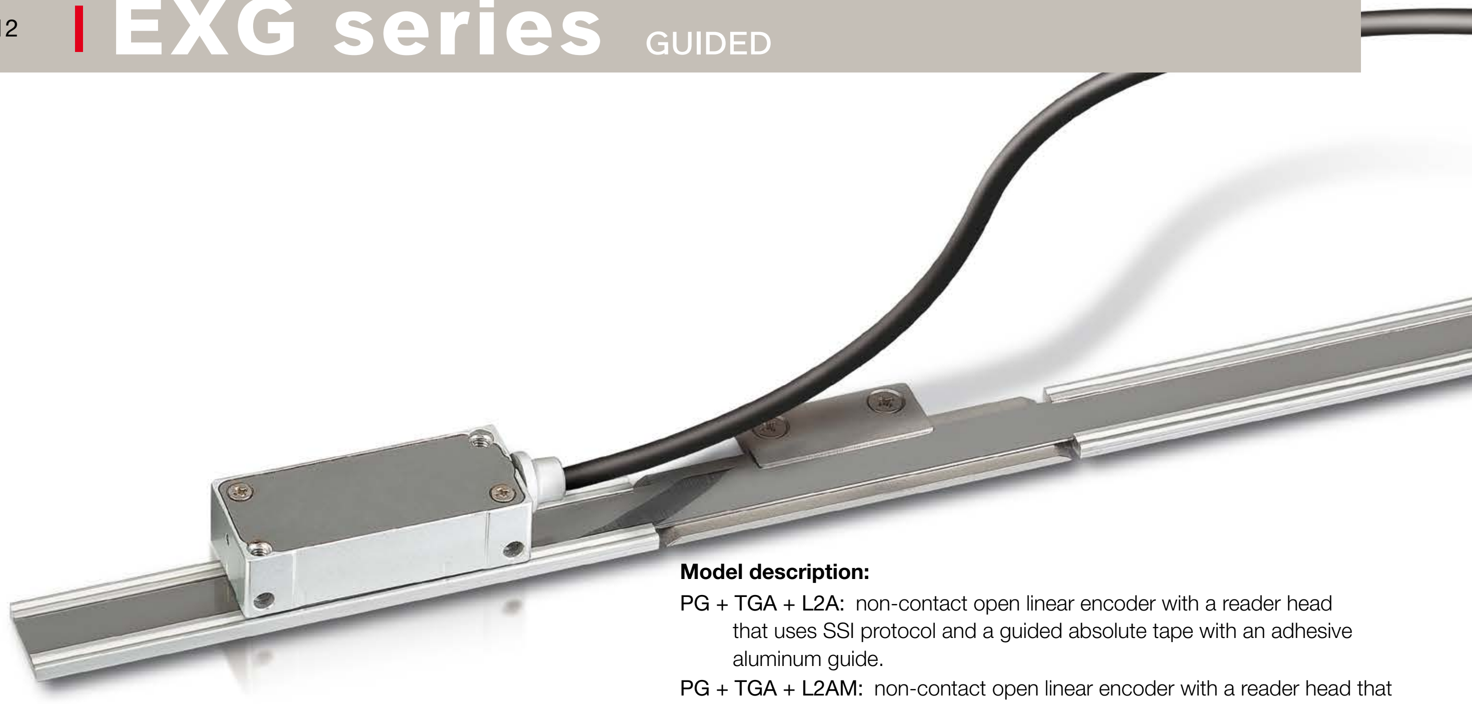
EXG series GUIDED



Model description:

PG + TGA + L2A: non-contact open linear encoder with a reader head that uses SSI protocol and a guided absolute tape with an adhesive aluminum guide.

PG + TGA + L2AM: non-contact open linear encoder with a reader head that uses MITSUBISHI® CNC full dupllex protocol and a guided absolute tape with an adhesive aluminum guide.

PG + TGA + L2AMH: non-contact open linear encoder with a reader head that uses MITSUBISHI® CNC half duplex protocol and a guided absolute tape with an adhesive aluminum guide.

PG + TGA + L2AP: non-contact open linear encoder with a reader head that uses PANASONIC® (Matsushita) protocol and a guided absolute tape with an adhesive aluminum guide.

