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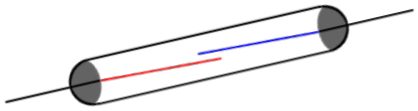
Reed switch



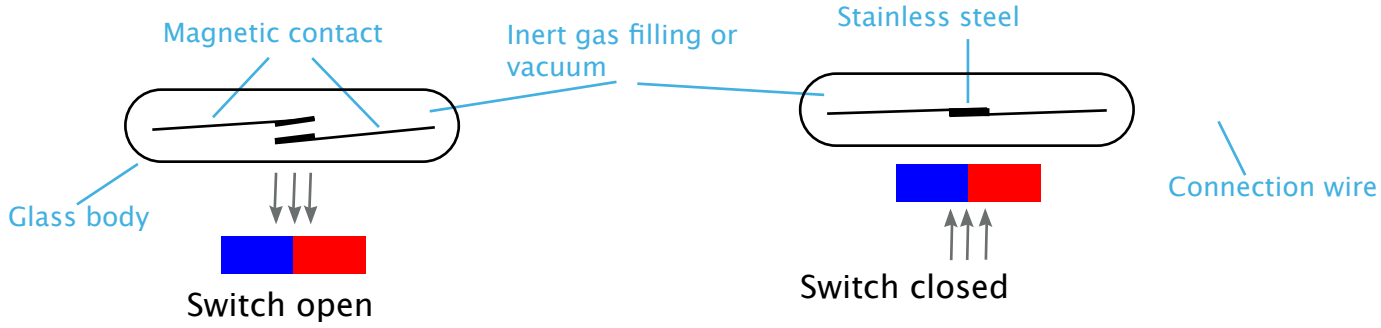
Goal: Use of a Reed switch

Contets: Function
Advantages + possible applications
Programming

Function

Reed switches contain 2 switching contacts sealed into a glass tube.
In case of a NO switch (normally open), the 2 switching contacts are moved together if a magnetic field is applied, and the switch is closed.

In case of a NC switch (normally closed), the exact opposite applies, and the switch is opened if a magnetic field is applied.



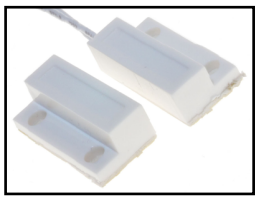
Advantages

Long service life, quick switching, high voltages, switchable extra-low currents, wide temperature range (-55 to 100 degrees), minimum dimensions(SMD) resistant against water, vacuum, oil, dust, etc. For this reason, annual sales have increased to more than 1 billion pieces.

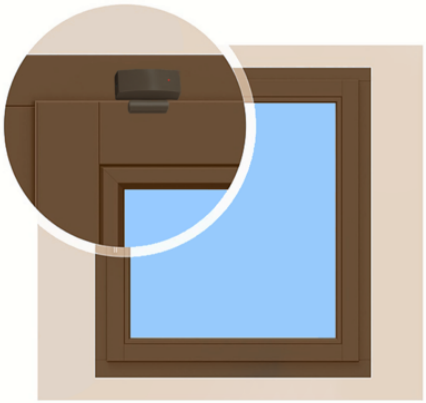
Possible application

The field of applications of Reed switches ranges from electrical engineering, electronics, the automotive industry and alarm systems over measuring technology and household appliances down to medical devices and industrial applications.

Home:	Alarm system, water meter
Shipping industry:	Filling level for diesel tanks, anchor position
Automotive:	Brake pedal position recognition, ABS
Medicine:	Hearing aids, cardiac pacemakers



