

# BG8 Series

## Linear Position Sensor



### Feature:

- Diameter  $\phi 8$ mm pen shape, compact structure.
- Measuring range 0-10 mm, high resolution and good repeatability.
- Core movement without sliding brush, long service life
- Can output standard 0-5V, 0-10V, 4-20mA signals

### Details:

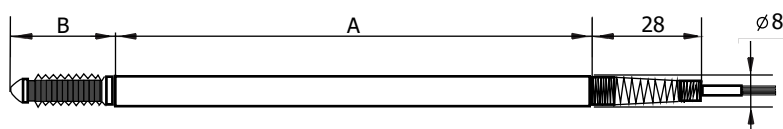
- Outer shell 304 stainless steel
- Inductive element main negative coil
- Probe assembly high hardness wear resistant zirconia, iron core
- Electrical connection direct lead

### Usage:

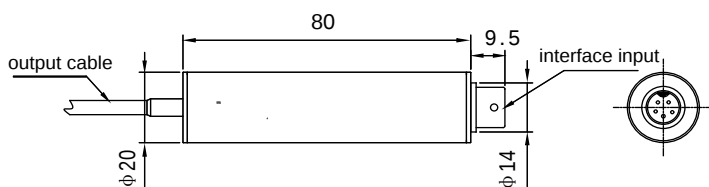
- Robot
- Shaft diameter detection
- Precision displacement measurement
- Glass production test flatness
- Auto parts online test

### Dimensions:

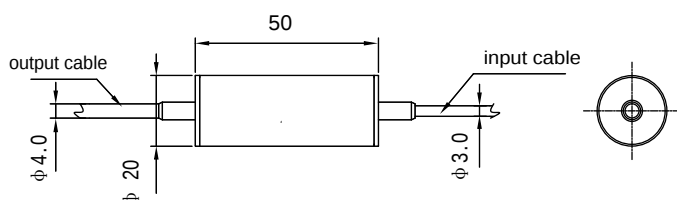
Self-return type:



Default: Aviation socket, Construction for analog and RS485



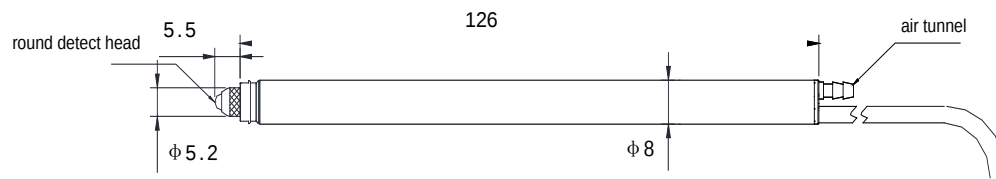
direct cable outlet:



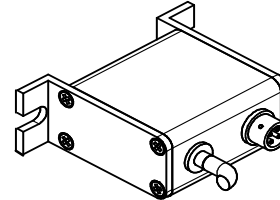
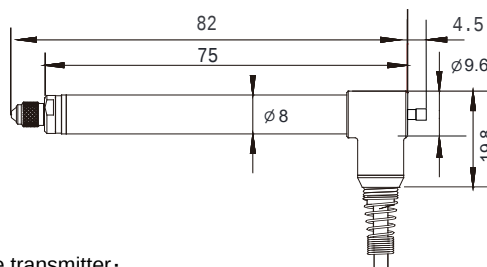
| Size (mm)      | self-return type |      |      |      |
|----------------|------------------|------|------|------|
| Range          | 2                | 5    | 8    | 10   |
| Shell length A | 65.5             | 115  | 121  | 121  |
| Exposed rod B  | 17               | 23.3 | 30.3 | 30.3 |

## Dimensions:

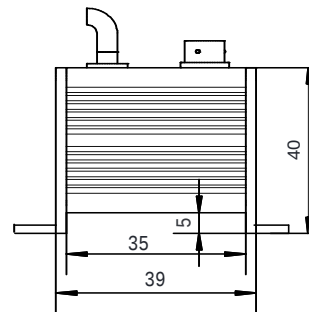
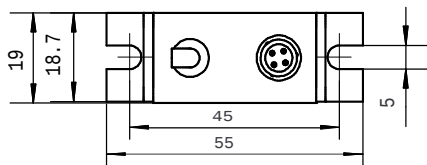
Air-operated 0-8mm /0-10mm:



