


	LS 303	LS 406	LS 603	LS 106
Scale housing	Slimline		Full size	
Accuracy grade	± 10 µm	± 5 µm or ± 3 µm to ML 1240	± 10 µm	± 5 µm or ± 3 µm
Measuring standard	Glass scale with DIADUR graduation; grating period 20 µm			
Measuring lengths ML in mm	70, 120, 170, 220, 270, 320, 370, 420, 470, 520, 570, 620, 720, 770, 820, 920, 1020, 1140, 1240, Only with mounting spar: 1340, 1440, 1540, 1640, 1840, 2040		170, 220, 270, 320, 370, 420, 470, 520, 570, 620, 720, 770, 820, 920, 1020	140, 240, 340, 440, 540, 640, 740, 840, 940, 1040
			1140, 1240, 1340, 1440, 1540, 1640, 1740, 1840, 2040, 2240, 2440, 2640, 2840, 3040	
Reference marks	LS 303, LS 406 Selectable by magnet every 50 mm; Standard setting: <i>ML 70 mm:</i> One reference mark at midpoint of ML; <i>up to ML 1020 mm:</i> Two, each 35 mm from beginning/end; <i>from ML 1140 mm:</i> Two, each 45 mm from beginning/end; LS 303C, LS 406C Distance-coded; for finding the absolute position value after max. 20 mm traverse		LS 603, LS 106 Selectable by magnet every 50 mm; Standard setting: One reference mark at midpoint of measuring length LS 603C, LS 106C Distance-coded; for finding the absolute position value after max. 20 mm traverse	
Max. traversing speed	120 m/min (4720 ipm)		60 m/min (2362 ipm)	120 m/min (4720 ipm)
Vibration IEC 60068-2-6 (55 to 2000 Hz)	$\leq 100 \text{ m/s}^2$ without mounting spar $\leq 200 \text{ m/s}^2$ with mounting spar		$\leq 30 \text{ m/s}^2$	$\leq 200 \text{ m/s}^2$
Shock IEC 60068-2-27 (11 ms)	$\leq 300 \text{ m/s}^2$		$\leq 200 \text{ m/s}^2$	$\leq 400 \text{ m/s}^2$
Required moving force	$\leq 5 \text{ N}$		$\leq 10 \text{ N}$	$\leq 4 \text{ N}$
Type of protection IEC 60529	IP 53 when mounted as per instructions IP 64 with compressed air			
Operating temperature	0 to 50 °C (32 to 122 °F)			
Weight	0.4 kg + 0.4 kg/m ML		0.7 kg + 2 kg/m ML	0.2 kg + 2.6 kg/m ML
Power supply	5 V ± 5 % < 100 mA			
Output signals	 11 µApp; signal period 20 µm			
Electrical connection	Separate adapter cable (1 m/3 m/6 m/9 m) with or without armor (see <i>Cables and Pin Layouts</i>)			
Permissible cable length to subsequent electronics	30 m (98.5 ft) max.			