

CARMAR ACCURACY CO., LTD.

Pen Linear Gauge PLG



Connecting Precision, Defining Accuracy.

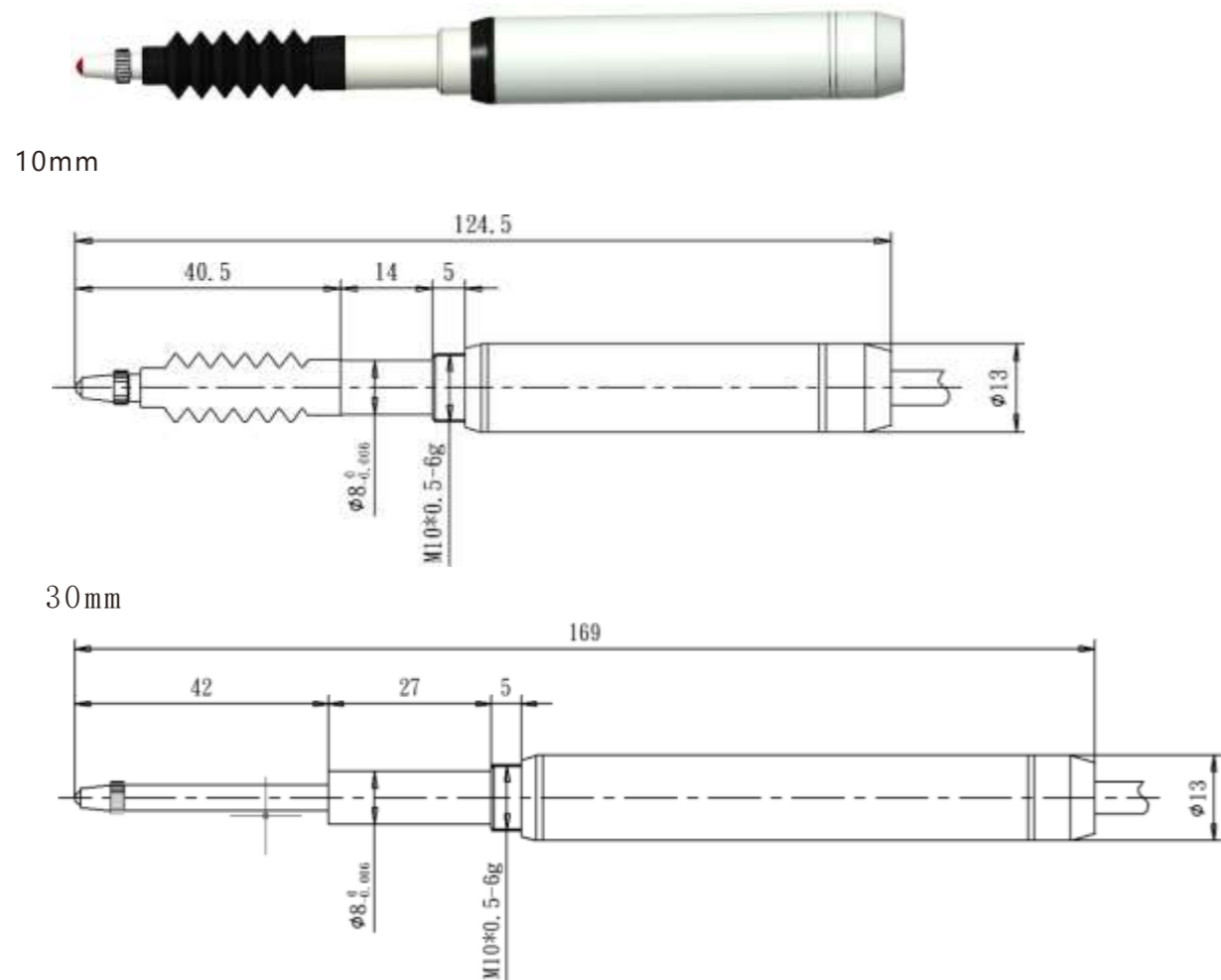


The PLG series length gauge is a high-precision length measurement sensor designed for small measuring ranges. It has a compact installation space, a long service life, and finds applications in areas such as product measurement, multi-point inspection, measuring equipment testing, and position measurement.

