

Incremental encoders

Through hollow shaft $\varnothing 38$ to $\varnothing 75$ mm

250...2500 pulses per revolution

HOG 161



HOG 161

Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC ± 5 % 9...26 VDC
Consumption w/o load	≤ 100 mA
Pulses per revolution	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 stages	HTL TTL/RS422
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approvals	CE, UL approval / E256710

Features

- Robust light-metal housing
- Through hollow shaft up to $\varnothing 75$ mm
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...26 VDC
- Special protection against corrosion
- Big terminal box, turn by 180°

Optional

- Redundant sensing with two terminal boxes

Technical data - mechanical design

Size (flange)	$\varnothing 158$ mm
Shaft type	$\varnothing 38$...75 mm (through hollow shaft)
Shaft loading	≤ 350 N axial ≤ 500 N radial
Protection DIN EN 60529	IP 54
Operating speed	≤ 6000 rpm (mechanical)
Operating torque typ.	15 Ncm
Rotor moment of inertia	26.3 kgcm ² ($\varnothing 48$) 13.5 kgcm ² ($\varnothing 75$)
Materials	Housing: aluminium alloy Shaft: stainless steel
Operating temperature	-40 ... $+85$ °C
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 100 g, 6 ms
Explosion protection	II 3 G Ex nA IIC T4 Gc (gas) II 3 D Ex tc IIIB T100°C Dc (dust)
Connection	Terminal box 2x terminal box (with option M)
Weight approx.	4.5 kg ($\varnothing 48$), 3.2 kg ($\varnothing 75$), 3.6 kg ($\varnothing 75$ with option M)

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Part number

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					<u>Voltage supply / signals</u>
					- 9...30 VDC / output circuit HTL
					I 9...30 VDC / output circuit HTL with inverted signals (for output signals DN)
					TTL 5 VDC / output circuit TTL with inverted signals (for output signals DN)
					R 9...26 VDC / output circuit TTL with inverted signals (for output signals DN)
					<u>Pulse number - see table</u>
					<u>Output signals</u>
					D K1, K2
					DN K1, K2, K0
					<u>Redundant sensing</u>
					Without redundant sensing
					M With redundant sensing

Accessories

Connectors and cables

HEK 8 Sensor cable for encoders

Mounting accessories

DMS 6 Torque arm size M6

Diagnostic accessories

HENQ 1100 Analyzer for encoders

Pulse number

250	512	1024	1200	2500
500	1000	1080	2048	

Incremental encoders

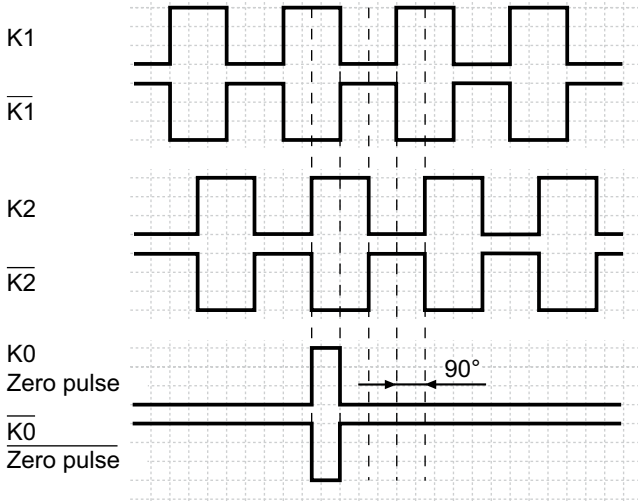
Through hollow shaft $\varnothing 38$ to $\varnothing 75$ mm

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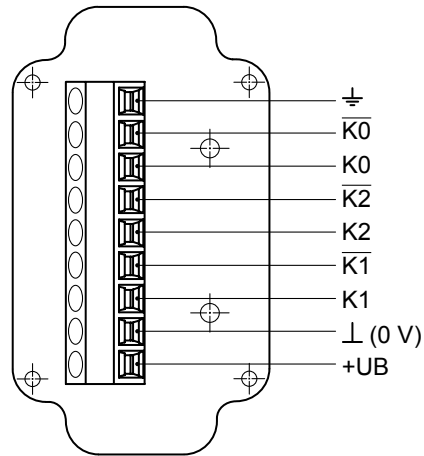
Output signals

At positive rotating direction

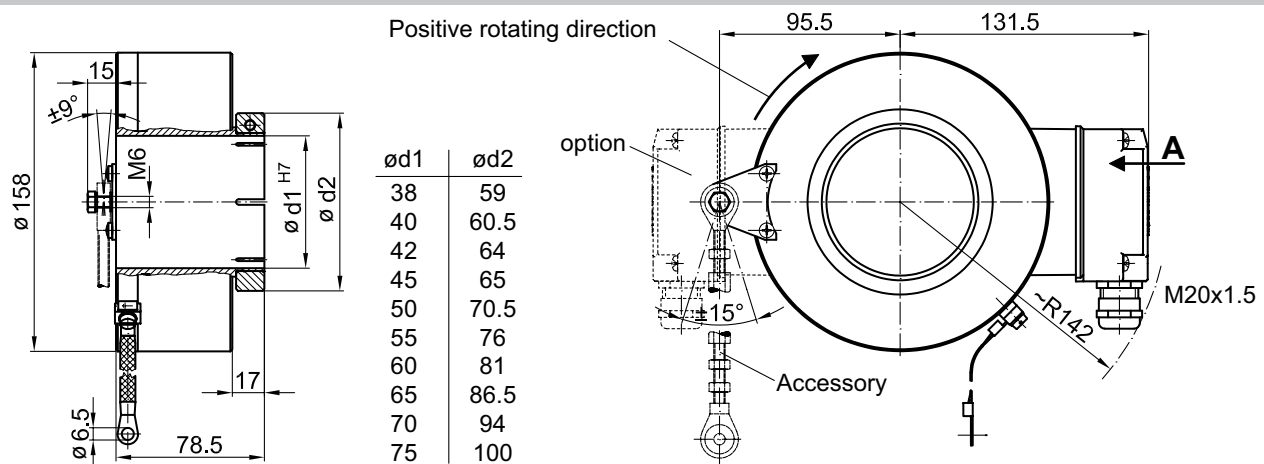


Terminal assignment

View A - Connecting terminal in terminal box



Dimensions



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