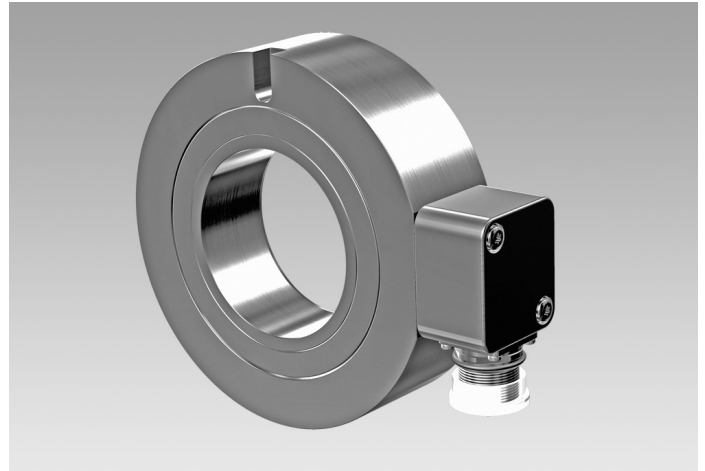


AG 14

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

Overview

- 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



HUBNER
BERLIN
A Baumer Brand

Technical data

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
Approval	CE UL approval / E217823

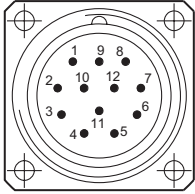
Technical data - mechanical design

Size (flange)	$\varnothing 139$ mm
Shaft type	$\varnothing 70$ mm (through hollow shaft)
Admitted shaft load	≤ 75 N axial ≤ 150 N radial
Protection 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	$-20...+85^\circ\text{C}$
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

Terminal assignment

View A (see dimension)

Assignment flange connector



Flange connector M23,
male, 12-pin,
counter-clockwise (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	0V (\perp)
11	dnu
12	+UB

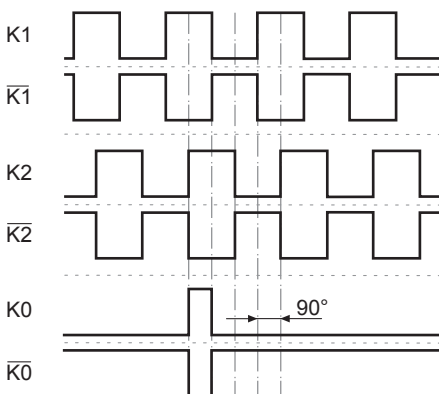
Terminal significance

+UB	Voltage supply
0V (\perp)	Ground
K1	Output signal channel 1
$\overline{K1}$	Output signal channel 1 inverted
K2	Output signal channel 2 (offset by 90° to channel 1)
$\overline{K2}$	Output signal channel 2 inverted
K0	Zero pulse (reference signal)
$\overline{K0}$	Zero pulse inverted

Output signals

HTL/TTL

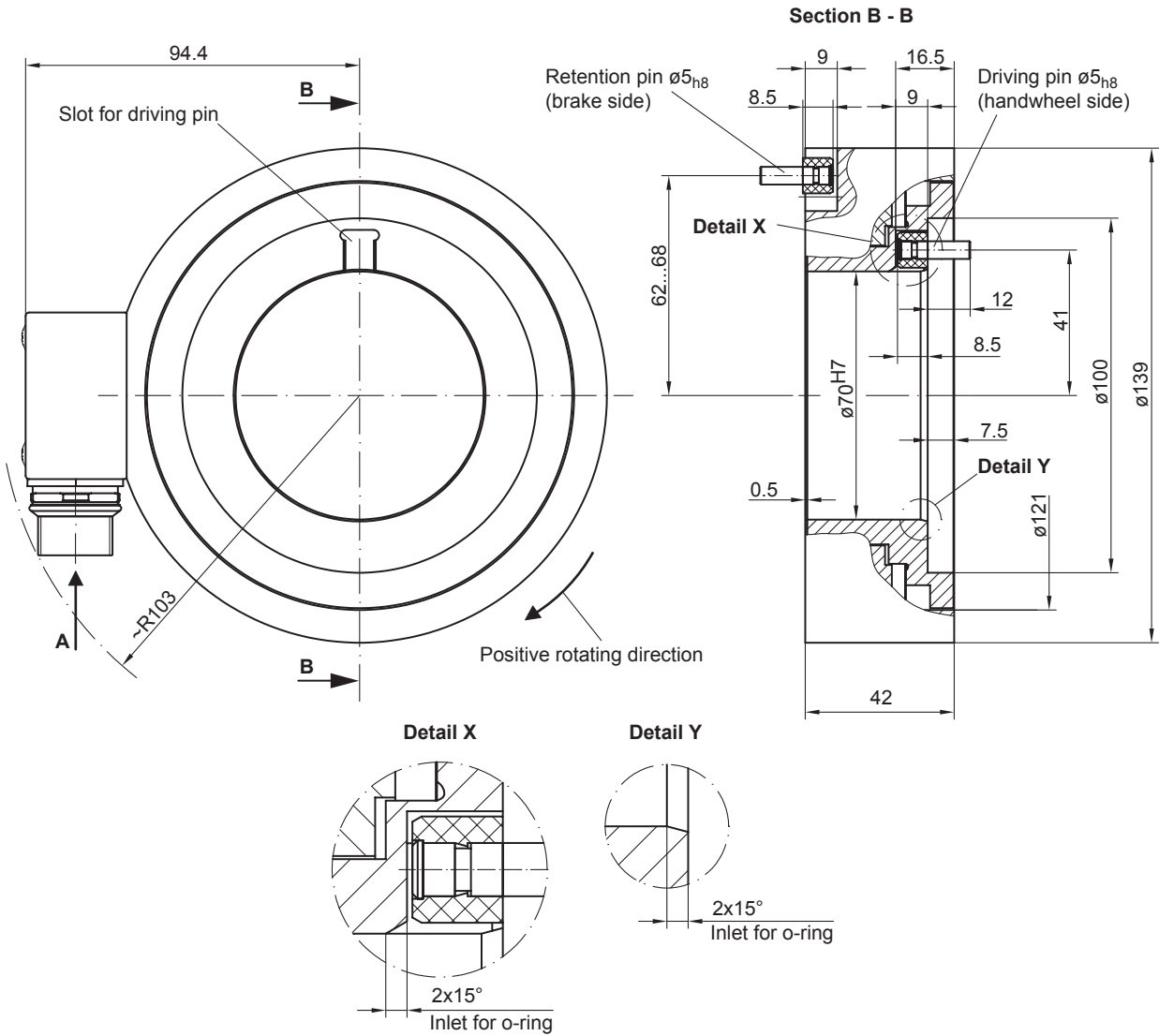
At positive rotating direction (see dimension)



AG 14

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

Dimensions



AG 14

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

Ordering reference

	AG14	DN	####	###
Product				
Incremental encoder	AG14			
Output signals				
K1, K2, K0		DN		
Pulse number⁽¹⁾				
250			250	
500			500	
1024			1024	
2048			2048	
2500			2500	
Voltage supply / output stage				
9...26 VDC / output stage HTL (C) with inverted signals				CI
5 VDC / output stage TTL with inverted signals				TTL
9...30 VDC / output stage TTL with inverted signals				R

(1) Other pulse numbers on request.