

ULS 300, ULS 300C

Fully encapsulated
Pushrod design
Protection to IP 67

Recommended measuring step

1 μm 0.5 μm
(0.00005 in. 0.00002 in.)



Specifications		ULS 300, ULS 300C	
Measuring standard		Glass scale with DIADUR graduation	
Grating period		20 μm	
Thermal expansion coefficient		$\alpha_{\text{therm}} \approx 8 \text{ ppm/K}$	
Accuracy grades		$\pm 3 \mu\text{m}$ ($\pm 0.00012 \text{ in.}$) $\pm 2 \mu\text{m}$ up to ML 270 mm ($\pm 0.00008 \text{ in.}$ for ML to 10.6 in.)	
Measuring length ML	mm	170, 220, 270, 320, 370, 420	
	inch	6.7, 8.6, 10.6, 12.6, 14.5, 16.5	
	mm	470, 520	
	inch	18.5, 20.5	
Reference marks	ULS 300	Standard: 1 reference mark at midpoint of measuring length; Special versions: Several reference marks in 50 mm (2 in.) intervals starting from midpoint of measuring length; or 1 reference mark at any desired position	
	ULS 300C	Distance-coded; absolute position value available after max. 20 mm traverse	
Max. traversing speed		30 m/min (1181 ipm)	
Vibration (55 to 2000 Hz)		$\leq 30 \text{ m/s}^2$ (IEC 68-2-6)	
Shock (11 ms)		$\leq 200 \text{ m/s}^2$ (IEC 68-2-27)	
Required moving force		$\leq 1 \text{ bis } 3 \text{ N}$	
Protection (IEC 529 or DIN 40050)		IP 64 when installed as per instructions IP 67 with compressed air	
Permissible guideway error of machine slide		$\pm 0.5 \text{ mm}$ (0.02 in.)	
Operating temperature		0 to 50° C (32 to 122° F)	
Storage temperature		-20 to 70° C (- 4 to 158° F)	
Weight		1.25 kg + 1.5 kg/m measuring length	
Light source		LED	
Power supply		5 V $\pm 5\%$ / < 120 mA (with no load)	
Output signals		$\sim 11 \mu\text{App}$	
Electrical connection		Flange socket	
Cable length to subsequent electronics		30 m (100 ft) max.	

Dimensions

in mm/inch

