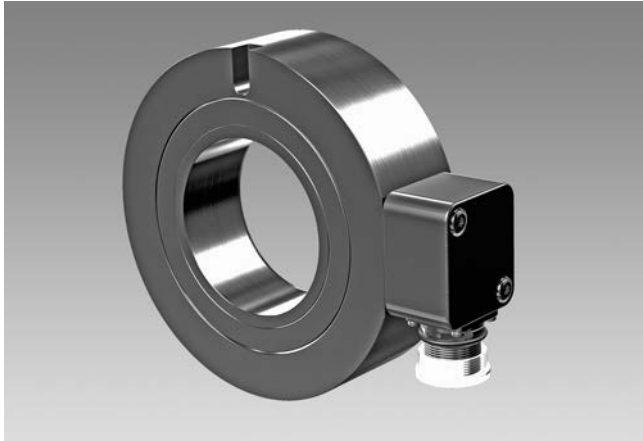


# Incremental encoders

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 $\pm 5$ %
Consumption w/o load	$\leq 100$ mA
Pulses per revolution	250...2500
Phase shift	$90^\circ \pm 20^\circ$
Scan ratio	40...60 %
Reference signal	Zero pulse, width $90^\circ$
Sensing method	Optical
Output frequency	$\leq 120$ 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	$\leq 75$ N axial $\leq 150$ N radial
Protection DIN EN 60529	IP 54
Operating speed	$\leq 3500$ rpm (mechanical)
Operating torque typ.	10 Ncm
Rotor moment of inertia	7.1 kgcm <sup>2</sup>
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

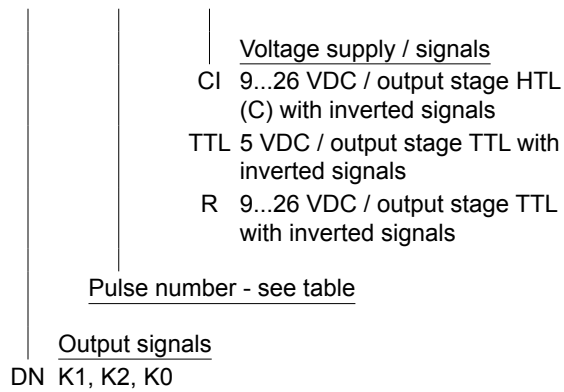
Through hollow shaft  $\varnothing 70$  mm  
250...2500 pulses per revolution

AG 14

## Part number

### Incremental encoder

AG14 **DN**



## Accessories

### Connectors and cables

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

### Diagnostic accessories

HENQ 1100	Analyzer for encoders
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## Pulse number

250 | 500 | 1024 | 2048 | 2500

Other pulse numbers on request.

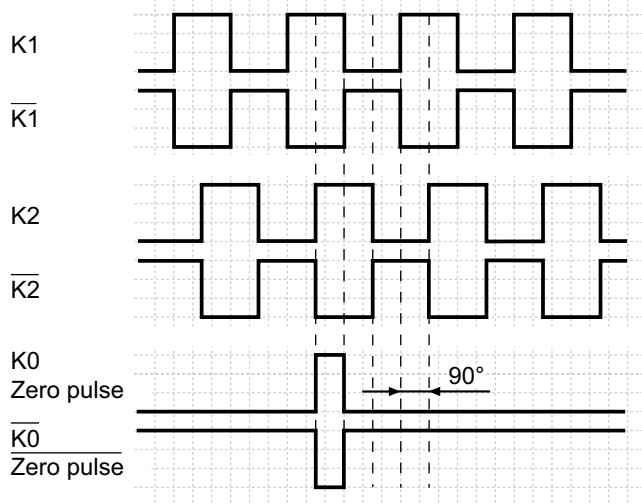
# Incremental encoders

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## AG 14

### Output signals

At positive rotating direction

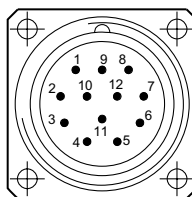


### Terminal assignment

#### View A

Flange connector M23, 12 pin, male contacts, CCW

Pin	Assignment
1	$\overline{K2}$ (K2 inv.)
2	Do not use
3	K0 (Zero pulse)
4	$\overline{K0}$ (Zero pulse inv.)
5	K1
6	$\overline{K1}$ (K1 inv.)
7	Do not use
8	K2
9	Do not use
10	0 V
11	Do not use
12	+UB



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## Dimensions

