

Incremental encoders

Shaft with EURO flange B10

Resolution 1...1250 pulses

OG 9



OG 9

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 line driver)
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	UL approval / E256710

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 line driver
- Temperature max. +100 °C

Technical data - mechanical design

Housing	\varnothing 85 mm
Shaft	\varnothing 11 mm
Admitted shaft load	\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 ²
Materials	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-30...+100 °C
Resistance	DIN EN 60068-2-6 Vibration 10 g, 10-2000 Hz DIN EN 60068-2-27 Shock 100 g, 6 ms
Explosion protection	II3G Ex nA T4 X (gas) II3D Ex tD IP55 A22 T135°C X (dust)
Connection	Terminal box
Weight approx.	900 g

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Part number

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Voltage supply / signals

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

See part number (pulses)

Output signals

- 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

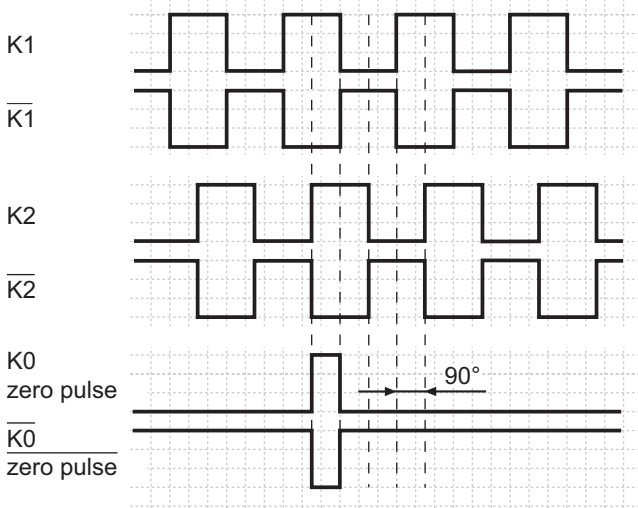
Shaft with EURO flange B10

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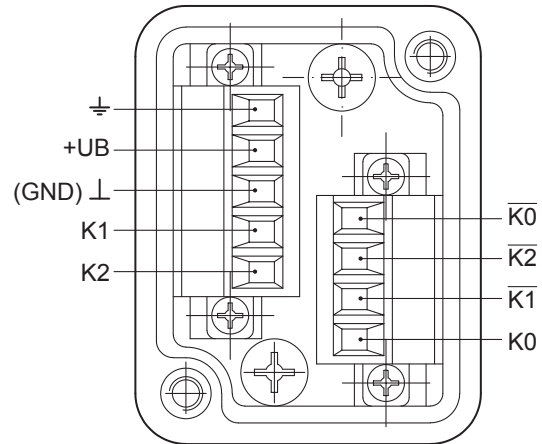
Output signals

at positive direction of rotation

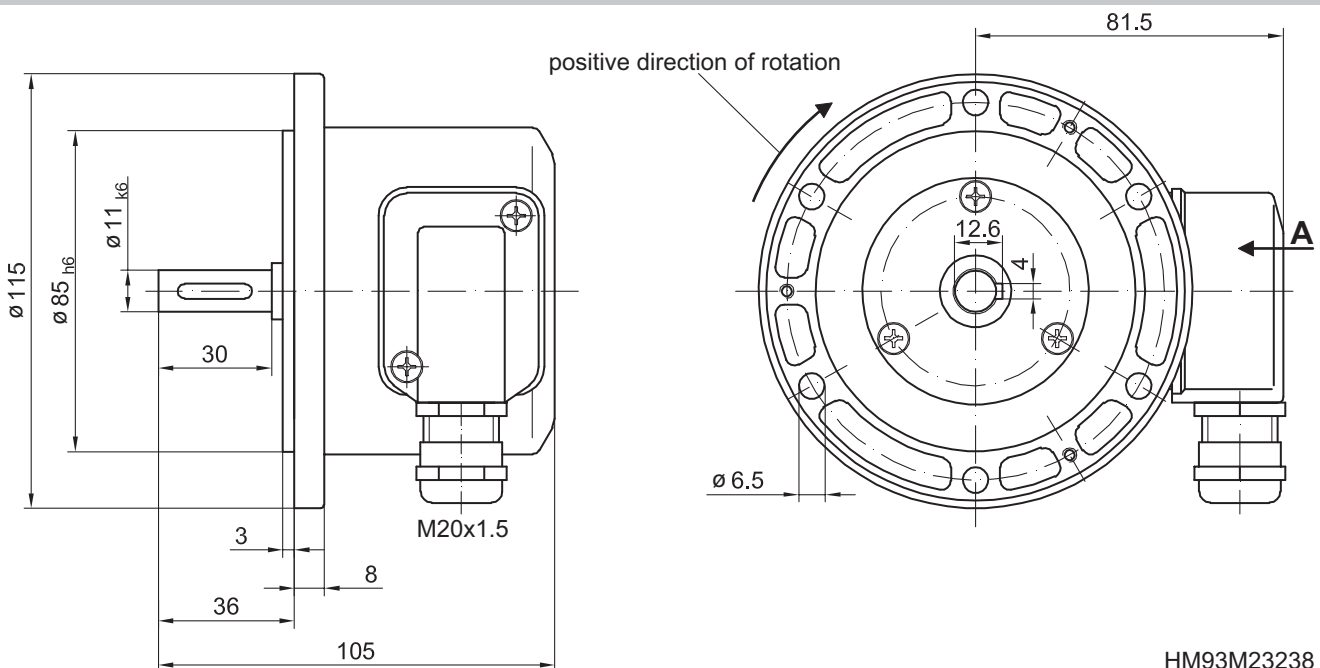


Terminal assignment

View A - Connecting terminal in terminal box



Dimensions



HM93M23238

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