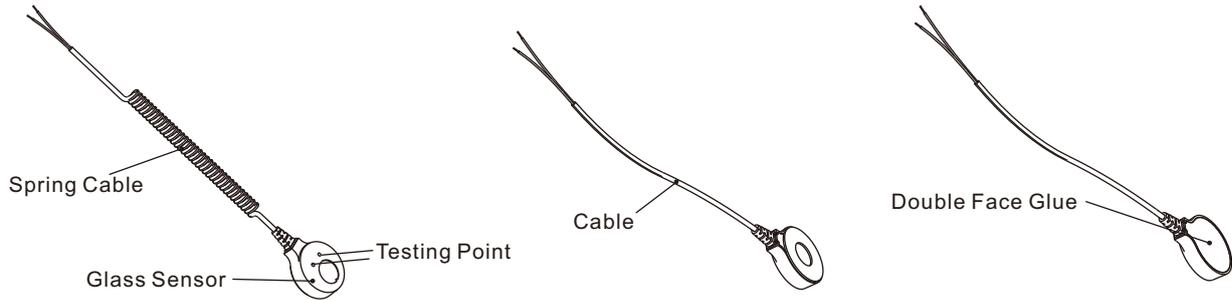# GLASS SENSOR
GS-380C • GS-380S

SENGATE

Thank you for selecting the GLASS SENSOR of SENGATE Brand.
Please read the Instruction Manual carefully before using it.

Features

◎ No power suppy is required.
◎ Accurately and effectively detect the strike of glass. No false alarm signal will be generated from various interruption signal.
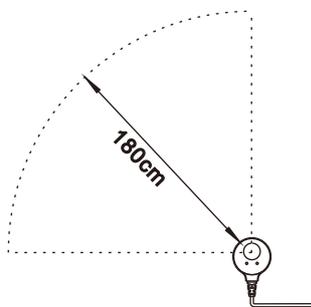◎High performance. High quality.

1. PARTS DESCRIPTION

Spring Cable

Glass Sensor — Testing Point

Cable

Double Face Glue

2. CAUTIONS ON INSTALLATION

DETECTABLE RANGE

Alarm range within radius of 180cm

180cm
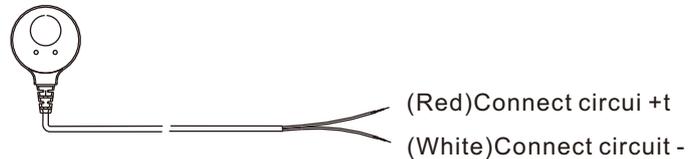
Notice:
(1) This product is designed for the of indoor installation. Outdoor setting is prohibited.
(2) The Sensor can adhere to those of glass material only.
   For example , glass windows, glass door, or glass cabinet.
(3) Sensor must adhere tightly within the detectable area.
   Then its high performance of delectability could be well functioned.
(4) The "alarm output" provided by the detector is of semiconductor style switch. Please notice if the "circuit current" and "circuit voltage" are too high, so as to avoid damage to the detector.
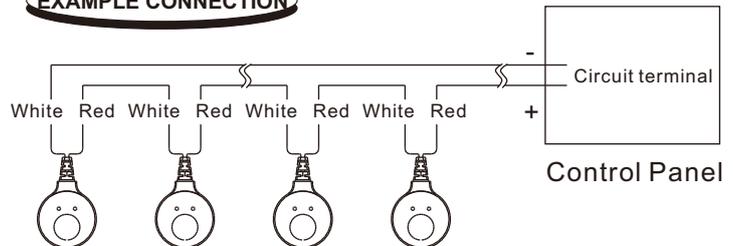
3. WIRING

WIRE CONFIGURATION

GS-380C,GS-380S

(Red)Connect circui +t

(White)Connect circuit -

Notice:
(1) Wiring of the detector has distinct polar.
(2) Each detector has inner resistance value of 13 ohm (including wiring of the detector).
(3) This sensor is semiconductor style switch."circuit current" and "circuit voltage" should limited. Max loading is DC24V 40mA (it could connect with control panel circuit directly).

EXAMPLE CONNECTION

White Red White Red White Red White Red +
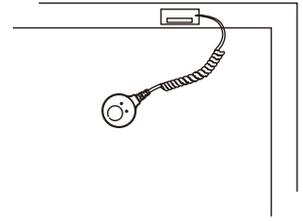
- Circuit terminal

Control Panel

Notice:
(1) As to how many detectors can be installed, the problem of matching of resistance brought among the detector, total circuit resistance and terminal resistance of the receiving unit should be taken into consideration.
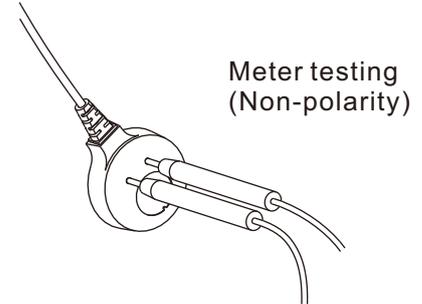(2) No extra power supply to the detector is needed.

