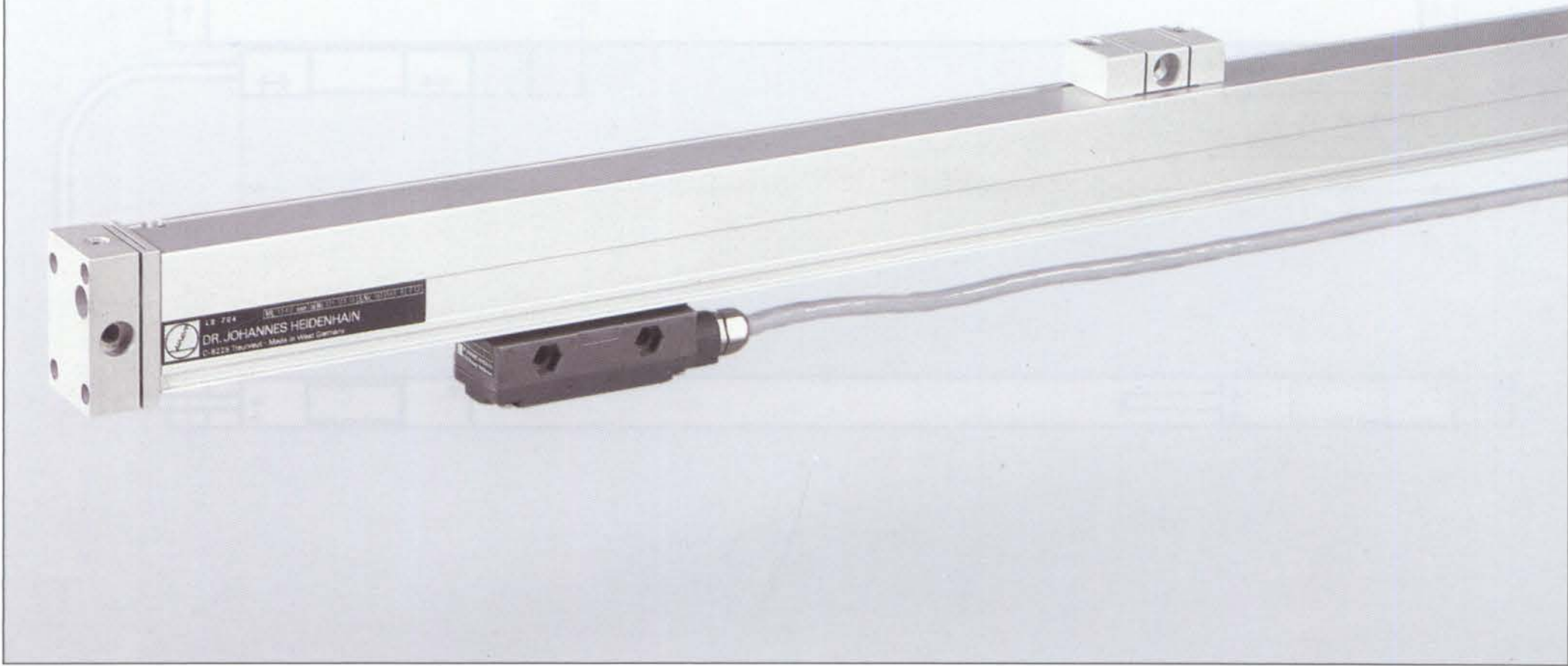


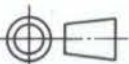
Standard Linear Encoders LS 704, LS 704 C

