

- High pressure resistant sensor rod
- Stroke length up to 5500 mm
- Output signals : Current & Voltage
- Resolution: 1  $\mu$ m/ 2  $\mu$ m/ 5  $\mu$ m/ 10  $\mu$ m/ 20  $\mu$ m
- Flat & Compact application
- With connector M16 or cable outlet

### Construction

Robust, non-contact and wear free, the CARLEN linear position sensors provide best durability and accurate position measurement accuracy is tightly controlled by the quality of the waveguide which is manufactured by CARLEN. The position magnet is mounted on the moving machine part and travels non-contact over the sensor rod with the built-in waveguide.

### Electrical data

- Interface: SSI ( standard )
- Data format: Binary, Gray
- Resolution: 1  $\mu$ m/ 2  $\mu$ m/ 5  $\mu$ m/ 10  $\mu$ m
- Linearity:  $< \pm 0.01 \%$
- Repeatability:  $< \pm 1 \mu$ m
- Cycle time:  $< 1$  ms
- Supply voltage.: 24 VDC (-15/+20 %)
- Consumption: 100 mA max

### Mechanical data

- Movement speed: Any
- Stroke length: 50 – 5500 mm
- Sensor head: 1.4301 (304)
- Sensor rod: 1.4301 (304)

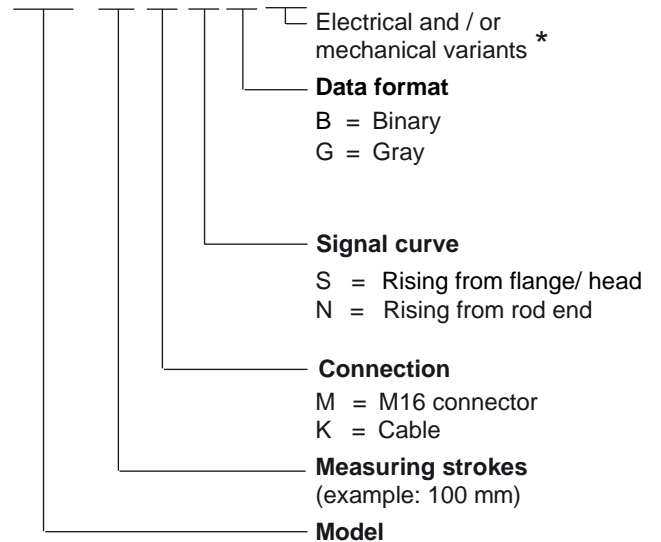
### Environmental data

- Operating temperature range: - 40 °C to + 85 °C
- Storage temperature: - 40 °C to + 95 °C
- Resistance to vibration: 20 g (10 to 2.000 Hz)
- Resistance to shock: 100 g (11ms)
- Protection type: IP 67
- Humidity: 100 % no condensation
- EMC test: EN 61000-6-3  
EN 61000-6-2



### Order code format

**CG 7 / 100 M S G 01**



\* The basic versions in accordance with the data sheet bear the code number 01. Variations of the basic version are indicated by a consecutive number and are documented in our works.

### Counter plugs

- CSTK4GS10: straight, plastic (STBG)
- CSTK4GS09: straight, metal (STBGM)
- CSTK4WS05: angled, plastic (STBW)
- CSTK4GS08: straight, plastic, 10 m cable (STK65)

To be ordered separately .

# Magnetostrictive Linear Position Sensors CG5

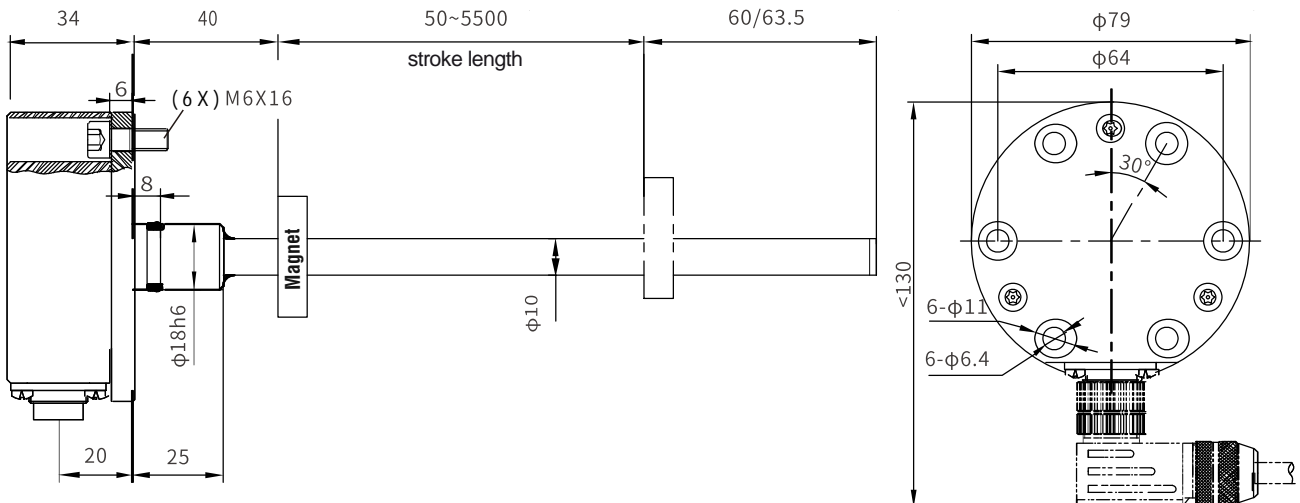
## Electrical connections



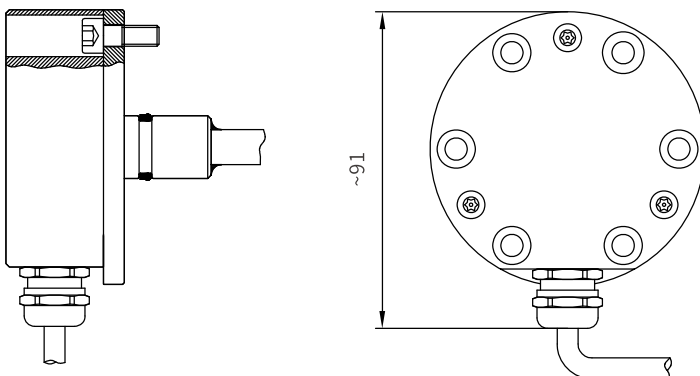
7-pin male connector  
as viewed from the end of the sensor

Pin No.	Cable color	Function
1	Gray	Data (-)
2	Pink	Data (+)
3	Yellow	Clock (+)
4	Green	Clock (-)
5	Brown	+24Vdc power supply (-20%~+20%)
6	White	0 Vdc
7		Not connected

## Dimensions in mm



### cable outlet



## Measuring strokes and technical data

The measuring strokes are situated in the center of the mechanical strokes.