

# CG-094 - Mid range distance sensor

## Description

### CG-094 Mid range distance sensor

If used as a direct replacement for [CG-083](#) (in any machine originally fitted with CG-083) you need to install the retrofit kit [CG-900](#)

DT35-B15851

## Specifications

### General data

Measuring range	50 mm ... 12,000 mm, 90 % remission <sup>1) 2)</sup> 50 mm ... 5,300 mm, 18 % remission 50 mm ... 3,100 mm, 6 % remission
Target	Natural objects
Resolution	0.1 mm
Repeatability	? 0.5 mm <sup>2) 3) 4)</sup>
Accuracy	Typ. $\pm 10$ mm <sup>4)</sup>
Response time	2.5 ms ... 96.5 ms, 2.5 ms / 6.5 ms / 12.5 ms / 24.5 ms / 96.5 ms <sup>5) 6)</sup>
Switching frequency	333 Hz / 100 Hz / 50 Hz / 25 Hz / 6 Hz <sup>5) 6)</sup>
Output time	1 ms ... 32 ms, 1 ms/2 ms/4 ms/8 ms/32 ms <sup>5) 7)</sup>
Light source	Laser, infrared <sup>8)</sup> Infrared light
Laser class	1 (IEC 60825-1:2014, EN 60825-1:2014)
Typ. light spot size (distance)	15 mm x 15 mm (at 2 m)
Additional function	Set speed: Super Fast ... Super Slow, teach-in of analog output and invert

	Q <sub>2</sub> adaptable: Current output / Voltage output / Digital output, Switching / switching window / object between sensor and background (ObSB), teach output invertible, Multifunctional input: laser off / external teach / deactivation
Average laser service life (at 25 °C)	100,000 h

- <sup>1)</sup> For speed setting Slow.
- <sup>2)</sup> See repeatability characteristic lines.
- <sup>3)</sup> Equivalent to 1 ?.
- <sup>4)</sup> 6 % ... 90 % remission.
- <sup>5)</sup> Depending on the set speed: Super Fast ... Super Slow.
- <sup>6)</sup> Lateral entry of the object into the measuring range.
- <sup>7)</sup> Continuous change of distance in measuring range.
- <sup>8)</sup> Wavelength: 827 nm; max. output: 130 mW; pulse duration: 3.5 ns; duty cycle: 1/250.

## Equipment Ref

812 V3 Ref **D1**

## Catalogues/Families

Spare Part Type	
Electrical Component	
Spare Part Group	
Sensor	
Stock Type	
Standard Stock	

## Product Gallery