



ENCLOSED LINEAR SCALE

Optical linear scale

Product Information

Linear Scale *A-rite Series*



Model : PT-4025-4300

The **A-rite Series, Model PT-4025-4300** is a high reliability of the system makes it particularly suitable for installation on measuring machine-tools and assures correct working also in heavy conditions. The particular protections used to prevent any malfunctions, avoid any maintenance and reduce servicing

A-rite Series is high quality linear scale used for digital linear scales measuring system and the video measuring system. It can analyses and process the 3D measuring data. It is widely used in the projector, the tool microscope, CCD measuring instruments and other three-dimension measuring instrument.

TECHNICAL SPECIFICATION

General Technical Specification

| |
|--|
| Measure Length Available: 25-300mm |
| Pitch: 20-40um |
| Resolution: 5µm , 1µm, 0.5µm |
| Accuracy: ± 3µm |
| Speed: 25-60 m/sec ² |
| Max Acceleration: 25m/sec ² |
| Working Temperature: 0°C~50°C |
| Storage Temperature: -20°C~70°C |
| Humidity: 20-80% |
| |
| |
| |
| |


Features.

- High repeatability
- High accuracy
- Resolution: 5µm, 1µm, 0.5µm
- High quality & reliable solution





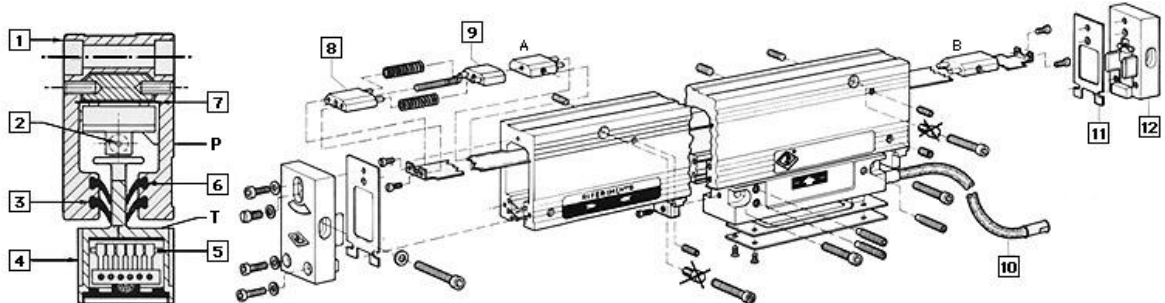
| Model Available | Type of Accessory Available* |
|--|---|
| <p>Resolution: 5μm PT-4025A-5 Measure length 25mm PT-4050A-5 Measure length 50mm PT-40100A-5 Measure length 100mm PT-40150A-5 Measure length 150mm PT-40200A-5 Measure length 200mm PT-40250A-5 Measure length 250mm PT-40300A-5 Measure length 300mm</p> <p>Resolution: 1μm PT-4025A-1 Measure length 25mm PT-4050A-1 Measure length 50mm PT-40100A-1 Measure length 100mm PT-40150A-1 Measure length 150mm PT-40200A-1 Measure length 200mm PT-40250A-1 Measure length 250mm PT-40300A-1 Measure length 300mm</p> <p>Resolution: 0.5μm PT-4025A-0.5 Measure length 25mm PT-4050A-0.5 Measure length 50mm PT-40100A-0.5 Measure length 100mm PT-40150A-0.5 Measure length 150mm PT-40200A-0.5 Measure length 200mm PT-40250A-0.5 Measure length 250mm PT-40300A-0.5 Measure length 300mm</p> | <p>*Kindly Specify the type of range require when ordering</p> |

| Optical Linear Scale | |
|--|---|
|  <p>#4025A-4300A</p> | <p>(#4025A) 25mm Linear Scale (#4050A) 50mm Linear Scale (#4100A) 100mm Linear Scale (#4150A) 150mm Linear Scale (#4200A) 200mm Linear Scale (#4250A) 250mm Linear Scale (#4300A) 300mm Linear Scale</p> <p>Resolution: 5μm , 1μm, 0.5μm Accuracy: \pm 3μm</p> |



PRODUCT INFORMATION

1. **Scale housing** in extruded anodized aluminum TA 16 - size mm 39 x 23 - section 461 mm² - weight Kg/m 1.245.
2. **Flexible coupling** for compensation of misalignments and self correction of mechanical hysteresis.
3. **Lip seals** for the protection of the internal grating made of rubber electrometric 70.
4. **Slider set** composed by reader head (P) and tie rod (T). The housing of the circuit is water proof by a gasket and steel cover with incorporated cable clamp.
5. **Hybrid circuit** for generation of signals. The accurate calibration of signals prevents any further unbalance (calibrated resistors substitute the potentiometers normally used).
6. **Internal gasket** for further protection. A double barrier prevents any infiltration of pollutants.
7. **Stainless steel grating.** Size mm 18 x 0.305 in a single piece also in "modular" scales. The grating is kept in position by the scale housing which leaves it free to expand without deformation in case of faulty installation.
8. **Lateral fixing** of the grating.
9. **Self-regulation** of the grating extension. The compression springs damp any variation of distance between the two constraints A and B (integral to the housing and so subject to variations caused by its thermal expansion coefficient, similar to that of the material used in the manufacturing of the machine). The measurements become homogenous and relative to the temperature of 20° C (68° F).
10. **Shielded cable** reinforced by plaited stainless steel protection. The conductors section (0.14 mm² for the signals and 0.22 mm² for the supply), allows it to be used for lengths over 50/60 m.
11. **Rubber gaskets** for the protection of the scale ends.
12. **End caps** used also for the lateral fixing of the scale.



For More Information

For more information on our products and services, kindly send an E-mail to sales@pinnacletech.biz

Tel: +(65) 6364 0626 Fax: +(65) 6894 9646