



# PS6300

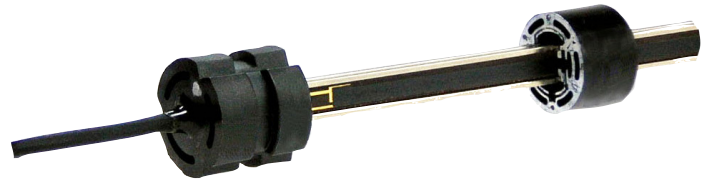
## Cylinder sensor 50-1000 mm

Regasense® is a trademark from Regal for position sensors. PS6300 is one in the family. The linear potentiometer sensor is small for compact installation in cylinder applications. Almost 40 years of experience in manufacturing of industrial and military potentiometers guarantee a high quality and reliability.

The PS6300 has a conductive plastic element, which provides benefits such as long life and good linearity values. It has been on the market for many years in interesting and demanding applications such as industry, agriculture and forestry and marine environment.

With an absolute analogue output, it is easy to connect to different types of measuring or control systems and does not need to be reset when switching on or starting the machine.

With flexible mounting possibilities in cylinders, with or without link ears, a compact and mechanically well protected sensor unit is obtained. It also provides a simplified machine design and minimizes maintenance costs. In addition, the sensor becomes insensitive to external environmental impact, such as impacts, shocks and dirt etc.



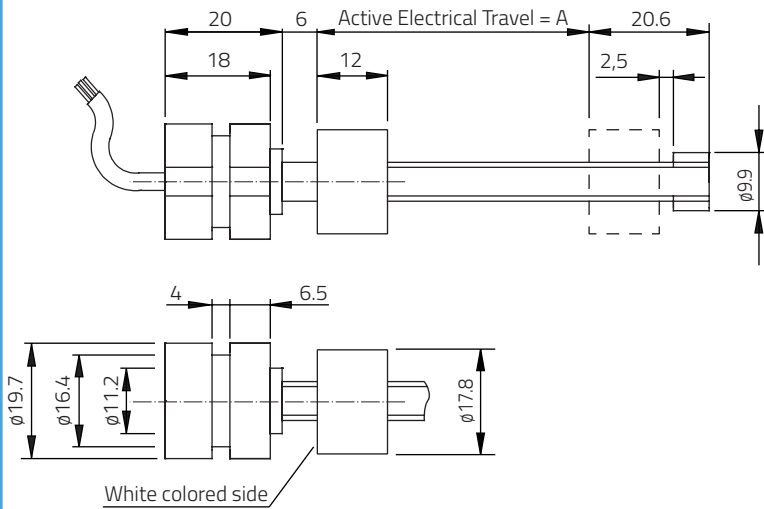
- High accuracy
- Compact design
- Priceworthy

| SPECIFICATION               |  | ORDER INFORMATION |                       |                    |                    |
|-----------------------------|--|-------------------|-----------------------|--------------------|--------------------|
| Power supply                |  | Model             | Standard linearity ±% | Electric stroke mm | Resistance kΩ ±20% |
| Recommended                 | 10 VDC                                     | PS6301            | 0.750                 | 50                 | 4                  |
| Max                         | 40 VDC                                     | PS6302            | 0.380                 | 100                | 8                  |
| Max effect                  | 10 mW/mm @ 70°C                            | PS6303            | 0.250                 | 150                | 12                 |
| Output signal               | Potentiometer                              | PS6304            | 0.190                 | 200                | 16                 |
| Non-linearity               | Standard ±0,4 mm                           | PS6305            | 0.150                 | 250                | 20                 |
| Resolution                  | Near infinite                              | PS6306            | 0.130                 | 300                | 24                 |
| Repeatability               | <±0.013 mm                                 | PS6307            | 0.110                 | 350                | 28                 |
| Recommended input impedance | 1000 x sensor resistance                   | PS6308            | 0.100                 | 400                | 32                 |
| Effective stroke            | 50 - 1000 mm                               | PS6309            | 0.085                 | 450                | 36                 |
| Temperature                 |  | PS6310            | 0.075                 | 500                | 40                 |
| Operating                   | -40°C...+125°C                             | PS6311            | 0.070                 | 550                | 44                 |
| Material                    |  | PS6312            | 0.065                 | 600                | 48                 |
| Housing                     | Plastic                                    | PS6313            | 0.060                 | 650                | 52                 |
| Sensor profile              | Nickel plated aluminum                     | PS6314            | 0.055                 | 700                | 56                 |
| Sensing element             | Conductive plastic                         | PS6315            | 0.050                 | 750                | 60                 |
| Working pressure            | 350 bar                                    | PS6316            | 0.047                 | 800                | 64                 |
| Life time                   | 1x10 <sup>6</sup> meters of contact travel | PS6317            | 0.045                 | 850                | 68                 |
|                             |  | PS6318            | 0.042                 | 900                | 72                 |
|                             |  | PS6319            | 0.040                 | 950                | 76                 |
|                             |  | PS6320            | 0.038                 | 1000               | 80                 |

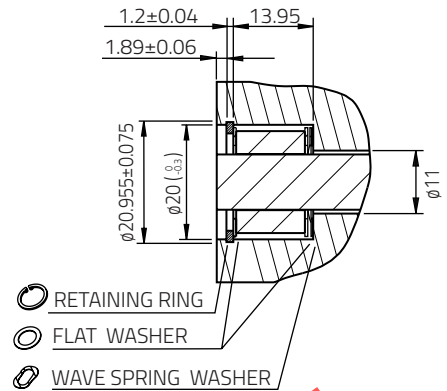
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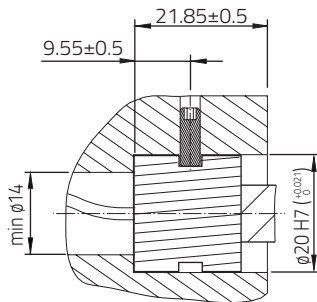
## Dimensions sensor



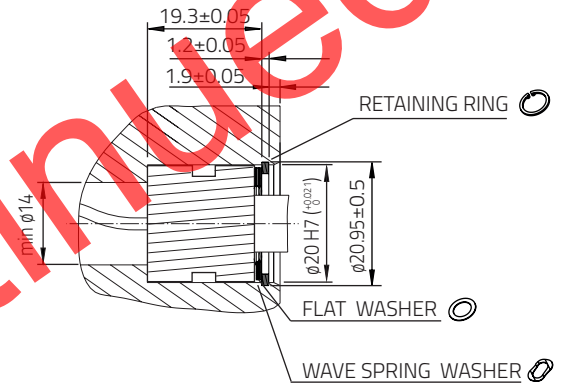
## Installation dimensions wiper



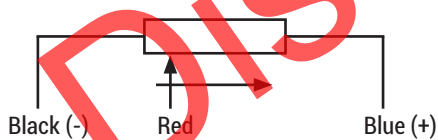
## Installation dimensions stop screw



## Installation dimensions retaining ring



## Connection



3x AWG22 (0.35 mm<sup>2</sup>)  
Length:  $305 \pm 12$  mm

## Connector

### 6140 (M12)

After the cables have been passed through the cylinder, they are soldered to the connector. The connector is pressure sealed.



See separate data sheet for further details