

Incremental encoders

Through hollow shaft $\varnothing 120$ to $\varnothing 150$ mm
1024...2048 pulses per revolution

HOG 28



HOG 28 - Version with terminal box

Features

- Through hollow shaft $\varnothing 120$... 150 mm
- Optical sensing method
- Robust light-metal housing
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...26 VDC
- Big terminal box, turn by 180°

Optional

- With earthing brushes (no explosion protection)
- Plug-in electronics
- Redundant sensing with two terminal boxes

Technical data - electrical ratings

Voltage supply	9...26 VDC 5 VDC ± 5 %
Consumption w/o load	≤ 100 mA
Pulses per revolution	1024...2048
Phase shift	90° ± 20 °
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

Technical data - mechanical design

Size (flange)	$\varnothing 287$ mm
Shaft type	$\varnothing 120$... 150 mm (through hollow shaft)
Admitted shaft load	≤ 550 N axial ≤ 800 N radial
Protection DIN EN 60529	IP 54
Operating speed	≤ 3600 rpm (mechanical)
Operating torque typ.	50 Ncm
Rotor moment of inertia	240 kgcm ² ($\varnothing 150$)
Materials	Housing: aluminium alloy Shaft: stainless steel
Operating temperature	-30...+85 °C
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 200 g, 6 ms
Explosion protection	II 3 G Ex nA IIC T4 Gc (gas) II 3 D Ex tc IIIB T135°C Dc (dust)
Connection	Terminal box (2x with option M) Flange connector M23, 12-pin (2x with option M)
Weight approx.	20 kg ($\varnothing 150$)

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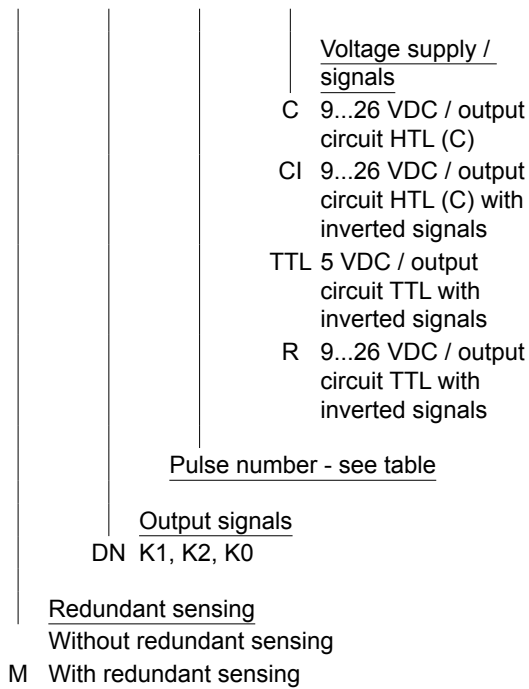
HOG 28

Part number

Incremental encoder

HOG 28

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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

Pulse number

1024 | 1800 | 2048

Other pulse numbers on request.

Incremental encoders

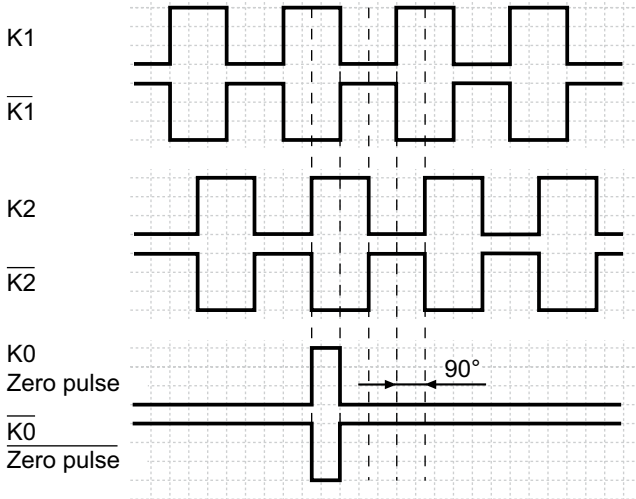
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Output signals

