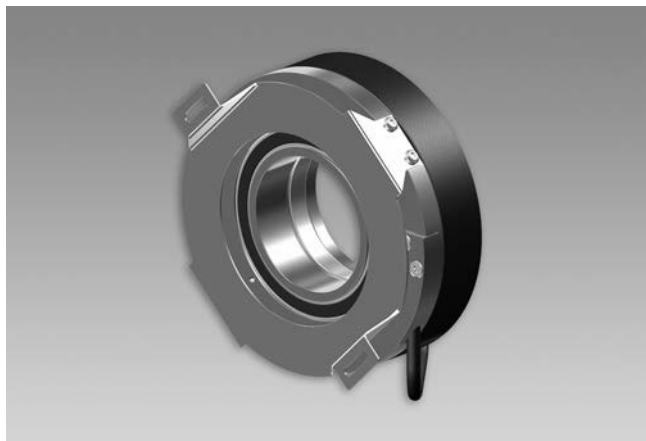


Sine encoders

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 ± 10 % 9...26 VDC
Consumption w/o load	≤ 90 mA
Sinewave cycles per turn	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
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	≤ 350 N axial ≤ 500 N radial
Protection DIN EN 60529	IP 54
Operating speed	≤ 6300 rpm (mechanical)
Operating torque typ.	20 Ncm
Rotor moment of inertia	14.9 kgcm ² ($\varnothing 70$)
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

· Subject to modification in technic and design. Errors and omissions excepted.

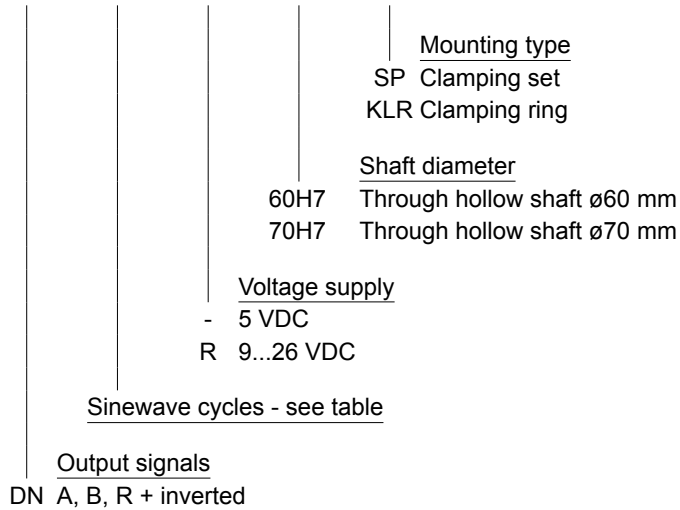
Sine encoders

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

HOGS 151

Part number

HOGS151 **DN**



Sinewave cycles

1024 | 5000

Accessories

Diagnostic accessories

HENQ 1100 Analyzer for encoders

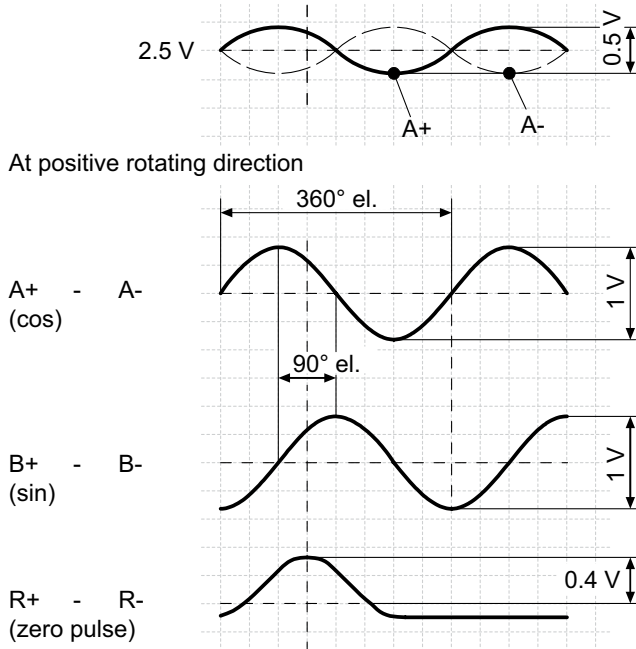
Sine encoders

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HOGS 151

Output signals



Terminal assignment

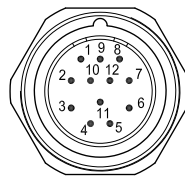
Cable assignment

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 _{Sensor}
Violet	Option: +UB _{Sensor}

