

Incremental encoders

Through hollow shaft $\varnothing 80$ to $\varnothing 115$ mm

1024 pulses per revolution

HOG 220



HOG 220

Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC ± 5 % 9...26 VDC
Consumption w/o load	≤ 100 mA
Pulses per revolution	1024
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 stages	HTL TTL/RS422
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approvals	CE, UL approval / E256710

Features

- Through hollow shaft $\varnothing 80$...115 mm
- Robust light-metal housing
- Output stage HTL or TTL
- Output stage TTL with regulator UB 9...26 VDC
- Large terminal box, turn by 180°

Optional

- Isolated through hollow shaft (≥ 500 VDC)
- Redundant sensing with two terminal boxes

Technical data - mechanical design

Size (flange)	$\varnothing 227$ mm
Shaft type	$\varnothing 80$...115 mm (through hollow shaft)
Admitted shaft load	≤ 450 N axial ≤ 700 N radial
Protection DIN EN 60529	IP 56
Operating speed	≤ 3800 rpm (mechanical)
Operating torque typ.	50 Ncm
Rotor moment of inertia	102 kgcm ² ($\varnothing 100$)
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 terminal box (with option M)
Weight approx.	10.3 kg ($\varnothing 100$)

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Part number

Incremental encoder

HOG220 **DN** **1024**

Shaft diameter

80H7	Through hollow shaft ø80 mm
85H7	Through hollow shaft ø85 mm
90H7	Through hollow shaft ø90 mm
95H7	Through hollow shaft ø95 mm
100H7	Through hollow shaft ø100 mm
105H7	Through hollow shaft ø105 mm
106H7	Through hollow shaft ø106 mm
110H7	Through hollow shaft ø110 mm
115H7	Through hollow shaft ø115 mm

Voltage supply / signals

I	9...30 VDC / output stage HTL with inverted signals
TTL	5 VDC / output stage TTL with inverted signals
R	9...26 VDC / output stage TTL with inverted signals

Pulse number

1024

Output signals

DN K1, K2, K0

Redundant sensing

Without redundant sensing

M With redundant sensing

Other pulse numbers on request.

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

Incremental encoders

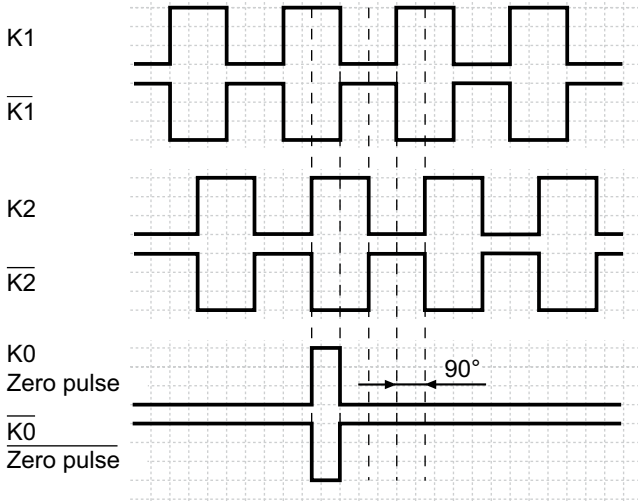
Through hollow shaft $\varnothing 80$ to $\varnothing 115$ mm

1024 pulses per revolution

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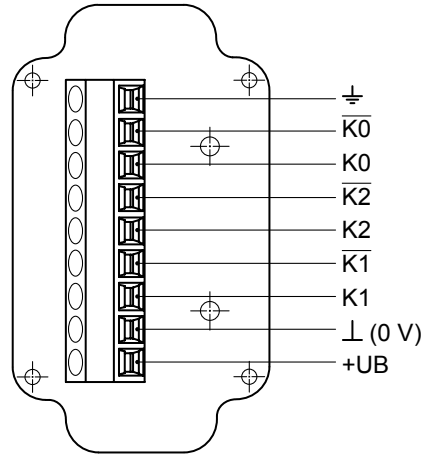
Output signals

At positive rotating direction

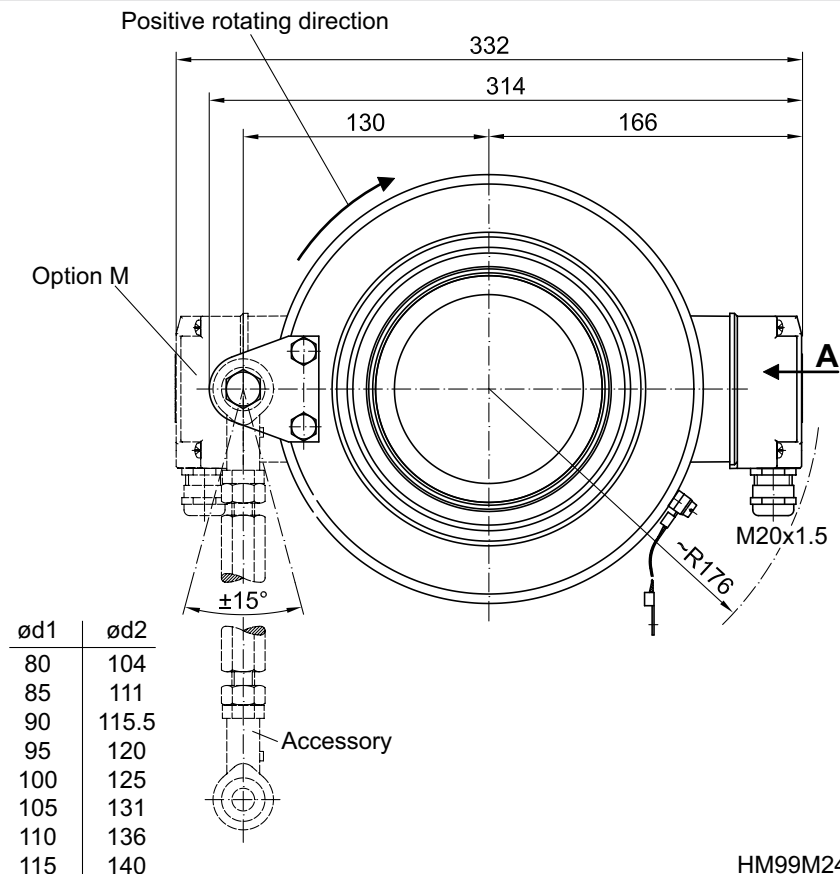
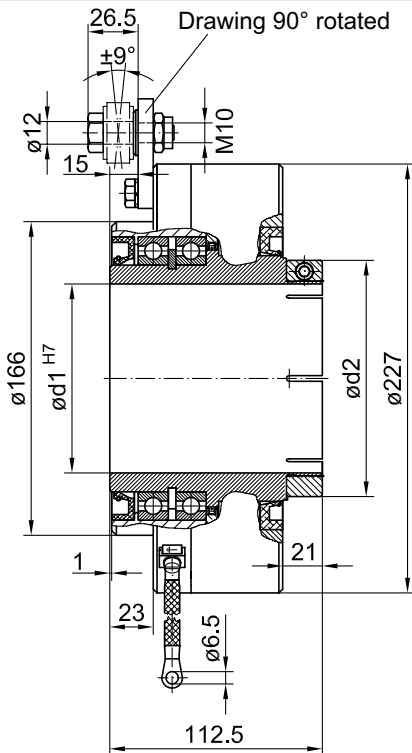


Terminal assignment

View A - Connecting terminal in terminal box



Dimensions



HM99M24995

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