

Overview

- Solid shaft $\varnothing 6$ mm
- Up to 5000 sinewaves cycles per turn
- SinCos output-signals 1 Vpp
- Low harmonic content (patented LowHarmonics technology)
- Compact, robust die-cast housing
- Inside connecting terminals
- High protection IP 66



Technical data

Technical data - electrical ratings

Voltage supply	5 VDC ± 10 % 9...30 VDC
Consumption w/o load	≤ 90 mA
Sinewave cycles per revolution	1024 ... 5000
Phase shift	90 °
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output signals	K1, K2, K0 + inverted
Output stages	SinCos 1 Vpp
Difference of SinCos amplitude	≤ 20 mV
Harmonics typ.	-50 dB
DC offset	≤ 20 mV
Bandwidth	250 kHz (-3 dB)
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approval	CE UL approval / E217823

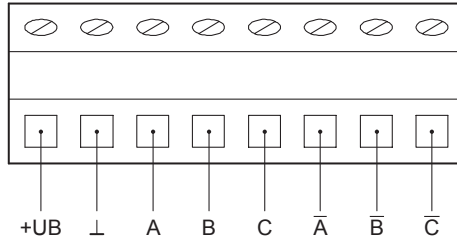
Technical data - mechanical design

Size (flange)	$\varnothing 58$ mm
Shaft type	$\varnothing 6$ mm solid shaft
Admitted shaft load	≤ 30 N axial ≤ 40 N radial
Flange	Synchro flange
Protection EN 60529	IP 66
Operating speed	≤ 10000 rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	25 gcm ²
Material	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-20...+85 °C
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 300 g, 6 ms
Explosion protection	II 3 G Ex ec IIC T4 Gc X (gas) II 3 D Ex tc IIIC T85°C Dc X (dust) (only with option ATEX)
Connection	Connecting terminal
Weight approx.	350 g

Terminal assignment

View A (see dimension)

Connecting terminal



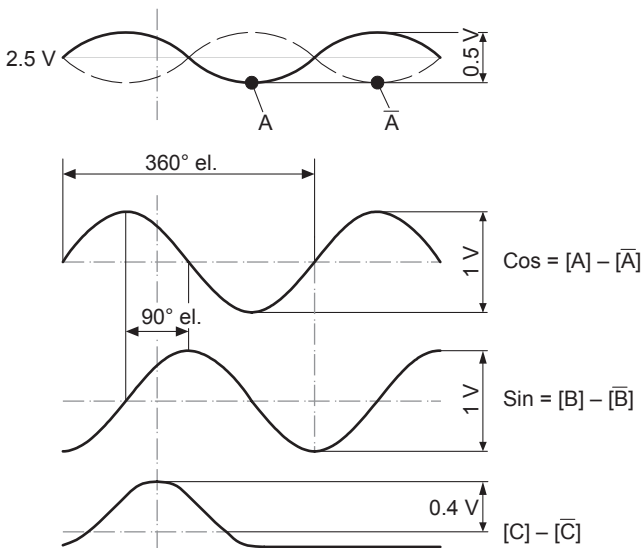
Terminal significance

+UB	Voltage supply
⊥	Ground
A	Output signal channel 1
A̅	Output signal channel 1 inverted
B	Output signal channel 2 (offset by 90° to channel 1)
B̅	Output signal channel 2 inverted
C	Zero pulse (reference signal)
C̅	Zero pulse inverted

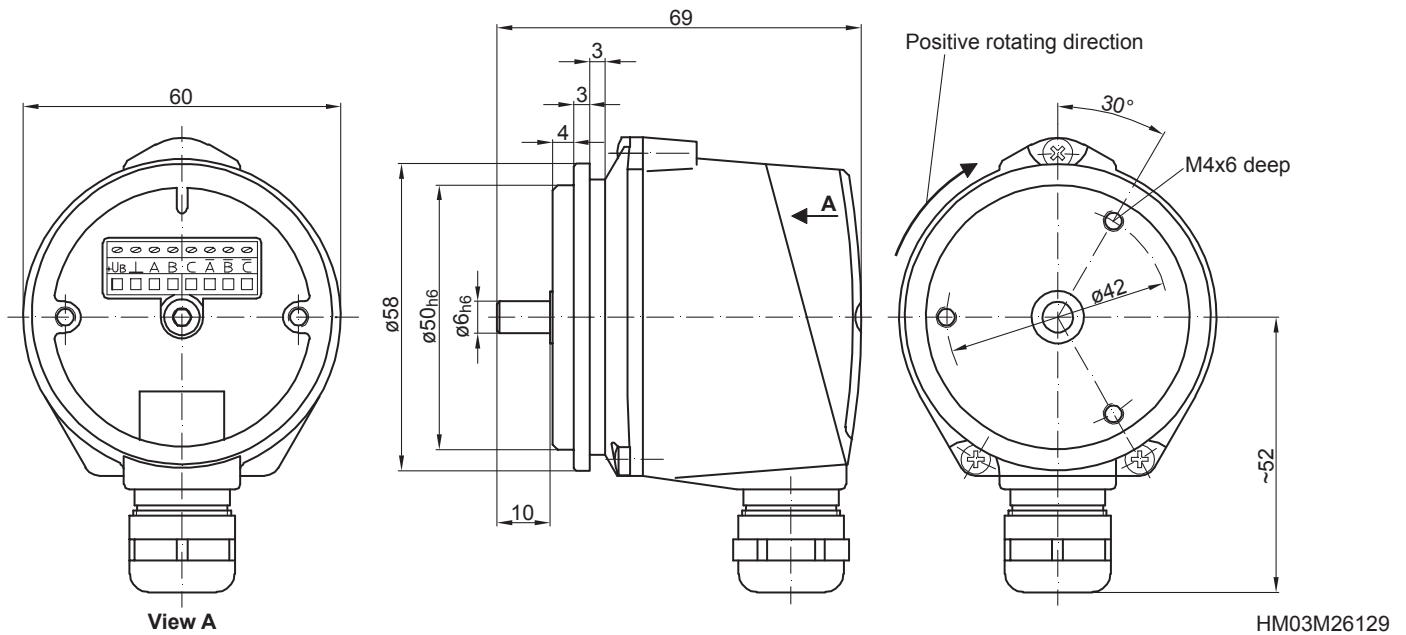
Output signals

SinCos

At positive rotating direction (see dimension)



Dimensions



OGS 71

Solid shaft with synchro flange
1024...5000 sinewave cycles per turn

Ordering reference

	OGS71	DN	####	#
Product				
Sine encoder	OGS71			
Output signals				
A, B, C		DN		
Sinewave cycles				
1024				1024
2048				2048
5000				5000
Voltage supply				
5 VDC				-
9...30 VDC				R

Accessories

Mounting accessories

Eccentric disks (clamping claws)