

# Incremental encoders

Shaft with EURO flange B10

Resolution 1...1250 pulses

OG 9



OG 9

## Features

- Encoder with shaft  $\varnothing 11$  mm
- Optical sensing
- EURO flange B10
- Logic level TTL with regulator UB 9...26 VDC
- Logic level HTL with power linedriver
- Temperature max. +100 °C

## Technical data - electrical ratings

Voltage supply	5 VDC $\pm 5$ % 9...26 VDC 9...30 VDC
Consumption w/o load	$\leq 100$ mA
Resolution (steps/turn)	1...1250
Phase shift	90° $\pm 20$ °
Scan ratio	40...60 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	$\leq 120$ 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
Approval	UL approval / E256710

## Technical data - mechanical design

Dimensions (flange)	$\varnothing 85$ mm
Shaft	$\varnothing 11$ mm
Shaft loading	$\leq 250$ N axial $\leq 350$ N radial
Flange	EURO flange B10
Protection DIN EN 60529	IP 55
Operating speed	$\leq 12000$ rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	280 gcm <sup>2</sup>
Materials	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-30...+100 °C
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 100 g, 6 ms
Explosion protection	II3G Ex nA IIC T4 Gc (gas) II3D Ex tc IIIB T135°C Dc (dust)
Connection	Terminal box
Weight approx.	900 g

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## Part number

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### Voltage supply / signals

- 9...30 VDC / output circuit HTL
- I 9...30 VDC / output circuit HTL with inverted signals (for output signals D and DN)
- TTL 5 VDC / output circuit TTL with inverted signals (for output signals D and DN)
- R 9...26 VDC / output circuit TTL with inverted signals (for output signals DN)

See part number (pulses)

### Output signals

- E K1
- D K1, K2
- DN K1, K2, K0

## Accessories

### Connectors and cables

HEK 8 Sensor cable for encoders

### Mounting accessories

K 35 Spring disk coupling for shaft  $\varnothing 6...12$  mm

K 50 Spring disk coupling for shaft  $\varnothing 11...16$  mm

K 60 Spring disk coupling for shaft  $\varnothing 11...22$  mm

### Diagnostic accessories

HENQ 1100 Analyzer for encoders

## Part number (pulses)

1	15	64	200	900
2	16	72	240	1000
3	20	80	250	1006
4	25	100	256	1024
5	26	112	300	1042
6	30	120	360	1200
7	36	128	400	1250
8	40	150	500	
10	45	176	512	
11	50	180	600	
12	60	192	720	

Other pulse numbers upon request.

# Incremental encoders

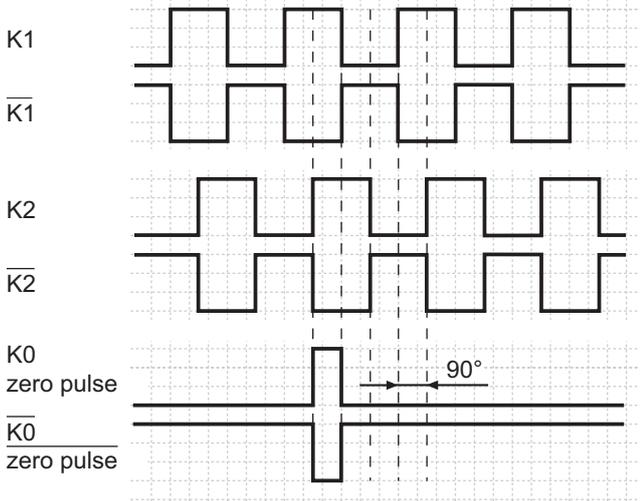
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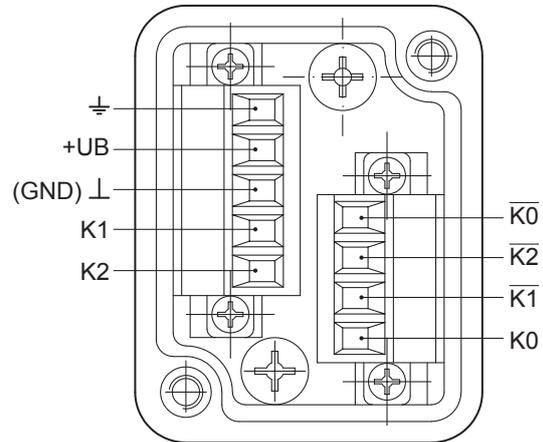
### Output signals

at positive rotating direction

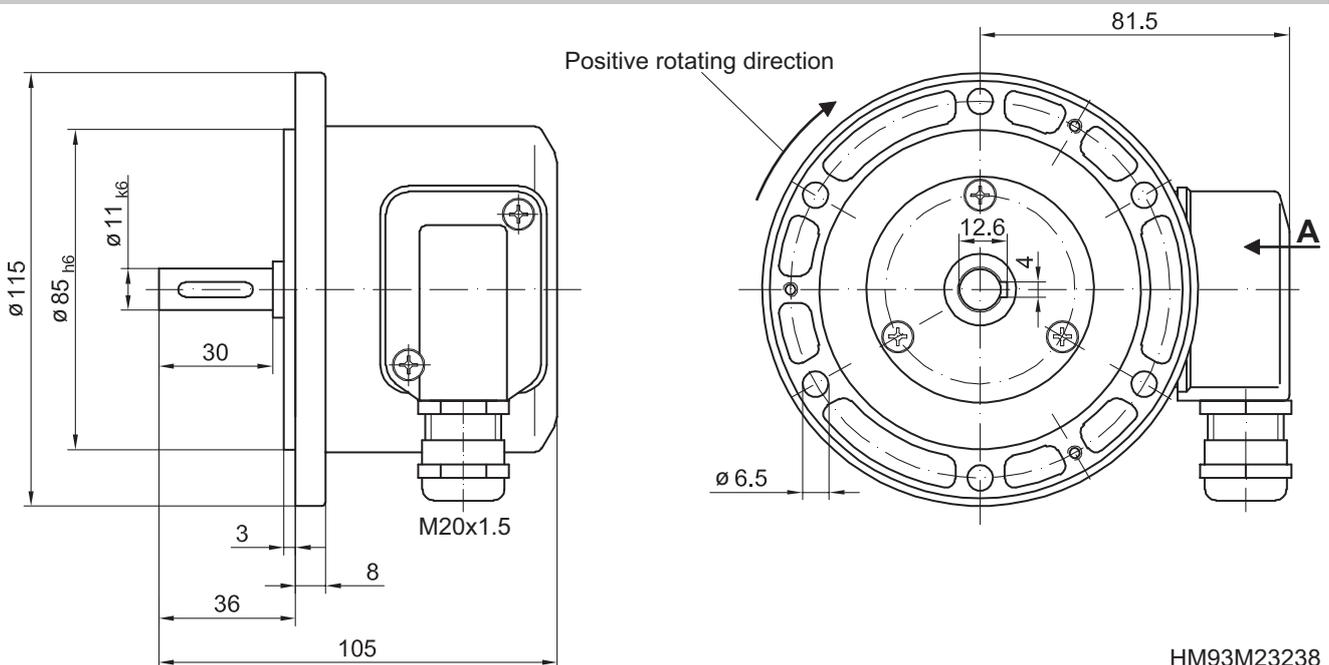


### Terminal assignment

View A - Connecting terminal in terminal box



### Dimensions



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