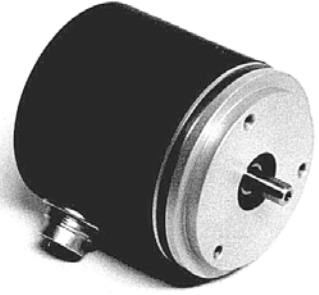


Inductive Angular Transducer

Series SM62



- Housing Ø 58mm
- Measuring range up to 120°
- Integrated electronic circuit
- Protection class IP65

Construction and operating principle:

A NiFe-rotor turns through two coils of a differential choke. The position of the rotor lead to a inductance variation of the two coils. The integrated electronic circuit convertes the variation into an output signal proportional to the angle of rotation.

Standard-measuring angle:

30°	60°	90°
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Standard versions:

Type	output	Supply voltage U_B *	signal*	mid
SM621	0 .. 20 mA	20 .. 32 V	CW	10 mA
SM622			CCW	
SM623	4 .. 20 mA	20 .. 32 V	CW	12 mA
SM624			CCW	
SM625	± 10 V	±13 .. ±16 V	CW	0 V
SM626			CCW	
SM627	0..10 V	20 .. 32 V	CW	5 V
SM628			CCW	

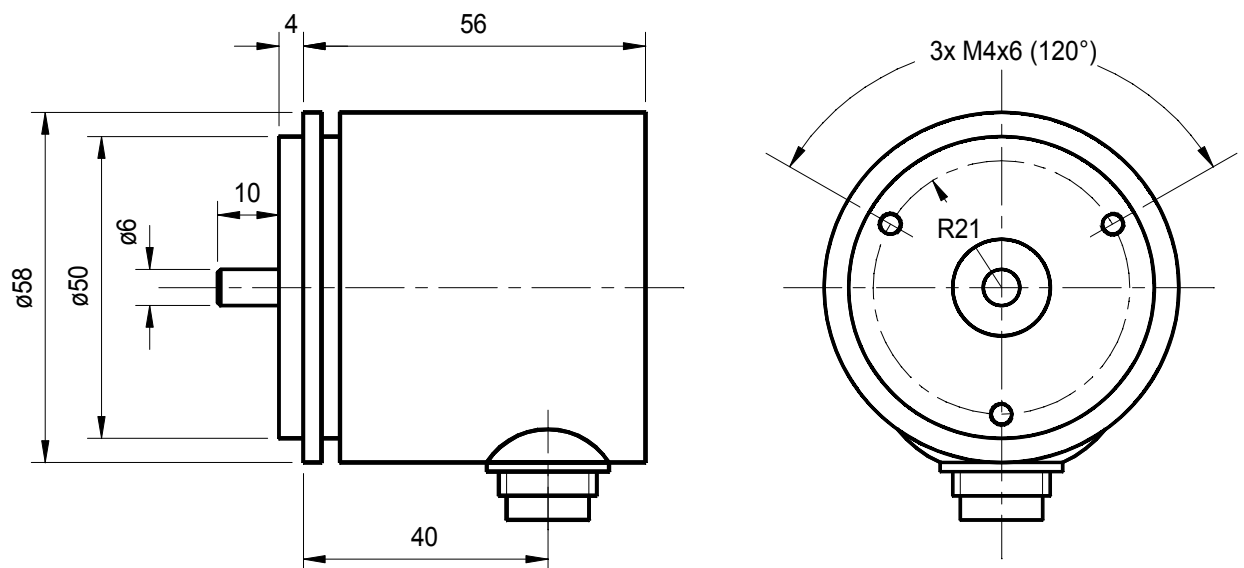
*CW = signal increases positively for rotation in clockwise direction when viewed on the shaft.

Technical data:

Accuracy	< 0,5% oder 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 peak)
Protection class	IP65 *

* with mounted mating plug Bi 423

Dimensions in mm



Current output (SM621..624)

Output signal	0..20 mA or 4..20 mA
Supply current I_B	max. 60 mA
Load resistance R_L	0..500 Ω
Residual ripple	< 0,005 mA _{SS}
Dependence on R_L	< 0,001% for $\Delta R_L = 100\Omega$
Dependence on V_S	< 0,05% for $\Delta U_B = 1V$
Max. output current	25 mA

Voltage output (SM625..628)

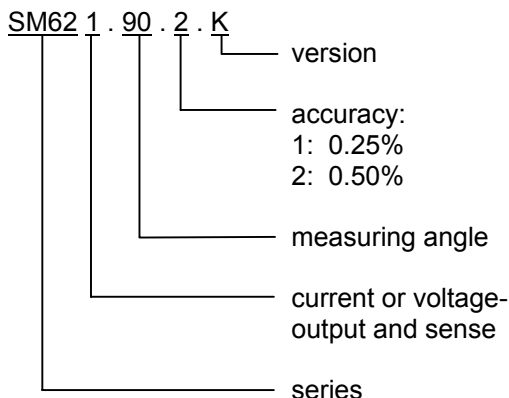
Output signal	± 10 VDC
Supply current I_B	max. 50 mA
Permissible load R_L	≥ 2 k Ω (short-circuit proof)
Residual ripple	< 5 mV _{SS}
Residual voltage SM627/628	max. 0,1VDC
Dependence on V_S	< 0,05% for $\Delta U_B = 1V$

Note: Unless otherwise stated, all values are valid at +20°C ambient temperature and 30 VDC or ± 15 VDC supply voltage, starting 10 minutes after switch-on

Materials and masses

Housing	Alu, powder mould coated
Flange	Alu, anodised
Shaft	Stainless steel
Ball bearing	Stainless steel, sealed
Mass	~ 280g

Order code



Order codes for customer specified versions will be named at plant

For example.: SM623.60.2

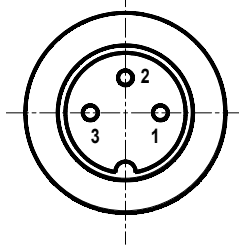
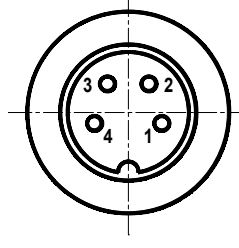
Angular Transducer series 62, output 4-20 mA (CW), 60° measuring angle, accuracy 0.5%

other versions:

- Cable output with Pg-fastener (.K)
- Low frictional torque (.X01)
- Different supply voltage and output signals

Electrical connections on plug

(View to the plug at transducer)

3-channel output /1 /2 /3 /4 /7 /8	4-channel output /5 /6
	
1: + U_B 2: - U_B (0V) 3: I_A / U_A (output)	1: + U_B 2: 0V 3: - U_B 4: U_A (output)

Accessories:

Fixing clamps SM906.620
coupling

Mating plugs

IP40: Binder Ser. 681 3PS/4PS
Metal case
(must be orderd separately)

IP66: Binder Ser. 423 3PS/4PS
(must be ordered separately)