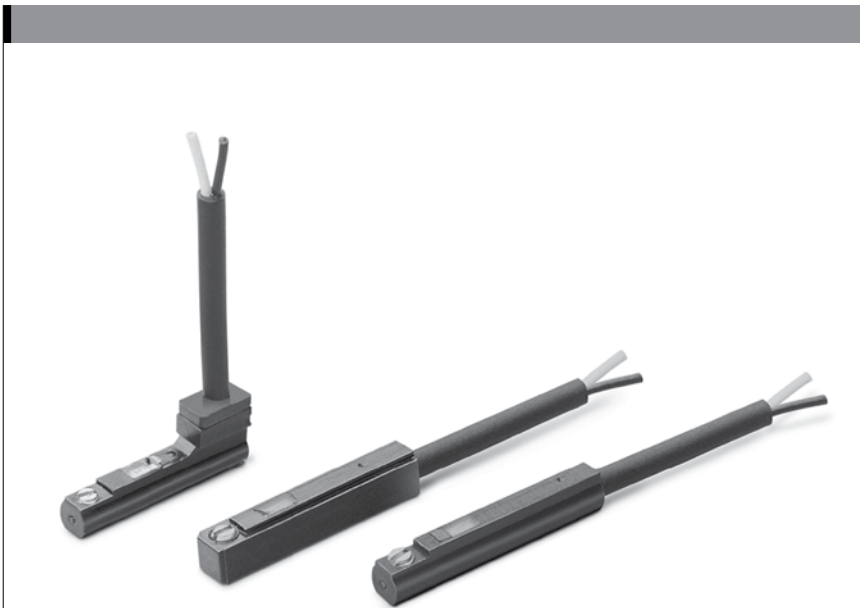


# Magnetic Proximity Switches Series CSB and CSC

## Reed switches



- » Mod. CSB for direct mounting on all gripper series, except gripper CGL
- » Mod. CSC for direct mounting on series CGL grippers

The reed switch that has a mechanical switching element, is suitable for voltages, AC and DC up to 110 V. Proximity switches mod. CSC are suitable for gripper mod. CGL. The proximity switches are impregnated in a sealed isolating cover. These sensors are designed to fit into the grooves provided in the profile barrel of the grippers. For electrical connections see schemes.

The magnetic proximity switches CSB/CSC define the position of the magnetic piston. When the internal contact is actuated by a magnetic field, the sensors complete an electrical circuit and provide an output signal to actuate directly a solenoid valve or a PLC. A red Led shows when the internal magnetic contact is closed.

### GENERAL DATA

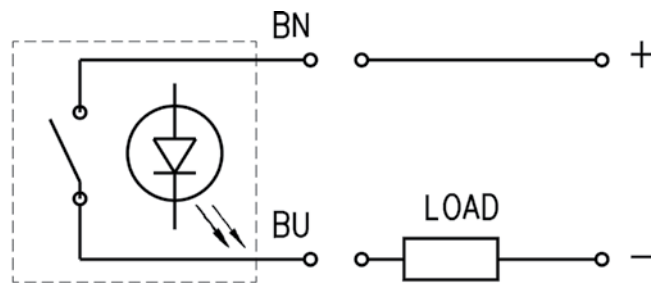
<b>Model</b>	CSB-220 CSC-220
<b>Operation</b>	Reed contact
<b>Voltage</b>	3 – 110 V AC/DC
<b>Protection</b>	IP66
<b>Material</b>	Plastic body encapsulating epoxy resin
<b>Mounting</b>	directly into the groove
<b>Signalling</b>	by means of LED (red)
<b>Electrical connections</b>	2 x 0,14 cable ( 2 m )
<b>Switching current</b>	3 – 50 mA
<b>Max. load</b>	8 W, 10 VA
<b>Switching time</b>	<1 ms (1/1000 sec)
<b>Operating temperature</b>	-10°C – 60°C, ( 14°F - 140°F )
<b>Type of contact</b>	Normally Open
<b>Weight</b>	18 g
<b>Protection circuit</b>	None
<b>Output</b>	-

**CODING EXAMPLE**

**CS** | **B** | **-** | **D** | **-** | **2** | **20**

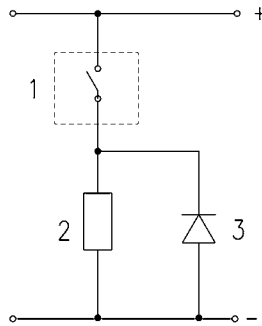
<b>CS</b>	SERIES
<b>B</b>	B = Square shape C = Round shape
<b>D</b>	D = straight lead H = lead 90°
<b>2</b>	2 = reed
<b>20</b>	20 = 2 wires (only reed)