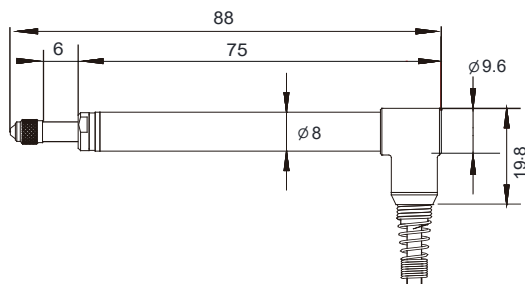
Air-operated 0-4mm:



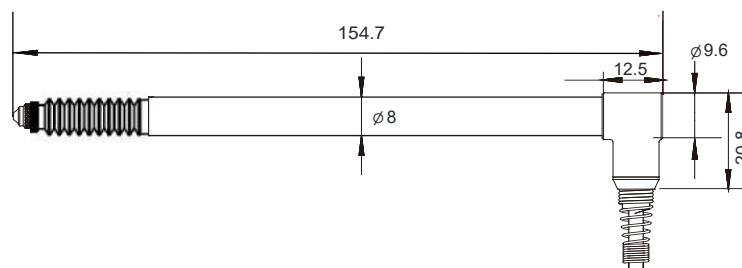
Quadrature transmitter:



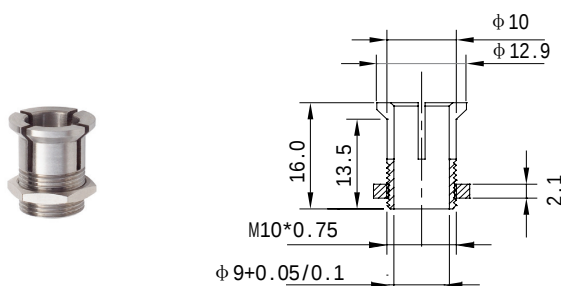
Rebound side exit line 0-4 mm:



Rebound side exit line 0-10mm (0-8mm) :



Sectional fixture:



Note: The positioning installation of LVDT requires a non-magnetic fixture with a small temperature expansion coefficient to be fixed. If the installation of a magnetic metal block fixture will affect the performance of the product

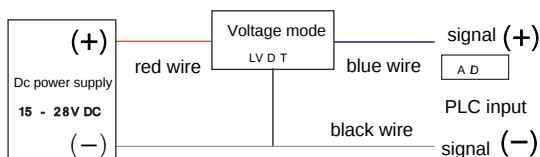
## Parameters:

| DATA                           | UNIT | VALUE                                                       |
|--------------------------------|------|-------------------------------------------------------------|
| Range                          | mm   | 2, 4, 5, 8,                                                 |
| Transmitter outputs signal     |      | 0-10V , 4-20mA 0-5V , RS485 (Modbus)                        |
| Driving force (horizontal)     | N    | 0.3 -                                                       |
| Operating voltage              | V    | 15-28 V DC 9-28 V DC                                        |
| Operating temperature          | °C   | -20 - 100,                                                  |
| Linear accuracy                | %FS  | analog output $\pm 0.25\%$ ( $\pm 0.3\%$ for range 10mm)    |
| Repeatability                  |      | $\leq 1 \mu\text{m}$                                        |
| Resolution ratio               |      | 0.1 $\mu\text{m}$ maximum, 16 bit for digital output        |
| Working air pressure           | MPa  | 0.03-0.06                                                   |
| Protection level               |      | IP64                                                        |
| Outlet cable length (standard) | M    | 1                                                           |
| Signal refresh frequency       | HZ   | voltage signal: 250 , current signal: 50 , RS485 signal: 25 |

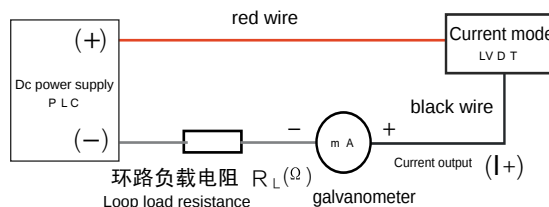
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## wiring:

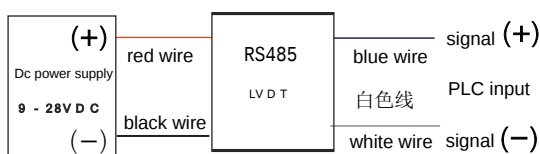
## ◆ Voltage output signal



## ◆ Current output signal



## ◆ RS485 signal



## Instructions:

