

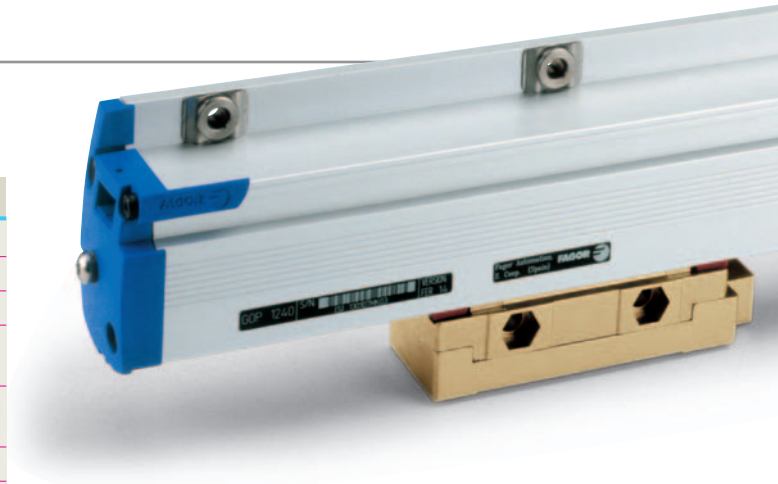
G Series

GENERAL CHARACTERISTICS	
Maximum speed	120 m/min. (396 ft / min.)
Maximum vibration	20 g
Moving force	<5N
Operating temperature	0°...50°C
Storage temperature	-20°...70°C
Weight	0.25 Kg + 2,25 Kg/m
Humidity	20...80%
Protection	IP 53 (standard) IP 64 (DIN 40050) with pressurized air intake
Movement	On roller bearings
Light source	IRED
Power supply	5V ± 5%, 100 mA
Reader head	With built-in connector (see pages 30-31 for connection devices)
Method of measuring	Chromed glass scale with 20 µm (0.0008 inch) grating pitch

SPECIFICATIONS	GX	GY	GW	GP
	GOX	GOY	GOW	GOP
	GSX	GSY	GSW	GSP
Accuracy	± 5 µm (± 0.0002") ± 3 µm (± 0.00012")			
Resolution	1 µm (0.00004")	0,5 µm (0.00002")	0,1 µm (0.000004")	Up to 0,1 µm (0.000004")
Reference marks I ₀	GX, GY, GW and GP: every 50 mm (1.97 inches) from the middle to both ends GOX, GOY, GOW and GOP: Distance-coded reference marks GSX, GSY, GSW and GSP: Selectable reference marks			
Output signals	□ Differential TTL			~ 1 V _{pp}
Period "T" of output signals	4 µm	2 µm	0,4 µm	20 µm
Maximum cable length	50 m (165 ft)		150 m (495 ft)	

Measuring length: G Series

mm	inches	mm	inches
140	5,5	1340	52
240	9,5	1440	56
340	13,4	1540	60
440	17,3	1640	64
540	21,3	1740	68
640	25	1840	72
740	29	2040	80
840	33	2240	88
940	37	2440	96
1040	41	2640	104
1140	44	2840	112
1240	48	3040	120