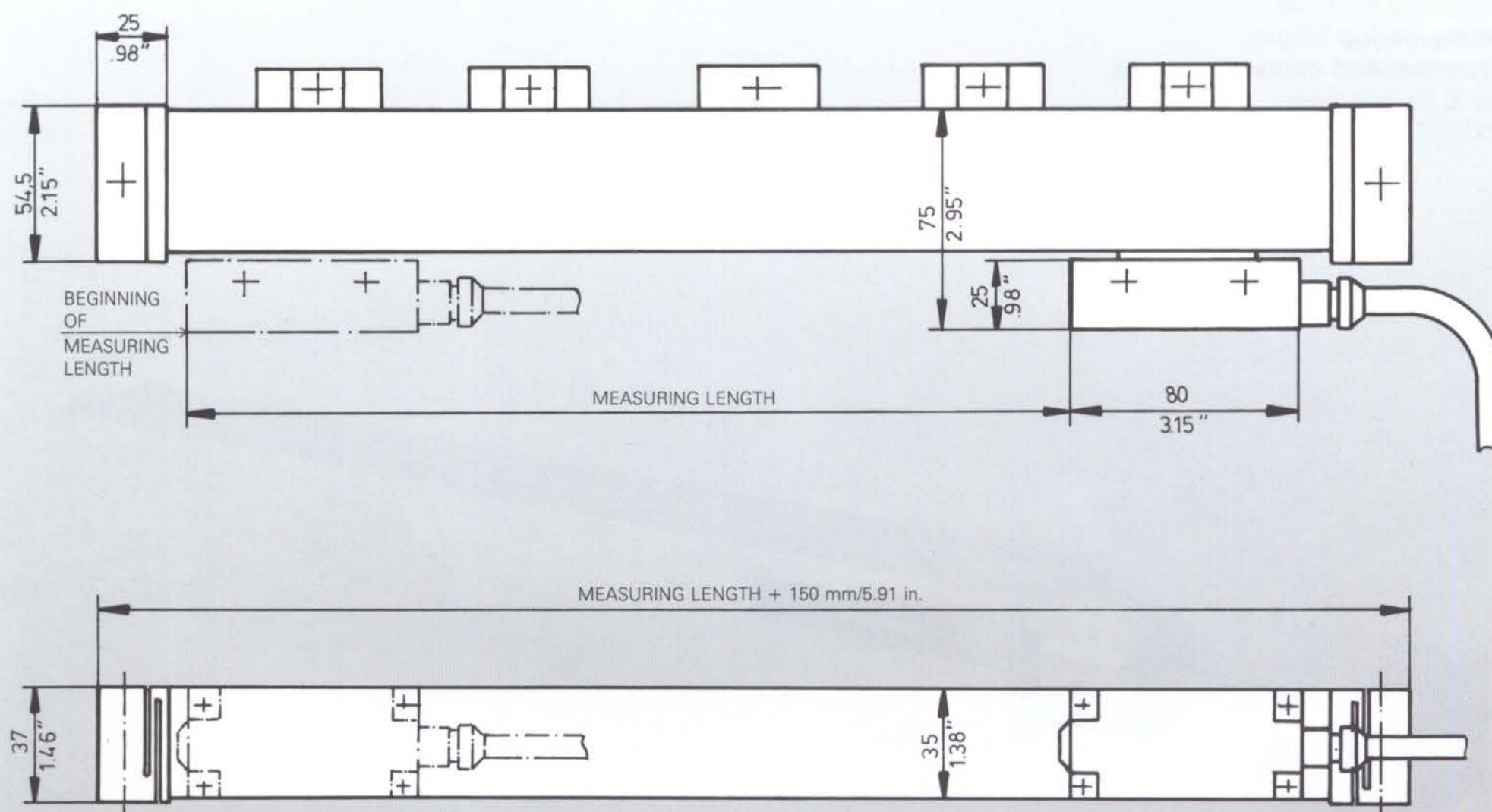
robust design

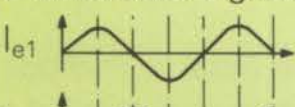
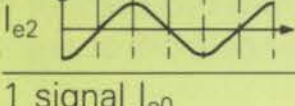
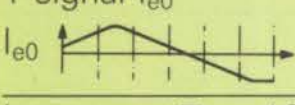
Incremental, sealed linear encoders
Measuring lengths up to 3040 mm (120.0 in.)
Grating period 20 µm
Recommended measuring steps 1 µm/0.5 µm
 (0.000 05 in./0.000 02 in.)



Mechanical data		LS 704, LS 704 C
Measuring standard		Glass scale with DIADUR-grating Grating period 20 µm
Accuracy grades		± 5 µm/± 3 µm up to 1240 mm (48.8 in.) only (± 0.000 20 in./± 0.000 12 in.)
Reference marks	LS 704	One reference mark at mid-point of measuring length (standard) or several reference marks on 50 mm (2 in.) module from mid-point of measuring length. Further reference marks on request
	LS 704 C	distance-coded reference marks
Measuring lengths	mm	170/220/270/320/370/420/470/520/620/720/770/820/920/1020/1140/1240/1340/1440/1540/1640/1740/1840/2040/2240/2440/2640/2840/3040
	inch	6.7/8.6/10.6/12.6/14.5/16.5/18.5/20.5/24.4/28.3/30.3/32.3/36.2/40.1/44.9/48.8/52.7/56.7/60.6/64.6/68.5/72.4/80.3/88.2/96.0/104.0/112.0/120.0
Max. traversing speed		48 m/min (160 ft/min)
Permissible acceleration		
Max. vibration (50 ... 2000 Hz)		30 m/s ²
Max. shock (11 ms)		200 m/s ²
Required moving force		≤ 10 N
Operating temperature		0 ... 50°C (32 ... 122°F)
Storage temperature		-20 ... 70°C (-4 ... 158°F)
Weigth		0.7 kg + 2 kg/m measuring length (1.54 lb + 1.34 lb/ft)
Connecting cable		3 m (10 ft), with connector (standard); 0.3 m (1 ft), with flange socket (male) on mounting block (special type); 3 m (10 ft), with armored sheathing with connector (special type)

Dimensions in mm/inch 



Electrical data		LS 704, LS 704 C
Light source		Miniature lamp 5 V/0.6 W
Operating voltage		5 V $\pm$ 5 %/120 mA
Output signals	Incremental signals	2 sinusoidal signals I_{e1} and I_{e2}  
	Reference signal	1 signal I_{e0} 
	Signal levels with 1 k Ω load	I_{e1} approx. 7 ... 16 μA_{pp} I_{e2} approx. 7 ... 16 μA_{pp} I_{e0} approx. 2 ... 8 μA (usable portion)
	Total permissible cable length	20 m (65.6 ft)