

Sine encoders

SIL2 standard

End shaft $\varnothing 16$ mm, resolution 720...5000 pulses

HOGS 100 S



HOGS 100 S - SIL2 approval

Features

- For safety-relevant applications according SIL2
- Encoder with end shaft $\varnothing 16$ mm
- Resolution max. 5000 ppr
- Low harmonic content (patented LowHarmonics technology)
- Top-quality sine signals
- Protection against inductive shaft current
- Big terminal box, turn by 180° or axial terminal cover

Technical data - electrical ratings

Voltage supply	5 VDC ± 10 % 7...30 VDC
Consumption w/o load	≤ 90 mA
Resolution (steps/turn)	720...5000
Phase shift	90°
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output signals	K1, K2, K0 + inverted
Output circuit	Sine/cosine 1 Vpp
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	UL approval / E256710
Offset sine/cosine amplitude	≤ 20 mV
Harmonics share approx.	-50 dB
Spectrum	250 kHz (-3 dB)
Overlying constant share	≤ 20 mV

Technical data - mechanical design

Dimensions (flange)	$\varnothing 105$ mm
Shaft	$\varnothing 16$ mm end shaft
Shaft loading	≤ 250 N axial ≤ 400 N radial
Protection DIN EN 60529	IP 66
Operating speed	≤ 10000 rpm (mechanical)
Operating torque typ.	6 Ncm
Rotor moment of inertia	180 gcm ²
Materials	Housing: aluminium die-cast 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 100 g, 6 ms
Explosion protection	II 3G Ex nA T4 X (gas) II 3D Ex tD IP66 A22 T135°C X (dust)
Connection	Terminal box Terminal cover
Weight approx.	1.6 kg

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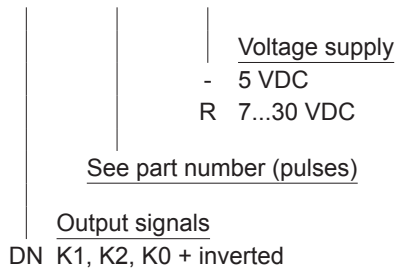
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Part number

HOGS 100 S **DN**



Accessories

Connectors and cables

HEK 8 Sensor cable for encoders

Mounting accessories

DMS 6 Torque arm size M6

Diagnostic accessories

HENQ 1100 Analyzer for encoders

Part number (pulses)

720 | 800 | 1024 | 2048 | 5000

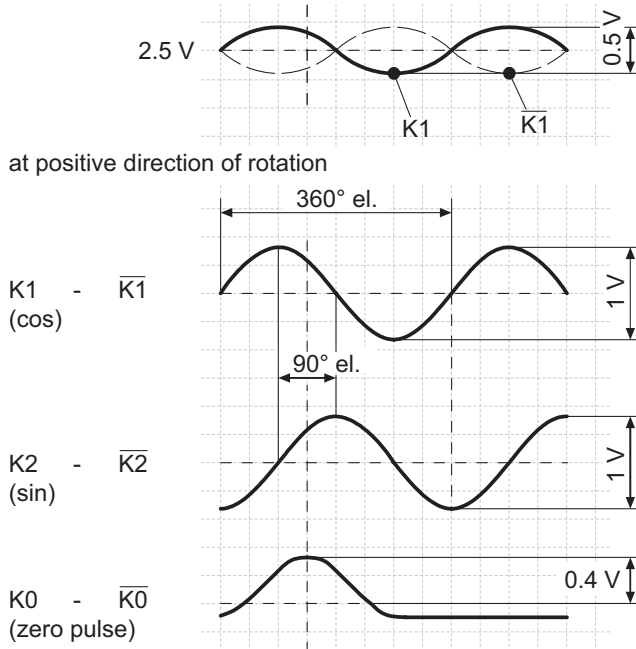
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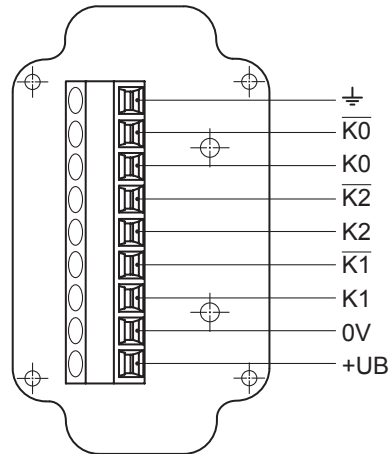
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Output signals

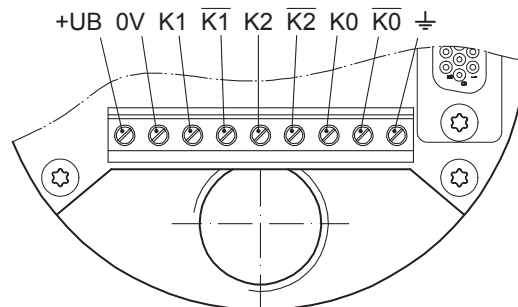


Terminal assignment

View A - Connecting terminal in radial terminal box



View B - Connecting terminal in axial terminal cover



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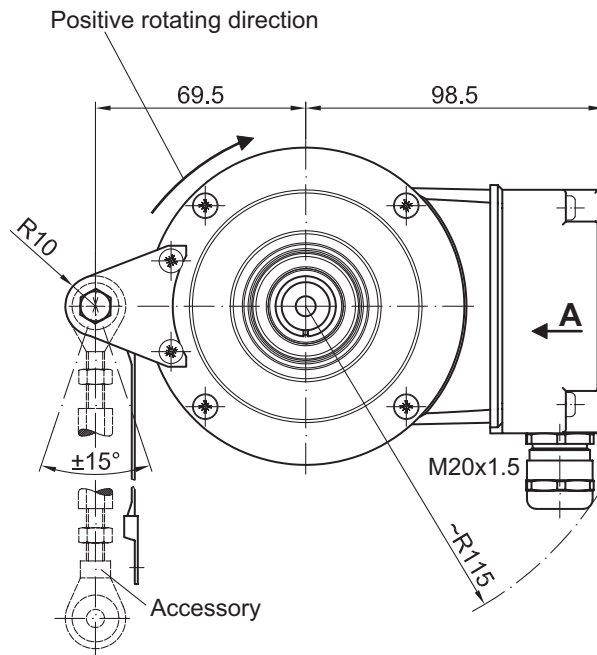
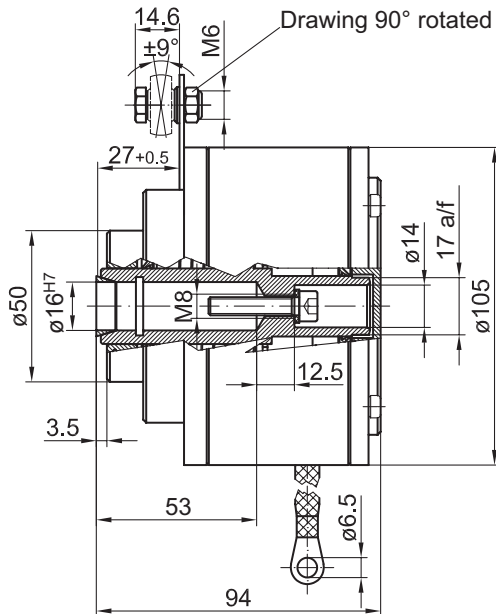
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Dimensions

Version with radial terminal box



Version with axial terminal cover

