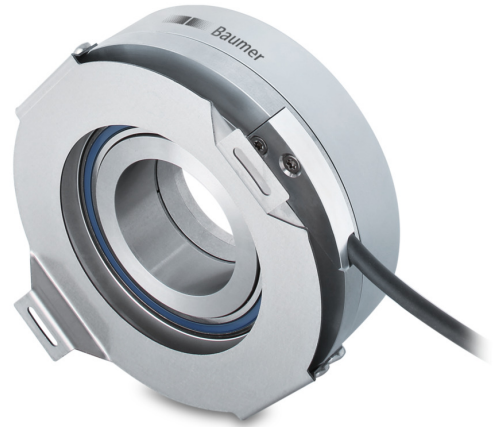


HOGS 151

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

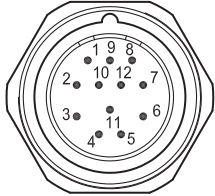
Voltage supply	5 VDC ± 10 % 9...26 VDC
Consumption w/o load	≤ 90 mA
Sinewave cycles per revolution	1024 ... 5000
Phase shift	90 °
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output signals	A+, B+, R+, A-, B-, R-
Output stages	SinCos 1 Vpp
Difference of SinCos amplitude	≤ 20 mV
Harmonics 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)

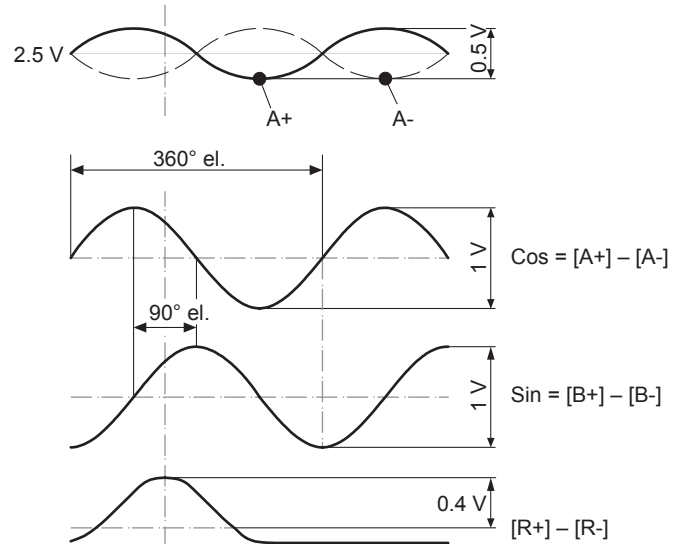
Terminal significance

+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)

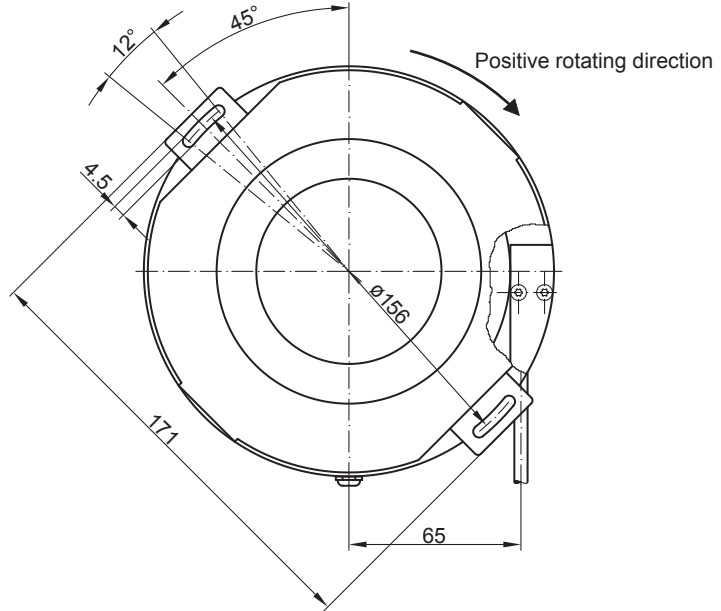
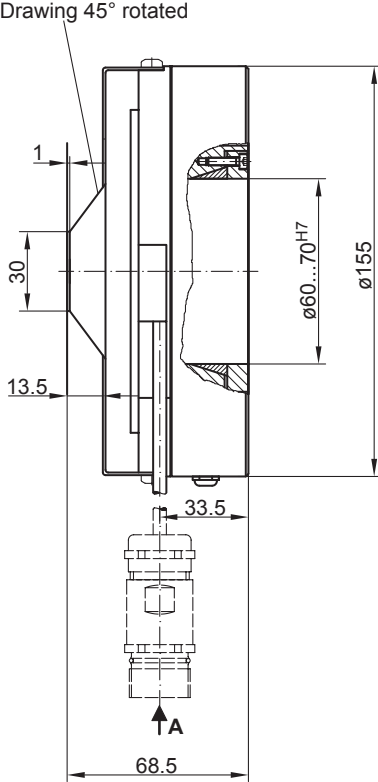


HOGS 151

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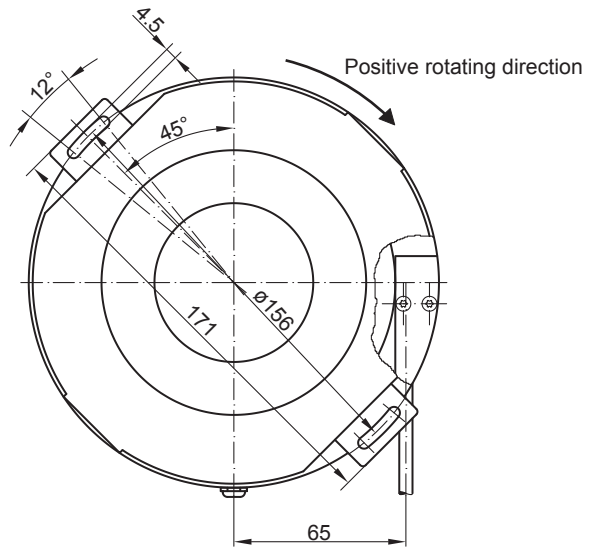
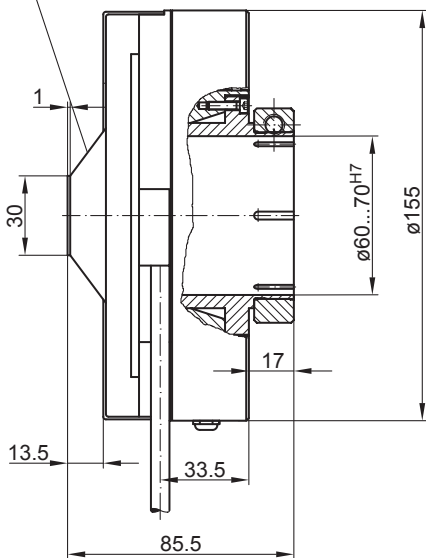
Dimensions

Drawing 45° rotated



Version with clamping set

Drawing 45° rotated



Version with clamping ring

HOGS 151

Through hollow shaft up to $\varnothing 70$ mm
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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 $\varnothing 60$ mm					60H7
	Through hollow shaft $\varnothing 70$ mm					70H7
Mounting type	Clamping set					SP
	Clamping ring					KLR