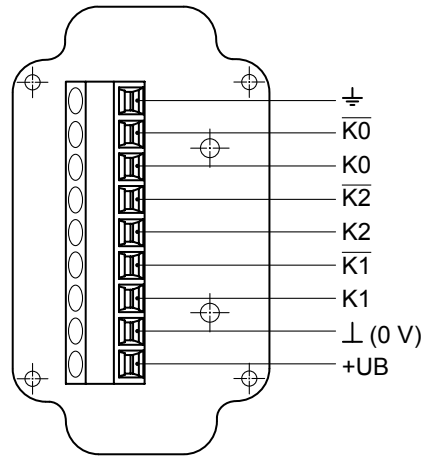
At positive rotating direction



Terminal assignment

View A

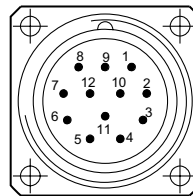
Connecting terminal in terminal box



View B

Flange connector, 12 pin, male contacts, CW

Pin	Assignment
1	$\overline{K2}$ (K2 inv. / B-)
2	Do not use
3	K0 (Zero pulse / R+)
4	$\overline{K0}$ (Zero pulse inv. / R-)
5	K1 (A+)
6	$\overline{K1}$ (K1 inv. / A-)
7	Do not use
8	K2 (B+)
9	Do not use
10	0 V
11	Do not use
12	+UB



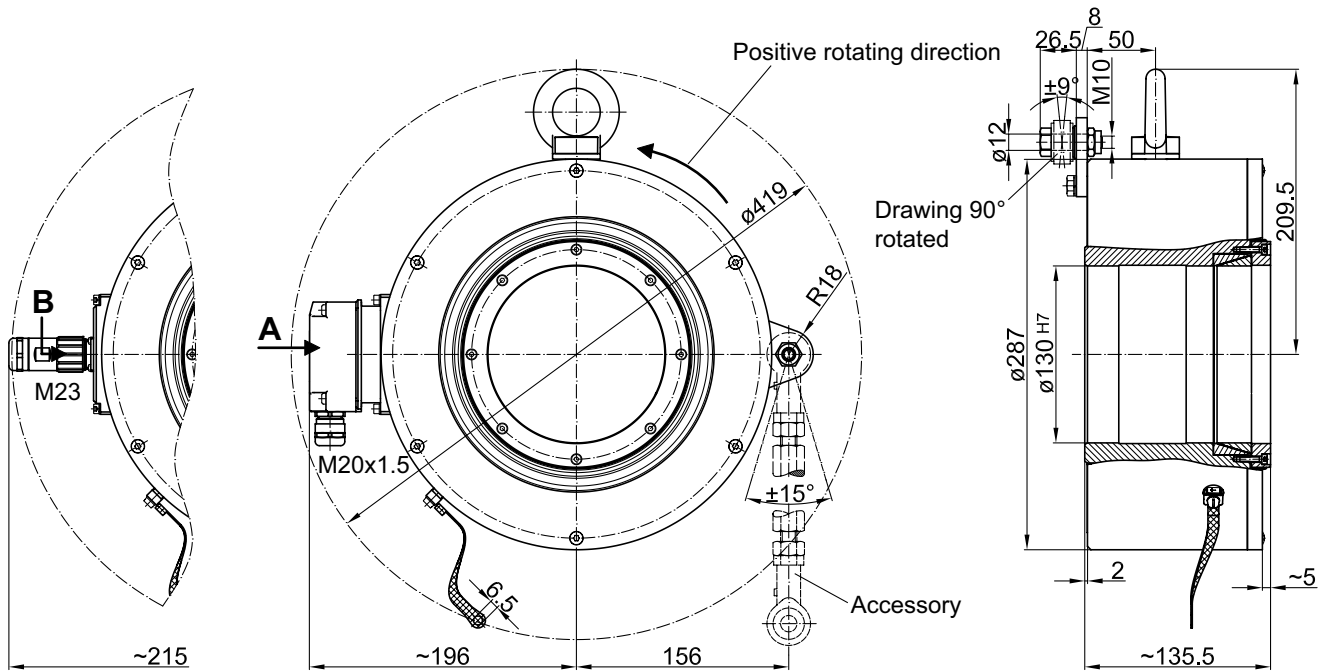
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Dimensions

HOG 28 - Version with clamping set



HOG 28 - Version with clamping ring

