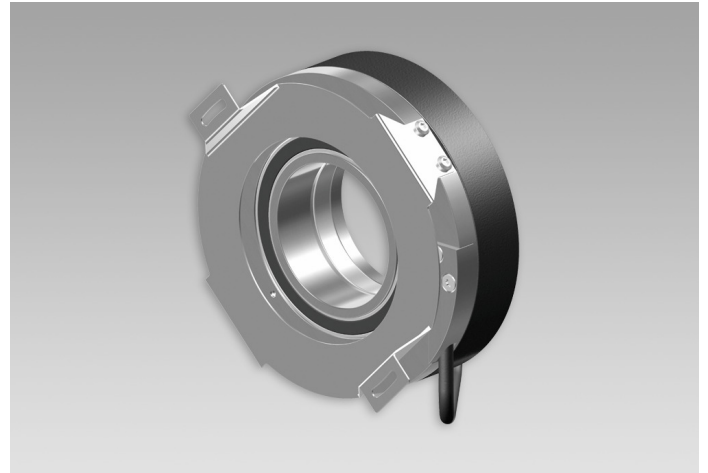


HOGS 151

Through hollow shaft up to $\varnothing 70$ mm
1024...5000 sinewave cycles per turn

Overview

- Through hollow shaft up to $\varnothing 70$ mm
- Up to 5000 sinewaves cycles per turn
- Low harmonic content (patented LowHarmonics technology)
- Top-quality SinCos output-signals



Technical data

Technical data - electrical ratings

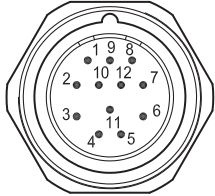
Voltage supply	5 VDC ± 10 % 9...26 VDC
Consumption w/o load	≤ 90 mA
Sinewave cycles per revolution	1024 ... 5000
Phase shift	90 °
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output signals	A+, B+, R+, A-, B-, R-
Output stages	SinCos 1 Vpp
Difference of SinCos amplitude	≤ 20 mV
Harmonics 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)	$\varnothing 168$ mm
Shaft type	$\varnothing 60$...70 mm (through hollow shaft)
Admitted shaft load	≤ 350 N axial ≤ 500 N radial
Protection EN 60529	IP 54
Operating speed	≤ 6300 rpm (mechanical)
Operating torque typ.	20 Ncm
Rotor moment of inertia	14.9 kgcm ² ($\varnothing 70$)
Material	Housing: aluminium Shaft: stainless steel
Operating temperature	-20...+85 °C
Resistance	IEC 60068-2-6 Vibration 10 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 IIIB T135°C Dc (dust) (only with option ATEX)
Connection	Cable 1 m Mating connector
Weight approx.	3.2 kg

Terminal assignment

View A (see dimension)



Mating connector M23
with outside screw thread
(male, 12-pin),
counter clockwise (CCW)

Pin	Assignment
1	B-
2	+UB (sensor)
3	R+
4	R-
5	A+
6	A-
7	dnu
8	B+
9	dnu
10	⊥
11	⊥ (sensor)
12	+UB

Assignment connecting cable

Wire colour	Assignment
Red	+UB
Blue	⊥
White	A+
Brown	A-
Green	B+
Yellow	B-
Grey	R+
Pink	R-
Black	⊥ (sensor, option)
Violet	+UB (sensor, option)

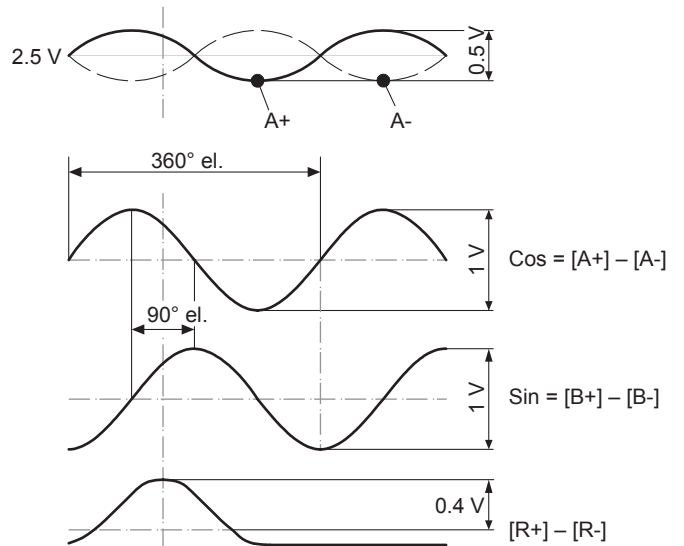
Terminal significance

+UB	Voltage supply
0V (⊥)	Ground
A+	Output signal channel 1
A-	Output signal channel 1 inverted
B+	Output signal channel 2 (offset by 90° to channel 1)
B-	Output signal channel 2 inverted
R+	Zero pulse (reference signal)
R-	Zero pulse inverted
dnu	Do not use

Output signals

SinCos

At positive rotating direction (see dimension)



