

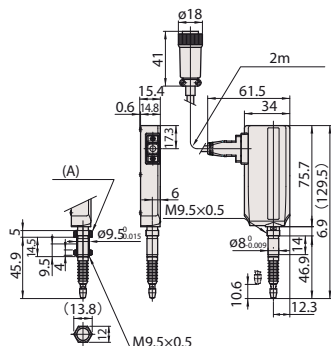
Linear Gage LGF

Series 542

- Economical design. Due to the advanced construction of the plunger guidance assembly the LGF is very resistant to external shocks and vibration.
- IP-66 protection class.
- Differential square-wave signal output for a wide range of applications.
- Very long life due to linear ball-bearings in the spindle unit.



542-161



10 mm (A) Optional fixing set

No.	Range	Resolution mm	Accuracy (20°C)	Measuring force *1	Stem diameter	Max. response speed (mm/s)	Signal pitch μm	Mass g
542-612	0-25 mm	0,005	(7,5 + L/50)	4.6/4.3/4.0 N	15 mm	1500	20	300
542-613	0-50 mm	0,005	(7,5 + L/50)	4.6/4.3/4.0 N	15 mm	1500	20	400
542-161	0-10 mm	0,001	(1,5 + L/50)	1.2/1.1/1.0 N	8 mm	1500	4	260
542-162	0-25 mm	0,001	(1,5 + L/50)	4.6/4.3/4.0 N	15 mm	1500	4	300
542-163	0-50 mm	0,001	(1,5 + L/50)	5.7/5.3/4.9 N	15 mm	1500	4	400
542-123*	0-50 mm	0,001	(1,5 + L/50)	5.7/5.3/4.9 N	15 mm	1500	4	380
542-171	0-10 mm	0,0005	(1,5 + L/50)	1.2/1.1/1.0 N	8 mm	1500	2	260
542-172	0-25 mm	0,0005	(1,5 + L/50)	4.6/4.3/4.0 N	15 mm	1500	2	300
542-173	0-50 mm	0,0005	(1,5 + L/50)	5.7/5.3/4.9 N	15 mm	1500	2	400
542-181	0-10 mm	0,0001	(0,8 + L/50)	1.2/1.1/1.0 N	8 mm	400	0.4	310
542-182	0-25 mm	0,0001	(0,8 + L/50)	4.6/4.3/4.0 N	15 mm	400	0.4	350

*1 Spindle DOWN/Horizontal/Spindle UP

Specifications

Scale type	Photoelectric linear encoder
Contact point	Ø3 mm carbide (mounting threads M 2,5 x 0,45)
Bearing type	Linear ball bearing
Output signal	90° phase difference, differential square wave (RS-422A equivalent), edge distance 200 ns for 1 μm model, 250 ns for 0,5 μm model, 200 mV p-p max.
Cable length	2 m
Power supply	+ 5 V (4.8 V to 5.2 V), 120 mA max.
Environmental conditions	0 °C to 40 °C (20 % to 80 % rel. humidity, no condensation)

Standard accessories

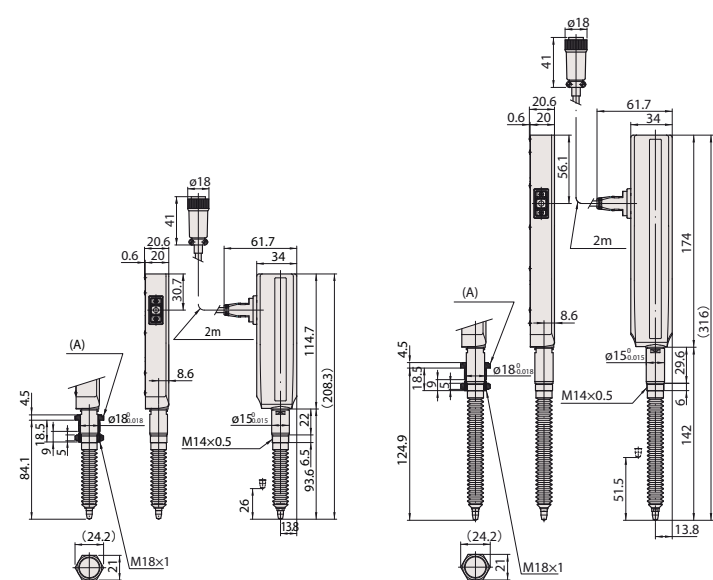
No.	Description
538610	Wrench for contact point (for 10 mm range models)
04GAA857	Wrench for contact point (for 25/50 mm range models)

Optional accessories

No.	Description
Extension cable	
902432	Extension cable (20 m)
902433	Extension cable (10 m)
902434	Extension cable (5 m)
Fixing set	
02ADB680	Fixing set Ø 9,5 mm (for 10 mm models)
02ADN370	Fixing set Ø 18 mm (for 25 mm/50 mm models)
Pneumatic drive	
02ADE230	Pneumatic drive CAP 10 mm
02ADE250	Pneumatic drive CAP 25 mm
02ADE270	Pneumatic drive CAP 50 mm
Thrust stem	
02ADB683	Thrust stem wrench (for 10 mm range models)
02ADB693	Thrust stem wrench (for 25/50 mm range models)

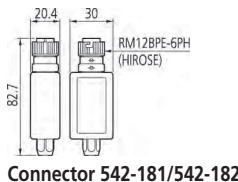
Consumable spares

No.	Description
238772	10 mm rubber boot
962504	25 mm rubber boot
962505	50 mm rubber boot
901312	Standard contact point



25 mm (A) Optional fixing set

50 mm (A) Optional fixing set



Connector 542-181/542-182



Refer to the Linear Gage brochure