

Incremental encoders

Hollow shaft $\varnothing 20$ or $\varnothing 25$ mm

Resolution 250...5000 pulses

HOG 165



HOG 165

Technical data - electrical ratings

Voltage supply	5 VDC ± 5 % 9...26 VDC 9...30 VDC
Consumption w/o load	≤ 100 mA
Resolution (steps/turn)	250...5000
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 circuit	TTL (RS422) HTL (power linedriver)
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4
Approvals	UL approval / E256710, ROHS compliant

Features

- Robust light-metal housing
- Hollow shaft $\varnothing 20$ mm or $\varnothing 25$ mm
- Logic level TTL with regulator UB 9...26 VDC
- Logic level HTL with power linedriver
- Special protection against corrosion
- Big terminal box, turn by 180°
- Very high resistance to shock and vibrations

Optional

- Redundant version
- Large torque support plate

Technical data - mechanical design

Dimensions (flange)	$\varnothing 165$ mm
Shaft	$\varnothing 20$ mm hollow shaft $\varnothing 25$ mm hollow shaft
Shaft loading	≤ 350 N axial ≤ 500 N radial
Protection DIN EN 60529	IP 67
Operating speed	≤ 6000 rpm (mechanical)
Operating torque typ.	15 Ncm
Rotor moment of inertia	4.9 kgcm ²
Materials	Housing: aluminium alloy Shaft: stainless steel
Operating temperature	$-30...+100$ °C
Resistance	IEC 60068-2-6 Vibration 20 g, 10-2000 Hz IEC 60068-2-27 Shock 300 g, 6 ms
Explosion protection	II3G Ex nA IIC T4 Gc (gas) II3D Ex tc IIIC T135°C Dc (dust)
Connection	Terminal box
Weight approx.	4 kg

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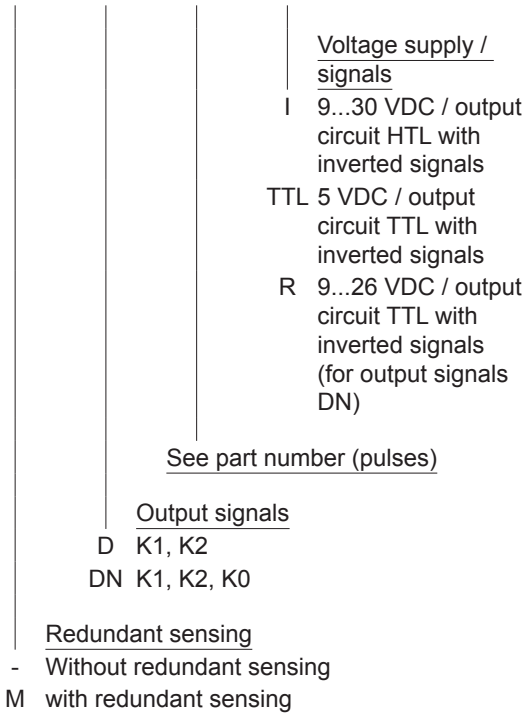
Resolution 250...5000 pulses

HOG 165

Part number

HOG 165

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Accessories

Connectors and cables

HEK 8 Sensor cable for encoders

Mounting accessories

DMS 12 Torque arm size M12

Diagnostic accessories

HENQ 1100 Analyzer for encoders

Part number (pulses)

250	600	1080	2500
500	1000	1200	4096
512	1024	2048	5000

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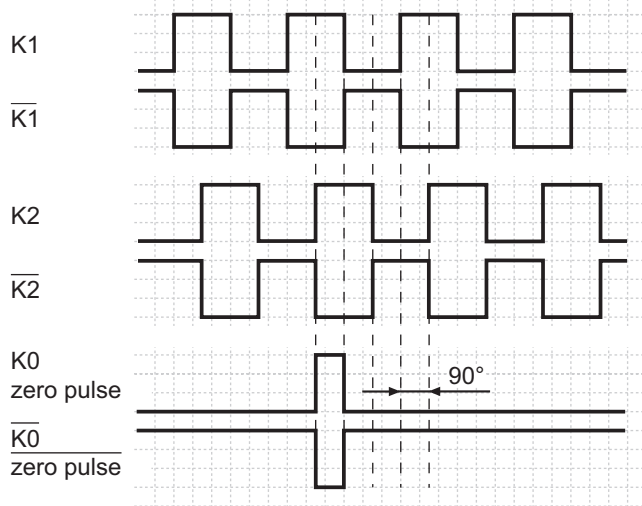
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Output signals

at positive rotating direction



Terminal assignment

View A - Connecting terminal in terminal box

