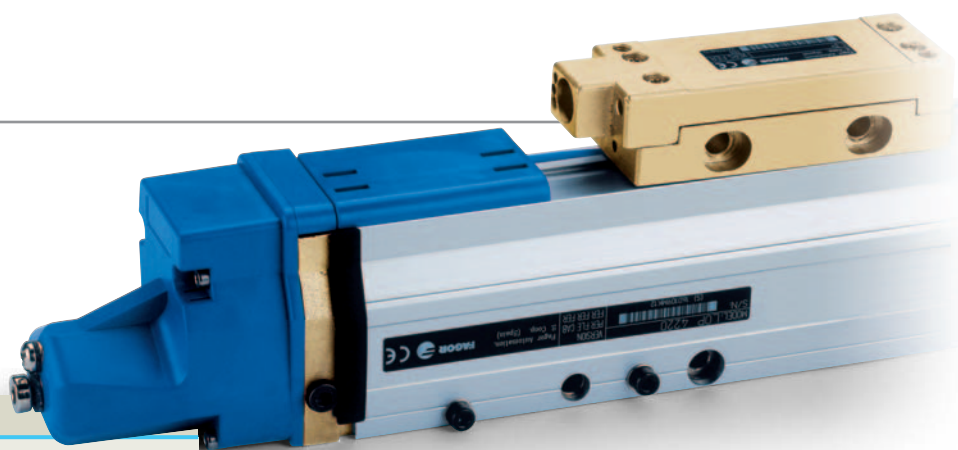


L Series



GENERAL CHARACTERISTICS

Maximum speed	120 m/min. (396 ft / min.)
Maximum vibration	10 g
Moving force	<5N
Operating temperature	0°...50°C
Storage temperature	-20°...70°C
Weight	1.50 Kg + 4 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	By graduated steel tape, 40 µm (0.0016 inch) grating pitch

Developed with Diffused light technology to generate electrical signals. These linear encoders are ideal for machines with measuring lengths between 3,2 m and 30 m in high speed and vibration environments. The special and patented design of the mounting points (TDMS®) minimizes the effect of temperature changes on the precision of the linear encoder. It offers reference marks every 50 mm or distance-coded and a connector at the reader head. The graduation pitch of the steel tape is 0.04 mm. Measuring lengths over 4040 mm require the use of modules.

SPECIFICATIONS	LX / LOX	LP / LOP
Accuracy	± 5 µm (± 0.0002 inch)	
Resolution	1 µm (0.00004 inch)	Up to 0.1 µm (0.000004 inch)
Reference marks I _o	LX and LP: every 50 mm (1.97 inches) LOX and LOP: Distance-coded reference marks	
Output signals	□ Differential TTL	~ 1Vpp
Period "T" of output signals	4 µm	40 µm
Maximum cable length	50 m (165 ft)	150 m (495 ft)

Measuring length: L Series

All measuring lengths are manufactured in 200 mm (7.87 inches) increments

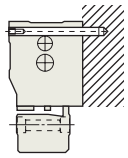
mm	inches	Nr. of modules	Length code
3240	128	1	32
3440	135	1	34
3640	143	1	36
3840	151	1	38
4040	159	1	40
4240	167	3	42
4440	175	3	44
4640	183	3	46
4840	190	3	48
5040	190	3	50
5240.../6440	206.../253	4	52.../64
6640.../7840	253.../309	5	66.../78
8040.../9240	316.../364	6	80.../92
9440.../10640	372.../419	7	94.../106
10840.../12040	427.../474	8	108.../120
12240.../13440	482.../529	9	122.../134
13640.../14840	537.../565	10	136.../148
15040.../16240	592.../640	11	150.../162
16440.../17640	647.../694	12	164.../176
17840.../19040	702.../750	13	178.../190
19240.../20440	758.../805	14	192.../204
20640.../21840	813.../860	15	206.../218
22040.../23240	868.../915	16	220.../232
23440.../24640	923.../970	17	234.../246
24840.../26040	978.../1025	18	248.../260
26240.../27440	1033.../1080	19	262.../274
27640.../28840	1088.../1135	20	276.../288
29040.../30040	1143.../1182	21	290.../300

