

LS 623

Incremental linear encoder for measuring steps of 10 µm and 5 µm (0.0005 in. and 0.0002 in.)

Specifications	LS 623	Dimensions
Measuring standard Grating period	Glass scale with DIADUR graduation 20 µm	in mm  DIN ISO 8015 ISO 2768 - m H
Accuracy grade	± 10 µm (± 0.0004 in.)	
Measuring length ML in mm inches	170, 220, 270, 320, 370, 420, 6.7, 8.6, 10.6, 12.6, 14.5, 16.5, 470, 520, 620, 720, 770, 820, 18.5, 20.5, 24.4, 28, 30, 32, 920, 1020, 1140, 1240, 1340, 1440, 36, 40, 44, 48, 52, 56, 1540, 1640, 1740, 1840, 2040, 2240, 60, 64, 68, 72, 80, 88, 2440, 2640, 2840, 3040 96, 104, 112, 120	
Reference marks	LS 623 LS 623C	Standard: One reference mark at midpoint Special versions: Several reference marks at 50 mm intervals starting from midpoint of measuring length; or one reference mark at any desired position Distance-coded, absolute position value available after max. 20 mm traverse
Max. traversing speed	60 m/min (2362 ipm)	
Vibration (55 to 2000 Hz) Shock (11 ms)	30 m/s ² (IEC 60068-2-6) 200 m/s ² (IEC 60068-2-27)	
Required moving force	≤ 10 N	
Protection (IEC 60529)	IP 53 when installed as per instructions IP 64 with compressed air	
Operating temperature	0 to 50 °C (32 to 122 °F)	
Weight	0.7 kg + 2 kg/m measuring length	
Power supply	5 V ± 5 % / < 170 mA (with no load)	
Output signals/Signal period	□ □ TTL/20 µm	
Electrical connection	Sep. adapter cable (1 m/3 m/6 m) with or without armor (see <i>Electrical connection</i>) Cable length to subsequent electronics	 P, Q = Gauging points for alignment ①, ② = Mounting options F = Machine guideway ③ = Required mating dimensions ④ = Compressed air inlet ⑤ = Reference mark position LS 623 ⑥ = Reference mark position LS 623 C ⑦ = Beginning of measuring length (ML)

