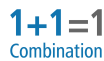


## Overview

- Protection IP66, IP67
- Shaft insulation 3.5 kV
- Corrosion protection CX
- Operating temperature -40...+100 °C
- Signal outputs with automatic temperature compensation for stable signals up to 350 m (HTL-P) or 550 m (TTL)
- Sealed and user-friendly field termination
- Extended protection circuit
- Redundant design with two parameterizable output signals
- Status monitoring and display with Baumer Sensor Suite
- 4-fold sealing concept for protection against abrasive dust, humid and salty moisture and temperature changes



Picture similar



## Technical data

### Technical data - electrical ratings

Voltage supply	4.75...30 VDC (Vin = Vout, HTL/TTL)
Consumption w/o load	≤100 mA
Pulses per revolution	1 ... 32768
Further pulses per revolution	Pulse numbers parameterized ex works or freely parameterizable (SMART) with Baumer Sensor Suite
Phase shift	Typ. 90 °
Duty cycle	Typ. 50 %
Reference signal	Zero pulse, width 90° or 180°
Sensing method	Optical
Output frequency	≤200 kHz
Output signals	K1, K2, K0 + inverted
Output stages	HTL-P (power linedriver) TTL
Shaft insulation	Suitable up to 3.5 kV
Transmission length	≤350 m at 100 kHz (HTL-P) ≤550 m at 100 kHz (TTL)
Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-4
Approval	CE UL approval / E217823 CSA

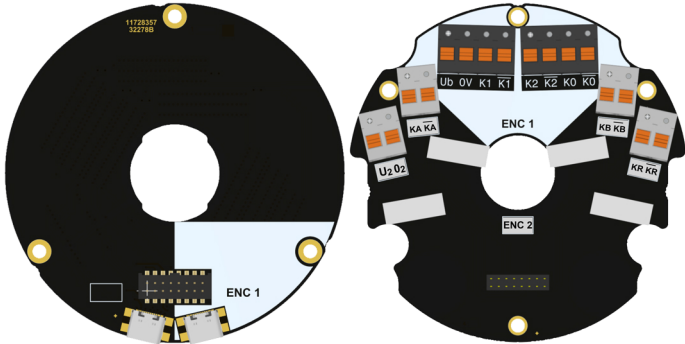
### Technical data - mechanical design

Size (flange)	ø105 mm, length 94 mm
Shaft type	ø16G7 mm (blind hollow shaft) ø11 x 30 mm (solid shaft with key)
Admitted shaft load	≤350 N axial ≤450 N radial
Mounting type	Hollow shaft: central screw Solid shaft: EURO flange B10
Protection EN 60529	IP 66 / IP 67
Operating speed	≤6000 rpm (mechanical)
Operating torque	≤6 Ncm
Rotor moment of inertia	160 gcm <sup>2</sup>
Material	Housing: aluminium, powder-coated Shaft: stainless steel
Operating temperature	-40...+100 °C
Resistance	IEC 60068-2-6 Vibration 20 g, 10-2000 Hz IEC 60068-2-27 Shock 300 g, 6 ms 1 Mio. brake shocks
Corrosion protection	IEC 60068-2-52 Salt mist for ambient conditions CX according to ISO 12944-2
Connection	Terminal box with pluggable push in terminal blocks and cable gland M20

