

Incremental encoders

End shaft $\varnothing 12$ mm and $\varnothing 14$ mm

Resolution 10...10000 pulses

HOG 70



HOG 70

Technical data - electrical ratings

Voltage supply	5 VDC ± 5 % 9...26 VDC
Consumption w/o load	≤ 100 mA
Resolution (steps/turn)	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 circuit	TTL (RS422) HTL
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approval	UL approval / E256710

Features

- Compact, robust die-cast housing
- Resolution max. 10000 ppr
- Inside connecting terminals
- Logic level TTL with regulator UB 9...26 VDC
- Logic level HTL with power linedriver
- High output frequency
- High protection IP 66

Technical data - mechanical design

Dimensions (flange)	$\varnothing 60$ mm
Shaft	$\varnothing 12$ mm end shaft $\varnothing 14$ mm end shaft
Shaft loading	≤ 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	II3G Ex nA IIC T4 Gc X (gas) II3D Ex tc IIIC T85°C Dc X (dust)
Connection	Connecting terminal
Weight approx.	240 g

Incremental encoders

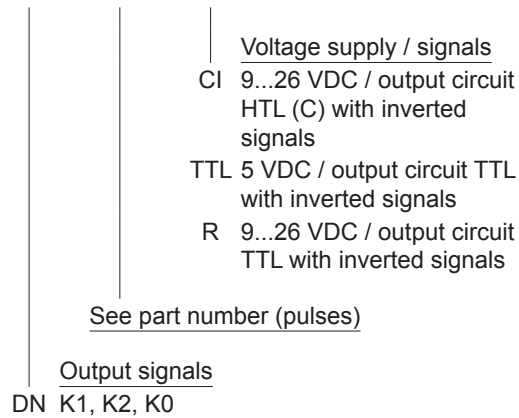
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Part number

HOG 70

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Accessories

Connectors and cables

HEK 8 Sensor cable for encoders

Diagnostic accessories

HENQ 1100 Analyzer for encoders

Part number (pulses)

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

Incremental encoders

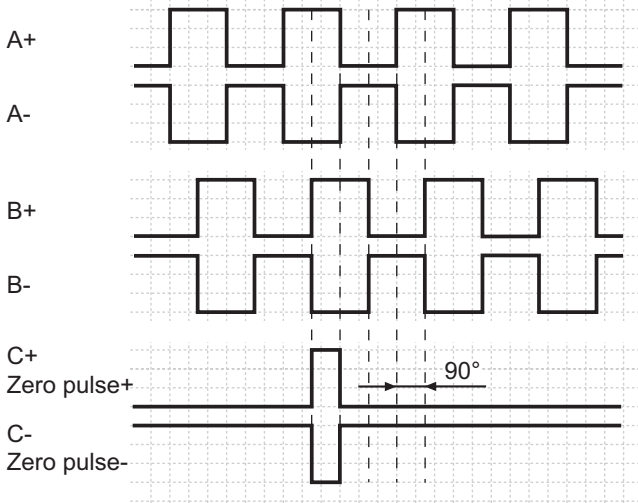
End shaft $\varnothing 12$ mm and $\varnothing 14$ mm

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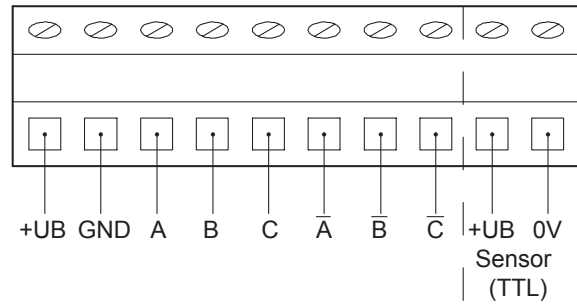
Output signals

at positive direction of rotation

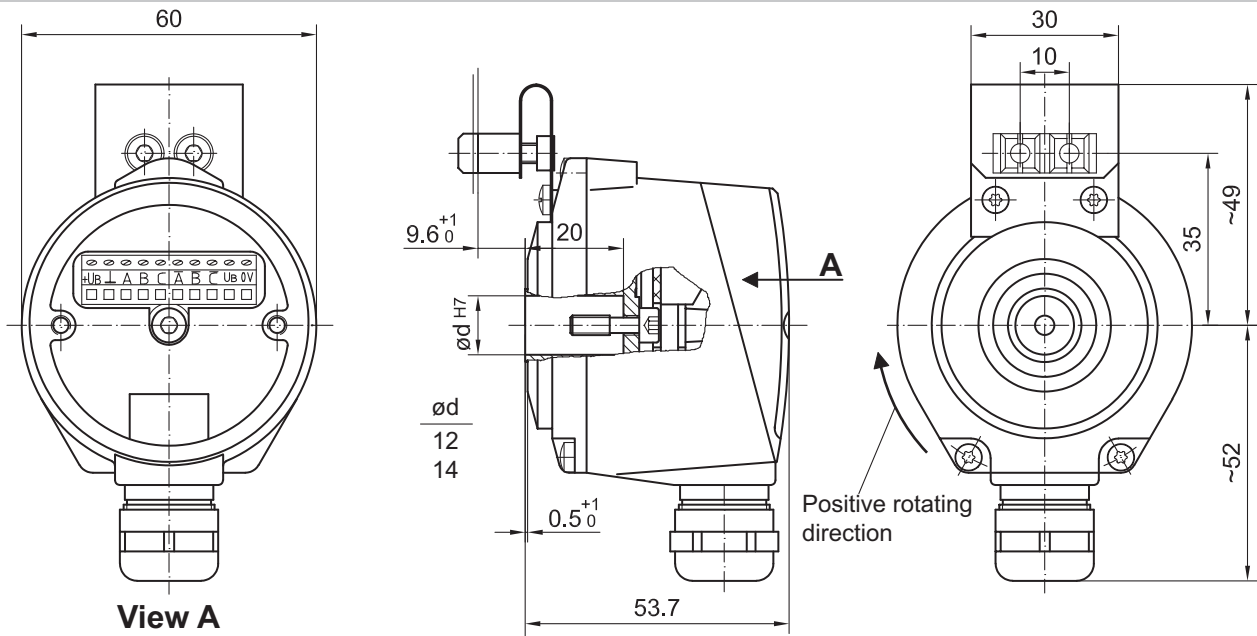


Terminal assignment

View A - Connecting terminal inside the encoder



Dimensions



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