

Ultra-compact Linear Encoder FIBER SCALE



World's smallest detector head allows reduction in size and weight of equipment*

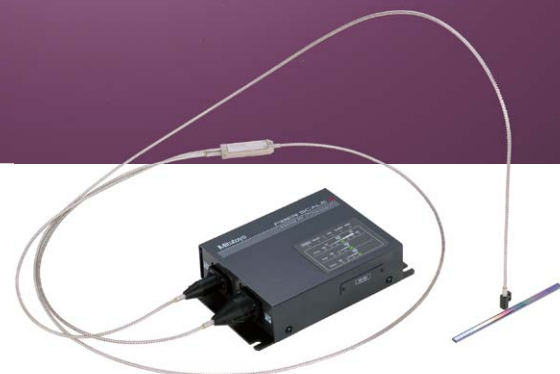
*S Type (based on cubic volume of the detector head; according to Mitutoyo research, April 2014)

Digital Scale and DRO Systems



Catalog No. E13009

Mitutoyo



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FEATURES

- Separating electronic components from the inside of the detector head using an optical fiber-guided wave enables an ultra-compact unit without a heat source and free of electromagnetic noise.
- The ultra-compact detector head, the world's smallest, is ideal for reducing the size and weight of systems.
- 2 μ m signal output cycle contributes to the development of high-resolution systems.
- LED indicators on the interface unit eliminate the need for an oscilloscope during detector head mounting adjustment, helping to reduce installation work.



SPECIFICATIONS

Item	Specifications
Signal output cycle	2 μ m
Output signal	2-phase sine wave (2Vpp); 2-phase square wave
Min. resolution	10nm *With square-wave output
Detector head dimensions	5 x 9.6 x 15mm (S Type); 6 x 20 x 10.4mm (L Type)
Effective length	Max. 100mm
Max. response speed	0.8 m/s *With sine-wave output
Fiber-optic cable length	2, 3, 5, 10m (or 20, 30m by special order)

APPLICATION EXAMPLES

- ★ High-precision stage positioning control
- ★ Component positioning control
(e.g. Z-axis control and optical axis control of optical systems)

Safety Caution Regarding Laser Radiation

This product employs a low-power visible-light laser for measurement and corresponds to Class 2 (visible light) under the JIS C 6802 Safety of Laser Products standard. A Class 2 warning and explanatory label like the one to the right will be attached to the interface unit.



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