

# MPSR Series Ruggedized Magnetic Proximity Sensors

NEW

## 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: 30 VDC 3W (0.2A maximum)  
RESISTIVE

CONTACT RESISTANCE: 300 m  $\Omega$  max. initial.

DIELECTRIC STRENGTH: 150V 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°F to 176°F (-40°C to 80°C).

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.

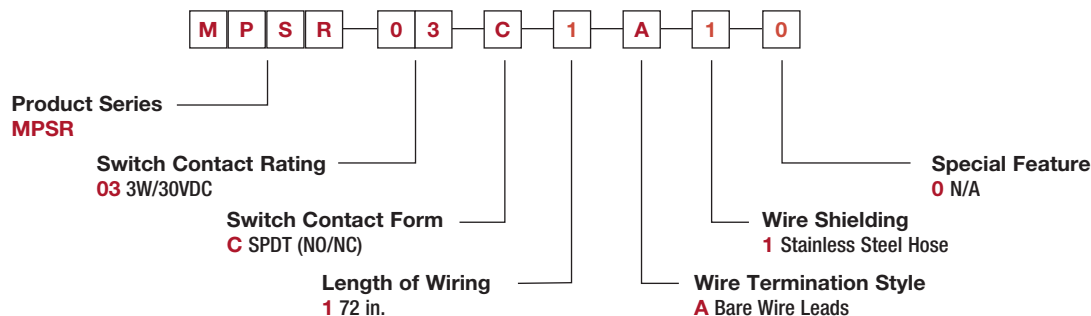
POTTING (around wires): Epoxy.

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.



\* Please consult factory to see if your custom application requirements can be accommodated by a tailored solution



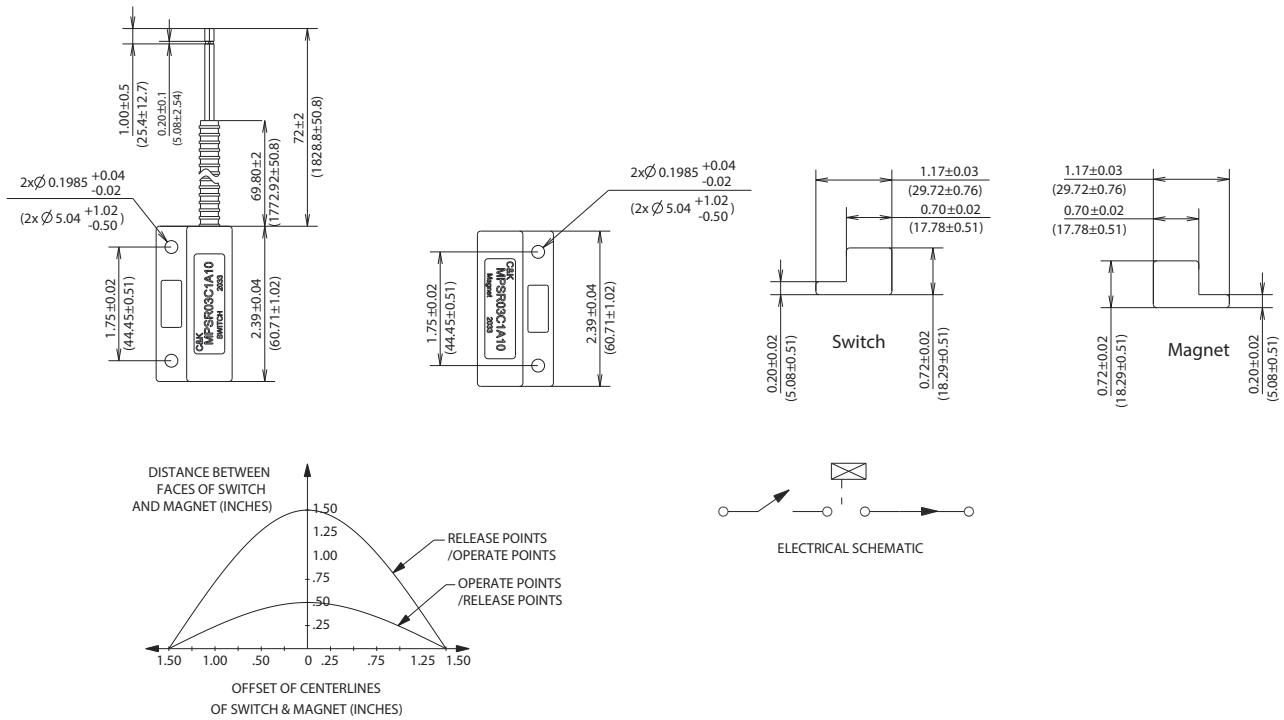
Third Angle  
Projection



**NEW**

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Dimensions unit: inch (mm)



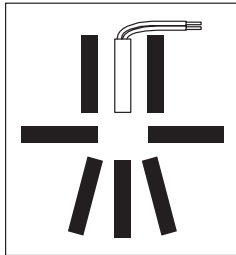
## Actuating Positions

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.

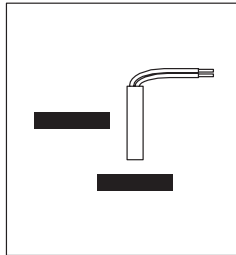
## Gap Distance

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"

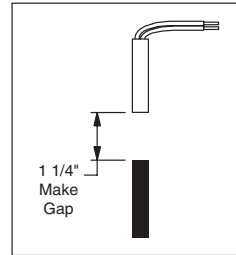
### Correct Configuration



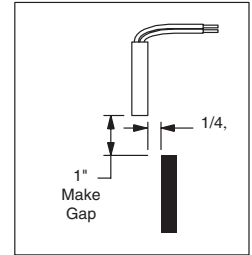
### Incorrect Configuration



### Center Alignment



### Off Center Alignment



**C&K**

23 Sep 21



Dimensions are shown in (mm)

Specifications and dimensions subject to change

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