

Incremental encoders

Blind hollow shaft or cone shaft
300...2500 pulses per revolution

HOG 10



HOG 10 with axial terminal cover

Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC $\pm$ 5 %
Consumption w/o load	< 100 mA
Pulses per revolution	300...2500
Phase shift	90° $\pm$ 20°
Scan ratio	40...60 %
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	$\leq$ 170 kHz
Output signals	K1, K2, K0 + inverted Error output (only EMS)
Output stages	HTL-P (power linedriver) TTL/RS422
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approvals	CE, RoHS, UL approval / E256710

Features

- TTL output driver for cable length up to 500 m
- Very high resistance to shock and vibrations
- Protection against inductive shaft current by hybrid bearing
- Big terminal box, turn by 180° or axial terminal cover

Optional

- Function control with EMS
(Enhanced Monitoring System)
- Redundant sensing with two terminal boxes
- With heating up to -50°C
- With earthing brushes

Technical data - mechanical design

Size (flange)	$\varnothing$ 105 mm
Shaft type	$\varnothing$ 12...20 mm (blind hollow shaft) $\varnothing$ 17 mm (cone shaft 1:10)
Shaft loading	$\leq$ 450 N axial $\leq$ 600 N radial
Protection DIN EN 60529	IP 66
Operating speed	$\leq$ 6000 rpm (mechanical)
Operating torque typ.	6 Ncm
Rotor moment of inertia	340 gcm ²
Materials	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-40...+100 °C -50...+100 °C (optional)
Resistance	IEC 60068-2-6 Vibration 20 g, 10-2000 Hz IEC 60068-2-27 Shock 300 g, 6 ms
Explosion protection	II 3 G Ex nA IIC T4 Gc (gas) II 3 D Ex tc IIIC T135°C Dc (dust)
Connection	Terminal box Terminal cover 2x terminal box (with option M)
Weight approx.	1.6 kg, 1.8 kg (with option M)