed upon any person pursuant to the Magnuson-Moss Warranty Act (P.L. 93-637), as now in effect or as amended hereafter.

No warranties expressed or implied are created with respect to The Company's products except those expressly contained herein. The Customer acknowledges the disclaimers and limitations contained herein and relies on no other warranties or affirmations.

Red Lion Controls  
Headquarters  
20 Willow Springs Circle  
York PA 17406  
Tel +1 (717) 767-6511  
Fax +1 (717) 764-0839

Red Lion Controls  
Europe  
Printerweg 10  
NL - 3821 AD Amersfoort  
Tel +31 (0) 334 723 225  
Fax +31 (0) 334 893 793

Red Lion Controls  
India  
201-B, 2nd Floor, Park Centra  
Opp 32 Mile Stone, Sector-30  
Gurgaon-122002 Haryana, India  
Tel +91 984 487 0503

Red Lion Controls  
China  
Unit 101, XinAn Plaza  
Building 13, No.99 Tianzhou Road  
ShangHai, P.R. China 200223  
Tel +86 21 6113-3688  
Fax +86 21 6113-3683