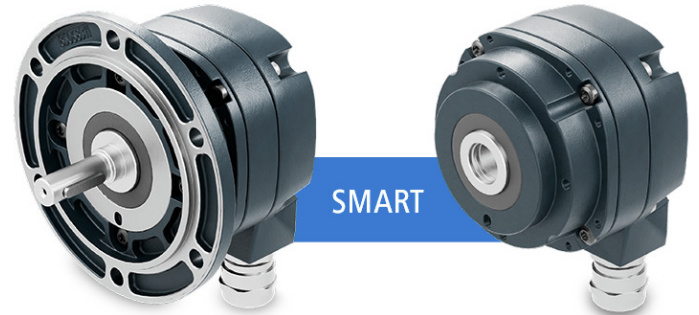


Overview

- Protection IP66
- Shaft insulation 3.5 kV
- Corrosion protection CX
- Operating temperature -40...+100 °C
- Cable length up to 350 m (HTL-P)
- Sealed and user-friendly field termination
- Extended protection circuit
- Parameterization
- Status monitoring and display with Baumer Sensor Suite



Picture similar

HUBNER
BERLIN
A Baumer Brand



HeavyDuty
70 years of experience



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	Further 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)	ø90 mm, length 72 mm
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Technical data - mechanical design

Shaft type	ø12G7 mm (blind hollow shaft) ø16G7 mm (blind hollow shaft) ø11 x 30 mm (solid shaft with key) ø17 mm (cone shaft 1:10)
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
Operating speed	≤6000 rpm (mechanical)
Operating torque	≤6 Ncm
Rotor moment of inertia	160 gcm ²
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 Flange connector M23

Optional

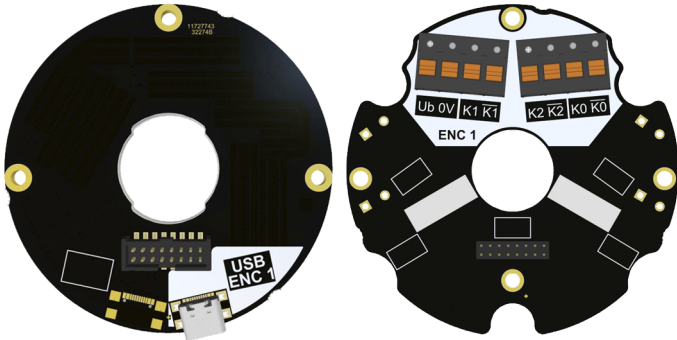
- Parameterized pulse numbers can be ordered ex works
- ATEX

Possible combinations

- Redundant sensing with second output (HOG870)
- Speed monitoring (HOG890)

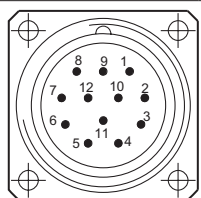
Terminal assignment

Terminal box



Flange connector M23, 12-pin, male

Pin	Assignment
1	$\overline{K2}$
2	dnu
3	K0
4	$\overline{K0}$
5	K1
6	$\overline{K1}$
7	dnu
8	K2
9	dnu
10	0 V
11	dnu
12	Ub



