

Incremental encoders

Blind hollow shaft $\varnothing 12$ mm and $\varnothing 14$ mm

10...10000 pulses per revolution

HOG 70



HOG 70

Features

- Compact, robust die-cast housing
- Max. 10000 pulses per revolution
- Inside connecting terminals
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...26 VDC
- High output frequency
- High protection IP 66

Technical data - electrical ratings

Voltage supply	9...26 VDC 5 VDC ± 5 %
Consumption w/o load	≤ 100 mA
Pulses per revolution	10...10000
Phase shift	$90^\circ \pm 20^\circ$
Scan ratio	40...60 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 250 kHz
Output signals	A, B, C + 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)	$\varnothing 60$ mm
Shaft type	$\varnothing 12...14$ mm (blind hollow shaft)
Admitted shaft load	≤ 30 N axial ≤ 40 N radial
Protection DIN EN 60529	IP 66
Operating speed	≤ 12000 rpm (mechanical)
Operating torque typ.	1 Ncm
Rotor moment of inertia	55 gcm ²
Materials	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	$-20...+85$ °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 X (gas) II 3 D Ex tc IIIC T85°C Dc X (dust)
Connection	Connecting terminal
Weight approx.	280 g

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Part number

Incremental encoder

HOG70 **DN**

Shaft diameter
 12H7 Blind hollow shaft $\varnothing 12$ mm
 14H7 Blind hollow shaft $\varnothing 14$ mm
 Voltage supply / signals
 CI 9...26 VDC / output stage HTL (C) with inverted signals
 TTL 5 VDC / output stage TTL with inverted signals
 R 9...26 VDC / output stage TTL with inverted signals
 Pulse number - see table
 Output signals
 DN A, B, C + inverted

Accessories

Connectors and cables

HEK 8 Sensor cable for encoders

Diagnostic accessories

HENQ 1100 Analyzer for encoders

Pulse number

10	300	625	1500	3600
20	360	720	1800	4096
60	400	900	2000	5000
100	500	1000	2048	6000
200	512	1024	2500	8192
256	600	1250	3000	10000

Incremental encoders

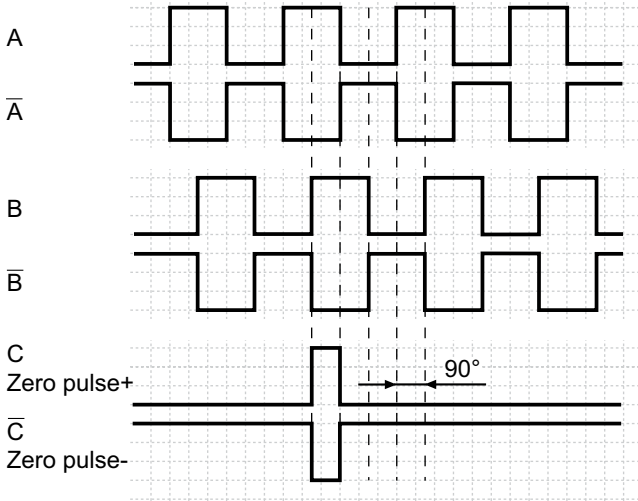
Blind hollow shaft $\varnothing 12$ mm and $\varnothing 14$ mm

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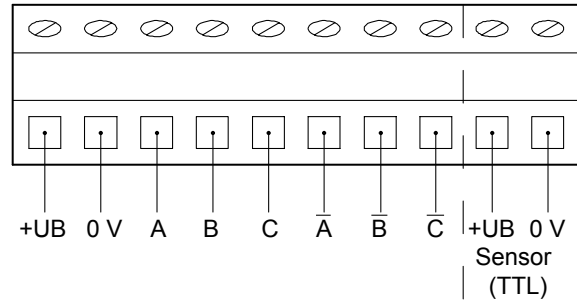
Output signals

At positive rotating direction

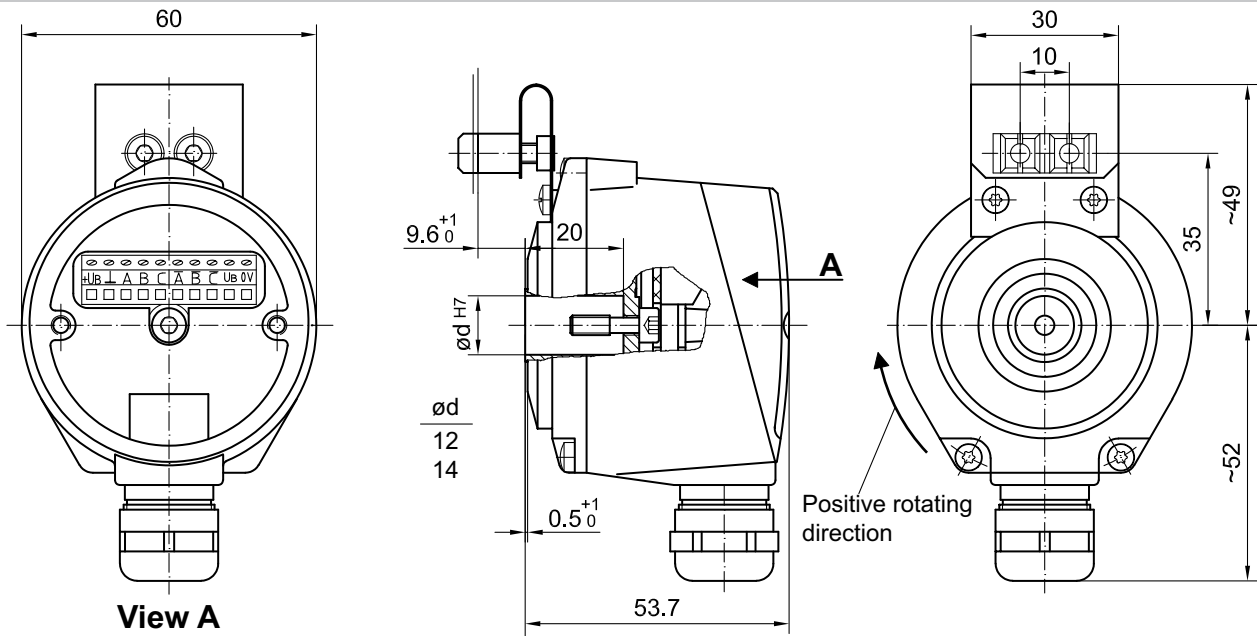


Terminal assignment

View A - Connecting terminal inside the encoder



Dimensions



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