**ELECTRICAL CONNECTORS**



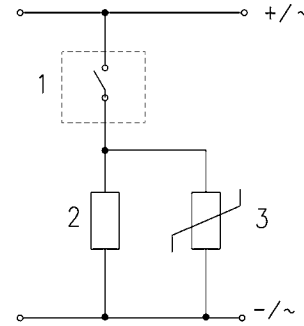
BN = brown  
BU = blue

Electric circuits with protection against voltage spikes



There is no protection on the Reed sensors on the inductive load, therefore it is advisable to use electric circuits with protection against the voltage spikes: the first for direct current (DC), the second for alternating current (AC).

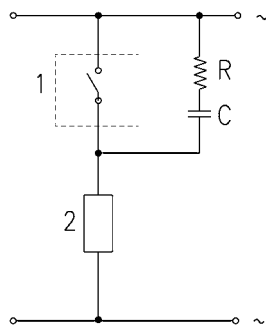
- 1 = Reed sensor
- 2 = Load
- 3 = Diode / Varistor



When the wire length of sensor connection load is more than 10m, inductors shall be installed in series near the sensor to avoid ripple.

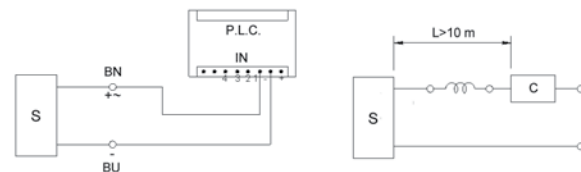
- 1 = Reed sensor
- 2 = Load
- R = Resistor
- C = Capacitor

Electric circuits with protection against voltage spikes



There is no protection on the Reed sensors on the inductive load, therefore it is advisable to use electric circuits with protection against the voltage spikes.

- BN = Brown
- BU = Blue
- C = Load

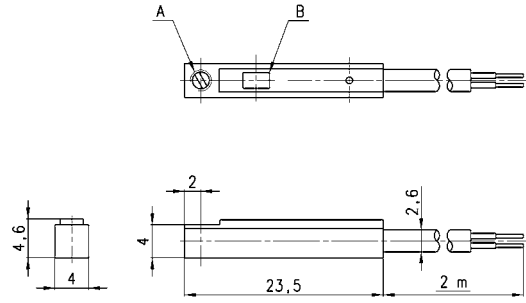


When the wire length of sensor connection load is more than 10m, inductors shall be installed in series near the sensor to avoid ripple.

- BN = Brown
- BU = Blue
- C = Load

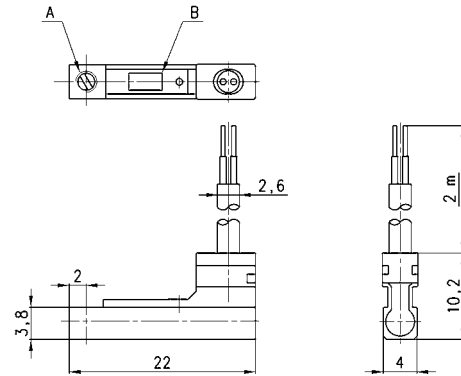
When L is more than 10mt. the cable has to be considered as an inductive load.

CSB - D - 220



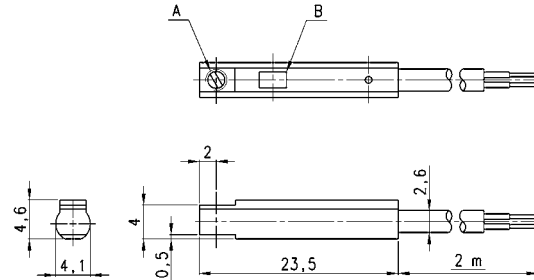
Mod.  
CSB-D-220

CSB - H - 220



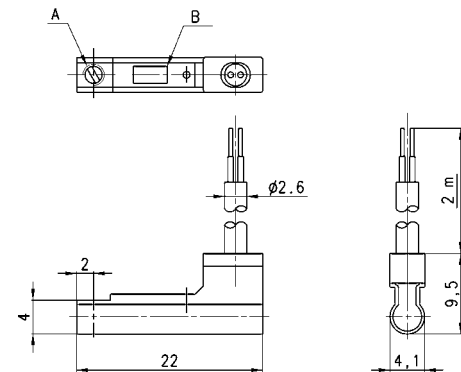
Mod.  
CSB-H-220

CSC - D - 220



Mod.  
CSC-D-220

CSC - H - 220



Mod.  
CSC-H-220