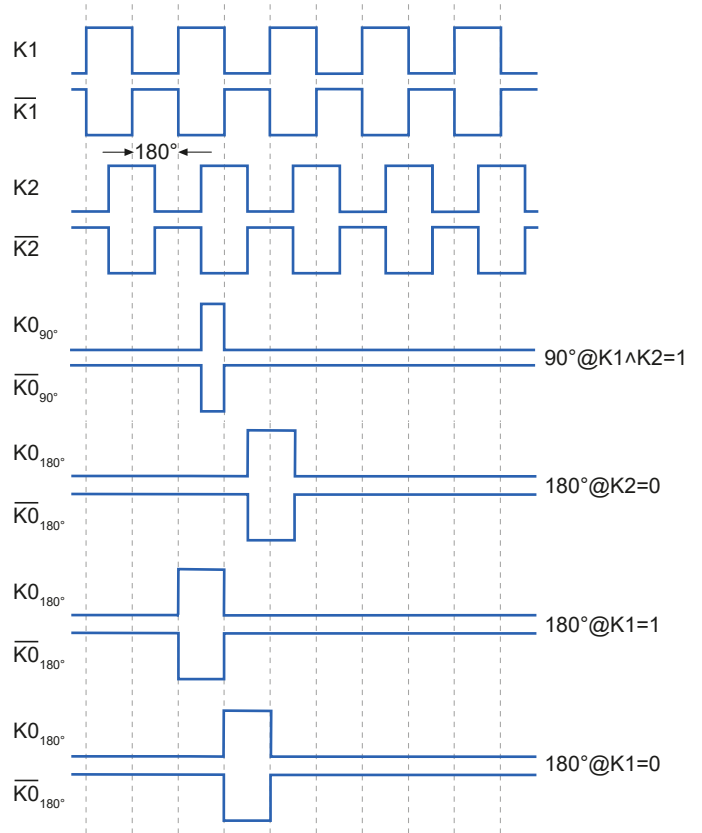
Flange connector M23 (male, 12-pin), CW

Terminal significance

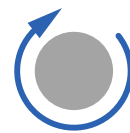
U_b	Voltage supply
0V	Ground
K0	Zero pulse (reference signal)
$\overline{K0}$	Zero pulse inverted
K1	Output signal channel 1
$\overline{K1}$	Output signal channel 1 inverted
K2	Output signal channel 2
$\overline{K2}$	Output signal channel 2 inverted

USB ENC1 USB-C for parameterization (SMART)

