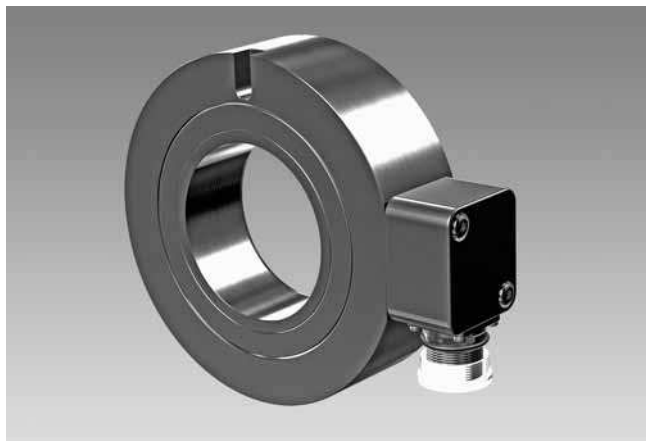


Incremental encoders

Hollow shaft $\varnothing 70$ mm

Resolution 250...2500 pulses

AG 14



AG 14

Features

- Robust incremental encoder with hollow shaft $\varnothing 70$ mm
- Optical sensing
- Logic level HTL with power linedriver
- Logic level 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	5 VDC ± 5 % 9...26 VDC
Consumption w/o load	≤ 100 mA
Resolution (steps/turn)	250...2500
Phase shift	$90^\circ \pm 20^\circ$
Scan ratio	40...60 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 120 kHz
Output signals	K1, K2, K0 + inverted
Output circuit	TTL (RS422) HTL (power linedriver)
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approvals	UL approval / E256710, ROHS compliant

Technical data - mechanical design

Dimensions (flange)	$\varnothing 139$ mm
Shaft	$\varnothing 70$ mm hollow shaft
Shaft loading	≤ 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	DIN EN 60068-2-6 Vibration 10 g, 10-2000 Hz DIN EN 60068-2-27 Shock 100 g, 11 ms
Connection	Connector M23, 12-pin
Weight approx.	1.2 kg

Incremental encoders

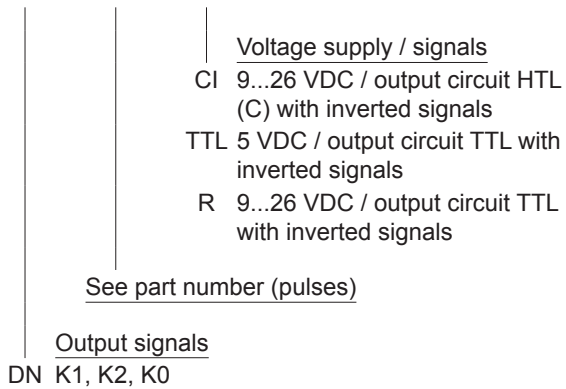
Hollow shaft $\varnothing 70$ mm

Resolution 250...2500 pulses

AG 14

Part number

AG 14 **DN** | | | |



Accessories

Connectors and cables

HEK 8	Sensor cable for encoders
11068549	Mating connector M23 clockwise

Diagnostic accessories

HENQ 1100	Analyzer for encoders
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Part number (pulses)

250 | 500 | 1024 | 2048 | 2500

Other pulse numbers upon request.

Incremental encoders

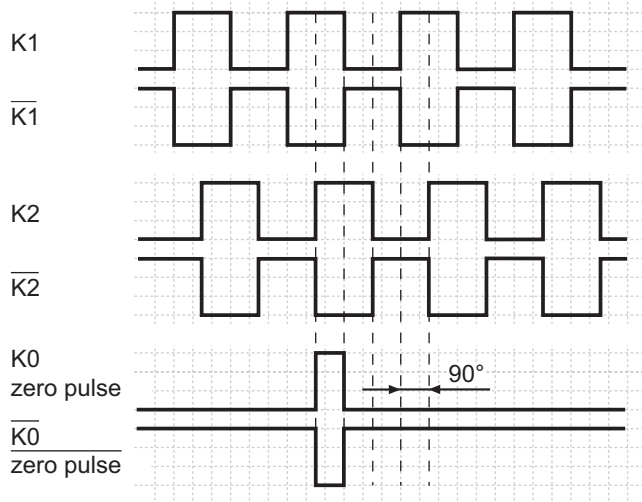
Hollow shaft $\varnothing 70$ mm

Resolution 250...2500 pulses

AG 14

Output signals

at positive rotating direction

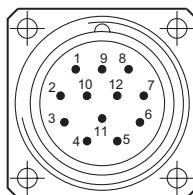


Terminal assignment

View A

Flange socket M23, male contacts, counter clockwise

Male	Assignment
Pin 1	$\overline{K2}$ (K2 inv.)
Pin 2	n.c.
Pin 3	K0 (zero pulse)
Pin 4	$\overline{K0}$ (zero pulse inv.)
Pin 5	K1
Pin 6	$\overline{K1}$ (K1 inv.)
Pin 7	n.c.
Pin 8	K2
Pin 9	n.c.
Pin 10	GND
Pin 11	n.c.
Pin 12	+UB



Incremental encoders

Hollow shaft $\varnothing 70$ mm

Resolution 250...2500 pulses

AG 14

Dimensions

