

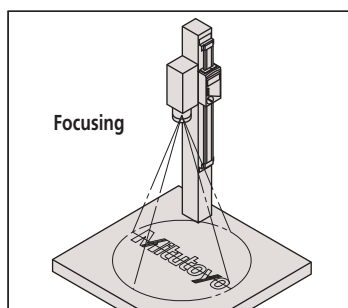
ABSOLUTE Digimatic Scale Units

SERIES 572

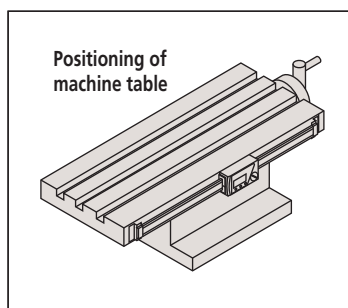
Mitutoyo's ABSOLUTE Digimatic Scale Units can be installed on almost any equipment, offering the user precise linear measurement capability with the added benefits of LCD readout and output for recording data and SPC.

APPLICATIONS

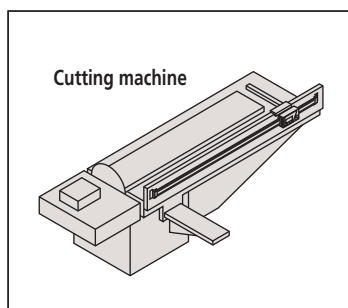
- Positioning of tables, etc., in adverse environments
- Measuring equipment to be used on the workshop floor
- Measurement of structure displacements
- Positioning of plain machine tools
- Measuring equipment to be used outside (in the rain)



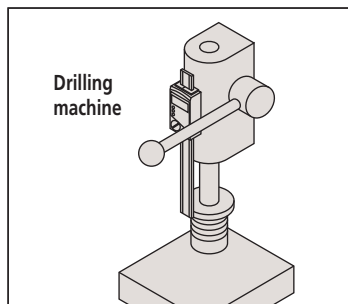
Focusing



Positioning of machine table



Cutting machine



Drilling machine

EC Counter

FEATURES

- The Digimatic Display Unit with GO/NG judgement function offers a large LED display for a Digimatic Scale Unit. The bright LED readout is ideal for low-light situations or when the scale unit must be inserted into an area where its own display cannot be viewed directly.



EC counter: 542-007A

Coolant Proof Scale Unit



Single Function Type Scale Unit



Multi-function Type Scale Unit



Multi-function Type Scale Unit



1. 05CZA624: 40" / 1m cable with data switch
05CZA625: 40" / 1m cable with data switch
2. 959149: 40" / 1m cable with data switch
959150: 40" / 1m cable with data switch
3. 905338: 40" / 1m cable
905409: 80" / 2m cable
4. 905689: 40" / 1m cable
905690: 80" / 2m cable



Digimatic Mini-Processor
DP-1VR: 264-504-5A



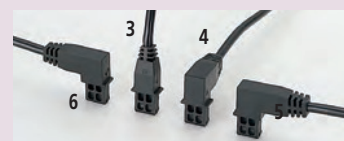
Multiplexer
MUX-10: 264-002A

RS-232C
output



Data input device
Input Tool: 264-012-10

Data entry
via USB



5. 905691: 40" / 1m cable
905692: 80" / 2m cable
6. 905693: 40" / 1m cable
905694: 80" / 2m cable
936937: 40" / 1m cable
965014: 80" / 2m cable

Note: Match Key no. to Diagram

ABSOLUTE Coolant Proof Digimatic Scale Units

SERIES 572 — With Dust/Water Protection IP66 Level

FEATURES

- Newly employed detection method (Electromagnetic induction method) enables use in adverse environments with water and cutting oil.
- Specially designed output cables are developed to maintain the water resistant structure.
- No over speed error since it employs absolute scale which reads the absolute value.
- Once an absolute zero (origin) point is set, the Digimatic Scale Unit shows its absolute distance from the point whenever turned on rather than 0.00".



