





# GS & BS sensors

## SPECIFICATIONS

Model		
Resolution	10 $\mu\text{m}$	1 $\mu\text{m}$
Response Speed	1 m/sec	0.2 m/sec
Measurement Force	1.47N (150gf) or less (If the dustproof rubber boot is removed, the force will be reduced to 0.98N (100gf) or less)	
Power Supply Voltage	4.5 ~ 6VDC	
Consumption Current	Approx 30mA at 5VDC	Approx 70mA at 5VDC
Output Signal	<p>Phase difference square wave form                      Phase difference: <math>90^\circ \pm 20^\circ</math> (at 5VDC)                      Hi: 4.5V or more (at no load condition)                      Lo: 0.4V or less</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p><math>\leftarrow P \rightarrow</math></p> <p>...P=40 <math>\mu\text{m}</math> ...P=4 <math>\mu\text{m}</math></p> <p>Sig. 1 </p> <p>Sig. 2 </p> <p>(When the spindle is pushed in)</p> </div> <div style="text-align: center;"> <p>Sig. 1 </p> <p>Sig. 2 </p> <p>(When the spindle is pulled out)</p> </div> </div>	
Connector Pin Arrangement	<p>Connector Type: R03-PB6M</p> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;"> <p>Sensor or AMP BOX</p> <p>Sig. 1</p> <p>Sig. 2</p> <p>Power IN (+)</p> <p>Common Power IN (-)</p> <p>Case Shield</p> </div> <div style="border: 1px dashed black; padding: 5px; margin-right: 10px;"> <p>Connector</p> <p>Blue</p> <p>White</p> <p>Red</p> <p>Black</p> <p>Orange (for BS-102)</p> <p>Green</p> <p>A</p> <p>B</p> <p>C</p> <p>D</p> <p>E</p> <p>F</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>counter</p> <p>Sig. 1</p> <p>Sig. 2</p> <p>Power out (+)</p> <p>Common Power out (-)</p> </div> </div> <p>DG-300, 400 Series MG Series RG Series</p> <p>Care should be taken that there is no connection between the case and the signal common in the sensor.</p>	
Operating Temperature	+5 $^\circ\text{C}$ ~ +40 $^\circ\text{C}$	
Storing Temperature	-10 $^\circ\text{C}$ ~ +55 $^\circ\text{C}$	
Signal Code Length	1.9m between sensor and counter	1.9m between sensor and AMP BOX 10cm between AMP BOX and counter