

HOGS 75

Through hollow shaft $\varnothing 14 \dots 26$ mm
720...5000 sinewave cycles per turn

Overview

- Compact, robust aluminium housing
- Inside connecting terminals
- SinCos output-signals 1 Vpp
- Low harmonic content (patented LowHarmonics technology)
- Especially high resistance to vibrations
- Hybrid bearing for extended service life (HOGS 75 C)



Technical data

Technical data - electrical ratings

Voltage supply	5 VDC ± 10 % 9...26 VDC
Consumption w/o load	≤ 90 mA
Sinewave cycles per revolution	720 ... 5000
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	200 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)	$\varnothing 75$ mm
Shaft type	$\varnothing 14 \dots 26$ mm (through hollow shaft)
Admitted shaft load	≤ 80 N axial ≤ 150 N radial
Protection EN 60529	IP 56
Operating speed	≤ 10000 rpm (mechanical)
Starting torque	≤ 4 Ncm
Rotor moment of inertia	180 gcm ²
Material	Housing: aluminium Shaft: stainless steel
Operating temperature	-20...+70 °C
Resistance	IEC 60068-2-6 Vibration 48 g, 10-2000 Hz IEC 60068-2-27 Shock 200 g, 6 ms
Explosion protection	II 3 G Ex ec IIC T4 Gc (gas) II 3 D Ex tc IIIC T135°C Dc (dust) (only with option ATEX)
Connection	Connecting terminal
Weight approx.	580 g

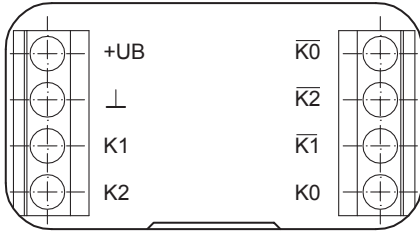
Optional

- Cable output

Terminal assignment

View A (see dimension)

Connecting terminal



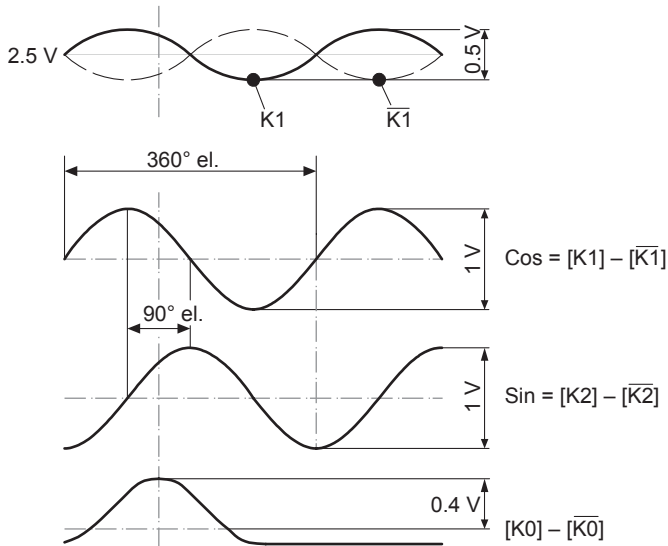
Terminal significance

+UB	Voltage supply
0V (⊥)	Ground
K1	Output signal channel 1
$\overline{K1}$	Output signal channel 1 inverted
K2	Output signal channel 2 (offset by 90° to channel 1)
$\overline{K2}$	Output signal channel 2 inverted
K0	Zero pulse (reference signal)
$\overline{K0}$	Zero pulse inverted

Output signals

SinCos

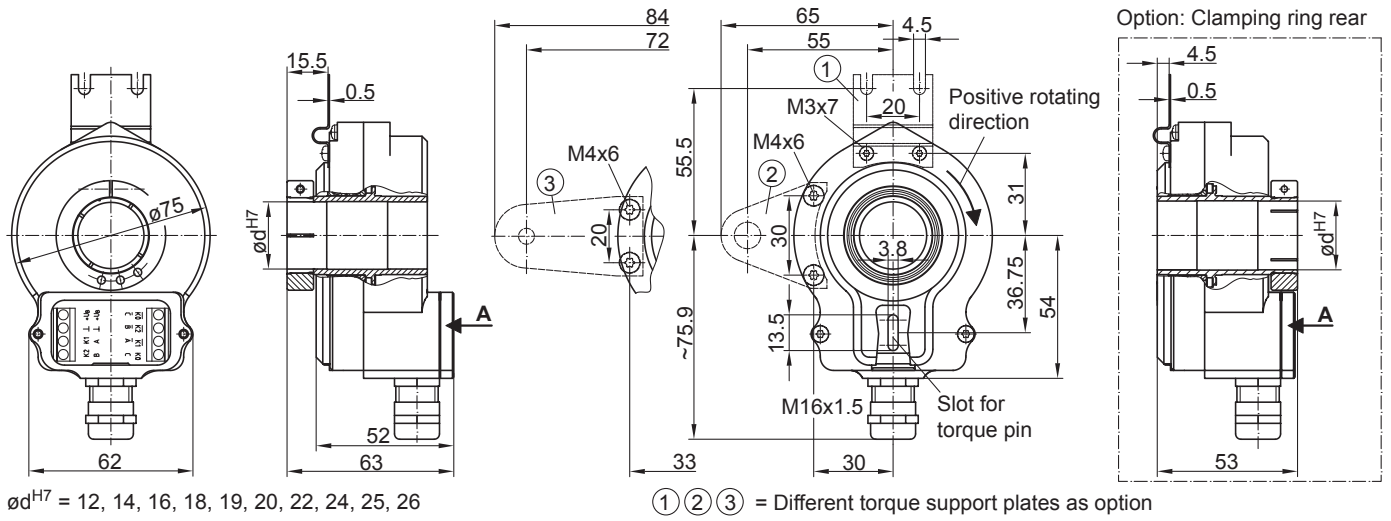
At positive rotating direction (see dimension)



