Baumer
Passion for Sensors

Incremental encoders

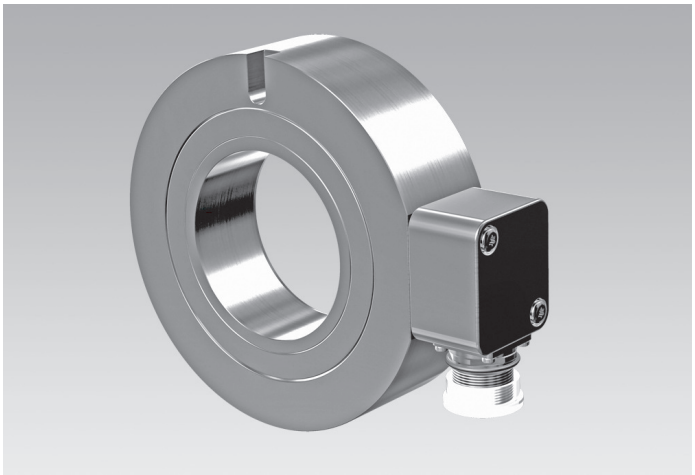
AG 14

Through hollow shaft ø70 mm

250...2500 pulses per revolution

Overview

- Robust encoder with through hollow shaft ø70 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



HTL TTL®

HÜBNER 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 ° ±20°
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)	ø139 mm
Shaft type	ø70 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 kgcm²
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

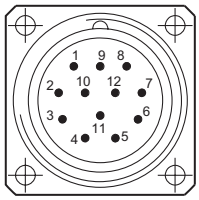
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Terminal assignment

View A *(see dimension)*
Assignment flange connector



Flange connector M23,
male, 12-pin,
counter-clockwise (CCW)

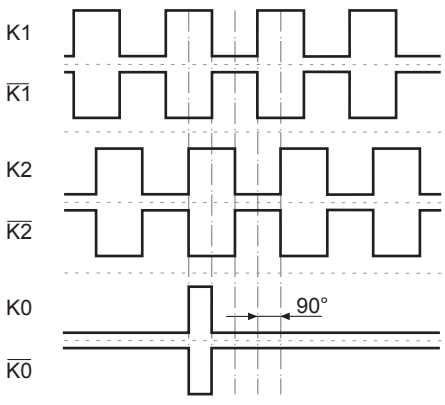
Pin	Assignment
1	$\overline{K2}$
2	dnu
3	K0
4	$\overline{K0}$
5	K1
6	$\overline{K1}$
7	dnu
8	K2
9	dnu
10	0V (⊥)
11	dnu
12	+UB

Terminal significance

+UB	Voltage supply
0V (⊥)	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)*



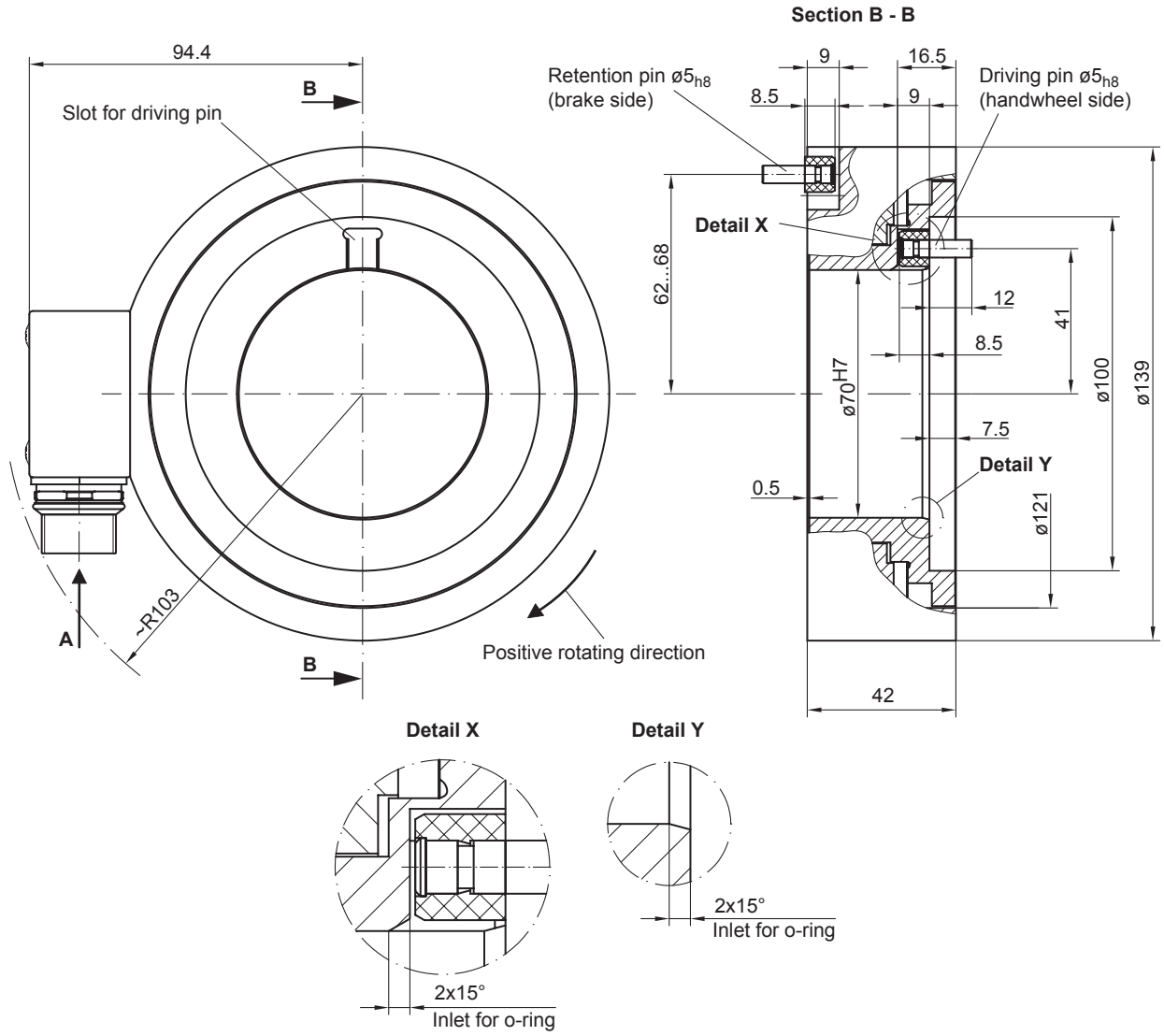
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Dimensions



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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 / HTL (C)				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.

Accessories

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

Diagnostic accessories	
11075858	Analyzer for encoders HENQ 1100
11075880	Analyzer for encoders HENQ 1100 B

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