PG +TGA + L2ABC: non-contact open linear encoder with a reader head that uses BiSS® protocol and a guided absolute tape with an adhesive aluminum guide.

PG +TGA + L2AD: non-contact open linear encoder with a reader head that uses FeeDat® protocol for FAGOR and others and a guided absolute tape with an adhesive aluminum guide.

PG +TGA + L2AD + XC-C8-PA-DQ-M: non-contact open linear encoder with a reader head that uses DRIVE-CLiQ® protocol for SIEMENS® (Solution Line and Sinumerik One) and a guided absolute tape with an adhesive aluminum guide.

PG + TGA + L2AK: non-contact open linear encoder with a reader head that uses YASKAWA® protocol and a guided absolute tape with an adhesive aluminum guide.

Non-contact open linear encoder for high accuracy, high speed applications.

It consists of a compact reader head with all the electronics and optics integrated into a single body that may be mounted from the side or from the top.

It has an LED to help mounting it and includes a 1 or 3 meter cable with a connector, a 10 mm wide reflective stainless steel tape that is highly resistant to solvents on an adhesive aluminum guide.

Measuring lengths in millimeters:

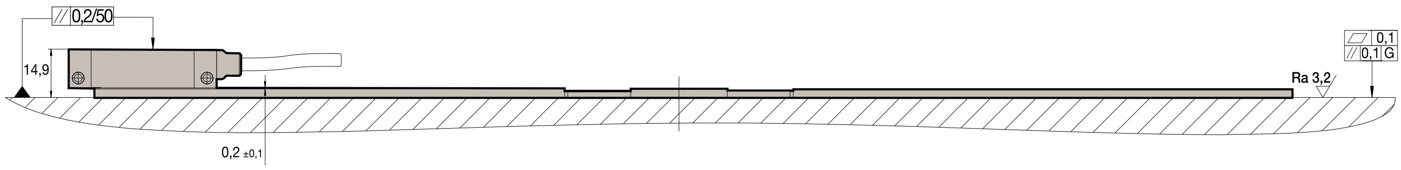
Available from 240 mm to 3,040 mm in 100 mm (*) increments.

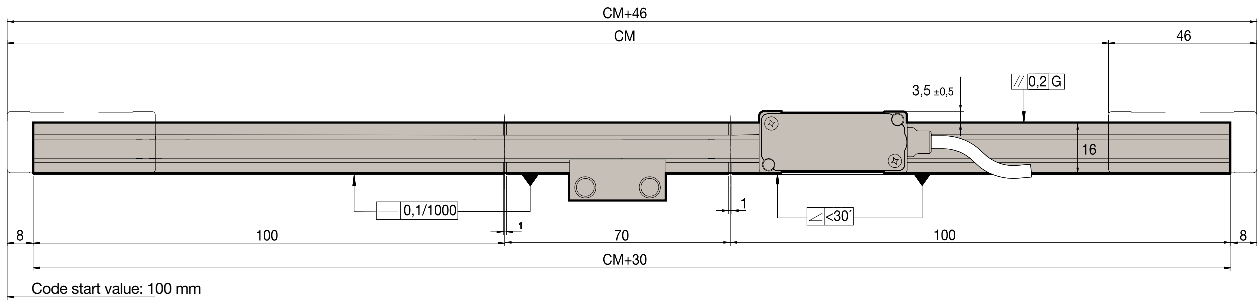
Characteristics

	PG + TGA + L2A	PG + TGA + L2AM / L2AMH	PG + TGA + L2AP / PG +TGA + L2AD + XC-C8-PA-DQ-M	PG + TGA + L2ABC	PG + TGA + L2AD	PG + TGA + L2AK
Measurement	**Incremental:** By means of a 20 µm-pitch stainless steel tape **Absolute:** Optical reading of sequential binary code					
Steel tape thermal expansion coefficient	α_{therm}: ≈ 11 ppm/K.					
Measuring resolution	0.01 µm / 0.05 µm	0.01 µm / 0.05 µm	0.01 µm / 0.05 µm	0.01 µm / 0.05 µm	0.01 µm / 0.05 µm	0.009765625 µm / 0.078125 µm
Maximum speed	480 m/min					
Maximum cable length	75 m (*)	30 m	30 m	(**)	100 m	50 m
Supply voltage	5V ± 10 %. < 250 mA (without load)					
Reader head	1 or 3 meter cable with a connector					
Reader head protection	IP 40					
Accuracy	± 10 µm/m					
Maximum vibration	200 m/s² (55 … 2000 Hz) IEC 60068-2-6					
Maximum shock	1000 m/s² (11 ms) IEC 60068-2-27					
Operating temperature	0 °C … 50 °C					
Storage temperature	-20 °C ... 70 °C					
Weight	0.27 kg + 0.05 kg/m					
Relative humidity	20 … 80 %					