Order Identification

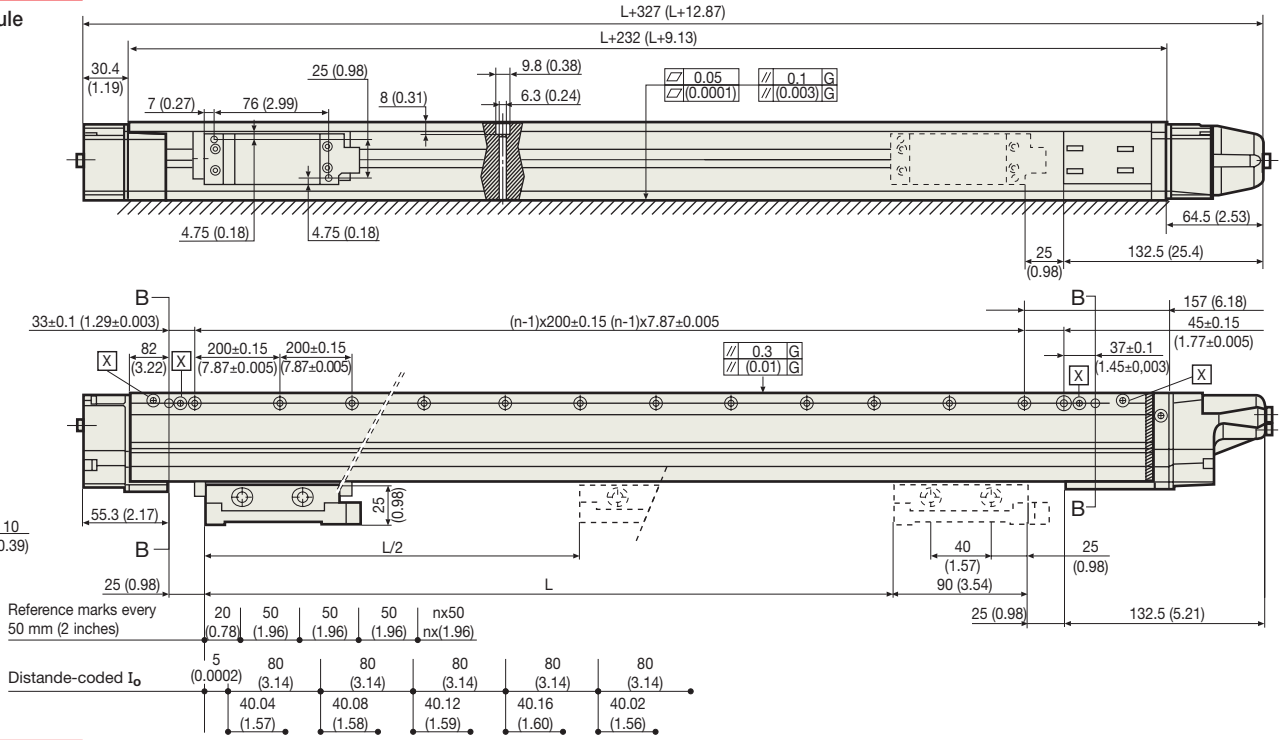
Example: LOP - 102

L	Type of profile: long lengths
O	Reference mark type I _o <ul style="list-style-type: none"> • Blank space: Reference mark every 50 mm (1.97 inches) • O: Distance-coded reference mark
P	Signal type <ul style="list-style-type: none"> • X: Differential TTL, resolution of 1 µm (0.00004 inch) • P: 1Vpp sinusoidal signal
102	Length code In the example (102) = 10240 mm (403.15 inches)
A	<ul style="list-style-type: none"> • Blank space: Without air inlet on the reader head • A: With air inlet on the reader head

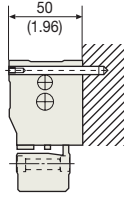
L Single module



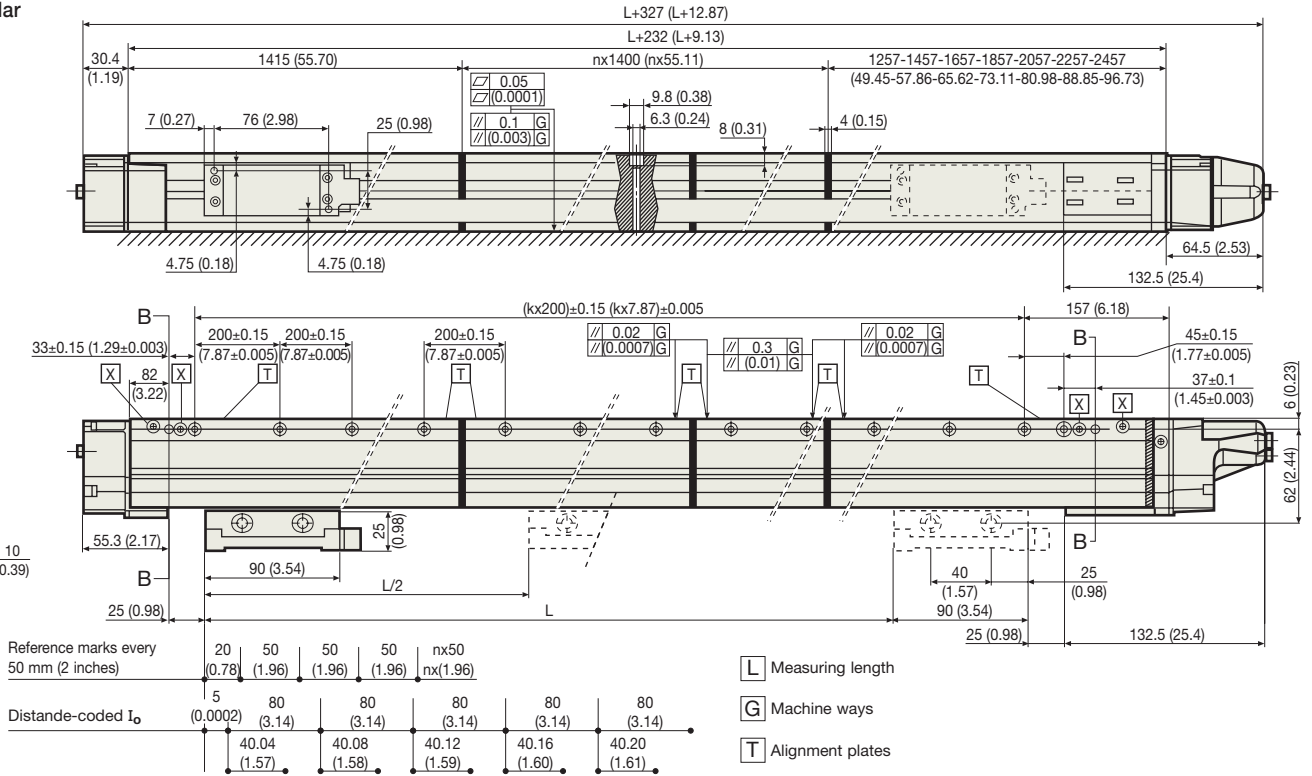
Section B-B



L Multi-modular



Section B-B



L Measuring length

G Machine ways

T Alignment plates

X Shipping screws. Do not remove until the encoder is fully mounted

Mounting possibilities

