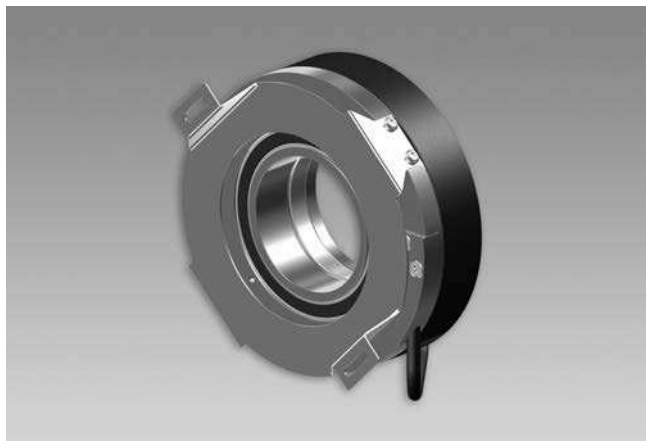


# Sine encoders

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

## HOGS 151



HOGS 151 with clamping set

### Features

- 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 - electrical ratings

Voltage supply	5 VDC $\pm 10$ % 9...26 VDC
Consumption w/o load	$\leq 90$ mA
Sinewave cycles per turn	1024...5000
Phase shift	$90^\circ$
Reference signal	Zero pulse, width $90^\circ$
Sensing method	Optical
Output signals	A+, B+, R+, A-, B-, R-
Output stages	SinCos 1 Vpp
Difference of SinCos amplitude	$\leq 20$ mV
Harmonics typ.	-50 dB
DC offset	$\leq 20$ mV
Bandwidth	200 kHz (-3 dB)
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approvals	CE, UL approval / E256710

### Technical data - mechanical design

Size (flange)	$\varnothing 168$ mm
Shaft type	$\varnothing 60...70$ mm (through hollow shaft)
Admitted shaft load	$\leq 350$ N axial $\leq 500$ N radial
Protection DIN EN 60529	IP 54
Operating speed	$\leq 6300$ rpm (mechanical)
Operating torque typ.	20 Ncm
Rotor moment of inertia	14.9 kgcm <sup>2</sup> ( $\varnothing 70$ )
Materials	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 nA IIC T4 Gc (gas) II 3 D Ex tc IIIB T135°C Dc (dust)
Connection	Cable 1 m Mating connector
Weight approx.	3.2 kg

# Sine encoders

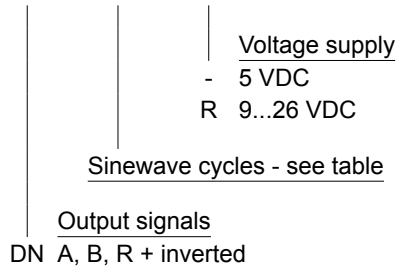
Through hollow shaft up to  $\varnothing 70$  mm  
1024...5000 sinewave cycles per turn

## HOGS 151

### Part number

HOGS 151 

DN			
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### Accessories

#### Diagnostic accessories

HENQ 1100 Analyzer for encoders

### Sinewave cycles

1024 | 5000

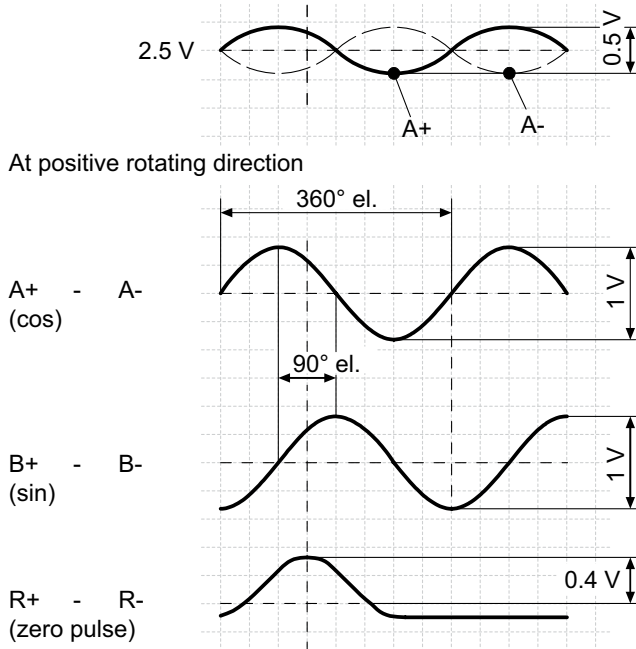
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## HOGS 151

