

## Magnetostrictive Linear Position Sensors Model series CG 5 with Analog - interface

# Analog

- High pressure resistant sensor rod
- Stroke length up to 5500 mm
- Output signals : Current & Voltage
- Resolution: 16 bits D/A ( 1  $\mu$ m min)
- 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

- Analog current: 4 - 20 mA / 20 - 4 mA
- Analog voltage: 0 – 10V / 0-5V
- Resolution: 16 bits D/A ( 1  $\mu$ 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)

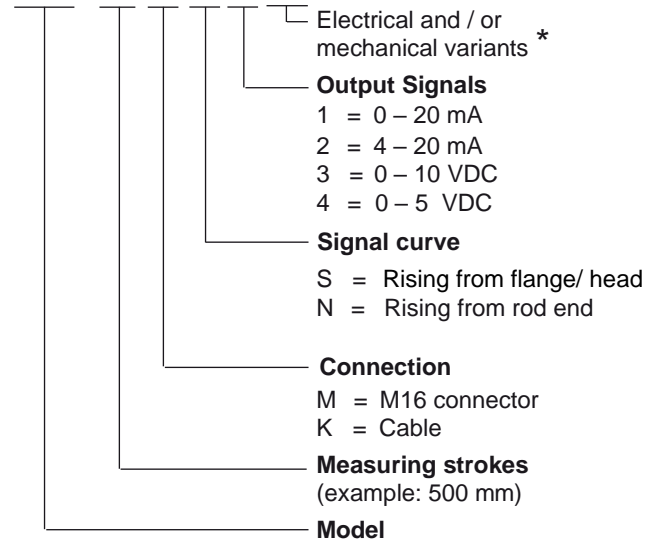
### Environmental data

- 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



### Oder code format

**CG 5 / 500 M S 2 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

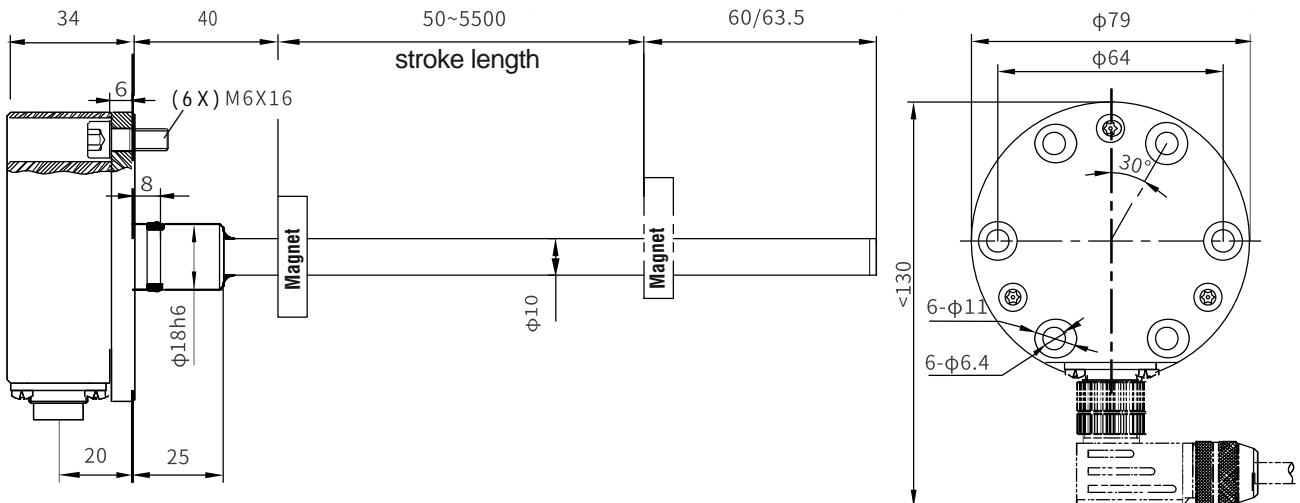


6-pin male connector  
as viewed from the end of the sensor

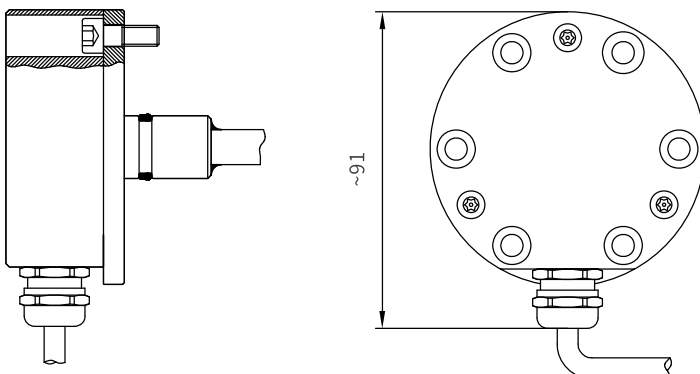
Pin No.	Cable color	Function
1	Gray	Magnet position signal (+) 4~20mA, 20~4mA, 0~10V, 10~0V
2	Pink	Magnet position signal (-)
3	Yellow	N.C
4	Green	N.C
5	Brown	+24Vdc power supply (-20%~+20%)
6	White	0Vdc (power supply circuit)

\* Shielded wire grounding.

## Dimensions in mm



### cable outlet



## Measuring strokes and technical data

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