Magnetic proximity switches Series CSB and CSC

Reed switches

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.

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.

GENERAL DATA

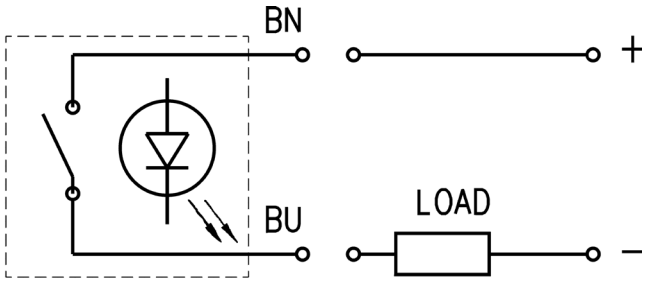
Model	CSB-220 CSC-220
Operation	Reed contact
Voltage	3 ÷ 110 V AC/DC
Protection	IP66
Material	Plastic body encapsulating epoxy resin
Mounting	directly into the groove
Signalling	by means of LED (red)
Electrical connections	2 x 0,14 cable (2 m)
Switching current	3 ÷ 50 mA
Max. load	8 W, 10 VA
Switching time	<1 ms (1/1000 sec)
Operating temperature	-10°C ÷ 60°C
Type of contact	NO
Weight	18 g
Protection circuit	None
Output	-

CODING EXAMPLE

CS	B	-	D	-	2	20

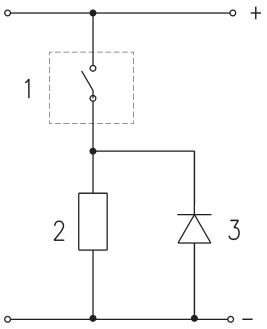
CS	SERIES
B	B = Square shape C = Round shape
D	D = straight lead H = lead 90°
2	2 = reed
20	20 = 2 wires (only reed)

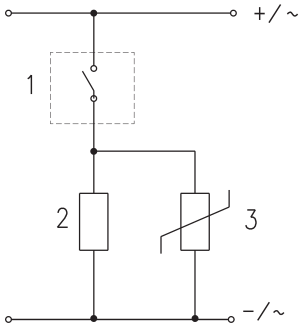
ELECTRICAL CONNECTORS



BN = brown
BU = blue

Electric circuits with protection against voltage spikes

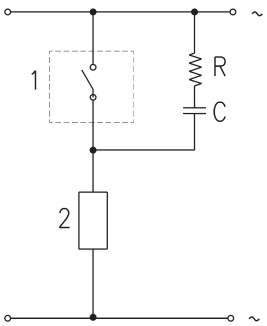


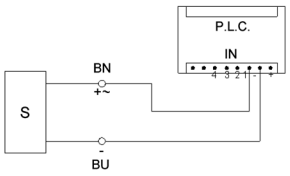


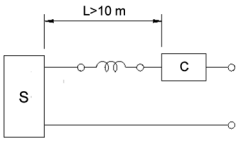
There is no protection on the Reed sensors on the inductive load, therefore it is advisable to use electric circuits with protection against the voltage spikes: the first for direct current (DC), the second for alternating current (AC).
1 = Reed sensor
2 = Load
3 = Diode / Varistor

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



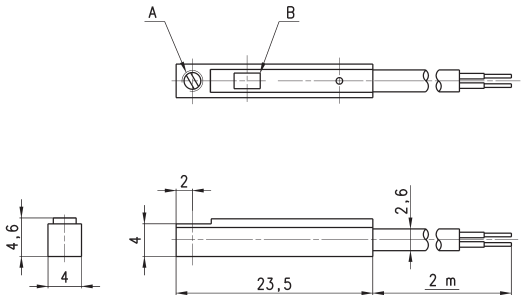




There is no protection on the Reed sensors on the inductive load, therefore it is advisable to use electric circuits with protection against the voltage spikes.
BN = Brown
BU = Blue
C = Load

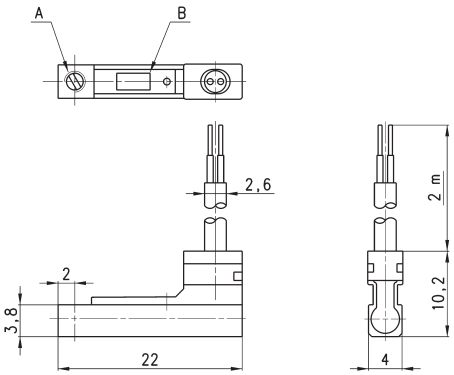
When the wire length of sensor connection load is more than 10m, inductors shall be installed in series near the sensor to avoid ripple.
BN = Brown
BU = Blue
C = Load
When L is more than 10mt. the cable has to be considered as an inductive load.

Connectors Mod. CSB-D-220



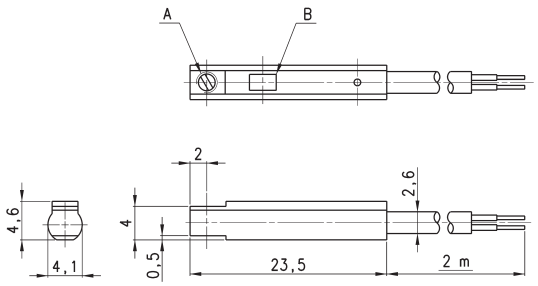
Mod.
CSB-D-220

Connectors Mod. CSB-H-220



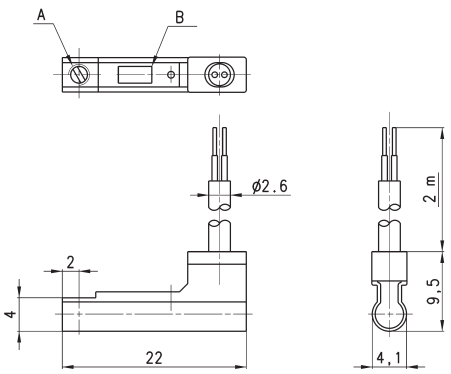
Mod.
CSB-H-220

Connectors Mod. CSC-D-220



Mod.
CSC-D-220

Connectors Mod. CSC-H-220



Mod.
CSC-H-220