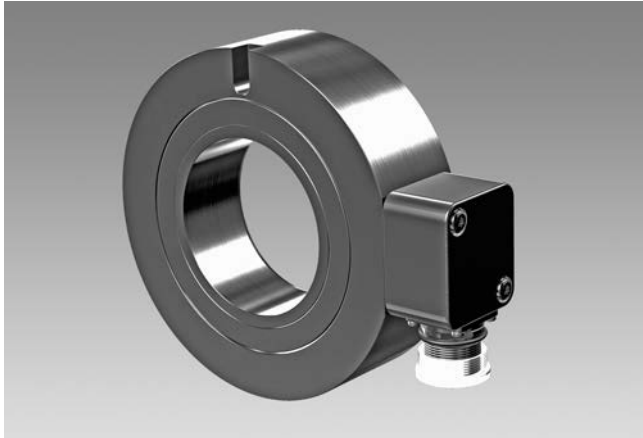


Incremental encoders

Through hollow shaft $\varnothing 70$ mm
250...2500 pulses per revolution

AG 14



AG 14

Features

- Robust encoder with through hollow shaft $\varnothing 70$ mm
- Optical sensing method
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...26 VDC
- For elevator drives ideal
- High resistance to shock and vibrations
- Short overall length

Technical data - electrical ratings

Voltage supply	9...26 VDC 5 VDC ± 5 %
Consumption w/o load	≤ 100 mA
Pulses per revolution	250...2500
Phase shift	$90^\circ \pm 20^\circ$
Duty cycle	40...60 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 120 kHz
Output signals	K1, K2, K0 + inverted
Output stages	HTL TTL/RS422
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approvals	CE, UL approval / E256710

Technical data - mechanical design

Size (flange)	$\varnothing 139$ mm
Shaft type	$\varnothing 70$ mm (through hollow shaft)
Admitted shaft load	≤ 75 N axial ≤ 150 N radial
Protection DIN EN 60529	IP 54
Operating speed	≤ 3500 rpm (mechanical)
Operating torque typ.	10 Ncm
Rotor moment of inertia	7.1 kgcm ²
Material	Aluminium, bare
Operating temperature	-20...+85 °C
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 100 g, 11 ms
Connection	Flange connector M23, 12-pin
Weight approx.	1.2 kg

Incremental encoders

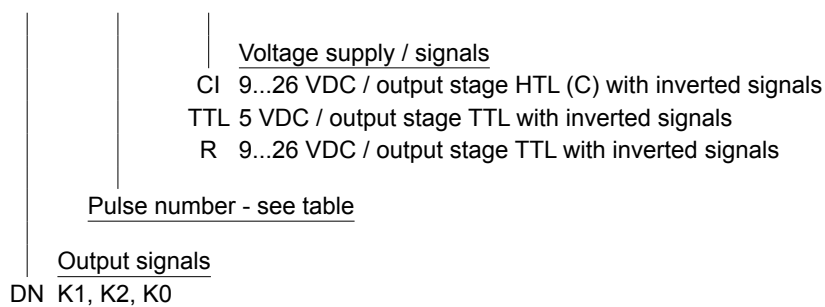
Through hollow shaft $\varnothing 70$ mm
250...2500 pulses per revolution

AG 14

Part number

Incremental encoder

AG14 **DN**



Pulse number

250 | 500 | 1024 | 2048 | 2500

Other pulse numbers on request.

Accessories

Connectors and cables

HEK 8	Sensor cable for encoders
11068549	Mating connector M23, solder version, 12-pin, CW

Diagnostic accessories

11075858	Analyzer for encoders HENQ 1100
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Incremental encoders

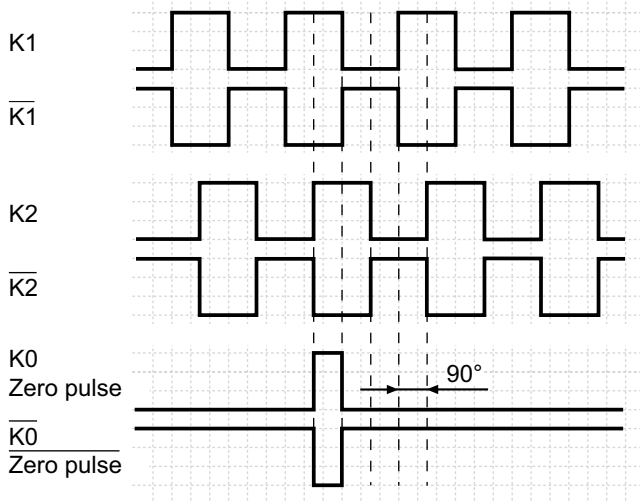
Through hollow shaft $\varnothing 70$ mm

250...2500 pulses per revolution

AG 14

Output signals

At positive rotating direction



Terminal assignment

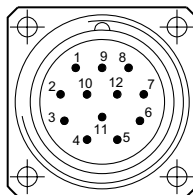
View A

Flange connector M23, 12-pin, male, CCW

Pin	Assignment
1	$\overline{K2}$
2	dnu
3	K0
4	$\overline{K0}$
5	K1
6	$\overline{K1}$
7	dnu
8	K2
9	dnu
10	\perp
11	dnu
12	+UB