Product Features

1. Utilizes a glass grating with high precision and a low coefficient of expansion, along with high-precision ball bearings.
2. Incorporates a reflective signal acquisition module.
3. Achieves a resolution of up to 0.1µm.
4. Supports interchangeable M2.5 scale heads.

Dimensions



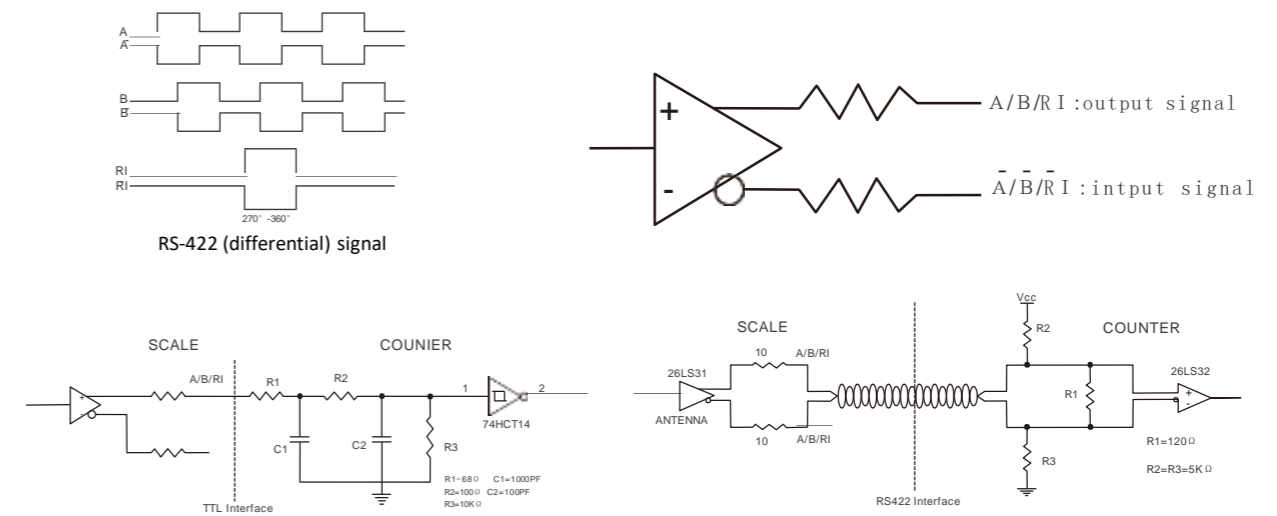
Product Parameters

No. 6, 23rd Road, Industrial Park, Taichung City 40850, Taiwan

| | | | | | | |
|------------------------------|--|---------|-------|-----|-----|-----|
| Travel range | 10 mm | 30 mm | | | | |
| Measuring range | 0-11 mm | 0-31 mm | | | | |
| Signal | TTL/HTL/RS422 Incremental Signal | | | | | |
| Resolution | 0.1µm | 0.2µm | 0.5µm | 1µm | 2µm | 4µm |
| Accuracy | ±1.5µm | | | | | |
| Reference point | Approximately 5 mm from the end | | | | | |
| Measurement Force | <1.5N | | | | | |
| Speed | <30m/min | | | | | |
| Power | 5VDC(<150MA) | | | | | |
| Working Temperature | 10~+40C° Standard temperature of 20 degrees | | | | | |
| Storage Temperature | -10~+50C° | | | | | |
| Cable Length | Standard configuration includes 3m (maximum length = 20m) with 9 PD standard connectors. | | | | | |
| Thread of the Measuring Head | M2.5 | | | | | |

Interface reference circuit diagram

The output signal interface circuit diagram



Connector definition

| PINS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------|-----|-------|-------|--------|--------|-----------------|----------------|----------------|--------|
| SIGNAL | +5V | 0V | A | B | RI | RI ⁻ | A ⁻ | B ⁻ | FG |
| COLOR | red | black | brown | yellow | orange | green | purple | blue | ground |

Ordering model

