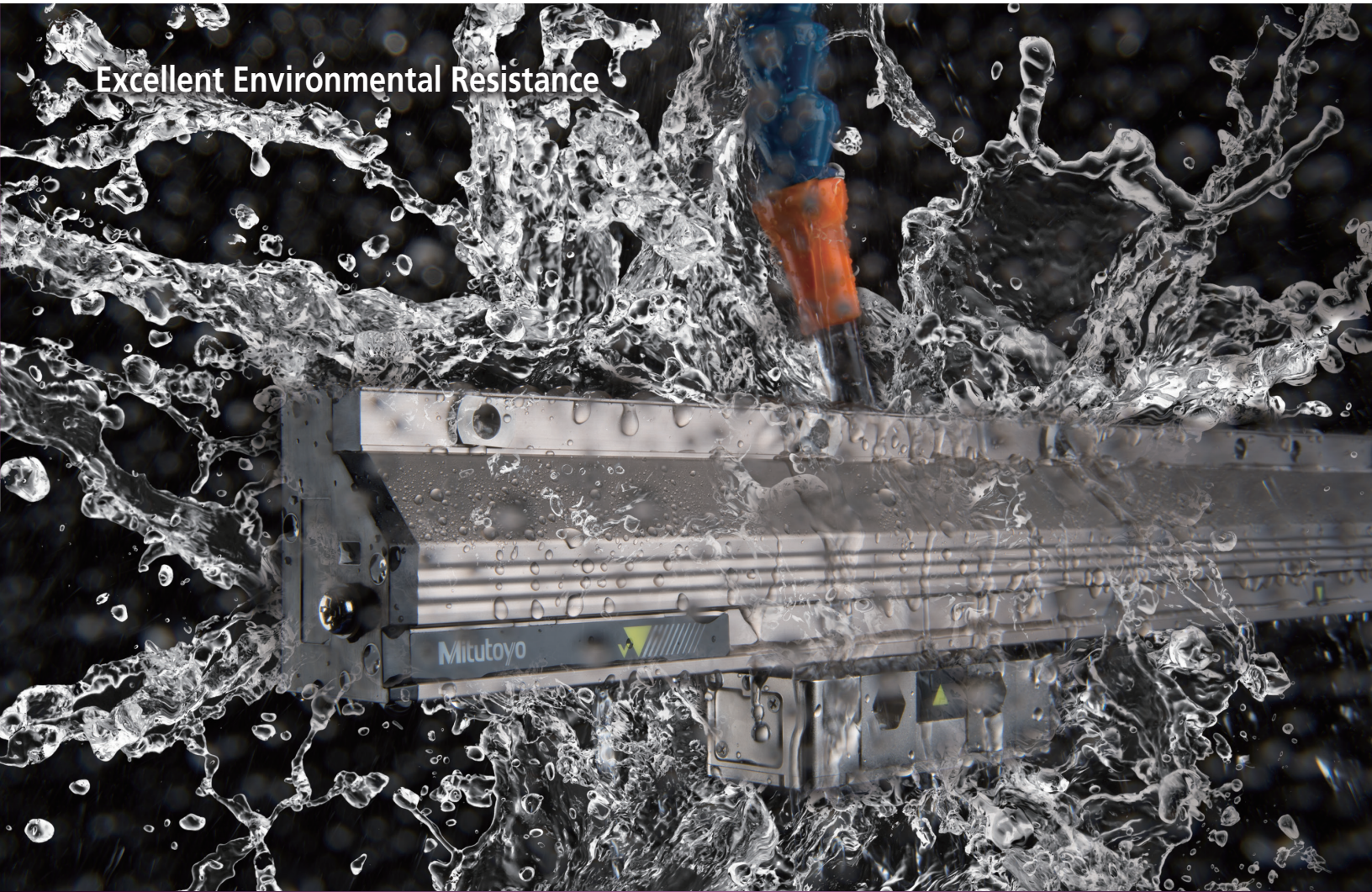


Latest Generation of Absolute Assembly-Type Linear Scale **ABS AT1100**

Mitutoyo Quality

Excellent Environmental Resistance



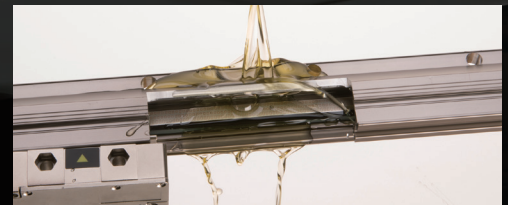
Digital Scale and DRO Systems



Stands Up to Harsh Environmental Conditions

Outstanding Environmental Resistance

This scale leverages Mitutoyo's unique electromagnetic induction technology to provide excellent resistance to oil, water and other contaminants when compared with optical linear encoders, thereby elevating the ABS AT1100 to the level of a highly reliable NC machine-tool scale suitable for tough shop-floor conditions.

