

# Adhesives

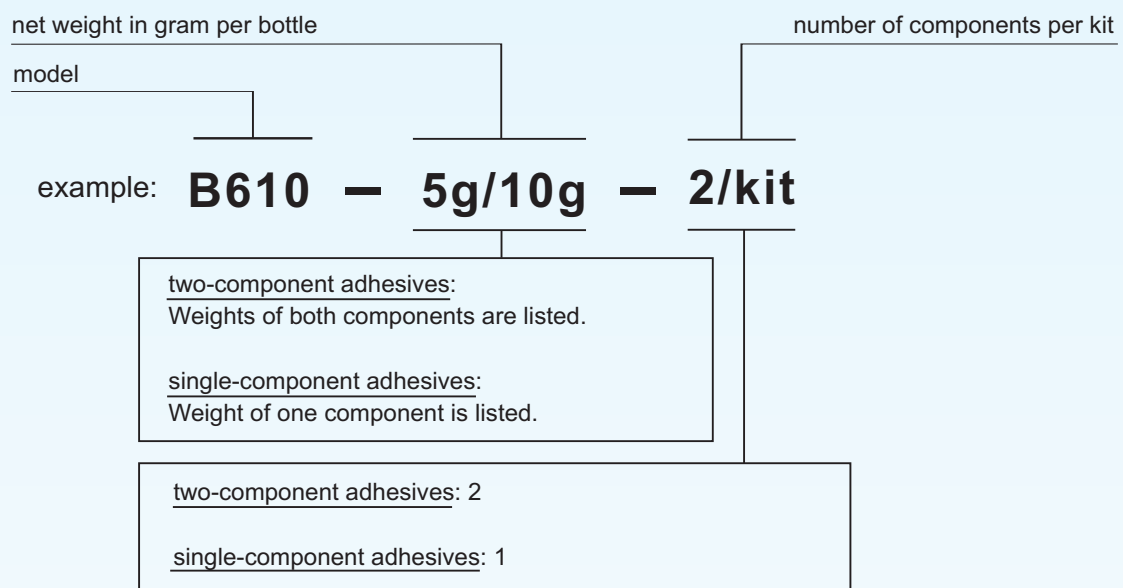
## Description

BCM SENSOR is able to supply strain gauge adhesives, protective coatings and sealants that are useful and necessary in strain gauge applications.

The specifications of these products can be found below.

There is also the gauge installation instruction in the documentation of the adhesives, which can be helpful for strain gauge bonding.

## Ordering Information



## 1. Adhesives to Bond Strain Gauges

Parameters		Specifications			
product name		Strain Gauge Adhesive for Precision Sensor Applications		Strain Gauge Adhesive for Stress Analysis Applications	
model		B610	B710	B611	B711
features		two components, high resistance to shear strain, low creep and low hysteresis, excellent repeatability and long-term stability, high insulation over a wide temperature range.	single component, high working temperature, excellent long-term stability, high insulation capability.	two components, no solvent, curing at room temperature, low creep and hysteresis, high insulation capability.	single component, cyanoacrylate, strong adhesion to a variety of materials, fast curing at room temperature, low creep and hysteresis.
working temperature range	long term	-220 ~ +200°C	-60 ~ +250°C	-30 ~ +60°C	-196 ~ +120°C
	short term	-230 ~ +300°C	-70 ~ +300°C	-40 ~ +80°C	-200 ~ +150°C
applications		excellent bonding of all types of BCM strain gauges and bondable resistors, especially recommended for use in the production of precision sensors.	capable of bonding all types of strain gauges, bondable resistors and terminals.	1) bonding of commonly used gauges for stress analysis. 2) bonding of compensation resistors or terminals for sensor applications.	1) bonding of commonly used gauges for stress analysis. 2) bonding of high elongation gauges for short term stress analysis.
curing conditions		cure: 2 hours at 135°C, under 1~3 bar pressure. post-cure: 2 hours at 165°C.	cure: 2 hours at 100°C, then 2 hours at 150°C, under 1~3 bar. post-cure: 4 hours at 250°C.	24 hours at room temperature under 1~3 bar, or 2 hours at 60~80 °C under 1~3 bar.	1 minute at room temperature under "finger" pressure
shelf-life <sup>(1)</sup>		6 months at room temperature, 12 months at 4°C.	8 months at 4°C	10 months at room temperature	6 months at room temperature, 12 months at 4~8 °C.
package quantity		two components: 15g in total A-component: 5g/bottle; B-component: 10g/bottle.	10g/bottle	two components: 10g in total A-component: 8g/bottle; B-component: 2g/bottle.	2g/bottle

Notes:

- (1) For the 2-component adhesives, the shelf-life refers to the period when the 2 components have not been mixed. Once the 2 components are mixed, the shelf-time of the adhesive will become significantly shorter. In general, it is not suggested to store the mixed adhesives.
- (2) Room temperature: 25°C.

## 2. Coatings to Protect Strain Gauges

Parameters	Specifications	
product name	Coating for Protection of Bonded Strain Gauges	
model	C820	C821
features	two components, polyurethane, water- and moisture-proof, mildew resistant and highly insulating.	two components, no solvent, curing at room temperature, low creep and hysteresis, high insulation capability.
working temperature range	-30 ~ +60°C	-60 ~ +90°C
applications	1) protective coating for strain gauges and for precision sensors; 2) protective coating for water-proof gauges.	1) protective coating for strain gauges and for precision sensors; 2) protective coating for strain gauges which may be used in aggressive working conditions. 3) protective coating for strain gauges on different materials, e.g., glass, ceramics and cement for stress analysis.
curing conditions	1) coating: 24 hours at room temperature 2) coating of water-proof gauges: 4 hours at 80°C, or 2 hours at 120°C under 0.5~1bar.	6 hours at room temperature, or 2 hours at 40~50°C.
shelf-life <sup>(1)</sup>	12 months at room temperature	24 months at room temperature
package quantity	two components: 25g in total. For strain gauge coating in sensor application: A-component: 12g/bottle; B-component: 13g/bottle. For under-water application: A-component: 11.25g/bottle; B-component: 13.75g/bottle.	two components: 45g in total. A-component: 30g/tube; B-component: 15g/tube.

**Notes:**

(1) For the 2-component adhesives, the shelf-life refers to the period when the 2 components have not been mixed. Once the 2 components are mixed, the shelf-time of the adhesive will become significantly shorter. In general, it is not suggested to store the mixed adhesives.

### 3. Sealants to Protect Strain Gauges

Parameters	Specifications	
product name	Sealant for Protection of Bonded Strain Gauges	
model	S910	S911
features	single component, white silicone rubber, cure at room temperature, excellent water- and moisture-proof, resistance to mildew, high insulation.	single component, translucent silicone rubber, high viscosity, containing UV indicator for automatic inspection, water- and moisture-proof, excellent insulation.
working temperature range	-50 ~ +250°C	-45 ~ +200°C
applications	protective sealant for sensors and for strain gauges used in stress analysis	1) protective sealant for sensors and for strain gauges used in stress analysis. 2) widely used as protective sealant for electronic circuits.
curing conditions	cure 2~4mm thickness sealant: 24 hours at room temperature and 55%RH. Longer time is required for thicker sealant.	24~72 hours at room temperature depending on the thickness of sealant
shelf-life	12 months at room temperature	12 months at room temperature
package quantity	100g/tube	85g/tube

Note: The listed ordering information and specifications are subject to change without prior notice.

**BCM SENSOR TECHNOLOGIES BVBA**