### Output signals



### Terminal assignment

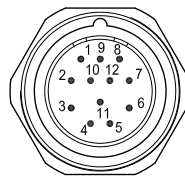
#### Cable assignment

Lead colour	Assignment
Red	+UB
Blue	GND
White	A+
Brown	A- (A+ inv.)
Green	B+
Yellow	B- (B+ inv.)
Grey	R+ (zero pulse)
Pink	R- (zero pulse inv.)
Black	Option: 0 V <sub>Sensor</sub>
Violet	Option: +UB <sub>Sensor</sub>

#### View A

Mating connector M23 with outside screw thread, 12 pins, male contacts, counter clockwise

Pin	Assignment
Pin 1	B- (B+ inv.)
Pin 2	+UB <sub>Sensor</sub>
Pin 3	R+ (zero pulse)
Pin 4	R- (zero pulse inv.)
Pin 5	A+
Pin 6	A- (A+ inv.)
Pin 7	do not use
Pin 8	B+
Pin 9	do not use
Pin 10	0 V
Pin 11	0 V <sub>Sensor</sub>
Pin 12	+UB



# Sine encoders

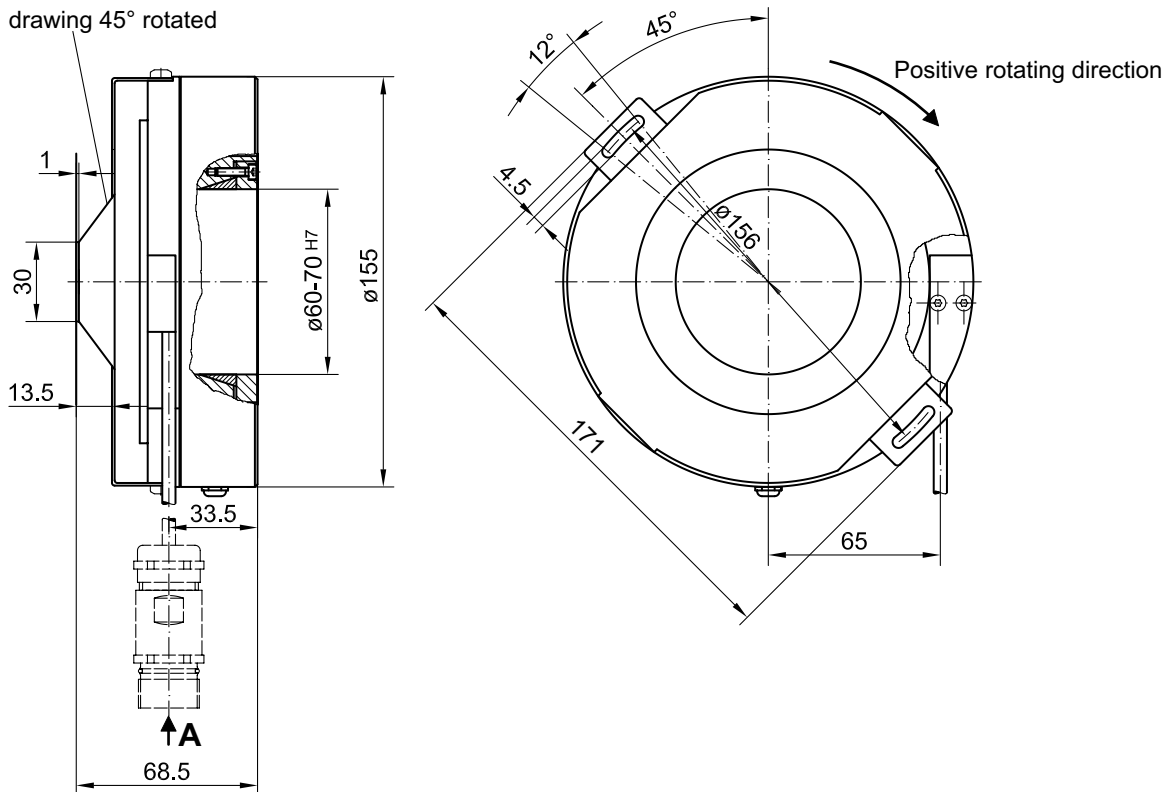
Through hollow shaft up to  $\varnothing 70$  mm  
1024...5000 sinewave cycles per turn

HOGS 151

## Dimensions

### Version with clamping set

drawing 45° rotated



### Version with clamping ring

drawing 45° rotated