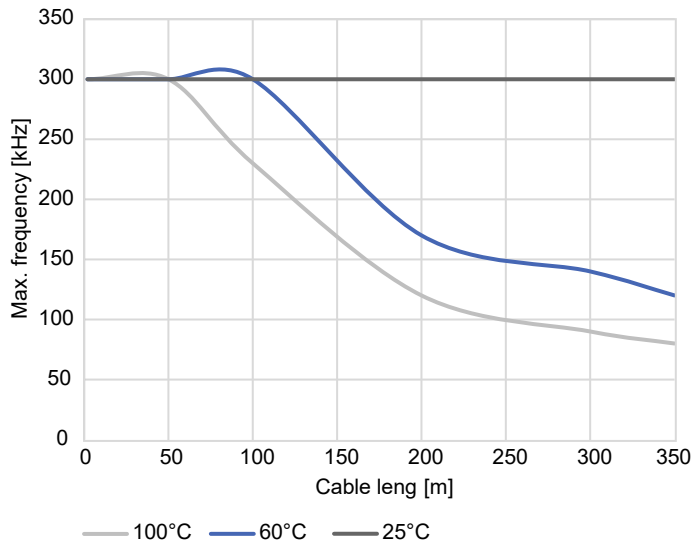
Output signals



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

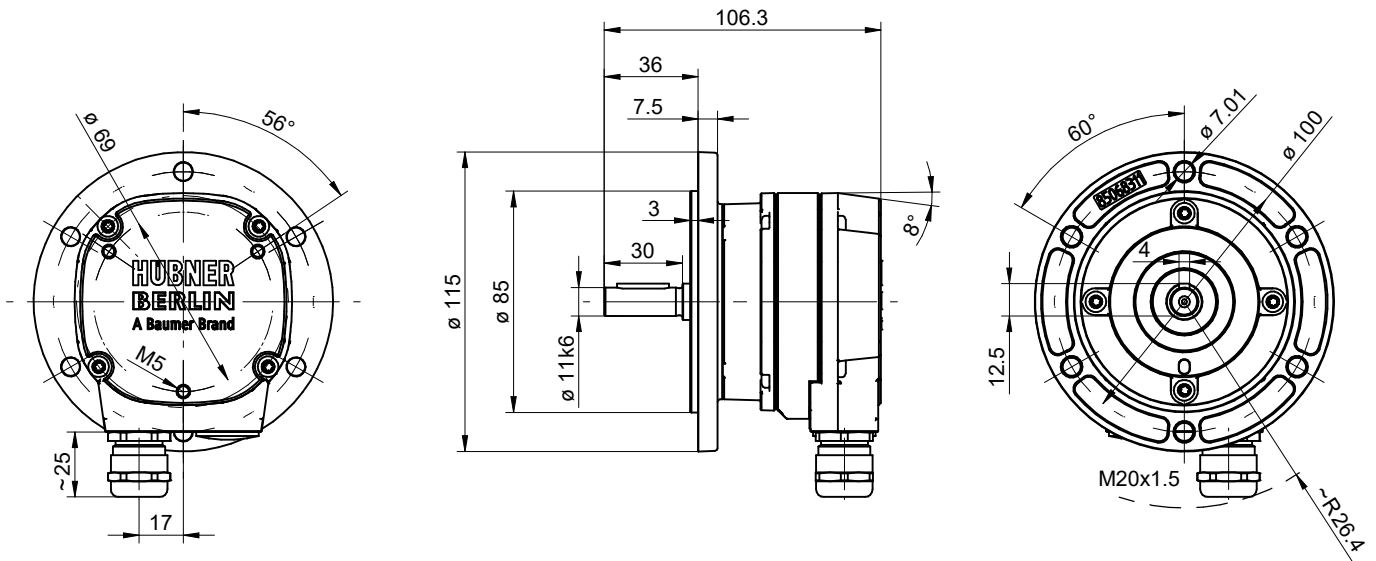


Derating



Max. frequency over cable length and temperature, Ub 24 V