## Optional

- Parameterized pulse numbers can be ordered ex works
- ATEX

**Terminal assignment**

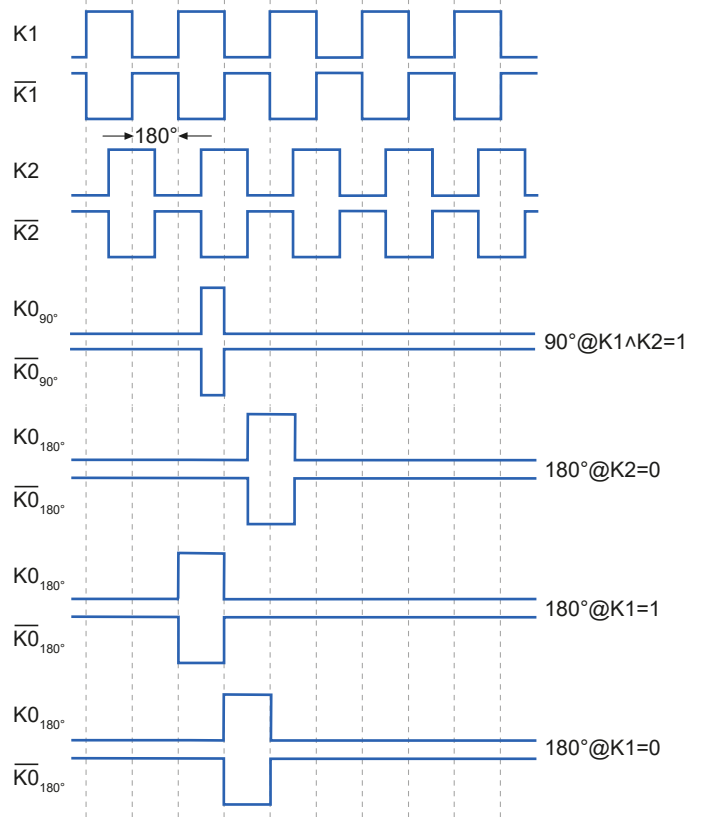


**Terminal significance**

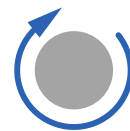
U <sub>b</sub>	Voltage supply - encoder 1
0V	Ground - encoder 1
K0	Zero pulse (reference signal) - encoder 1
K $\bar{0}$	Zero pulse inverted - encoder 1
K1	Output signal channel 1 - encoder 1
K $\bar{1}$	Output signal channel 1 inverted - encoder 1
K2	Output signal channel 2 - encoder 1
K $\bar{2}$	Output signal channel 2 inverted - encoder 1
U2	Voltage supply - encoder 2
02	Ground - encoder 2
KR	Zero pulse (reference signal) - encoder 2
K $\bar{R}$	Zero pulse inverted - encoder 2
KA	Output signal channel 1 - encoder 2
K $\bar{A}$	Output signal channel 1 inverted - encoder 2
KB	Output signal channel 2 - encoder 2
K $\bar{B}$	Output signal channel 2 inverted - encoder 2
USB ENC1	USB-C for parameterization - encoder 1 (SMART)
USB ENC2	USB-C for parameterization - encoder 2 (SMART)

**Output signals**

**Encoder 1**



With positive direction of rotation / clockwise, with view on the encoder shaft

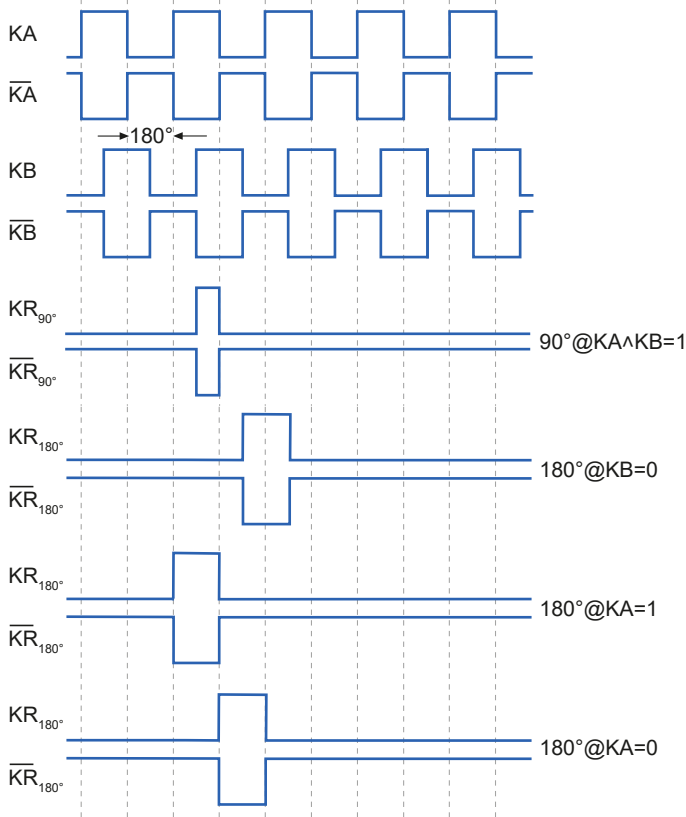


# HOG1070

Redundant incremental HeavyDuty encoders for demanding machinery and asynchronous drives