Terminal significance

+UB	Voltage supply (for the device)
\perp ; \downarrow ; GND; 0 V	Ground (for the signals)
\oplus ; \rightarrow	Earth ground (housing)
K1; A; A+	Output signal channel 1
$\overline{K1}$; \overline{A} ; A-	Output signal channel 1 inverted
K2; B; B+	Output signal channel 2 (offset by 90° to channel 1)
$\overline{K2}$; \overline{B} ; B-	Output signal channel 2 (offset by 90° to channel 1) inverted
K0; C; R; R+	Zero pulse (reference signal)
$\overline{K0}$; \overline{C} ; \overline{R} ; R-	Zero pulse (reference signal) inverted
dnu	Do not use

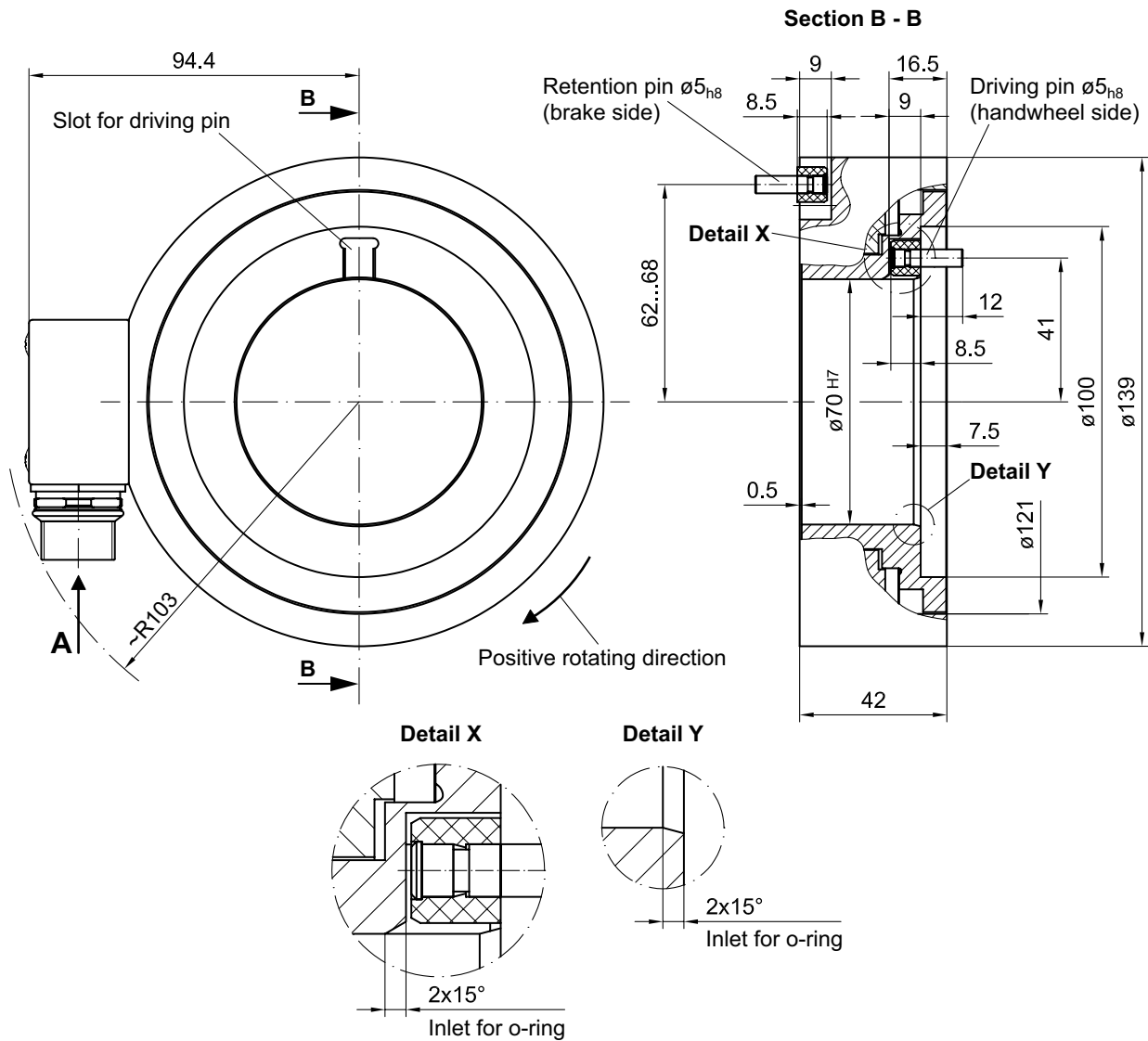


Incremental encoders

Through hollow shaft $\varnothing 70$ mm
250...2500 pulses per revolution

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Dimensions



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