Dimensions

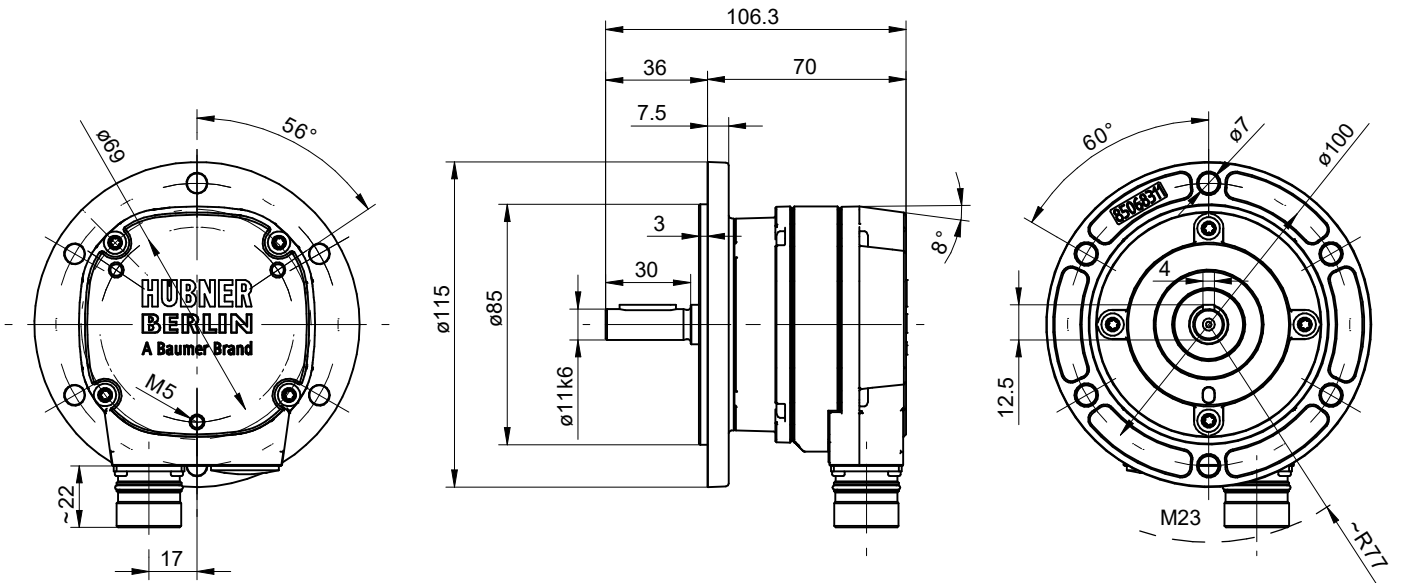


Solid shaft, cable gland

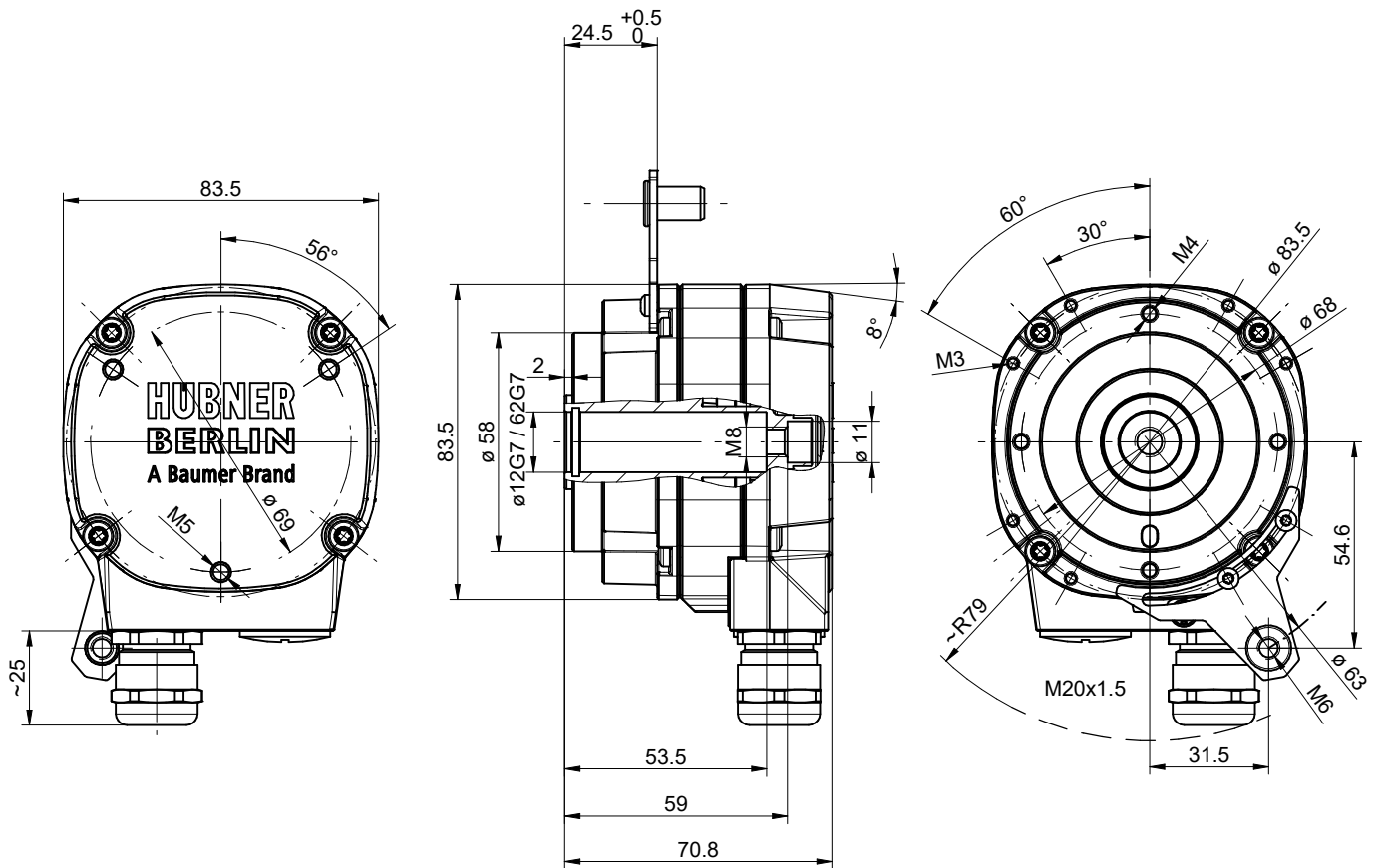
HOG860

High-performant incremental HeavyDuty encoders for demanding machinery and asynchronous drives