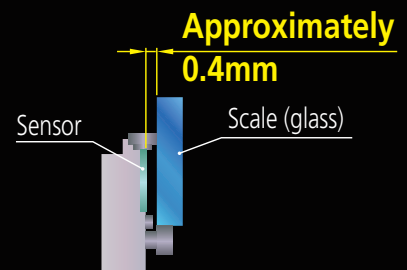


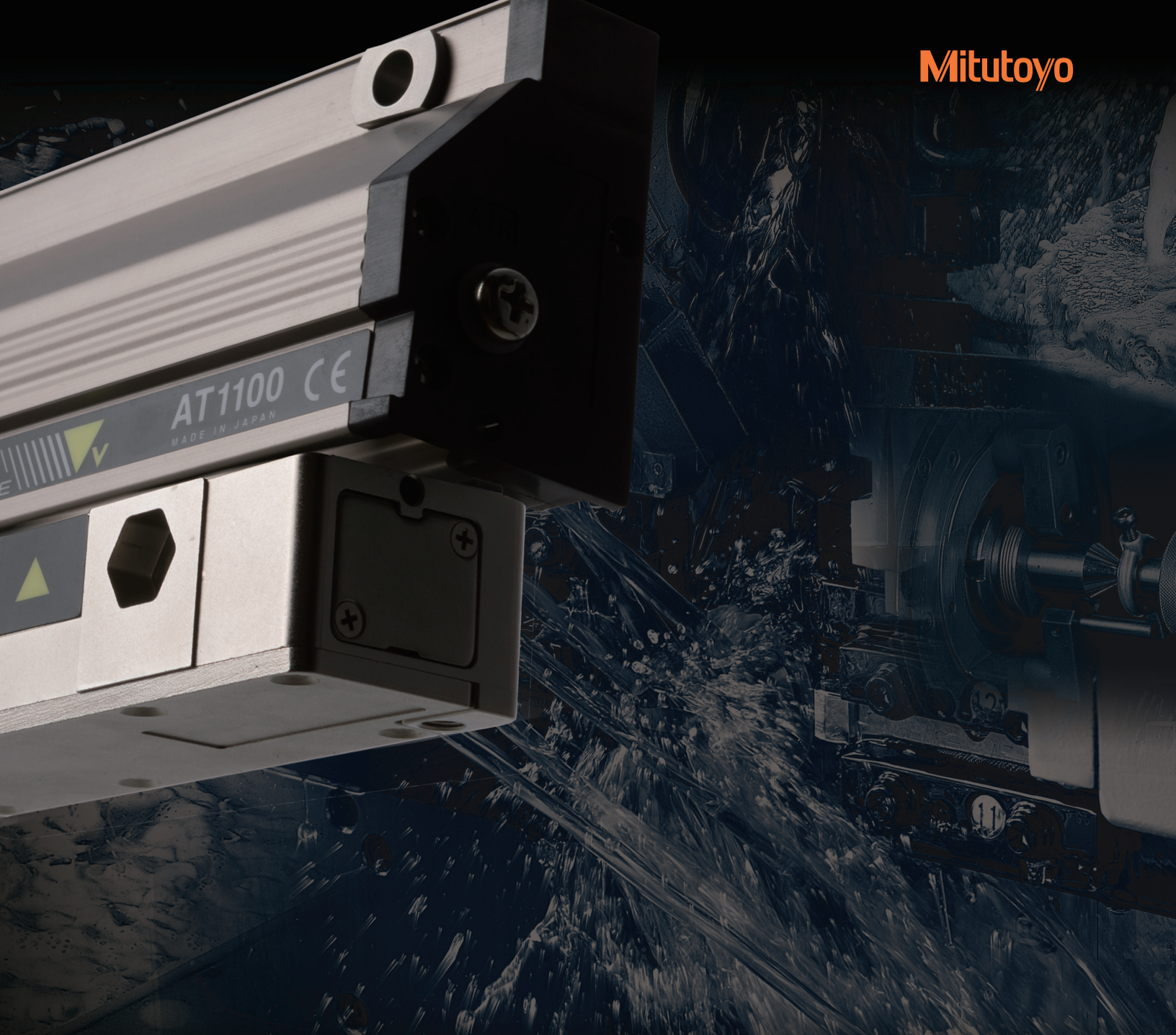
Robust Housing

Additional factors that contribute to the high performance of the ABS AT1100 are the innovative shape and location of the detector track in the aluminum frame, as well as the extreme coolant resistance of the track-seal material. Together these provide an effective first defense against contamination of the scale and sensor, even in harsh environments.

World's Largest Air Gap

The sensor-to-scale air gap is approximately 0.4mm, almost four times as wide as conventional optical or electromagnetic induction designs, making issues due to dust or oil contamination unlikely. This air gap is the largest in the world for a machine-tool scale.

