



## Setpoint Adjusters, passive BSG21...

### Passive setpoint adjusters

- For controllers with a 0...1000 Ohm input
- For controllers with a LG-Ni 1000 input
- Choice of setting ranges, depending on the type of setpoint adjuster

### Functions

The BSG21... setpoint adjusters are passive, infinitely adjustable signal transmitters. They transmit the adjusted resistance value directly to the connected controller.

### Type summary

There are 4 different types available, the difference being the temperature setting range and the resistance value:

<b>BSG21.1</b>	range	0 °C ... 50 °C (0...1000 Ω)	setpoint adjuster (plus other scales)	.
<b>BSG21.2</b>	range	0 °C ... 50 °C (1000...1235 Ω)	setpoint adjuster (LG-Ni 1000)	.
<b>BSG21.3</b>	range	10 °C ... 30 °C (1045...1138 Ω)	setpoint adjuster (LG-Ni 1000)	.
<b>BSG21.5</b>	range	-20 °C ... +20 °C ( 913...1091 Ω)	setpoint adjuster (LG-Ni 1000)	.
	range	20 °C ... 60 °C (1091...1285 Ω)	setpoint adjuster (LG-Ni 1000)	.
	range	-3 K ... +3 K (1000...1175 Ω)	setpoint adjuster (0K ≅ 1091 Ω)	.

## Ordering

When ordering, please give quantity, name and type reference.

*Example: 3 setpoints adjusters BSG21.1*

## Mechanical design

Multisectional plastic housing with:

- Printed circuit board carrying the potentiometer and the 4 connection terminals
- Mounting plate with 3 adjustable end-stop pins for mechanical limitation of the setting range
- Setting knob
- Scale (exchangeable)
- Transparent cover plate

## Accessories

Type BSG21.1 can be used with a number of different printed scales. An additional set of printed scales can be ordered using type reference **BSG-Z**. Each of the printed scales listed below is contained in this set twice. This means that the BSG21.1 can be used with the following types of printed scales:

Setting range	Measured value
0...50 °C	Temperature
0...100 °C	Temperature
-10...+130 °C	Temperature
0...130 °C	Temperature
0...250 °C	Temperature
100...200 °C	Temperature
150...450 °C	Temperature
0...30 K	Temperature difference
-5...+5 K	Temperature shift
-25...+25 K	Temperature shift
-35...+35 K	Temperature shift
-65...+65 K	Temperature shift
0...20 g/kg	Air humidity
0...0.5 bar	Differential pressure, liquids
0...2 bar	Differential pressure, liquids
0...10 bar	Differential pressure, liquids
0...20 bar	Differential pressure, liquids
0...40 bar	Differential pressure, liquids
0...20 Pa	Differential pressure, gases
0...100 Pa	Differential pressure, gases
0...500 Pa	Differential pressure, gases
0...3000 Pa	Differential pressure, gases
0...100 %	Position
Blank scale	

## Installation notes

### Mounting

The BSG21... setpoint adjusters are suited for mounting in a control panel front, control desk or on a concealed conduit box (on the cover plate).

## Technical data

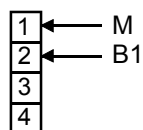
General unit data	Setting range	refer to "Type summary"
	Materials	
	Cover and mounting plate	Polycarbonate
	Setting knob	Polycarbonate / ASA
	Color	
	Cover plate	transparent
	Setting knob	RAL 9003 (signal-white)
Environmental conditions	Operation	to IEC 721-3-3
	Climatic conditions	class 3K5
	Temperature (housing)	-5...+55 °C
	Humidity (housing)	5...95 % r. h.
	Transport	to IEC 721-3-2
	Climatic conditions	class 2K3
	Temperature	-25...+70 °C
	Humidity	<95 % r. h.
	Mechanical environmental conditions	class 2M2
Norms and standards	Safety class	III to EN 60 730-1
	Degree of protection (built-in)	IP42 to EN 60 529
	Conformity with	CE requirements
Electrical connection	Screw terminals for a cross-sectional area of	max. 2.5 mm <sup>2</sup>
Max. cable lengths	Between BSG21... and controller	
	0.25 mm <sup>2</sup> copper	40 m
	0.50 mm <sup>2</sup> copper	75 m
	1.0 mm <sup>2</sup> copper	110 m
Weight	Incl. package	0.06 kg

## Connection terminals

### BSG21.1

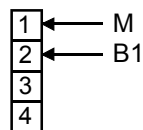
### BSG21.2

### BSG21.3



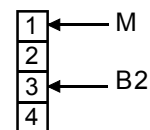
### BSG21.5

-20...+20 °C



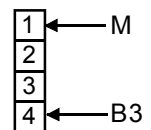
### BSG21.5

-3...+3 K

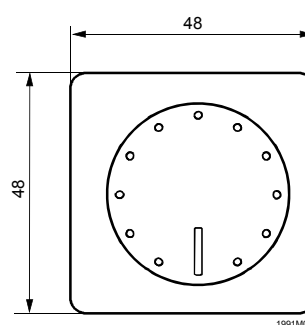
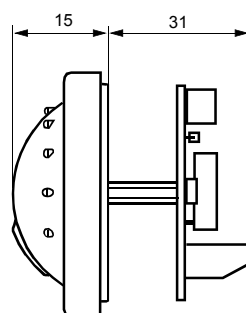


### BSG21.5

20...60 °C



## Dimensions



### Drilling template