Dimensions



Solid shaft, connector M23

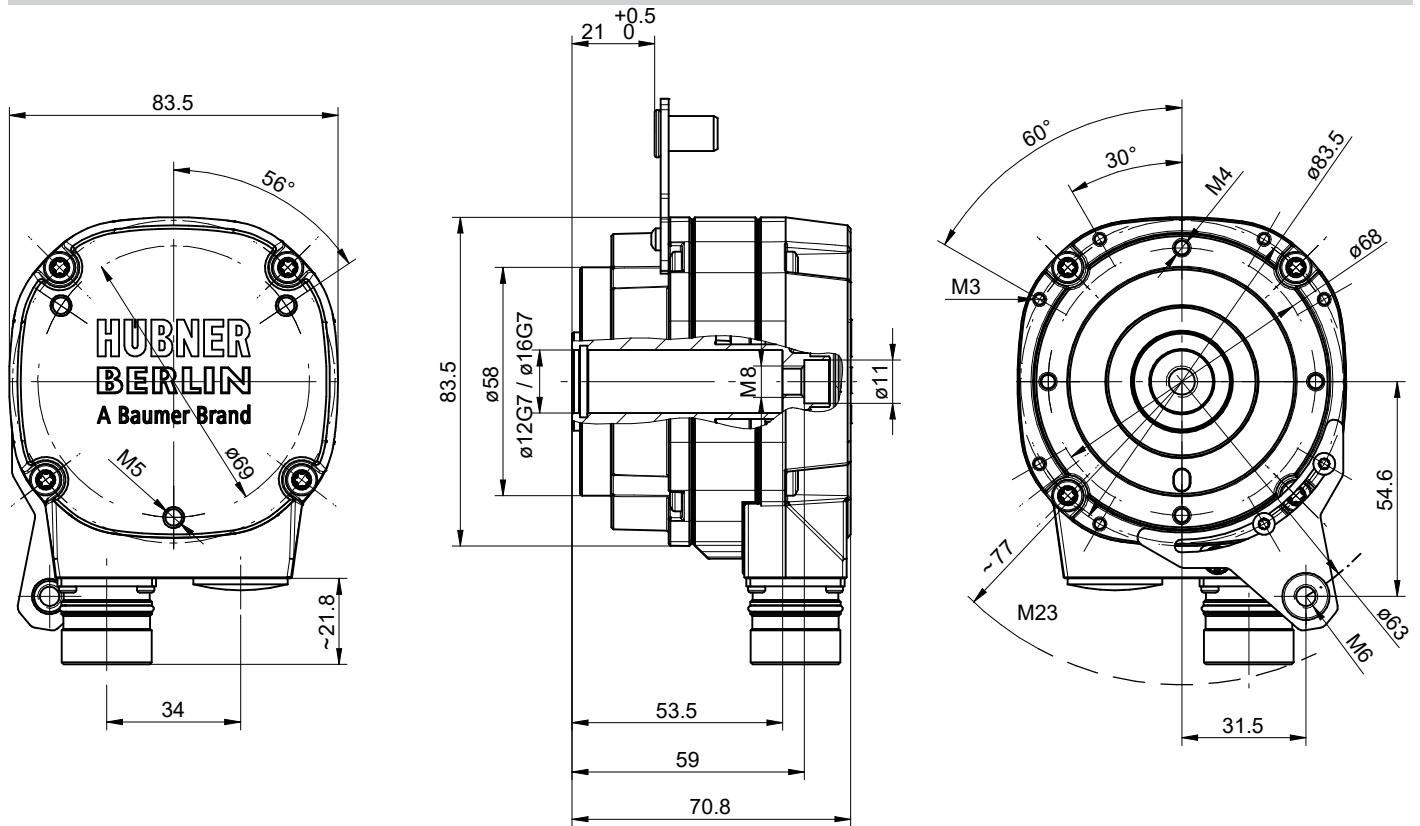


Blind hollow shaft, cable gland (torque plate can be mounted at different positions)