Technical Data

Accuracy: Refer to the list of specifications
Resolution: 0.01mm or .0005"/0.01mm
Repeatability: 0.01mm
Display: LCD
Length standard: ABSOLUTE electromagnetic induction linear encoder
Max. response speed: Unlimited
Battery: SR44 (1 pc.), **938882**
Battery life: Approx. 1.5 years under normal use
Dust/Water protection level: IP66

Function

Origin-set, Zero-setting, Automatic power on/off,
Data output, inch/mm conversion (on inch/metric models only)
Alarm: Low voltage, Counting value composition error

Optional Accessories

05CZA624: SPC cable with data switch (1m / 40")
05CZA625: SPC cable with data switch (2m / 80")

IP (International Protection) Codes:

Example, IP66 Means:
1st Digit "6": Dust sealing
2nd Digit "6": Water Resistant
For detailed descriptions, see page X

SPECIFICATIONS

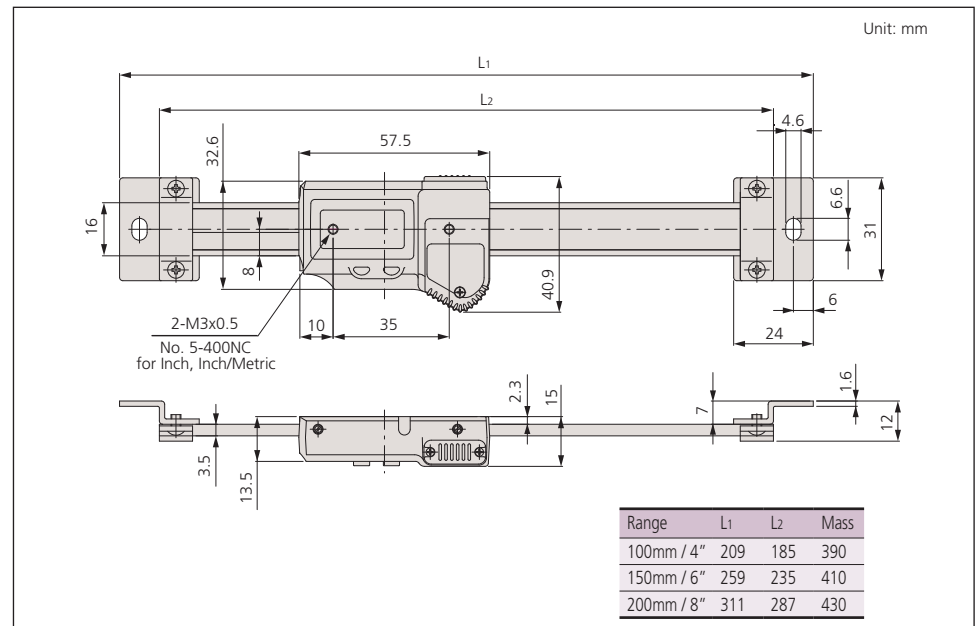
Metric

Range	Order No.	Accuracy	Resolution
0 - 100mm	572-600	0.03mm	0.01mm
0 - 150mm	572-601	0.03mm	0.01mm
0 - 200mm	572-602	0.03mm	0.01mm

Inch/Metric

Range	Order No.	Accuracy	Resolution
0 - 4" / 0 - 100mm	572-613	.001" / 0.03mm	.0005" / 0.01mm
0 - 6" / 0 - 150mm	572-614	.001" / 0.03mm	.0005" / 0.01mm
0 - 8" / 0 - 200mm	572-615	.001" / 0.03mm	.0005" / 0.01mm

DIMENSIONS AND MASS



ABSOLUTE Digimatic Scale Units

SERIES 572

FEATURES

- The ORIGIN key allows setting of an absolute zero point to be used as reference in subsequent measurements. Once set, the ABS Digimatic Scale Unit is ready to show its true position whenever turned on rather than 0.00" as with standard models.
- The ZERO/ABS key allows the display to be zero-set at any slider position along the beam for incremental comparison measurements. This key will also allow return to the absolute coordinate with a display of the true position
- from the origin point.
- No rack, no pinion, no glass scale. Digimatic Scale Unit is safely embedded in the hardened stainless steel blade.
- Horizontal or vertical face according to the scale mounting direction.
- Special type that is provided with diameter displaying function is available for lathes.
- All units come with two mounting brackets, each located at either end of the scale.
- With SPC data output.

