

The MCG linear encoder provides an ultra-low encoder profile for restricted spaces without the need to sacrifice performance or environmental robustness. Having a cylindrical shape, the MCG reader-head can be fitted into a bore of only 16mm in diameter offering a wide array of application possibilities.

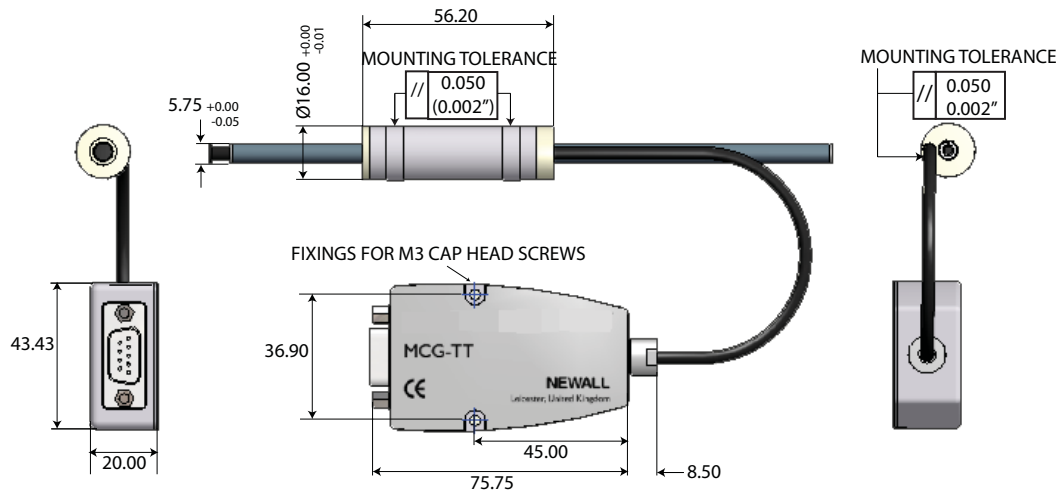
Construction

- Inductive system with no optics to fail or become contaminated
- No internal moving parts
- Fully sealed reader head to IP67
- Carbon fibre scale construction
- Unsurpassed shock and vibration capability
- Simple installation

Reference Marks

The MCG-TT provides periodic reference marker pulses every 5mm (0.2").

Dimensions



Specification

	MCG-TT
Accuracy	$\pm 5\mu\text{m}$ ($\pm 0.0002''$)
Resolution	$1\mu\text{m}$ (0.00005")
Output Type	TTL RS422 Differential Quadrature
Max. Traverse Rate	2 MHz (2m/s at $1\mu\text{m}$ resolution)
Max. Acceleration / Deceleration	10g / 98m/s (head moving)
Power Supply	5Vdc $\pm 5\%$ @ 80mA
Reference Type	Periodic
Reference Location	Every 5mm (0.2")
Ingress Protection Level	IP67, fully submersible (IEC 529) - Exceeds NEMA 6
Shock EN 60-068-2-27 (1 I ms)	980mS^{-2} (100g)
Vibration EN60-068-2-6 (55... 2000Hz)	294mS^{-2} (30g)
EMC	BS EN 50081-2 & BS EN 50082-2
Temperature (Storage)	-20 to +70°C
Temperature (Operation)	0 to +55°C
Maximum Scale Travel	1000mm (39")
Maximum Single End Mount Measuring Length	305mm (12")
Scale Over Travel Requirements	178mm (7")
Cable Length	0.5m (20")
Connector	D type 9 pin

Installation

The design of these linear encoders allows installation in almost any position, unlike glass-scale linear encoders, which usually need to be installed with the lip seal facing downwards to prevent contamination. Self-aligning fixing brackets allow virtually effortless scale mounting, needing only a single hole for each set of brackets or direct installation into machine frames in OEM applications.