

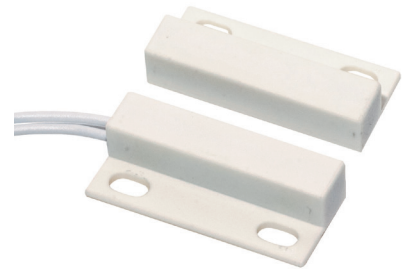
# MPS Series Magnetic Proximity Sensors

## Features/Benefits

- Long life—4M operations
- Sealed contacts
- Quality construction
- Quick and easy installation
- UL 61058 approved

## Typical Applications

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



## Specifications

CONTACT RATINGS: 50V AC/DC 50/60Hz 5W (0.25A maximum)  
RESISTIVE

CONTACT RESISTANCE: 100 m Ω max. initial.

DIELECTRIC STRENGTH: 200 V DC min.

ELECTRICAL CIRCUIT: SPST NO (Contact Form A). Reed switch opens when magnet is removed from proximity. Contacts are held closed when magnet is within actuation range.

OPERATING TEMPERATURE: -40°F to 212°F (-40°C to 100°C).

OPERATING DISTANCE/ALIGNMENT: Operate (pull-in or make) points are nominal values with ± 10% tolerance. Release points are 110% to 150% of the operating points.

MECHANICAL & ELECTRICAL LIFE: 4 million operations.

PACKAGING: Bulk packaging, 10 switch and magnet pairs per package.

## Materials

HOUSING/SPACER/COVER: ABS plastic (UL94V-0), white.

REED SWITCH: Rhodium coated reed contacts in hermetically sealed, nitrogen filled glass capsule. Closed when magnet is in close proximity. Used in closed loop circuits.

WIRE LEADS: UL 1061/ UL1007 / UL2468

All are 22 AWG wire: stranded, made of copper or aluminum; Length: 12 in. with ends stripped; Color: white.

POTTING (around wires): Epoxy.

MAGNETS: NdFeB

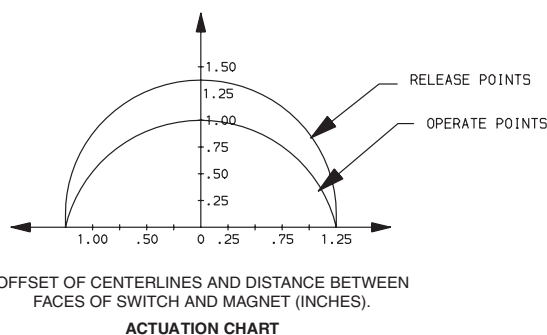
ADHESIVE MOUNTING: Foam-backed, pressure-sensitive adhesive with release liner.

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

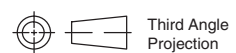
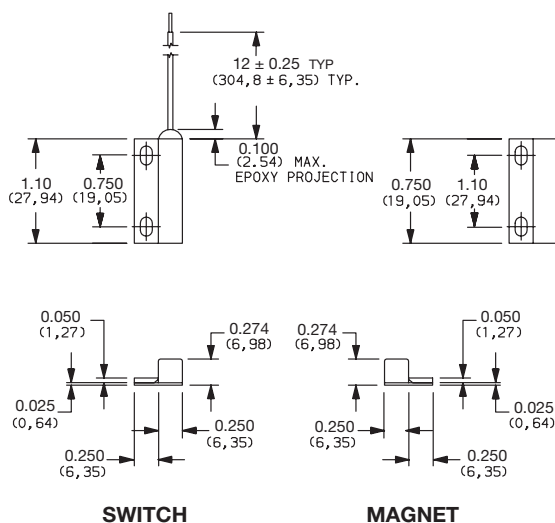
## How To Order

PART NUMBER	SWITCH TYPE
<b>MPS45WGW</b>	Subminiature surface mount (adhesive or flange), side exit leads, 1" make gap.

UL 61058



NOTE: UL 61058 Rating



Dimensions are shown: inches (mm)  
Specifications and dimensions subject to change



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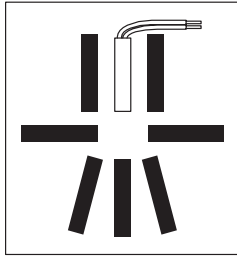
## Actuating Positions

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.

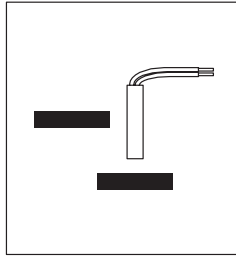
## Gap Distance

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"

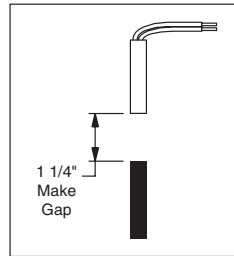
Correct Configuration



Incorrect Configuration



Center Alignment



Off Center Alignment