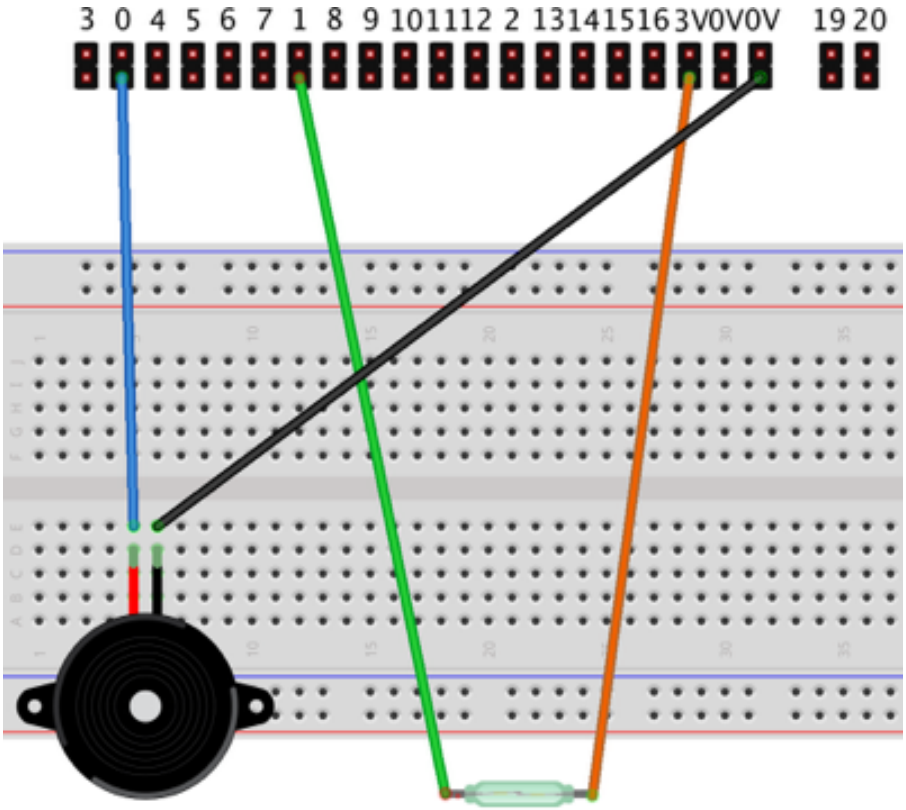
Further applications and information on Reed switches can be obtained from Standex Electronics.

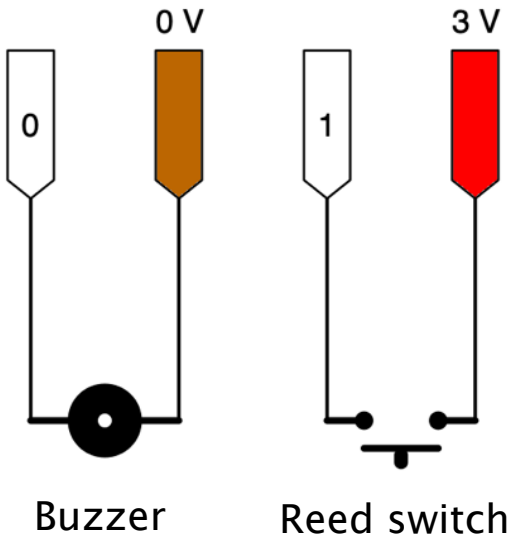


Circuit set-up of reed switches

Alarm systems must recognise when a window is opened. For this, a reed switch is the perfect choice.

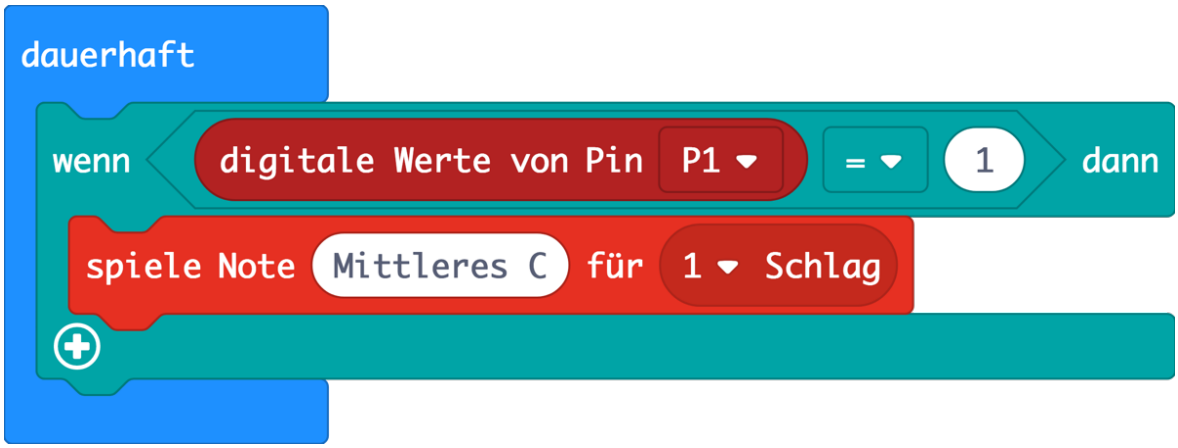
Recognition of open windows is also important for smart heating systems. If this fresh air ventilation is recognised, the heating phase is interrupted for some time to save energy.





- Position the buzzer as illustrated (alternatively, an LED can be used).
- One pin is connected to the 0V pin (Gnd) -
  [**Black cable – 0V**]
- the other pin is connected to pin 0.
  [**Blue cable – Pin0**]
- Afterwards, one side of the reed switch is connected to pin 1 with the green cable.
  [**Green cable – Pin1**]
- The other side is connected to the 3V pin with the green cable.
  [**Orange cable – Pin1**]

Programming



Information on block code