(*) Contact Fagor Automation for other lengths.
(**) Contact Fagor Automation for maximum cable length.

Dimensions in mm





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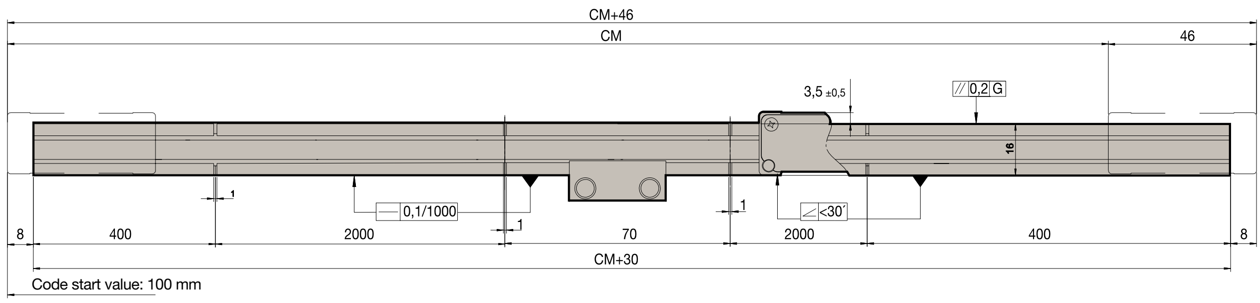

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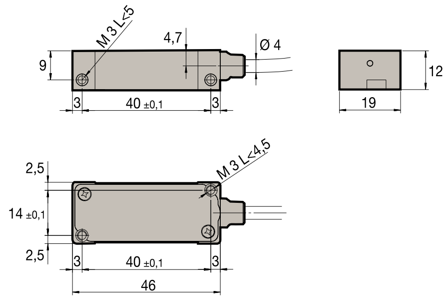

■ *Additional information can be found in the technical documentation and installation manual available on the website www.fagorautomation.com*

Order identification

Example of Non-contact linear Encoder: PG-30 + TGA-64 + L2AP10-3C9D

Guide		Tape	
PG	**30**	**TGA**	**64**
Adhesive guide for guided tape	*Lengths in centimeters:* In the example 30 = 300 mm	Absolute graduated tape for the guided model	*Measuring lengths in centimeters:* In the example 64 = 640 mm

Cabeza lectora

L2	A	P	10	3	C9D
Single-body reader head with LED	*Letter identifying the absolute encoder*	*Type of communications protocol:* • Blank space: SSI protocol (FAGOR) • M: MITSUBISHI® CNC protocol full duplex • MH: MITSUBISHI® CNC protocol half duplex • **P: PANASONIC® (Matsushita) protocol** • B: BiSS® protocol • D: FeeDat® protocol (FAGOR) (*) • K: YASKAWA® protocol	*Resolution:* 50: 0.05 µm **10: 0.01 µm** 211: 0.009765625 µm (**) 208: 0.078125 µm (**)	*Cable length:* 1: 1 meter **3: 3 meters**	*Connector:* • DA: Sub D HD 15 M • MB: MITSUBISHI® • PN5: PANASONIC® • PN: YASKAWA® • **C9D: 17-pin round connector** (***)

(*): plus XC-C8-PA-DQ-M with DRIVE-CLiQ® protocol for SIEMENS® (Solution Line and Sinumerik One).
(**): only for YASKAWA® model.
(***): Mitsubishi® models with ferrite. Description C9D-F.