HOG860

High-performant incremental HeavyDuty encoders for demanding machinery and asynchronous drives

Dimensions

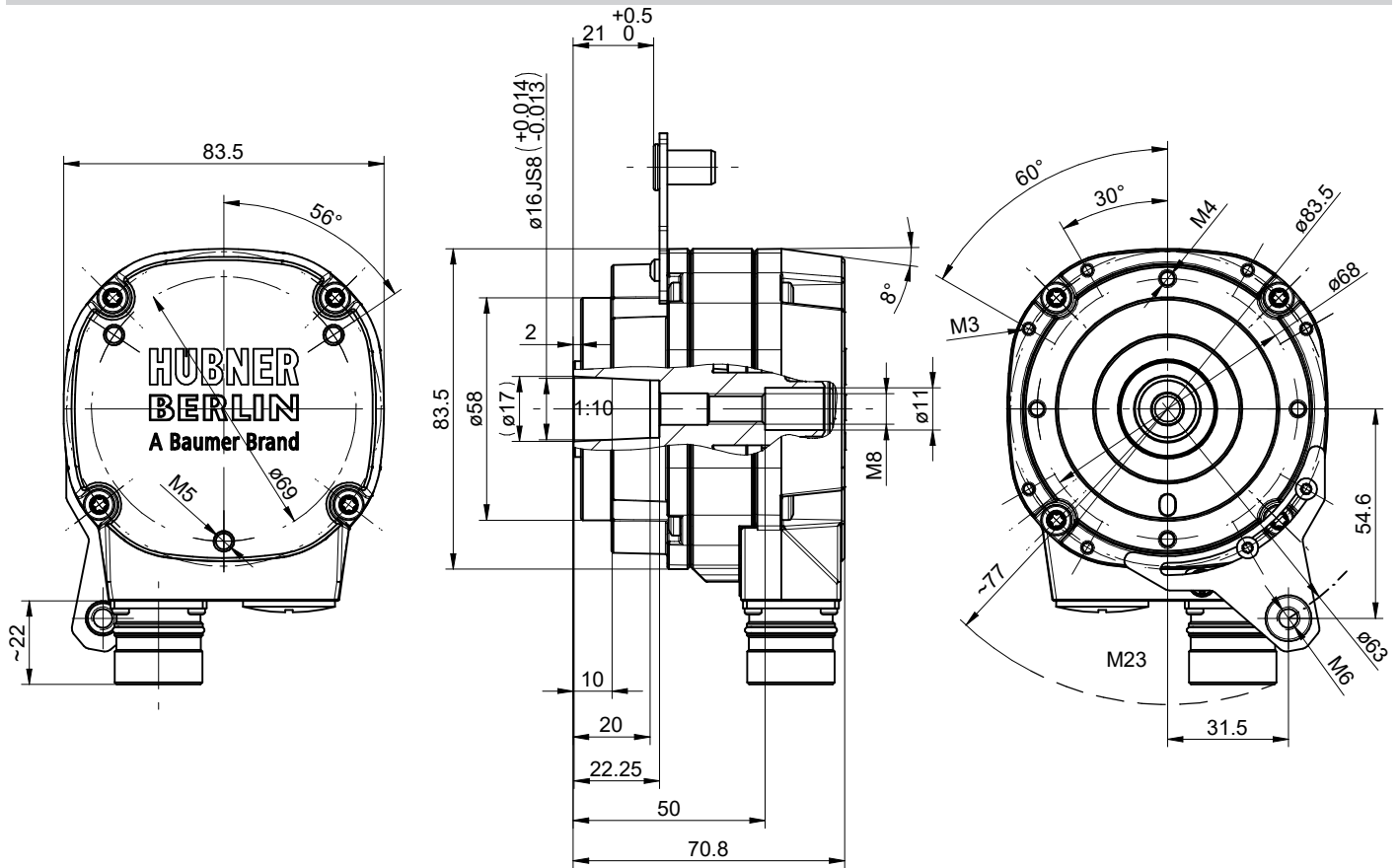


Blind hollow shaft, connector M23 (torque plate can be mounted at different positions)

HOG860

High-performant incremental HeavyDuty encoders for demanding machinery and asynchronous drives

Dimensions



Cone shaft, connector M23 (torque plate can be mounted at different positions)

Ordering reference					
Product	Shaft	Pulses per revolution, output	Connection	Comment	Material number
HOG860	Solid shaft ø11 mm	1024, HTL-P	1 x cable gland M20	Manipulation proof	EHOG860-11730669
			1 x flange connector M23	Manipulation proof	EHOG860-11730670
		2048, HTL-P	1 x cable gland M20	Manipulation proof	EHOG860-11730672
			1 x flange connector M23	Manipulation proof	EHOG860-11730673
		Parameterization at factory ¹⁾	1 x cable gland M20	Manipulation proof	EHOG860-11730674
			1 x flange connector M23	Manipulation proof	EHOG860-11730675
		Parameterization & monitoring at customer	1 x cable gland M20	SMART	EHOG860-11730676
			1 x flange connector M23	SMART	EHOG860-11730677
	Blind hollow shaft ø12G7 mm	1024, HTL-P	1 x cable gland M20	Manipulation proof	EHOG860-11730678
			1 x flange connector M23	Manipulation proof	EHOG860-11730679
		2048, HTL-P	1 x cable gland M20	Manipulation proof	EHOG860-11730680
			1 x flange connector M23	Manipulation proof	EHOG860-11730681
		Parameterization at factory ¹⁾	1 x cable gland M20	Manipulation proof	EHOG860-11730682
