

Assembly Type Linear Scales Incremental Scale Unit AT402E Absolute Scale Unit AT1100

Environmental Resistance Beyond the Usual



Digital Scale and DRO Systems

Incremental scale unit AT402E



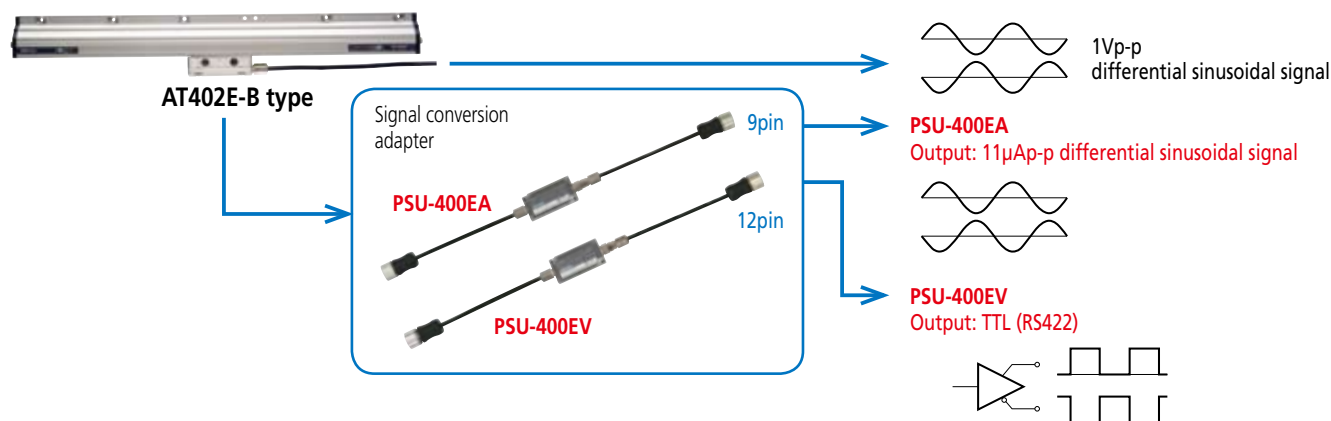
Features

- Mounting arrangements are compatible with linear scales supplied by third-party vendors*
 - Signal conversion adapters are available to provide a variety of industry-standard signal output formats
 - Absolute Interval Code has enabled implementation of simplified, low-cost ABS system
- * Please contact your local Mitutoyo Sales Office for more details.

Signal Conversion Adapters for the AT402E

PSU-400EA and PSU-400EV

Connected to the AT402E scale the **PSU-400EA** outputs a 11 μ Ap-p differential sinusoidal signal, while the **PSU-400EV** outputs TTL pulses.



Specifications

	AT402E-A Type	AT402E-B Type	AT402E-C Type
Cable configuration	3m single wire	3m European CNC manufacturers' specification	3m FANUC LTD. specification
Detection method	Photoelectric linear encoder		
Effective range	140 to 3040mm		
Output format	Signal: 1Vp-p differential sinusoidal Differential reference point pulse: Absolute Interval Code compatible		
Signal output pitch	20 μ m		
Accuracy (20°C)	Effective range 140 to 540mm : $\pm 2\mu$ m Effective range 640 to 940mm : $\pm 3\mu$ m Effective range 1040 to 3040mm : $\pm 3\mu$ m/m		



Absolute scale unit AT1100



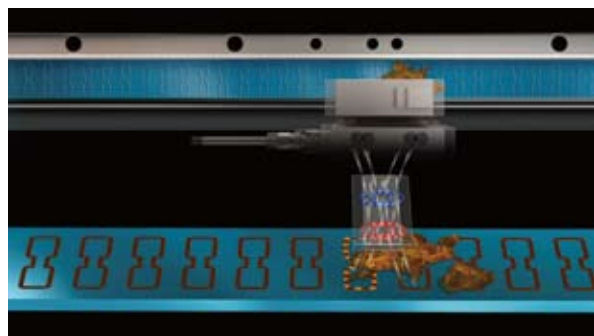
ABSOLUTE™

Features

- Leverages Mitutoyo's unique electromagnetic induction technology to provide excellent resistance to oil and water compared with the optical linear encoder type.
- Innovative shaping and location of the detector track in the aluminum frame and the extreme coolant resistance of the track seal material. Together these combine in a highly effective first defence against contamination of the scale and sensor even in extremely severe installation environments
- Mounting arrangements are compatible with linear scales supplied by third-party vendors*
* Please contact your local Mitutoyo Sales Office for more details.

Outstanding environmental resistance

Cutting oil or foreign-object contamination does not affect position detection



Specifications

	ABS AT1100
Detection method	Electromagnetic induction
Maximum effective range	3040mm
Resolution	0.05µm
Accuracy (at 20 °C)	(3+5L/1000) µm L= 140 to 2040mm (5+5L/1000) µm L= 2240 to 3040mm
Compatible interfaces	FANUC Corporation's Serial αi Interface Mitsubishi Electric Corporation's High speed Serial Interface Siemens AG, DRIVE CLiQ

ABS

ABSOLUTE
LINEAR SCALE

Coordinate Measuring Machines



Vision Measuring Systems



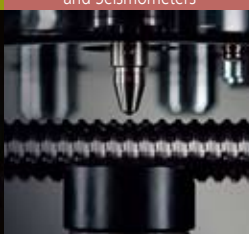
Form Measurement



Optical Measuring



Sensor Systems

Test Equipment
and Seismometers

Digital Scale and DRO Systems

Small Tool Instruments
and Data Management

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.



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