

MAGNETIC PROXIMITY SWITCH

MAGNETIC PROXIMITY SWITCH REED TYPE, WITH ACTUATING MAGNET

These switches require a magnet for operation. The magnet is supplied with the switch. The reed element which is sealed in the switch operates when the magnet passes nearby.

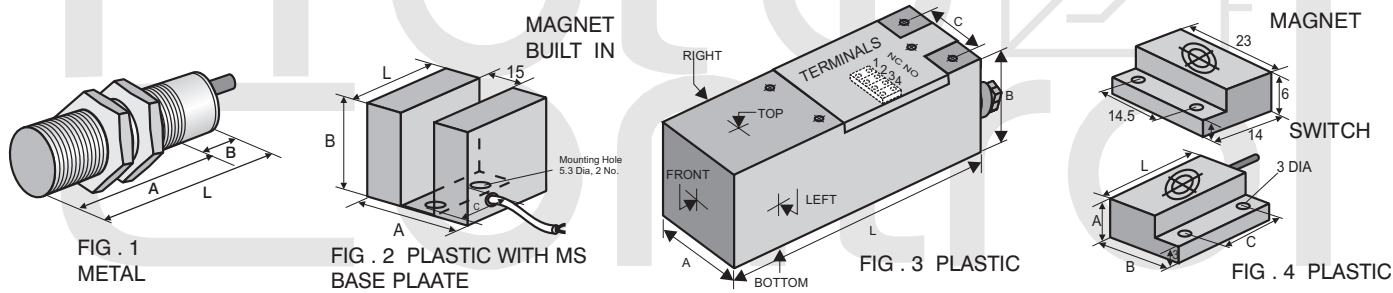
SALIENT FEATURES :

- 1) Non contact operation
- 2) Potential free contacts suitable for 24 VDC / 240 VAC.
- 3) High operating distance up to 25 mm.
- 4) Totally enclosed - Robust - cast Al / Plastic enclosure for switch as well as magnet. IP 67.
- 5) A Special stay-put type of switch is developed which can be used to sense direction.
- 6) Operating Temp up to 0-120 °C

	INSTANTANEOUS MPS-I	DIRECTION SWITCH / STAY PUT MPS-B
A. Output contacts	NO	2 Bistable contact
B. Contact Rating	200 mA at 220 V AC	200 mA at 220 V AC Resistive
C. Switching frequency:	1 make/break per sec.	1 make/break per sec.
D. Contact life:	Approx. 10 million operations	Approx. 10 million operations
E. Enclosure	Plastic IP 67 /Metal	Plastic IP 67 / Metal
F. Vibration resistance	50g	50 g

SPECIFICATION :

LOAD CURRENT : 1 Amp
 OPERATING VOLTAGE : 250 V Ac or Dc Max
 POWER : 80 VA max.
 HYSTERESIS : 25 %
 ENCLOSURE : Totally enclosed ,IP 67
 SWITCHING TIME ON : 0.3 ms - 1.5.ms
 SWITCHING TIME OFF : 0.5 ms Max
 MECHANICAL LIFE : 1 x 10⁶ TO 10⁹ Operations depending on type of load
 Sensing distance depends on the power of magnet. By increasing magnet power sensing distance will increase.



CYLINDRICAL **MPS** **M R**

SIZE	SENSING RANGE mm	LOGIC OPERATION	FIG. NO	DIMENSIONS				TYPE NO	
				A	B	C	L		
M12x1	10	NO INSTANTANEOUS	1	-	-	-	50	MPS NO	M12 RI
M18x1	10	NO INSTANTANEOUS	1	35	20	-	55	MPS NO	M18 RI
M18X1	10	NO BISTABLE	1	35	20	-	55	MPS NO	M18 RB

RECTANGULAR ENCLOSURE : **MPS** **B** **R**

Enclosure : Engineering plastic. With built in terminal box and terminals.

40x40X	20	1NO	INSTANTANEOUS	3	40	40	30	112	MPS 1NO	B	40	RI
120 mm	20	1CO	BISTABLE	3	40	40	30	112	MPS 1CO	B	40	RB
BLOCK	20	2NO	INSTANTANEOUS	3	40	40	30	112	MPS 2NO	B	40	RI
TYPE	20	2CO	BISTABLE	3	40	40	30	112	MPS 2CO	B	40	RB

Enclosure : Miniature enclosure, Plastic (Xerox Sensor)

CONTACT RATING : 250 m Amp. Voltage : 30 V DC Max.

Ref. Drg	10	1NO	INSTANTANEOUS	4	14	6	14.5	23	MPS 1NO	B	14	
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VANE OPERATED : SLOT ENCLOSURE **MPS** **S** **R**

Switches developed for vane operation.

Mounting is done by screws. The object M.S. (min. thickness 1 mm) moving through the shared cover the slot surface.

SLOT	15	1CO	INSTANTANEOUS	2	50	25	20	60	MPS 1CO	S	15	RI
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MAGNETIC PROXIMITY SWITCH-HALL EFFECT TYPE : SOLID STATE OUTPUT

MPS D3

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FEATURES & COMMON SPECIFICATIONS

SUPPLY VOLTAGE : 5-30V DC.
 VOLTAGE DROP : Less than 0.5 V
 MAX. LOAD CURRENT : 250 mA.
 LEAKAGE CURRENT : Less than 2 mA
 ENCLOSURE : Refer drawing

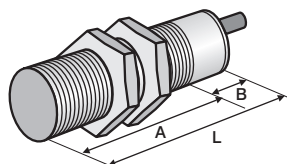


Fig. 1

LOAD : NPN	LOAD : PNP
MPS D3 OS	MPS D3 OG
LOGIC	LOGIC
Drg. 1	Drg. 2

PROTECTIONS

REVERSE POLARITY PROTECTION : Provided
 SHORT CIRCUIT PROTECTION : Provided
 PROTECTION AGAINST DAMAGE DUE TO BACK EMF GENERATED BY SWITCHING OF INDUCTIVE LOAD : Provided
 AMBIENT TEMP : -25 Degree cent to + 70 degree cent.
 HYSTERESIS : 3 TO 20 % Of sensing distance
 HOUSING PROTECTION CLASS : Totally enclosed, IP 67.
 MAX. OPERATING SPEED : 100 K Hz.

SIZE	SENSING LOGIC OPERATION		FIG. NO	DIMENSIONS				WIRING DIAGRAM	TYPE NO
	RANGE	mm		A	B	C	L		
M12X1	10	PNP NO	1	40	20	-	60	2	MPS D3 OG NO M12HE
	10	NPN NO	1	40	20	-	60	1	MPS D3 OS NO M12HE

Switches in other enclosure available.

MAGNETIC PICK-UPS

Magnetic pick up consists of permanent magnet, a pole piece and a sensing coil and electronic circuit. An object of iron, steel or other magnetic material passing closely by its pole face causes distortion of its magnetic flux field passing through sensing coil and pole piece, which in turn generate a signal voltage

Application : Magnetic pick ups are most widely used to sense teeth of a gear, timing belt wheel even bolt head, key-ways.

MAGNETIC PICK UP WITH SINE WAVE OUTPUT :

PU

DIMENSION	SENSING RANGE	TYPE NO
	mm	
5/8 Inch x70	1	PU 5/8
M 18 X 65 mm	1	PU M18