

# Sine encoders

## Shaft with synchro flange

### Resolution 1024...5000 pulses

#### OGS 71



OGS 71

#### Features

- Encoder with shaft  $\varnothing 6$  mm
- Resolution max. 5000 ppr
- Sine output signals 1 Vpp
- Low harmonic content (patented LowHarmonics technology)
- Compact, robust die-cast housing
- Inside connecting terminals
- High protection IP 66

#### Technical data - electrical ratings

Voltage supply	5 VDC $\pm 10$ % 9...30 VDC
Consumption w/o load	$\leq 90$ mA
Resolution (steps/turn)	1024...5000
Phase shift	$90^\circ$
Reference signal	Zero pulse, width $90^\circ$
Sensing method	Optical
Output signals	A, B, C + inverted
Output circuit	Sine 1 Vpp
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	UL approval / E256710
Spectrum	250 kHz (-3 dB)
Harmonics share approx.	-50 dB
Offset sine/cosine amplitude	$\leq 20$ mV
Overlying constant share	$\leq 20$ mV

#### Technical data - mechanical design

Housing	$\varnothing 60$ mm
Shaft	$\varnothing 6$ mm
Flange	Synchro flange
Protection DIN EN 60529	IP 66
Operating speed	$\leq 10000$ rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	25 gcm <sup>2</sup>
Admitted shaft load	$\leq 30$ N axial $\leq 40$ N radial
Materials	Housing: aluminium die-cast alloy Shaft: stainless steel
Operating temperature	$-20...+85$ °C
Resistance	DIN EN 60068-2-6 Vibration 10 g, 10-2000 Hz DIN EN 60068-2-27 Shock 300 g, 6 ms
Explosion protection	II3G Ex nA T4 X (gas) II3D Ex tD IP66 A22 T85°C X (dust)
Weight approx.	350 g
Connection	Terminal box

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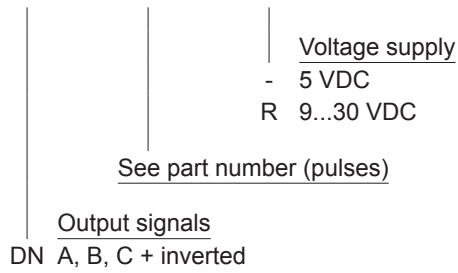
### Resolution 1024...5000 pulses

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#### Part number

OGS 71 

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#### Accessories

HENQ 1100  
Analyzer for encoders

Eccentric disks  
(clamping claws)

#### Connectors and cables

HEK 8      Sensor cable for encoders

#### Part number (pulses)

1024	2048	5000
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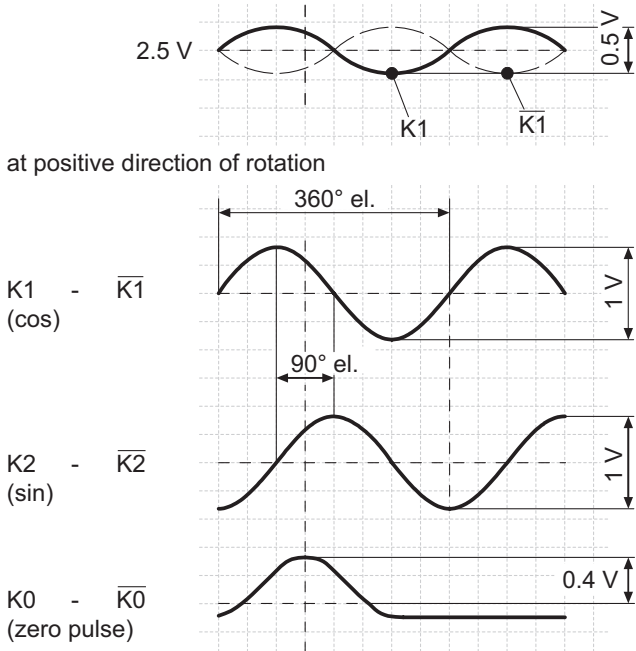
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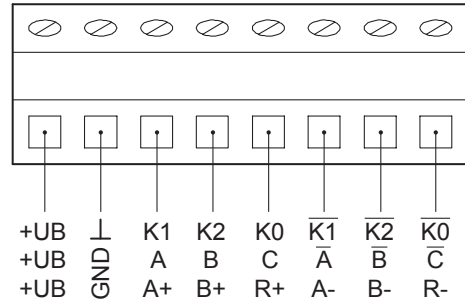
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#### Output signals

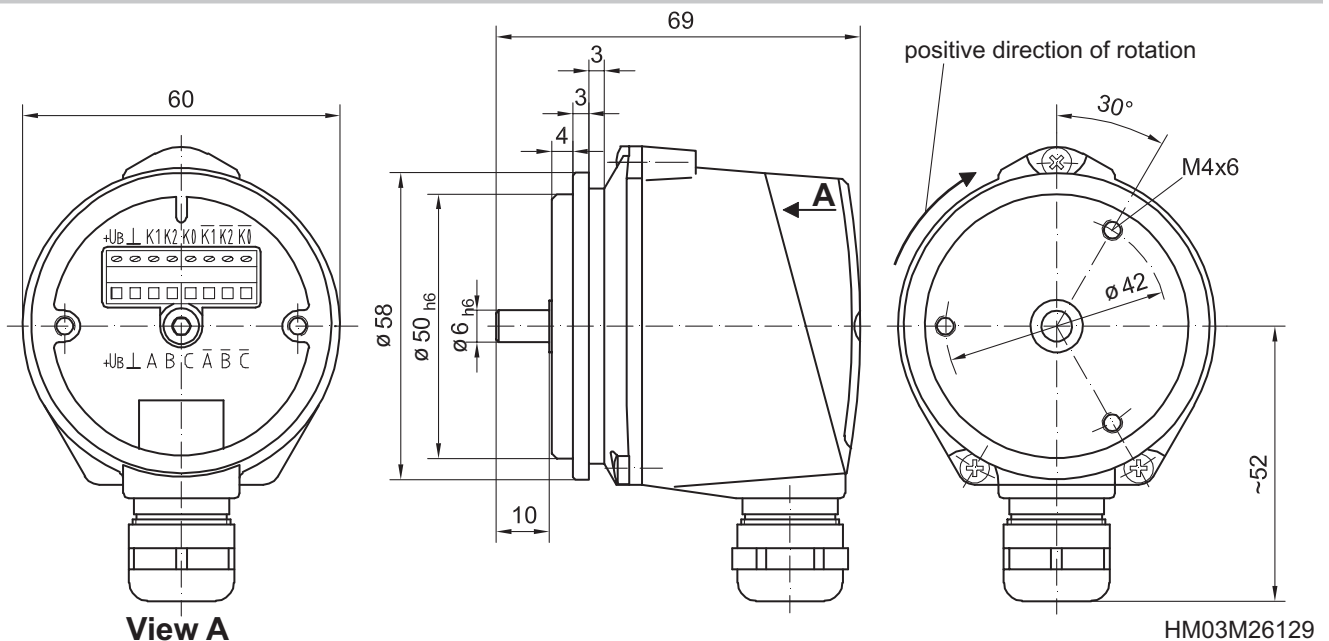


#### Terminal assignment

View A - Connecting terminal inside the encoder



#### Dimensions



Subject to modification in technic and design. Errors and omissions excepted.

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