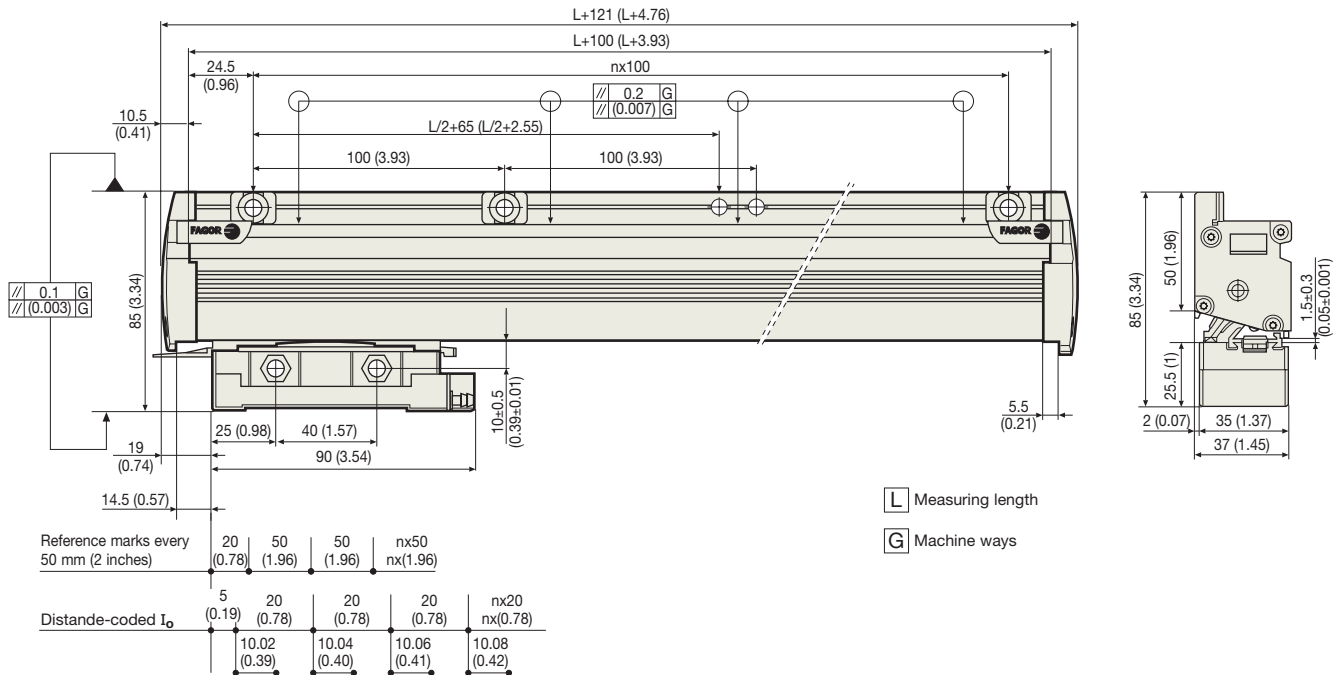
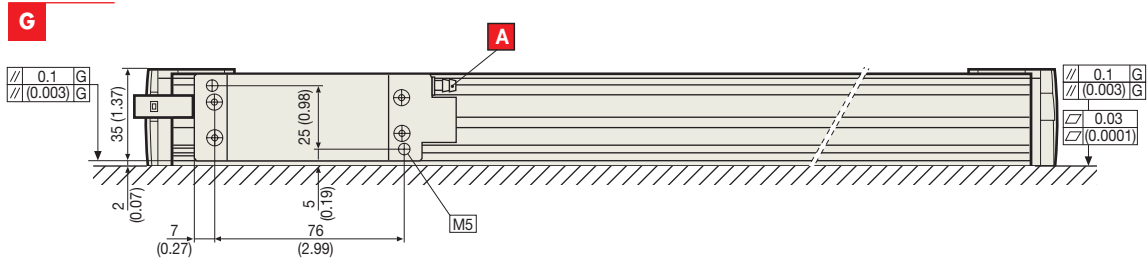
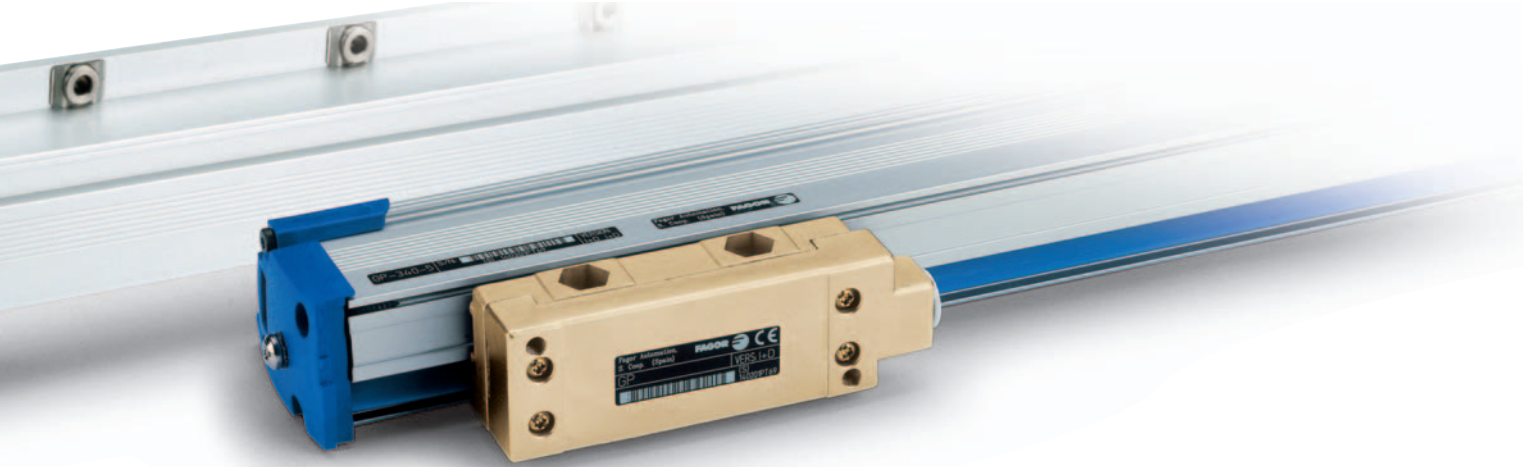


Especially recommended for applications with a measuring length (axis travel) of up to 3040 mm in high speed and vibration. Its special patented design of mounting points improves linear encoder accuracy despite temperature variations (TDMS®). It offers reference mark every 50 mm that may be selected by the installer as well as distance-coded reference marks. The reader head of this linear encoder has a connector.

Order Identification

Example: **GOX - 1640 - 5 - A**

G	Type of profile: for average space
0	Reference mark type I ₀ <ul style="list-style-type: none"> Blank space: Reference mark every 50 mm (1.97 inches) O: Distance-coded reference mark S: Selectable reference marks
X	Signal type <ul style="list-style-type: none"> X: Differential TTL, resolution of 1 µm (0.00004 inch) Y: Differential TTL, resolution of 0,5 µm (0.00002 inch) W: Differential TTL, resolution of 0,1 µm (0.000004 inch) P: Senoidal de 1V_{pp}
1640	Measuring length in mm In the example (1640) = 1640 mm (64.57 inches)
5	Accuracy <ul style="list-style-type: none"> 5: ± 5 µm (± 0.0002 inch) 3: ± 3 µm (± 0.00012 inch)
A	<ul style="list-style-type: none"> Blank space: Without air inlet on the reader head A: With air inlet on the reader head



Mounting possibilities