## Output signals

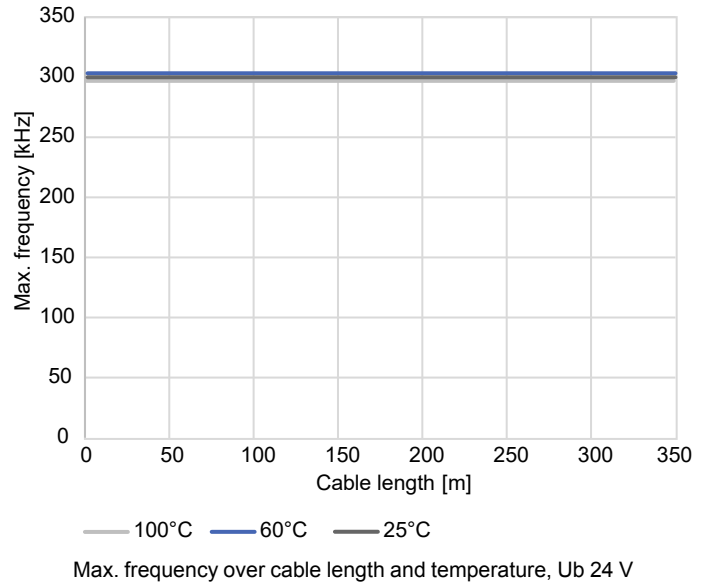
### Encoder 2



With positive direction of rotation / clockwise, with view on the encoder shaft



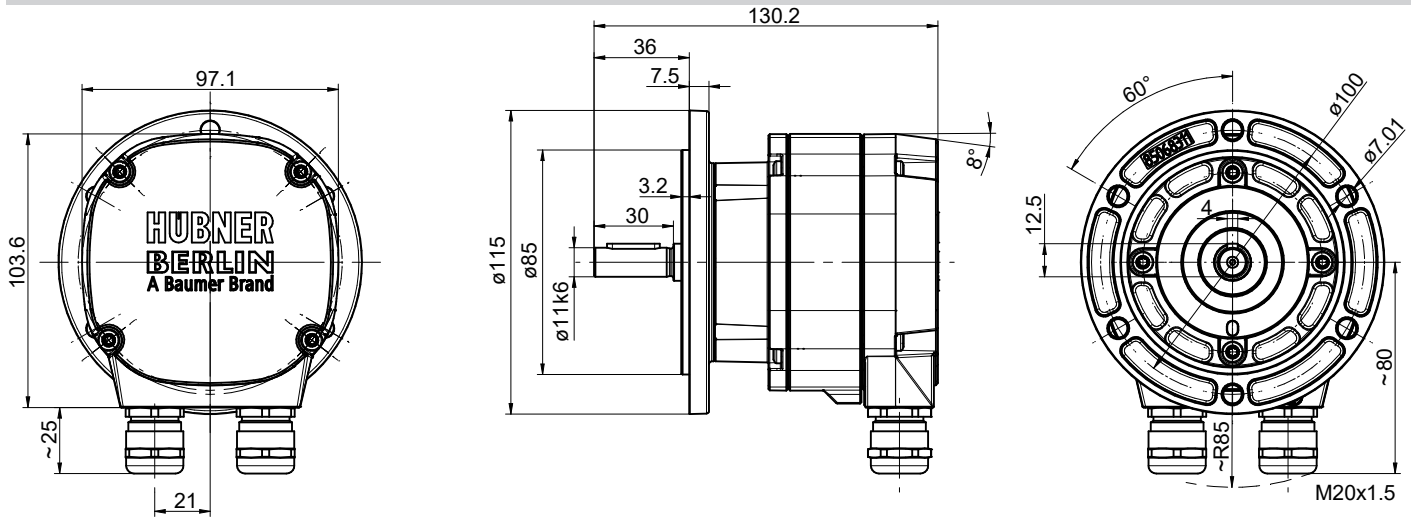
## Derating



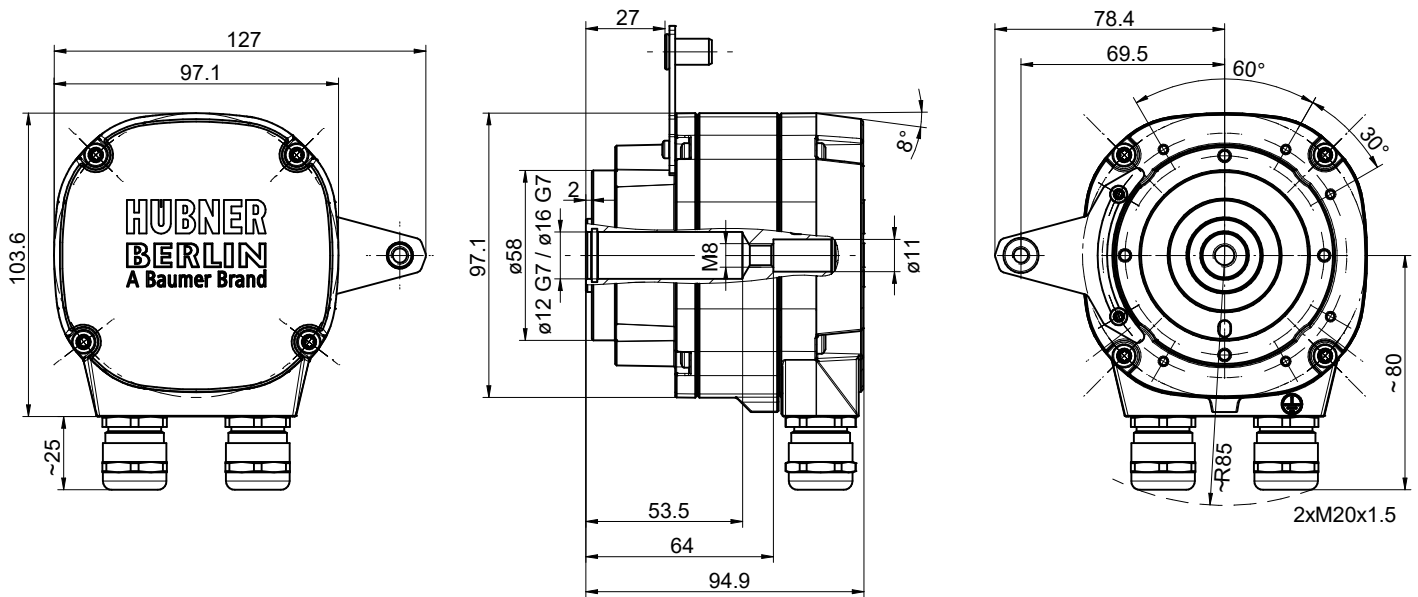
# HOG1070

Redundant incremental HeavyDuty encoders for demanding machinery and asynchronous drives

## Dimensions



Solid shaft, 2 x cable gland



Blind hollow shaft, 2 x cable gland (torque plate can be mounted at different positions)

# HOG1070

Redundant incremental HeavyDuty encoders for demanding machinery and asynchronous drives

**Ordering reference**

Product	Shaft	Pulses per revolution, output	Connection	Comment	Material number
HOG1070	Solid shaft ø11 mm	Parameterization at factory <sup>1)</sup>	2 x Cable gland M20	Redundant – Manipulation proof	EHOG1070-11731291
		Parameterization & monitoring at customer	2 x Cable gland M20	SMART, redundant	EHOG1070-11731290
	Blind hollow shaft ø16G7 mm	Parameterization at factory <sup>1)</sup>	2 x Cable gland M20	Redundant – Manipulation proof	EHOG1070-11731292
		Parameterization & monitoring at customer	2 x Cable gland M20	SMART, redundant	EHOG1070-11731293

1) Please choose 2x resolution, output stage and zero pulse (length and position) with your order

Resolution: 1...32768 ppr

Output stage: HTL-P or TTL

Zero pulse:

- 90°, K1=K2=1
- 180°, K1=0
- 180°, K2=0
- 180°, K1=1

Example for EHOG1070-11731292: encoder 1: 5000 ppr, TTL, 180°, K2=0 / encoder 2: 1024 ppr, HTL, 90°, K1=K2=1