

G Type

Probe with direct analogue output

Position feedback and linear displacement measurement

Description

The G-Type of analogue DC/DC displacement probes are based on the LVDT sensing principle and features a high accuracy and long life linear ball bearing (as AX-Series). All models incorporate a Linear Variable Differential Transducer (LVDT) as the measuring element, together with high performance conditioning electronics for low noise and superior linearity while being able to cope with a wide supply range.

The G Type Analogue Displacement Probe range has evolved from its predecessor DG Series with marked improvement in features and performance. This product offers a perfect solution for various displacement applications with a good linearity and repeatability:

- Extended measurement range up to 20mm
- 4-20 mA output
- Line regulation
- Metal end cap
- Better front bearing
- Wide input power range does not change output voltage

Features

2, 5, 10 and 20 mm measurement range
DC Unipolar, Bipolar and 4-20 mA output
Excellent repeatability: <0.15 µm
Linearity 0.2% FSO
Precision ball bearings
Large selection of probe tips
3D drawings available



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Technical specification

Generic sensor types

Voltage output (DC Bipolar)
Voltage output (DC Unipolar)
Current output (4 – 20 mA)

WG/2/S	WG/5/S	WG/10/S	WG/20/S
VG/2/S	VG/5/S	VG/10/S	VG/20/S
IG/2/S	IG/5/S	IG/10/S	IG/20/S

Measurement

Measurement range (mm)
Pre - travel (mm)
Post - travel (mm)
Linearity (% FSO)
Repeatability (micron)
Temperature coefficients (%FSO/°C)

2	5	10	20
0.15			
0.85			
<+/- 0.2			
0.15			
<0.02			

Mechanical

Body diameter -A (mm)
Body diameter -B (mm)
Case material
Tip force @ mid range
Cable type
Standard cable length
Standard cable style
Nominal mass (g) (+/- 5)

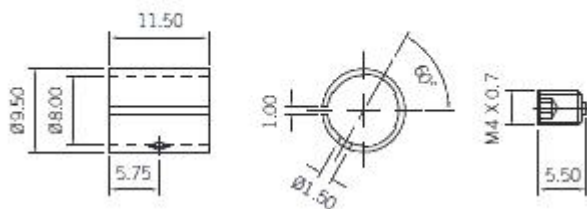
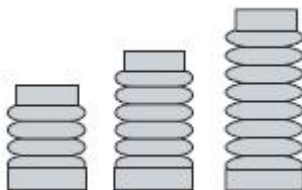
19			
8			
400 Series			
0.7N			
PUR			
3m			
Screened			
34	34	55	58

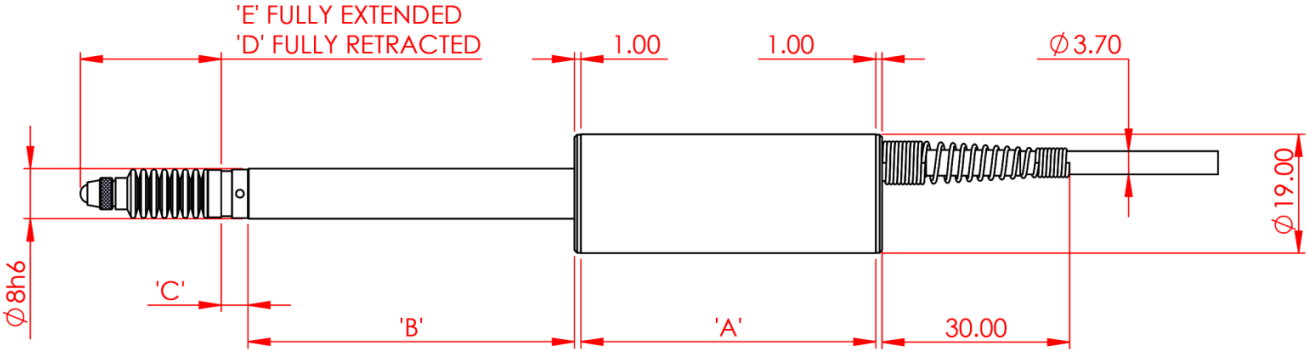
Environmental

Operating temperature (°C)
Storage temperature (°C)
Sealing
Vibration

+5 to +65			
-20 to +85			
IP60			
1 to 10g rms linear 10 to 50Hz			
10g rms linear 50 Hz to 1 kHz			

V Supply +	4 – 20 mA loop powered (+)
V Supply -	4 – 20 mA loop powered (-)
V Output +	
V Output gnd	
Earth	





Probe Designation	'A' mm	'B' mm	'C' mm	'D' mm	'E' mm
VG/2/S	47.00	28.00	3.75	13.10	16.10
VG/5/S	47.00	28.00	4.25	14.10	20.10
VG/10/S	47.00	52.00	4.25	16.60	27.60
VG/20/S	47.00	92.00	3.10	26.10	47.10
IG/2/S	42.00	33.00	3.75	13.10	16.10
IG/5/S	42.00	33.00	4.25	14.10	20.10
IG/10/S	42.00	57.00	4.25	16.60	27.60
IG/20/S	42.00	97.00	3.10	26.10	47.10
WG/2/S	47.00	28.00	3.75	13.10	16.10
WG/5/S	47.00	28.00	4.25	14.10	20.10
WG/10/S	47.00	52.00	4.25	16.60	27.60
WG/20/S	47.00	92.00	3.10	26.10	47.10

G TYPE RANGE

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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Solartron pursues a policy of continuous development. Specifications in this document may therefore be changed without notice.

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