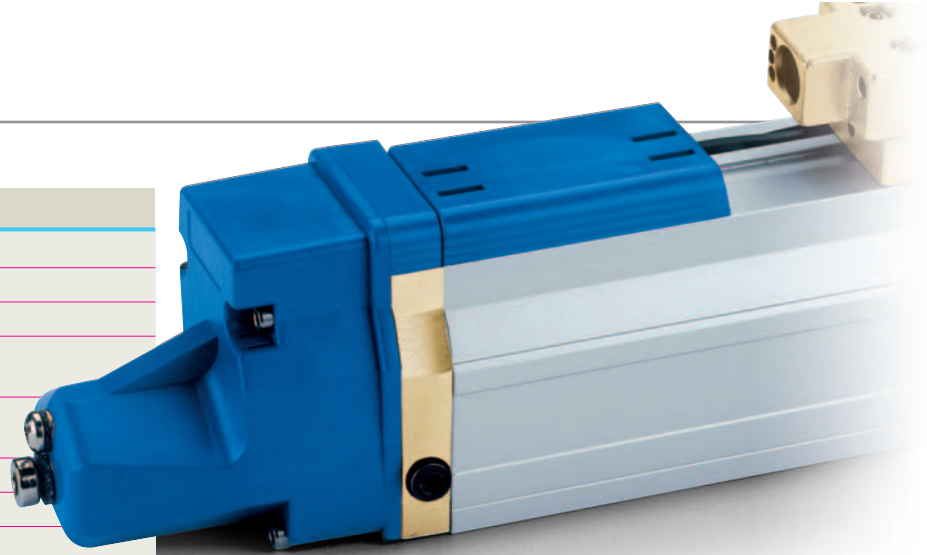


F Series




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	1.5 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	IREL
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, 100 µm (0.004 inch) grating pitch



Especially designed for conventional machines, with measuring lengths (axis travels) between 3,2 m and 30 m. With reference marks every 50 mm or distance-coded and a connector at the reader head.

The graduation pitch of the steel tape is 0.1 mm. Measuring lengths over 4040 mm require the use of modules.

SPECIFICATIONS	FT / FOT	FX / FOX	FP / FOP
Accuracy	± 5 µm (± 0.0002 inch)		
Resolution	5 µm (0.0002 inch)	Up to 1 µm (0.00004 inch)	Up to 0.1 µm (0.000004 inch)
Reference marks I₀	FT, FX and FP: every 50 mm (1.97 inches) from the middle to both ends FOT, FOX and FOP: Distance-coded reference marks		
Output signals	 TTL	 Differential TTL	 1Vpp
Period "T" of output signals	20 µm	4 µm	100 µm
Maximum cable length	20 m (66 ft)	50 m (165 ft)	150 m (495 ft)

Measuring length: F Series

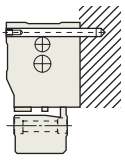
mm	inches	Nr. of modules	Length code
3240	128	1	32
3440	135	1	34
3640	143	1	36
3840	151	1	38
4040	159	1	40
4240	167	3	42
4440	175	3	44
4640	183	3	46
4840	190	3	48
5040	190	3	50
5240/.../6440	206/.../253	4	52/.../64
6640/.../7840	253/.../309	5	66/.../78
8040/.../9240	316/.../364	6	80/.../92
9440/.../10640	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