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 _{Sensor}
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 _{Sensor}
Pin 12	+UB



Sine encoders

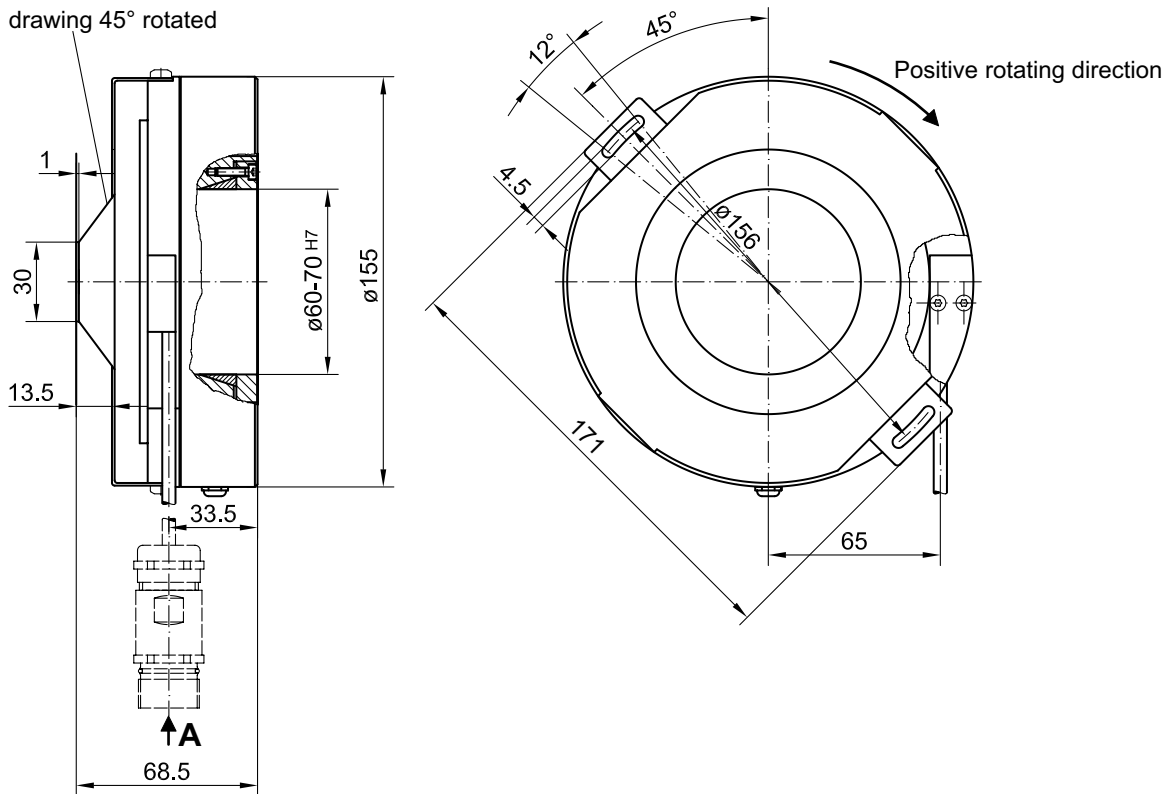
Through hollow shaft up to $\varnothing 70$ mm
1024...5000 sinewave cycles per turn

HOGS 151

Dimensions

Version with clamping set

drawing 45° rotated



Version with clamping ring

drawing 45° rotated

