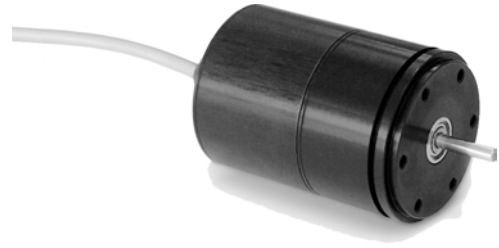


Inductive Angle Transducer

Series **SM61**



- Measuring range up to $\pm 45^\circ$
- Integrated electronic circuit
- Infinite resolution, no hysteresis
- Protection class IP51
- Calibrated output signal

Construction and operating principle:

A disc shaped rotor is turning through two coils of a differential choke. The position of the rotor changes the inductance and the integrated electronic generates a calibrated DC output signal proportional to the position.

Measuring range:

30°	60°	90°
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Standard versions:

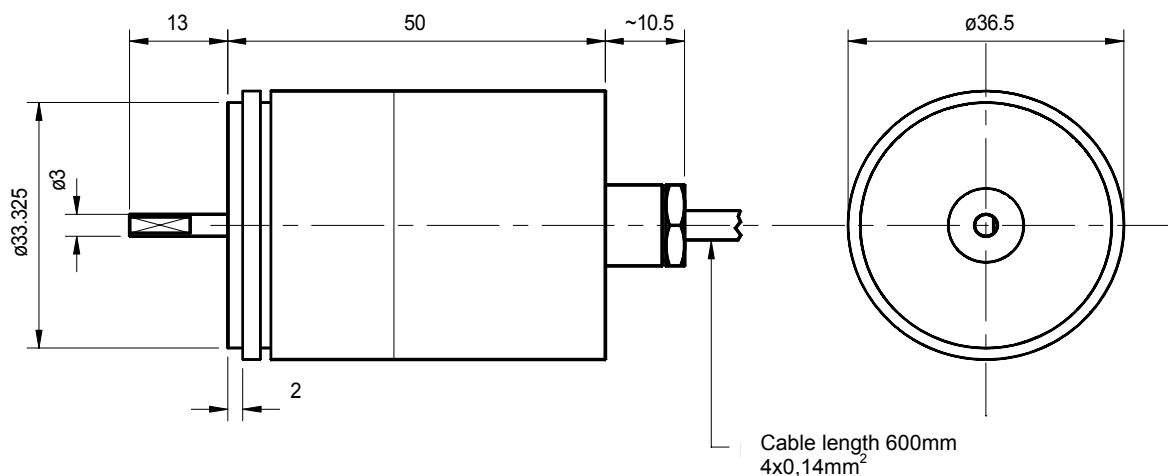
Type	output	Supply voltage U_B *	signal **	mid
SM615	± 10 V	$\pm 13 \dots \pm 16$ V	CW	0 V
SM616			CCW	

*CW: Signal positively increasing for shaft rotation in the clockwise direction

Technical data:

Accuracy	< 0,5% or 0,25%
Temperature drift	< 0,01% / °C
Measurement frequency	800 Hz
Temperature range	-20°C bis +85°C
Resistance to shock	20g SRS 20-2000Hz
Resistance to vibration	3g rms (50g peek)
Protection class	IP51

Dimensions in mm

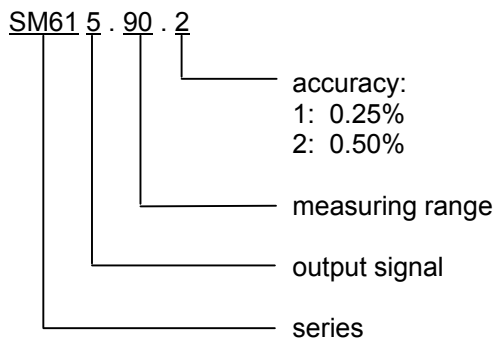


Voltage output (SM615..616)

Output signal	± 10 VDC
Supply current I_B	max. 50 mA
Permissible load R_L	≥ 2 k Ω
Residual ripple	< 5 mV _{SS}
Dependence on V_S	$< 0,05\%$ at $\Delta U_B = 1$ V

Note: Unless otherwise stated, all values are valid at +20°C ambient temperature and ± 15 VDC supply voltage, starting 10 minutes after switch-on.

Order code



Order codes for customer specified versions will be named at plant.

For example: SM615.90.2

Angle transducer Serie 61, output ± 10 V (CW),
90° measuring range, accuracy 0.5%

Additional versions:

- different supply voltage and output signals

Materials and mass

Housing	Aluminium, black anodised
Flange	Aluminium, anodised
Shaft	Stainless steel
Ball bearing	Stainless steel, sealed
Mass	~ 110 g

Electrical connections

Cable colour	SM515/516
red	+U _B
black	-U _B
brown	U _A (output)
orange	0V

accessories:

mounting clips SM906.600