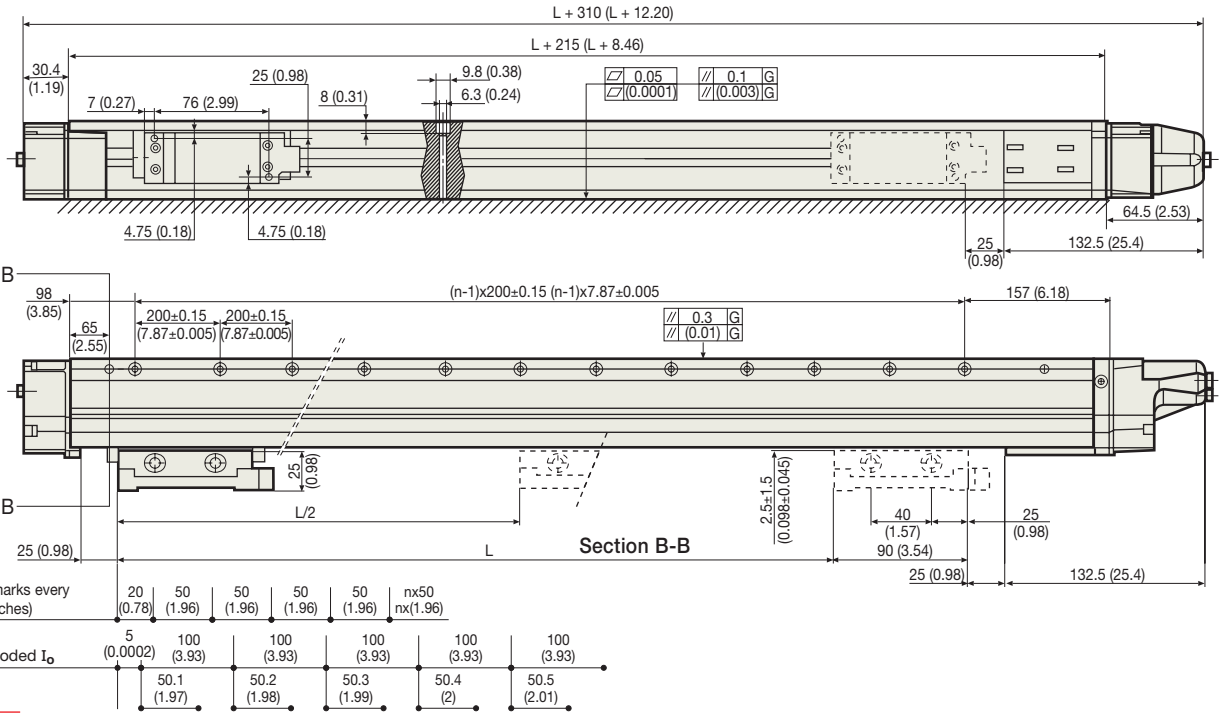
Example: **FOX - 36**

F	Type of profile • F: Long lengths
0	Reference mark type I₀ • Blank space: Reference mark every 50 mm (1.97 inches) • O: Distance-coded reference mark
X	Signal type • T: TTL, resolution of 5 or 10 µm (0.0002 or 0.0004 inch) • X: Differential TTL, resolution of 1 µm (0.00004 inch) • P: 1Vpp sinusoidal signal
36	Length code In the example (36) = 3640 mm (143 inches)

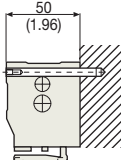
F Single module



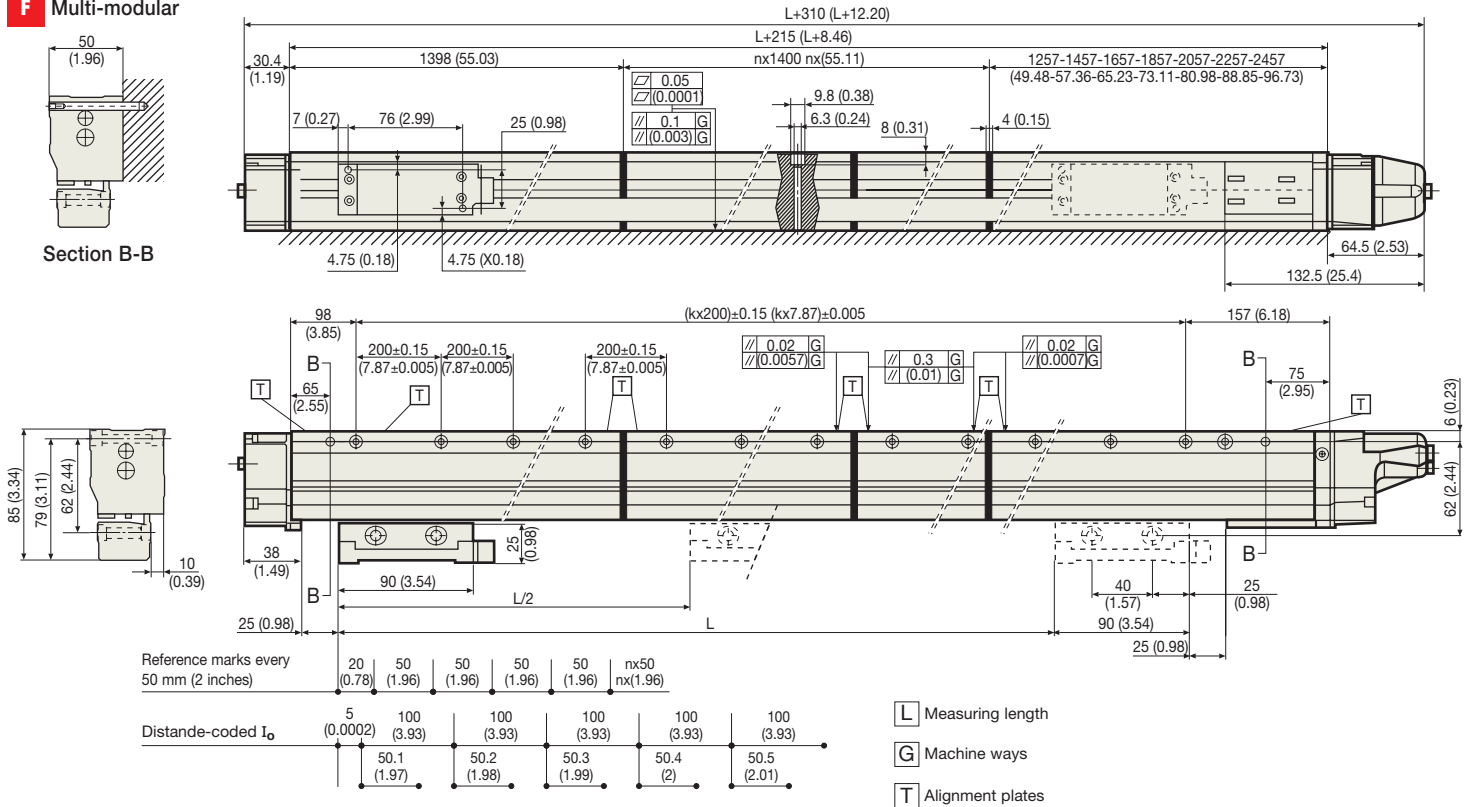
Section B-B



F Multi-modular



Section B-B



Mounting possibilities