			1 x flange connector M23	Manipulation proof	EHOG860-11730683
		Parameterization & monitoring at customer	1 x cable gland M20	SMART	EHOG860-11730684
			1 x flange connector M23	SMART	EHOG860-11730685
	Blind hollow shaft ø16G7 mm	1024, HTL-P	1 x cable gland M20	Manipulation proof	EHOG860-11730686
			1 x flange connector M23	Manipulation proof	EHOG860-11730687
		2048, HTL-P	1 x cable gland M20	Manipulation proof	EHOG860-11730688
			1 x flange connector M23	Manipulation proof	EHOG860-11730689
		Parameterization at factory ¹⁾	1 x cable gland M20	Manipulation proof	EHOG860-11730690
			1 x flange connector M23	Manipulation proof	EHOG860-11730691
		Parameterization & monitoring at customer	1 x cable gland M20	SMART	EHOG860-11730692
			1 x flange connector M23	SMART	EHOG860-11730693
Cone shaft ø17 mm	1024, HTL-P	1 x cable gland M20	Manipulation proof	EHOG860-11730694	
		1 x flange connector M23	Manipulation proof	EHOG860-11730695	
	2048, HTL-P	1 x cable gland M20	Manipulation proof	EHOG860-11730696	
		1 x flange connector M23	Manipulation proof	EHOG860-11730697	
	Parameterization at factory ¹⁾	1 x cable gland M20	Manipulation proof	EHOG860-11730698	
		1 x flange connector M23	Manipulation proof	EHOG860-11730699	
	Parameterization & monitoring at customer	1 x cable gland M20	SMART	EHOG860-11730701	
		1 x flange connector M23	SMART	EHOG860-11730702	

1) Please choose 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 EHOG860 - 11730674: 5000 ppr, TTL, 180°, K2=0