Horizontal single function type



Horizontal multi-function type



Horizontal multi-function type



Vertical single function type



Vertical multi-function type



Vertical multi-function type



Technical Data

Accuracy: Refer to the list of specifications.
 Resolution: 0.01mm or .0005"/0.01mm
 Display: LCD
 Length standard: ABSOLUTE electrostatic capacitance type linear encoder
 Max. response speed: Unlimited
 Battery: SR44 (1 pc.), **938882**
 Battery life: Approx. 3.5 years under normal use

Function

Origin-set, Zero-setting, Power on/off, Presetting, Data hold, Data output, inch/mm conversion (on inch/metric models only), Counting direction switching*
 Alarm: Low voltage, Counting value composition error
 *not available for single function models

Optional Accessories

- 959143:** Data hold unit for single function type
959149: SPC cable with data switch for single function type (40" / 1m)
959150: SPC cable with data switch for single function type (80" / 2m)
905338: SPC cable (40" / 1m standard)
905409: SPC cable (80" / 2m standard)
905689: SPC cable (40" / 1m L-shape, back)
905690: SPC cable (80" / 2m L-shape, back)
905691: SPC cable (40" / 1m L-shape, right)
905692: SPC cable (80" / 2m L-shape, right)
905693: SPC cable (40" / 1m L-shape, left)
905694: SPC cable (80" / 2m L-shape, left)

Refer to bottom of page H-2 for SPC cable details

SPECIFICATIONS

Metric

Range	Order No.		Accuracy	Resolution
	Horizontal	Vertical		
100mm	572-200-20	572-300-10	0.03mm	0.01mm
	572-460*	572-560*	0.03mm	0.01mm
	572-480-10**	572-580-10**	0.03mm	0.01mm
150mm	572-201-20	572-301-10	0.03mm	0.01mm
	572-461*	572-561*	0.03mm	0.01mm
	572-481-10**	572-581-10**	0.03mm	0.01mm
200mm	572-202-20	572-302-10	0.03mm	0.01mm
	572-462*	572-562*	0.03mm	0.01mm
	572-482-10**	572-582-10**	0.03mm	0.01mm
300mm	572-203-10	572-303-10	0.04mm	0.01mm
	572-463*	572-563*	0.04mm	0.01mm
	572-483-10**	572-583-10**	0.04mm	0.01mm
450mm	572-464*	572-564*	0.04mm	0.01mm
	572-484-10**	572-584-10**	0.04mm	0.01mm
600mm	572-465*	572-565*	0.05mm	0.01mm
	572-485-10**	572-585-10**	0.05mm	0.01mm
800mm	572-466*	572-566*	0.06mm	0.01mm
	572-486-10**	572-586-10**	0.06mm	0.01mm
1000mm	572-467*	572-567*	0.07mm	0.01mm
	572-487-10**	572-587-10**	0.07mm	0.01mm

* Multi-function type

** Multi-function type with diameter displaying function for lathe
(Counting direction switching function is not provided.)

Inch/Metric

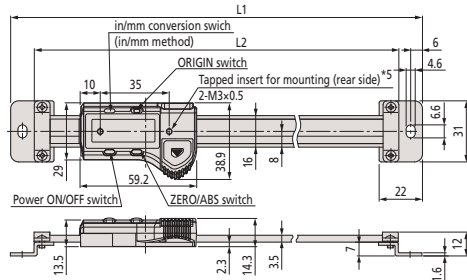
Range	Order No.		Accuracy	Resolution
	Horizontal	Vertical		
4" / 100mm	572-210-20	572-310-10	.001"	.0005" / 0.01mm
	572-470*	572-570*	.001"	.0005" / 0.01mm
	572-490-10**	572-590-10**	.001"	.0005" / 0.01mm
6" / 150mm	572-211-20	572-311-10	.001"	.0005" / 0.01mm
	572-471*	572-571*	.001"	.0005" / 0.01mm
	572-491-10**	572-591-10**	.001"	.0005" / 0.01mm
8" / 200mm	572-212-20	572-312-10	.001"	.0005" / 0.01mm
	572-472*	572-572*	.001"	.0005" / 0.01mm
	572-492-10**	572-592-10**	.001"	.0005" / 0.01mm
12" / 300mm	572-213-10	572-313-10	.002"	.0005" / 0.01mm
	572-473*	572-573*	.002"	.0005" / 0.01mm
	572-493-10**	572-593-10**	.002"	.0005" / 0.01mm
18" / 450mm	572-474*	572-574*	.002"	.0005" / 0.01mm
	572-494-10**	572-594-10**	.002"	.0005" / 0.01mm
24" / 600mm	572-475*	572-575*	.002"	.0005" / 0.01mm
	572-495-10**	572-595-10**	.002"	.0005" / 0.01mm
32" / 800mm	572-476*	572-576*	.0025"	.0005" / 0.01mm
	572-496-10**	572-596-10**	.0025"	.0005" / 0.01mm
40" / 1000mm	572-477*	572-577*	.0025"	.0005" / 0.01mm
	572-497-10**	572-597-10**	.0025"	.0005" / 0.01mm