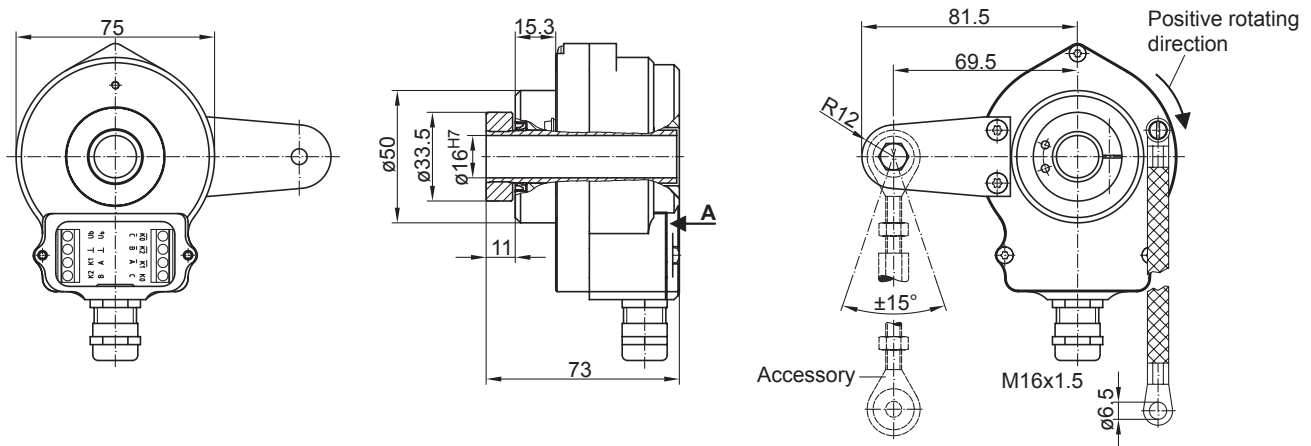
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Dimensions



HOGS 75 - With through hollow shaft without hybrid bearings



HOGS 75 C - With through hollow shaft and hybrid bearings

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Ordering reference

	HOGS75	#	DN	####	#	#####	#####
Product	Sine encoder	HOGS75					
Shaft type	Standard ball bearings						
	With hybrid bearings		C				
Output signals	K1, K2, K0		DN				
Sinewave cycles	720			720			
	1024			1024			
	2048			2048			
	5000			5000			
Voltage supply	5 VDC					-	
	9...26 VDC					R	
Shaft diameter	Through hollow shaft $\varnothing 12$ mm						12H7
	Through hollow shaft $\varnothing 14$ mm						14H7
	Through hollow shaft $\varnothing 16$ mm						16H7
	Through hollow shaft $\varnothing 18$ mm						18H7
	Through hollow shaft $\varnothing 19$ mm						19H7
	Through hollow shaft $\varnothing 20$ mm						20H7
	Through hollow shaft $\varnothing 24$ mm						24H7
	Through hollow shaft $\varnothing 22$ mm						22H7
	Through hollow shaft $\varnothing 25$ mm						25H7
	Through hollow shaft $\varnothing 26$ mm						26H7
Mounting type	Clamping ring in front (drive side)						KLR A
	Clamping ring rear						KLR B

Accessories

Mounting accessories

11043628	Torque arm M6, length 67...70 mm
11004078	Torque arm M6, length 120...130 mm (≥ 71 mm)
11002915	Torque arm M6, length 425...460 mm (≥ 131 mm)
11054917	Torque arm M6 insulated, length 67...70 mm
11072795	Torque arm M6 insulated, length 120...130 mm (≥ 71 mm)
11082677	Torque arm M6 insulated, length 425...460 mm (≥ 131 mm)