## MPSR Series

## Ruggedized Magnetic Proximity Sensors

## Features/Benefits

- Long life-2M operations
- Sealed contacts
- Quality construction
- Quick and easy installation
- IP69 rating
- Form C SPDT contacts


## Typical Applications

- Automotive sensors and indicators
- Industrial sensors
- Factory automation equipment
- Server / storage
- Security, alarms for windows



## Specifications

CONTACT RATINGS: 200mA @ 3W, 15 VDC
CONTACT RESISTANCE: $300 \mathrm{~m} \Omega$ max. initial.
DIELECTRIC STRENGTH: 150 V DC min.
ELECTRICAL CIRCUIT: SPDT NO/NC (Contact Form C). Reed switch normally open contact opens when magnet is removed from proximity. Normally open contact contacts are held closed when magnet is within actuation range.
OPERATING TEMPERATURE: $-40^{\circ} \mathrm{F}$ to $176^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.$ to $\left.80^{\circ} \mathrm{C}\right)$.
OPERATING DISTANCE/ALIGNMENT: Operate (pull-in or make) points are nominal values with $\pm 10 \%$ tolerance. Release points are $110 \%$ to $150 \%$ of the operating points.
MECHANICAL \& ELECTRICAL LIFE: 2 million operations.
PACKAGING: Bulk packaging, 1 switch and magnet pairs per package.

## Materials

HOUSING/SPACER/COVER: Aluminum, black.
REED SWITCH: Rhodium coated reed contacts in hermetically sealed, nitrogen filled glass capsule. Used in closed loop circuits.
WIRE LEADS: UL 1061/ UL1007 / UL2468
All are 22 AWG wire: stranded, made of copper or
aluminum; Length: 2 meters with ends stripped; Jacket: Stainless steel.
POTTING (around wires): Epoxy.
MAGNETS: NdFeB
NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

## How To Order

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.


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## Dimensions unit: inch (mm)




ELECTRICAL SCHEMATIC

## Actuating Positions

When installing recessed and surface mount contacts, magnet position is very important. The switch and magnet must always be parallel or end to end, and never in a ' $T$ ' configuration.

## Gap Distance

Gap distance is a combination of the horizontal and vertical plane separation of the switch and magnet. Example: if a recessed magnet is $1 / 4$ " off the centerline of the switch, the make gap is reduced by 1/4"

Correct Configuration
111

Incorrect Configuration


Center Alignment


Off Center Alignment



[^0]:    * Please consult factory to see if your custom application requirements can be accommodated by a tailored solution

