Vishay

## Precision Linear Transducers, Designed for Mounting in Hydraulic or Pneumatic Cylinder, Conductive Plastic Element (REC)



These unsealed sensors are suitable for installation in the

high pressure chamber of cylinders.

## **FEATURES**

- Large Range of Strokes from 25 to 2000 mm
- High Accuracy
- Very Good Repeatability
- Continuous Resolution
- Easy Mounting

| ELECTRICAL SPECIFICATIONS               |   |  |  |  |  |
|---|---|--|--|--|--|
| Theoretical electrical travel (TET = E) | from 25mm to 2000mm in increments of 25mm                           |  |  |  |  |
| Independent linearity over TET          | ≤ ± 1%; ≤ ± 0.1%  |  |  |  |  |
| on request                              | $\leq$ ± 0.05% if E $\geq$ 100mm, $\leq$ ± 0.025% if E $\geq$ 200mm |  |  |  |  |
| Actual electrical travel (AET)          | TET + 6mm ± 0.5   |  |  |  |  |
| Total resistance RT                     | 150Ω/cm   |  |  |  |  |
| Resistance tolerance at 20°C            | ± 20%   |  |  |  |  |
| Repeatability                           | ≤ 0.01%   |  |  |  |  |
| Maximum power rating                    | 0.05W/cm at 70°C, 0W at 125°C                                       |  |  |  |  |
| Wiper current                           | 1mA max. continuous, recommended: a few μA                          |  |  |  |  |
| Load impedance                          | 1000 times RT minimum   |  |  |  |  |
| Insulation resistance                   | > 1000MΩ 500VDC   |  |  |  |  |
| Dielectric strength                     | > 300VRMS at 50Hz   |  |  |  |  |

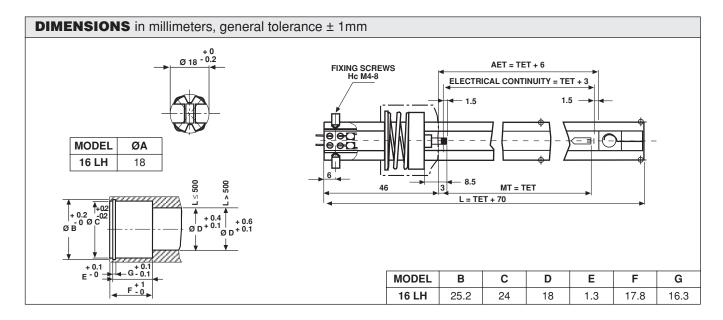
| MECHANICAL SPECIFICATIONS |   |  |  |  |
|---------------------------|---|--|--|--|
| Mechanical travel MT      | MT = TET                                    |  |  |  |
| Body                      | anodized aluminum                           |  |  |  |
| Rod internal diameter     | 16 LH : ø 18mm                              |  |  |  |
| Support                   | 2 screws                                    |  |  |  |
| Operating force           | 1N typical                                  |  |  |  |
| Electrical outputs        | wires 300mm long                            |  |  |  |
| Oil                       | insulating mineral hydraulic                |  |  |  |
| Pressure                  | 300 bars continuous, 1000 bars accidentally |  |  |  |
| Wiper                     | precious metal multifinger                  |  |  |  |

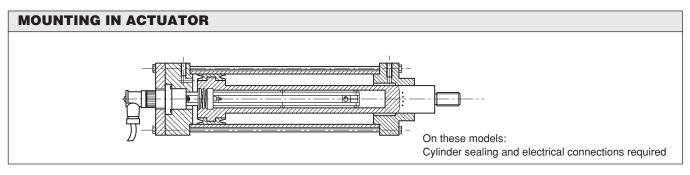
| PERFORMANCE               |                  |  |  |  |
|---------------------------|------------------|--|--|--|
| Life 40 million of cycles |                  |  |  |  |
| Temperature limits        | − 20°C to + 80°C |  |  |  |
| Speed at 20°C             | 1.5m/s max.      |  |  |  |

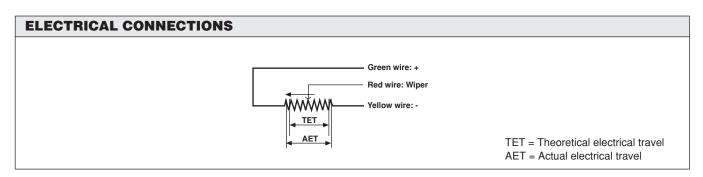
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| ORDERING INFORMATION |       |          |                                  |   |   |                                |  |  |
|----------------------|-------|----------|----------------------------------|---|---|--------------------------------|--|--|
| REC                  | 16    | LH       | 4                                | D   | 152   | W                              |  |  |
| SERIES               | MODEL | TYPE     | THEORETICAL<br>ELECTRICAL TRAVEL | LINEARITY   | RESISTANCE  | MODIFICATIONS                  |  |  |
|                      |       | Unsealed | Times 25mm                       | A: $\leq \pm 1\%$<br>D: $\leq \pm 0.1\%$<br>E: $\leq \pm 0.05\%$<br>F: $\leq \pm 0.025\%$ | First 2 digits are<br>significant numbers<br>Third indicates<br>number of zeros | Special Feature<br>Code Number |  |  |

Document Number: 54016 Revision: 08-Jan-04