

Linear Gauge LG200 Series

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This slim type linear gauge allows you to meet a variety of measurement needs.

- Differential square wave signal output enables use for a wide range of applications.
- Due to its compact design, you can install it even where space is restricted.
- Its photoelectric scale delivers high precision across the entire measuring range.
- Extremely long-lasting due to linear ball-bearings in the spindle unit.
- Perfect for use in tough environments, they come with a high IP class of IP67G.
- Ideal for in-line measurement and embedded in automatic machines.



Specifications

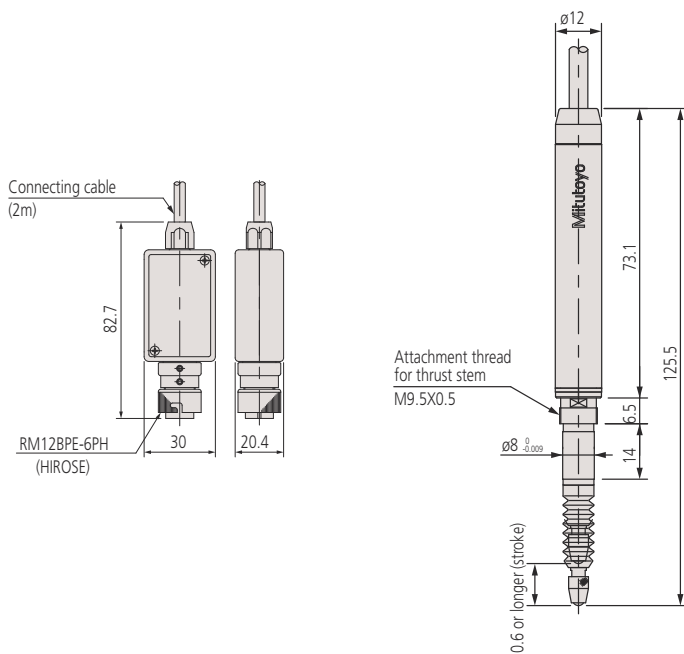
Scale	Photoelectric linear encoder
Stem \varnothing	8 mm
Contact point	\varnothing 3 mm carbide ball, thread: M 2,5 x 0,45
Repeatability ($\pm 2\sigma$)	0,3 μ m (20°)
Cable length	2 m
Power supply	5 V (4,5 V to 5,2 V), 80 mA max.
Output signal	90° phase difference, differential square wave (RS-422A equivalent) minimum edge distance 500 ns (0,1 μ m type), 250 ns (0,1 and 0,5 μ m type)
Environmental conditions	0° C to 50° C (20% to 80% rel. humidity, no condensation)
Bearing type	Linear ball bearing



LG200

No.	Range [mm]	Accuracy	Measuring force	Resolution	Signal pitch [μ m]	Max. re-sponse speed	Mass [g]
542-186	0 - 10	(1,5 + L/50) μ m L=measured length in mm	0,8 N with spindle down, 0,75 N spindle horizontal, 0,7 N spindle upwards	0,001 μ m	4	1500 mm/s	175
542-187	0 - 10	(1,5 + L/50) μ m L=measured length in mm	0,8 N with spindle down, 0,75 N spindle horizontal, 0,7 N spindle upwards	0,0005 μ m	2	1500 mm/s	175
542-188	0 - 10	(0,8 + L/50) μ m L=measured length in mm	0,8 N with spindle down, 0,75 N spindle horizontal, 0,7 N spindle upwards	0,0001 μ m	0,4	400 mm/s	175

*1 Spindle DOWN/Horizontal/UP



Optional accessories

No.	Description
21HZA197	Extension Cable 5 m (10P-10P)
21HZA198	Extension Cable 10 m (10P-10P)
21HZA199	Extension Cable 20 m (10P-10P)
21HZA195	Exchange Plug (for P-Counter)
21HZA260	Exchange cable (for P counter)
21HZA196	Exchange Plug (for Z-Counter)
21HZA261	Exchange cable (for Z-Counter)
02ADE230	Air Drive Unit for Linear Gauges 10 mm, 10 mm
02ADB680	Thrust Stem Set (for 10 mm model)
238772	Silicone Rubber Boot (for 10 mm model)
Connectable Counter	
542-080	EJ-Counter -102N
542-081	EJ Counter-102NE
Connectable Counter	
542-075D	Linear Gauge Counter EH, (need 21HZA195)
542-071D	Linear Gauge Counter EH, (need 21HZA195)

*the EH-counter need 21HZA195

Consumable spares

No.	Description
21HAA331	HNBR Rubber Boot (for 10 mm range model), 10 mm model
901312	Contact Element Ball Point, M2,5x0,45, 7,3 mm Length, Carbide, Metric



Refer to the Linear Gauge documentation for more details