4. PROCEDURE OF INSTALLATION

Step 1. Remove dust and clean the place where the sensor will be installed.
Step 2. Tear off the paper adhere to the double face glue.
Step 3. Determine the layout of the wire, adjust the direction of the sensor, then smoothly and tightly adhere it to the detected area of glass.
Step 4. Connect the loop wiring according to the description of "3.Wiring"

5. FUNCTION TEST

Step 1. Set the electric meter at the band of 200K ohm.
Step 2. Plug the test pin of the electric meter to the test hole (without polar). At the same time the reading of the electric meter is about 100K ohm.
Step 3. Then, simulate the action of the knocking glass. At the same time, the reading of the electric meter should be indefinitely great. The after seconds of time, the reading of the electric meter will return to 100K ohm.
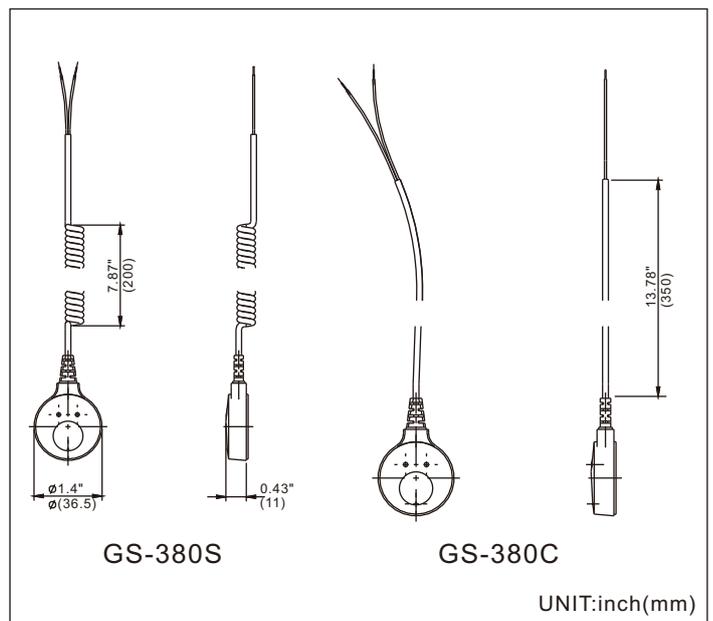Step 4. Set the receiving unit, then knock the surface of glass in the detected area, then alarm must be triggered.

Meter testing
(Non-polarity)

6. TROUBLE SHOOTING

Troubles	Possible Causes	Resolution
Cannot trigger the receiving unit	1. Poor circuit connection, short, or the circuit is destroyed. 2. Beyond the detectable area. 3. Knocking force is too small.	1. Check the circuit. 2. Readjust the sensor to the suitable position. 3. Try to strengthen the force, and knock in the detectable area.
Poor sensitivity	1. Poor circuit connection. 2. Detector did not completely and tightly adhere to glass. 3. Beyond the detectable are.	1. Check the circuit. 2. Press and tightly adhere again, or replace the sensor glue. 3. Readjust the sensor to the suitable position.

7. SPECIFCATION

Model	GS-380C	GS-380S
Detectable Range	Radius of 180cm	
Loop Voltage	DC24V (max)	
Loop Current	40mA (max)	
Detection Method	Piezoelectric	
Alarm Period	0.50 sec. ~ 6 sec. (0.3 sec. min)	
Alarm Output	Semiconductor style switch, polarity, DC24V/40mA. Resistance exceeds 20M ohm when abnormal. Resistance at 13 ohm (max) when normal.	
Operation Temperature	-20°C ~ +55°C	
Environment Humidity	95% (max)	
Wiring / Terminal	Straight style	Curling style
Mounting Positions	Indoor, Surface of glass materials	
Weight	0.46 oz (13g)	0.92 oz (26 g)
Dimension (mm)	Ø1.4"x0.43" (Ø36.5x11)	

Note:
1. Disassembly of the sensor is prohibited. If disassembled, it will destroy the performance and may result in the permanent damage.
2. Sensor should avoid external factors that lead to serious distortion or transfigure.

8. EXTERNAL DIMENSIONS

7.87" (200)

13.78" (350)

ø1.4" ø(36.5)

0.43" (11)

GS-380S

GS-380C

UNIT:inch(mm)

No:A009B01-00