

Vertical DRS

4D TECHNOLOGY

4D Technology

Radius Slide for 4D AccuFiz Laser Interferometers

FEATURES

- Accurate Radius of Curvature Measurement
- 1 μm Resolution
- Over 1 Meter Travel
- English or Metric Mounting
- Integrates Easily with 4D AccuFiz Interferometers

Accurate ROC Measurement

The Vertical Digital Radius Slide (VDRS) for 4D AccuFiz[®] Laser interferometers provides axial positioning resolution to 1 μm , for extremely accurate Radius of Curvature measurement of concave or convex optics.

The VDRS uses a linear optical encoder with 1 μm resolution and $\pm 5 \mu\text{m}/\text{meter}$ accuracy at 20°C. The scale is constructed of low CTE ($\sim 10.6 \mu\text{m}/\text{m}/^\circ\text{C}$) hardened stainless steel with high scratch and solvent resistance. Repeatability is $<15 \mu\text{m}$ and uncertainty is $<50 \mu\text{m}^*$.

The interferometer and sample stage can be moved over the full length of the rails. With the AccuFiz at its highest point and the stage at its lowest, the distance from the AccuFiz tip/tilt face to the top of the sample tip/tilt stage is approximately 1100 mm.

VDRS systems are integrated with 4D's 4Sight software for easy Radius of Curvature (ROC) measurement. The need for precise null at cat's-eye and confocal positions is not required, which increases both accuracy and throughput.

Easy to use controls, a long travel range, and mounting hardware for optical tables with English (1/4-20 x 1 inch) or metric (M6 x 25 mm) spacing make the versatile VDRS simple to install and use daily.



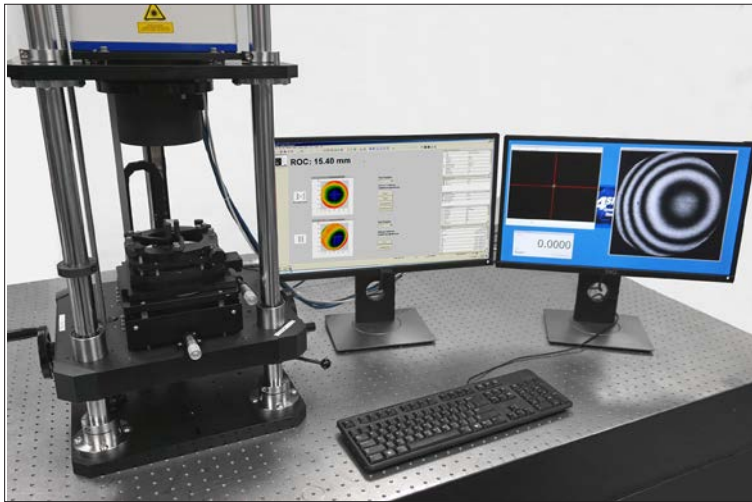
Vertical Digital Radius Slide.

* Factors such as setup, atmospheric conditions, thermal expansion, optics thermal drift and dead path error will contribute to overall system uncertainty.

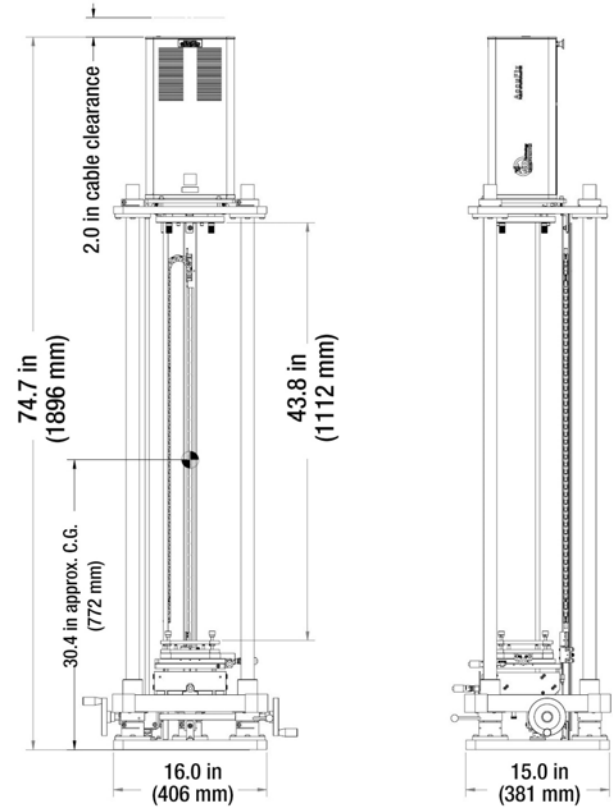
Vertical Digital Radius Slide

Specifications

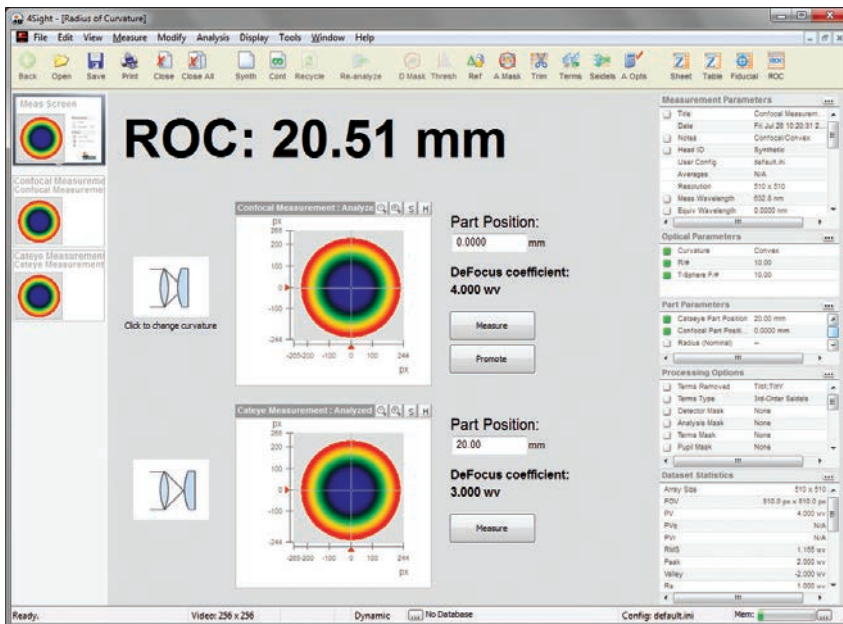
Description	Specification
4D Part No.	7001-00302
Rail Length	1112 mm (43.8 in)
Mount Size	102 mm (4 in)
Resolution	1 μ m
Accuracy	\pm 5 μ m/meter accuracy at 20°C
Repeatability	<15 μ m*



Vertical Digital Radius Slide with dual monitors for easy setup and reporting



Vertical Digital Radius Slide Dimensions



The Vertical Digital Radius Slide works in conjunction with 4Sight software for Radius of Curvature Analysis

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