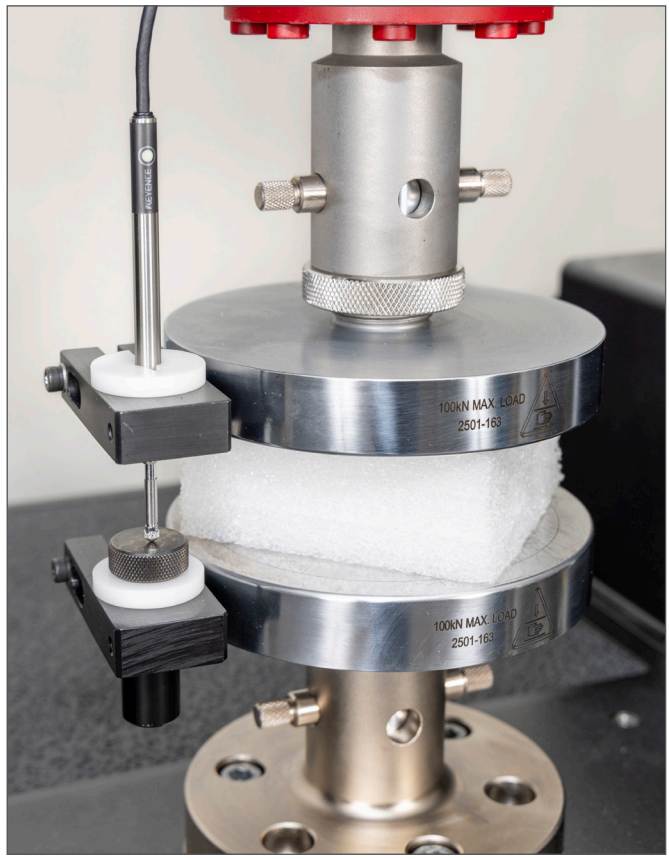
INSTRON®

The difference is measurable®

HIGH-ACCURACY DIGITAL DISPLACEMENT SENSOR

CP134297

Cutting-edge applications require the most advanced sensors available. Highly-accurate displacement measurements are one of the most critical, and sometimes most challenging, to do well in material testing. Using the latest digital sensor technology, this contacting transducer is best suited for situations where measuring strain on the specimen is difficult or impossible, including compression and flexural tests.



FEATURES AND BENEFITS

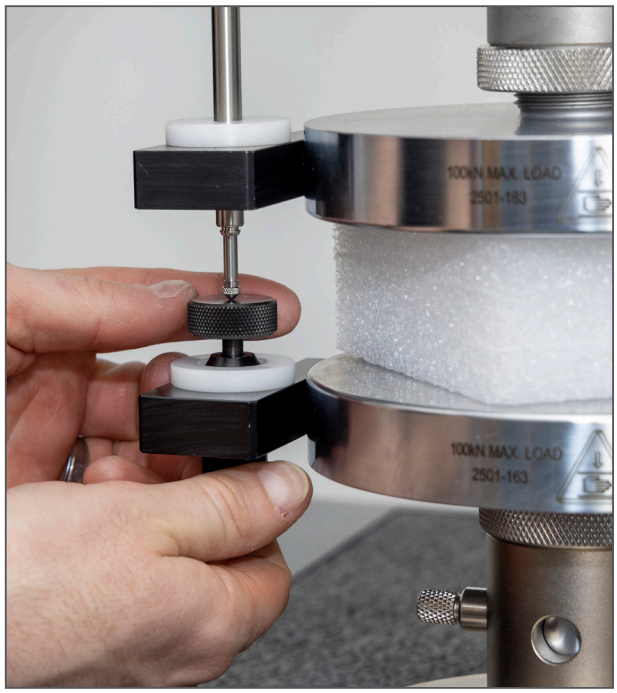
- Easy to use
- Self-identifying
- No calibration needed
- High-accuracy of 1 um throughout measurement range
- Completely digital measurement “from sensor to software”
- Extremely low contact force, near zero friction, and durable design

PRINCIPLE OF OPERATION

The digital displacement sensor has a stroke of ±12 mm (±0.47 in). The low contact force and low friction allow for the accurate measurement of linear displacement with the reference surface. The digital sensor can interface with 3300, 3400, 5900, and 6800 series testing systems. It is fully rationalized so it is automatically recognized with no calibration needed on these systems. There are several mounting configurations available, depending on the specimen type, the Instron model, and the test type. Mounting configurations include on platen displacement indicator and a magnetic base holder.

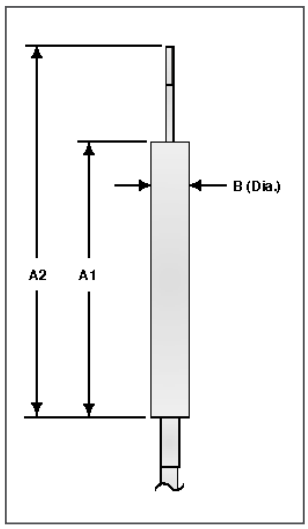
GENERAL PERFORMANCE

Measuring Range (± Full scale)	**mm** **in**	±12 ±0.47
Resolution	**µm**	0.1
Accuracy	**µm**	±1
Force at Electrical Zero (Mid Stroke)	**g**	15.3
Temperature Range	**°C**	-10 to +55
Measurement Principle		Opto-incremental
ISO 9513 Class		0.5
ASTM E83 Class		Axial B-1



DIMENSIONS

Barrel Length (A1)	**mm** **in**	104.8 4.126
Effective Length at Electrical Zero (A2)	**mm** **in**	110.95 4.368
Barrel Diameter (B Diam.)	**mm** **in**	±12 ±0.47



Sensor Dimensions


2601-069 Magnetic Base Holder

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