* Multi-function type

** Multi-function type with diameter displaying function for lathe
(Counting direction switching function is not provided.)

DIMENSIONS AND MASS

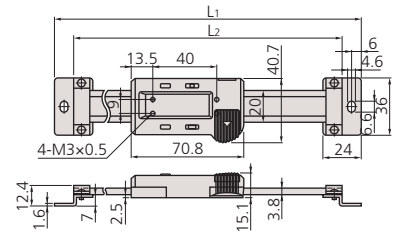
Single function type horizontal (100-200mm / 4-8")



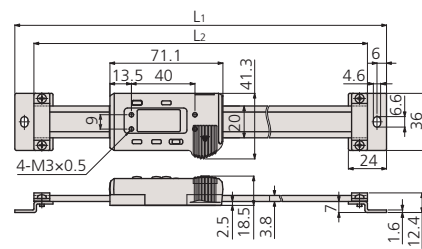
572-200-20~572-202-20 572-210-20~572-212-20

Range	L1	L2	Mass
4" / 100mm	209	185	230
6" / 150mm	259	235	250
8" / 200mm	311	287	270
12" / 300mm	444	420	370

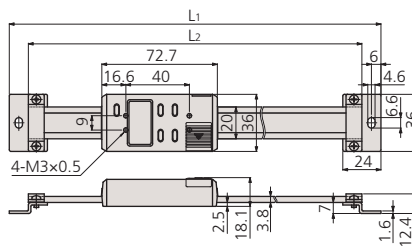
Single function type horizontal (300 / 12")



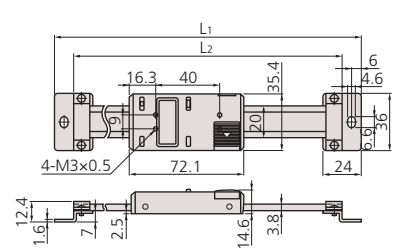
Multi function type horizontal (100-300mm / 4-12")



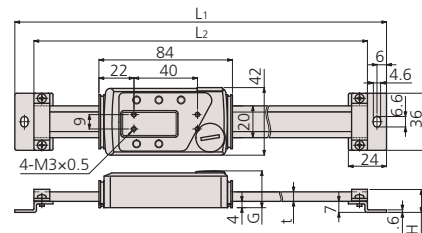
Multi function type vertical (100-300mm / 4-12")



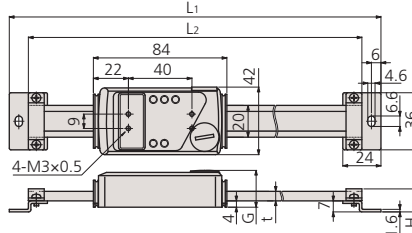
Single function type vertical (100-300mm / 4-12")



Multi function type horizontal (450-1000mm / 18-40")



Multi function type vertical (450-1000mm / 18-40")



Range	L1	L2	Mass
4" / 100mm	244	220	250
6" / 150mm	294	270	280
8" / 200mm	344	320	310
12" / 300mm	444	420	370
18" / 450mm	594	570	760
24" / 600mm	774	750	900
32" / 800mm	974	950	1710
40" / 1000mm	1174	1150	2040