

## DG/2.5/S MKII

Probe with direct analogue output  
Position feedback and linear  
displacement measurement

### Description

The new and improved DG/2.5/S Mark 2 is an analogue DC/DC position sensor based on the LVDT principle. It features a high accuracy long life linear ball bearing. A versatile integrated amplifier features low noise, high bandwidth and supply independent signal output for use with data logger, PLCs, control systems. Applications include motion control, position feedback, dimensional gauging.

The DG/2.5/S MKII comes readily calibrated with superior accuracy and does not require any further set up/adjustments. Integrated into the amplifier is a power supply capable of coping with a wide input range without affecting the output, making the DG/2.5/S MKII ideal in battery operated applications.

The DG/2.5/S MKII has evolved from its predecessor the successful DG-series.

### Features

- Wide input power range does not change output voltage
- Metal end cap
- High accuracy linear ball bearing
- Very good repeatability 0.15 µm
- PUR screened cable
- 500 Hz-3 db Bandwidth
- Anti-Rotation feature
- 3 mm Tungsten Carbide Probe Tip (replaceable)



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## Technical Specification

Voltage Output ( DC Bipolar )
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### Measurement

Measurement Range ( mm )
Pre - Travel ( mm )
Post - Travel ( mm )
Linearity ( % FSO )
Repeatability ( $\mu$ m )
Temperature coefficients ( % FSO/ $^{\circ}$ C )

### Mechanical

Body Diameter - Length A ( mm )
Body Diameter - Length B (mm )
Case Material
Tip Force @ Electrical zero ( +/- 20% )
Cable Type
Standard Cable Length
Standard Cable Style
Nominal Mass ( g ) ( +/- 5 ) (Not Including Cable : Cable = 35 g/m)

### Environment

Operating Temperature
Storage Temperature
Sealing
Vibration

### Electrical Interface

Input
Noise (DC Output) measured in 500 Hz
Bandwidth

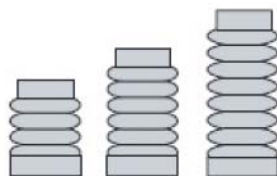
### Electrical Connections

Red
Blue
White
Green
Black and Screen

DG/2.5/MKII
$\pm$ 5 VDC
5 mm total
0.15
0.85
$< \pm$ 0.2
0.15
$<0.02$
19
8
400 Series ST/ST
0.7 N
PU
3 M
Screened
34
+5 to +65
-20 to +85
IP65
1 to 10 g rms linear 10 to 50 Hz 10 g rms linear 50 Hz to 1 kHz
10 to 30 VDC
$<0.2$ mV
500 Hz
V Supply +
V Supply -
V Output +
V Output gnd
Earth

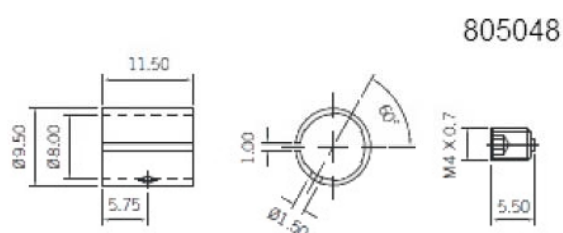
## Accessories

## Replacement Gaiters



Gaiters can be replaced when damaged.

### Clamping Collet

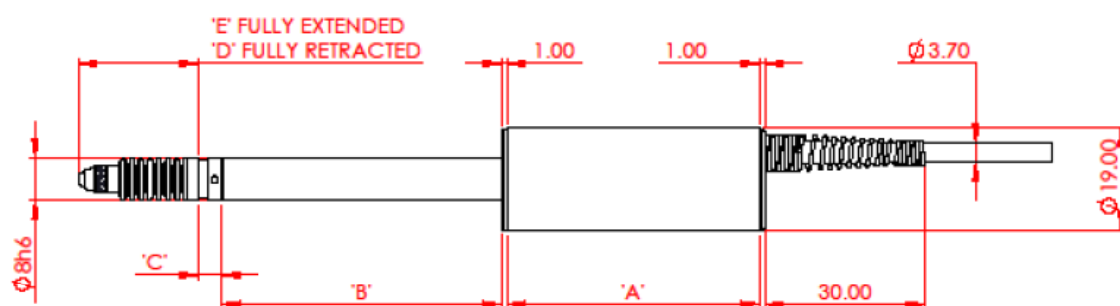


For use with all 8 mm clamping shaft sensors. The clamping collet distributes the clamping forces evenly around the shaft. Using the supplied grub screw, the probe can be loosened while holding the collet in place.

## Probe Tips

Various probe tips are available.

## Dimensional Drawings



'A' mm	'B' mm	'C' mm	'D' mm	'E' mm
47.00	28.00	4.25	14.10	20.10

DIMENSIONS ARE NOMINAL AND SPECIFIED IN MILLIMETRES  
SOLARTRON PURSUES A POLICY OF CONTINUOUS DEVELOPMENT.  
SPECIFICATIONS IN THIS DOCUMENT MAY THEREFORE BE CHANGED WITHOUT NOTICE.

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