

Linear Gauge Sensor

## BS Series

# BS-1210/BS-1310 Baby Gauge Sensor

Compact and Tough



### Overview

The BS-1210 / BS-1310 Baby Gauge Sensors are made to detect various dimensions, displacements and travel distances. They are compact and tough, that is to say, they achieve excellent durability, vibration / shock resistance and noise resistance despite their small size.

### Features

- Thin body and takes little space : Easy to install and maintain. Thickness **13 mm**
- Superior water-resistance \* : Protection class IP64 → **IP66**
- Superior life time \* : Number of sliding times 10 million times → **30 million times**
- Expanded temperature ranges \* : Operating temperature range +5 to +40 °C → **0 to +50 °C**  
Storage temperature range -10 to +55 °C → **-10 to +65 °C**

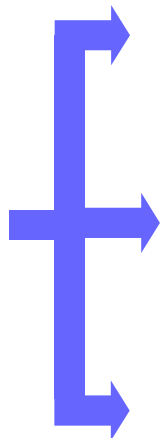
\* Compared to our existing model

### Example of system configurations

- Can be connected to not only exclusive counters but also a PLC.



BS-1210/BS-1310



AA-8910  
Conversion  
cable



DG-4300 Series



DG-5100 Series



PLC etc.

- Provides multiplication switching function/offset setting function/factor setting function.
- Provides calculation display function (MAX, MIN, RANGE).
- When judged in comparator function, color of the backlight changes to green (OK) or red (NG) (DG-4340).

- Enables to add functions with following optional cards.  
BCD output  
Analog output (voltage/current)  
Comparator output  
RS-232C communication  
DC power supply

- Can be connected to a PLC

## ● Specifications

Item	Model	BS-1210	BS-1310
Measurement range		10 mm	
Resolution		10 $\mu$ m	1 $\mu$ m
Accuracy		3 $\mu$ m (at +20 °C)	
Maximum spindle velocity *1		1 (4) m/s	0.3 (1.2) m/s
Measurement force (downward)		1.47 N or less	
Number of sliding times		30 million times	
Vibration resistance (when the power is off) *2		98 m/s <sup>2</sup> in each of the three axial directions (150 minutes per each), 20 cycles of 10 Hz to 150 Hz sweeping	
Shock resistance (when the power is off) *2		980 m/s <sup>2</sup> in each of direction for each of three axes, three times for each of $\pm$ X, Y and Z directions (18 times total), sine half-wave, pulse duration 6 ms	
Protection class		IP66 (not including connector part)	
Operating temperature range		0 to +50 °C	
Storage temperature range		-10 to +65 °C	
Outer dimension		Total length 94.5 mm	
Cable length		From sensor to counter approx. 1.9 m	
Weight		Approx. 110 g (including cable)	
Accessory		Instruction manual	
Options		<ul style="list-style-type: none"> <li>• AA-813 Mechanical release *3</li> <li>• AA-816 Air release *3</li> <li>• ST-022 Gauge stand</li> <li>• AA-973 Spare dust proof rubber</li> <li>• AA-844 (30 mm)/AA-845 (50 mm) Extension spindle</li> <li>• Various extension signal cables</li> <li>• Various measurement tips *4</li> </ul>	

\*1. When used with Ono Sokki's Gauge Counter. The values within parentheses () are the maximum spindle velocity used with the DG-4320/DG-4340/DG-5100/DG-3250.

\*2 Vibration/shock resistance values described in above are not guaranteed during measurement operation.

\*3 When using a release, IP66 is not guaranteed.

\*4 When using a measurement tip, IP66 is not guaranteed because it is necessary to remove the dust proof rubber.

## ● Outer dimensions