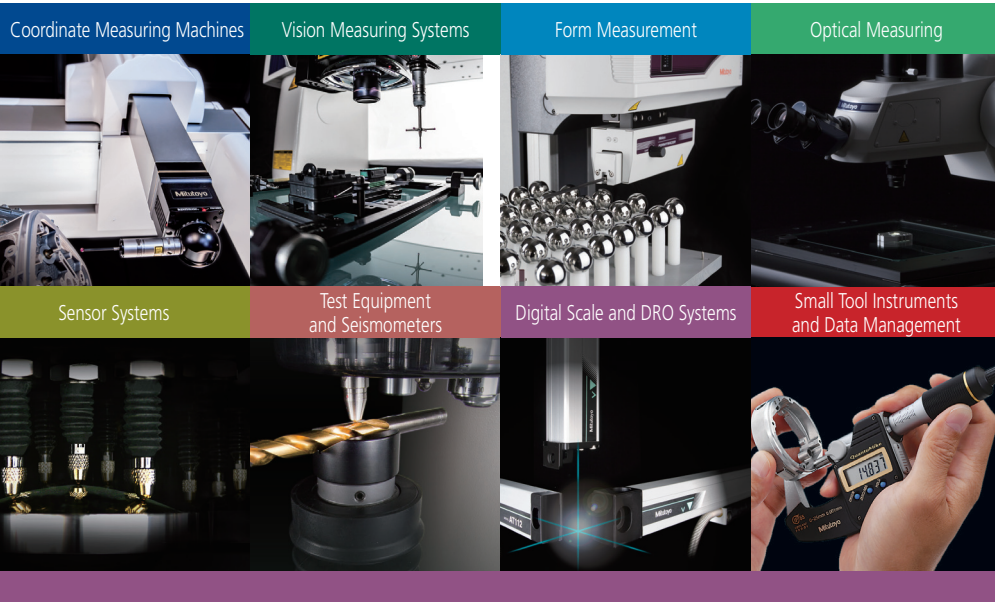




Specifications

	ABS AT1100
Detection method	Electromagnetic induction
Maximum effective range	3040mm
Resolution	0.05 μ m
Accuracy (at 20 °C)	(3+5L/1000) μ m L= 140 to 2040mm (5+5L/1000) μ m L= 2240 to 3040mm
Maximum response speed	3 m/s
Cross-section size	85x37 (mm)
Thermal expansion coefficient	$\approx 8 \pm 1.5 \times 10^{-6} / K$
Vibration resistance (at 55 to 2000Hz)	20g
Impact resistance (at 11ms, 1/2sin)	35g L=140 to 2040mm 30g L=2240 to 3040mm
Compatible interfaces *1	FANUC Corporation's Serial α i Interface Mitsubishi Electric Corporation's High-speed Serial Interface

*1: For details about connection of any applicable system, contact each manufacturer for confirmation.



Whatever your challenges are, Mitutoyo supports you from start to finish.

Mitutoyo is not only a manufacturer of top quality measuring products but one that also offers qualified support for the lifetime of the equipment, backed up by comprehensive services that ensure your staff can make the very best use of the investment.

Apart from the basics of calibration and repair, Mitutoyo offers product and metrology training, as well as IT support for the sophisticated software used in modern measuring technology. We can also design, build, test and deliver bespoke measuring solutions and even, if deemed cost-effective, take your critical measurement challenges in-house on a sub-contract basis.



Find additional product literature and our product catalog

www.mitutoyo.com

Note: All information regarding our products, and in particular the illustrations, drawings, dimensional and performance data contained in this printed matter as well as other technical data are to be regarded as approximate average values. We therefore reserve the right to make changes to the corresponding designs. The stated standards, similar technical regulations, descriptions and illustrations of the products were valid at the time of printing. In addition, the latest applicable version of our General Trading Conditions will apply. Only quotations submitted by ourselves may be regarded as definitive. Specifications are subject to change without notice.

Mitutoyo products are subject to US Export Administration Regulations (EAR). Re-export or relocation of our products may require prior approval by an appropriate governing authority.

Trademarks and Registrations

Designations used by companies to distinguish their products are often claimed as trademarks. In all instances where Mitutoyo America Corporation is aware of a claim, the product names appear in initial capital or all capital letters. The appropriate companies should be contacted for more complete trademark and registration information.



Mitutoyo America Corporation

www.mitutoyo.com

One Number to Serve You Better

1-888-MITUTOYO (1-888-648-8869)

M³ Solution Centers:

Aurora, Illinois (Headquarters)

Boston, Massachusetts

Huntersville, North Carolina

Mason, Ohio

Plymouth, Michigan

City of Industry, California

Birmingham, Alabama

Renton, Washington

Houston, Texas