## Permanent switching magnets <br> M

For activating the magnet switches iKA* and $\mathrm{wK}^{*}$, as well as the proximity switches INFA*Several design options available for optimum switching operationsPermit small to extremely large switching distancesOptions with magnet installed laterallyEasy to installHousing made of corrosion-resistant material

Permanent magnet and reed contact the functional elements for magnet switch operation

## Permanent switching magnets

M 10/2
Plastic housing

| Orientation | Art. No. |
| :--- | :--- |
| North | 037940 |
| South | 037939 |

M 10
Red brass housing

| Orientation | Art. No. |
| :--- | :--- |
| North | 037948 |
| South | 037947 |

M 10/S
Red brass housing
Orientation Art. No.
North 037946
South 037945

## M 8

Red brass housing

| Orientation | Art. No. |
| :--- | :--- |
| North | 037950 |
| South | 037949 |

M 9/1
Red brass housing
Orientation Art. No.
North 054594
South 037952

M 9/2
Stainless steel housing Orientation Art. No.
North 046564
South 037953
approx. 45 g

approx. 220 g

approx. 260 g

approx. 1190 g

approx. 400 g

approx. 1200 g


## Permanent switching magnets

M 9/4
Stainless steel housing
Orientation Art. No. North 055724
South 037954

M 9/6
Red brass housing

| Orientation | Art. No. |
| :--- | :--- |
| North | 055251 |
| South | 037955 |

South 037955
approx. 4000 g
Switching side


## M 9/6 double

Red brass housing
Orientation Art. No.
North 055784
South 050528


Other switching magnets upon request

## Permanent switching magnets

## FUNCTION AND DESIGN

The switching magnets of type $\mathrm{M}^{*}$ have been designed as transverse permanent magnets for the magnet switches $\mathrm{K} \mathrm{KA}^{*}$, $\mathrm{wK}^{*}$ and the proximity switches iNFA*.

In order to ensure optimum operation it is important to match the position of the magnet switch to the orientation of the magnetic field. The switching magnet should ideally be positioned such that the area with the maximum magnetic potential moves towards the reed contact. The switching distance depends on the magnetic force of the permanent switching magnet used.
With the "double" variant a larger switching distance can be achieved than with the standard variant.

Operation with a pulse switch


In this mode of operation, the switching action is triggered by a motion which is almost perpendicular or axial to the magnet poles or the field lines.
The orientation of the switching magnet (north/south) is irrelevant for the operation of the pulse switch.

## Installation

> Screws made of non-ferritic material must be used for fastening in order to avoid an unfavourable influence on the magnetic field and thus a reduction of the switching distance.
> If the magnet is placed on ferritic material the action of one of the two poles will increase. This allows to achieve larger switching distances.



Magnet laterally installed

Operation with a latching switch


The latching switch stores the contact position after being actuated. The activation action is triggered by a motion parallel to the magnetic field lines. Switching back is by the motion in the opposite direction or by repeating the previous set of motions with a magnet poled differently.

As standard, the latching switches are operated via the orientation „south" (switching function e.g. Open - Close).
When using a permanent switching magnet with the orientation "north" the switching function of the latching switch will change so that it is the opposite of the orientation „south"
(switching function e.g. Close - Open)