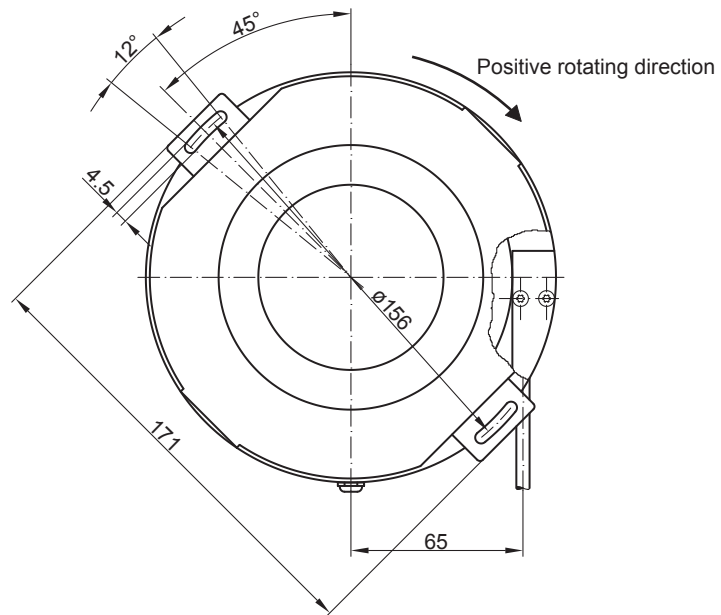
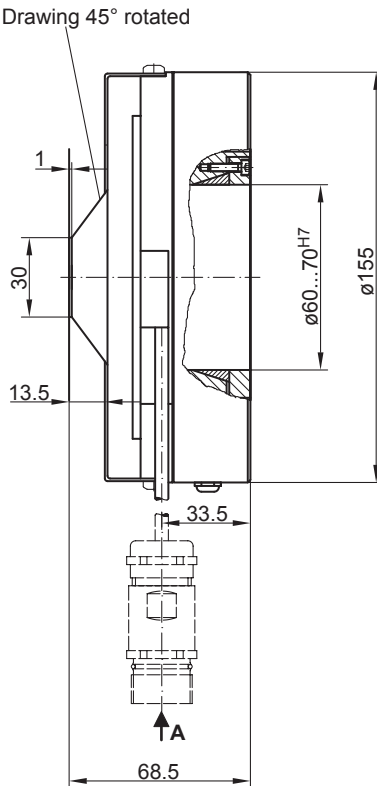
HOGS 151

Through hollow shaft up to $\varnothing 70$ mm

1024...5000 sinewave cycles per turn

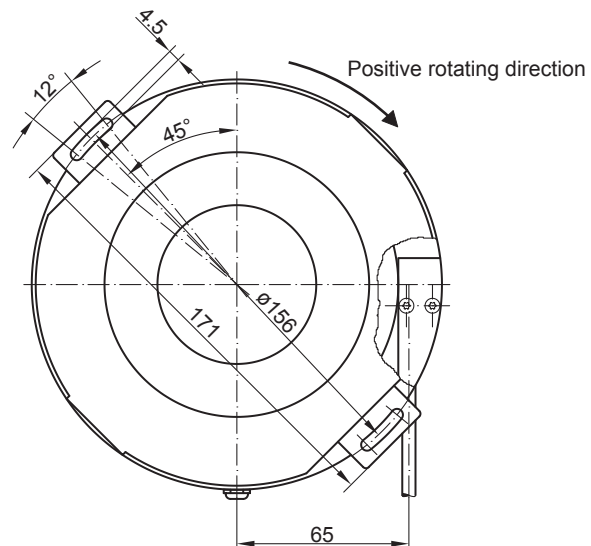
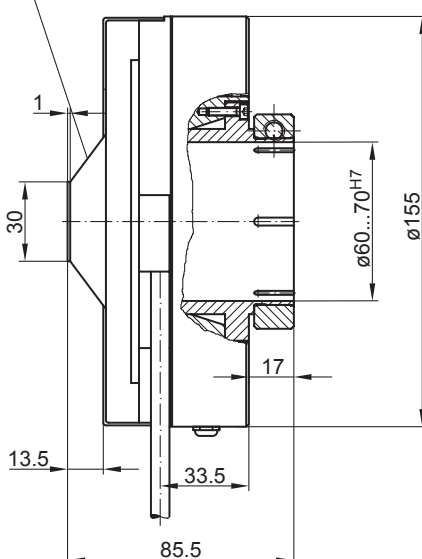
Dimensions

Drawing 45° rotated



Version with clamping set

Drawing 45° rotated



Version with clamping ring

HOGS 151

Through hollow shaft up to ø70 mm
 1024...5000 sinewave cycles per turn

Ordering reference

		HOGS151	DN	####	#	#####	#####
Product		Sine encoder	HOGS151				
Output signals		K1, K2, K0	DN				
Sinewave cycles		1024		1024			
		5000		5000			
Voltage supply		5 VDC			-		
		9...26 VDC			R		
Shaft diameter		Through hollow shaft ø60 mm				60H7	
		Through hollow shaft ø70 mm				70H7	
Mounting type		Clamping set					SP
		Clamping ring					KLR

Accessories

Diagnostic accessories

11075858	Analyzer for encoders HENQ 1100
11075880	Analyzer for encoders HENQ 1100 B