

Incremental encoders

Ex approval ATEX II 2 G Ex d e IIC T6 Gb and IECEx Ex d e IIC T6 Gb

250...2500 pulses per revolution

EEx HOG 161 - incremental



EEx HOG 161

Technical data - electrical ratings

Voltage supply	9...30 VDC 5 VDC $\pm 5\%$ 9...26 VDC
Consumption w/o load	≤ 100 mA
Pulses per revolution	250...2500
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
Approval	CE

Features

- Encoder incremental / ATEX
- Optical sensing method
- ATEX II 2 G Ex d e IIC T6 Gb
- IECEx Ex d e IIC T6 Gb
- Through hollow shaft $\varnothing 30$ -70 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

- Cable gland M20x1.5

Technical data - mechanical design

Size (flange)	$\varnothing 160$ mm
Shaft type	$\varnothing 30$...70 mm (through hollow shaft)
Admitted shaft load	≤ 450 N axial ≤ 650 N radial
Protection DIN EN 60529	IP 54, IP 56
Operating speed	≤ 5600 rpm (mechanical)
Operating torque typ.	60 Ncm
Rotor moment of inertia	31.9 kgcm ² ($\varnothing 40$) 11.3 kgcm ² ($\varnothing 70$)
Materials	Housing: aluminium alloy Shaft: stainless steel
Ambient temperature	-20...+58 °C (IP 56) -20...+66 °C (IP 54)
Resistance	IEC 60068-2-6 Vibration 10 g, 50-2000 Hz IEC 60068-2-27 Shock 100 g, 6 ms
Explosion protection	II 2 G Ex d e IIC T6 Gb Ex d e IIC T6 Gb
Connection	Terminal box
Weight approx.	8.8 kg ($\varnothing 40$), 6.2 kg ($\varnothing 70$)

Incremental encoders

Ex approval ATEX II 2 G Ex d e IIC T6 Gb and IECEx Ex d e IIC T6 Gb
250...2500 pulses per revolution

EEx HOG 161 - incremental

Part number

Incremental encoder

EEXHOG161 **DN**

Protection

IP54 IP 54 (ambient temperature -20...+66 °C)
IP56 IP 56 (ambient temperature -20...+58 °C)

Shaft diameter

30H7 Through hollow shaft ø30 mm
40H7 Through hollow shaft ø40 mm
42H7 Through hollow shaft ø42 mm
48H7 Through hollow shaft ø48 mm
50H7 Through hollow shaft ø50 mm
55H7 Through hollow shaft ø55 mm
60H7 Through hollow shaft ø60 mm
65H7 Through hollow shaft ø65 mm
70H7 Through hollow shaft ø70 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 - see table

Output signals

DN K1, K2, K0

Pulse number

250	512	1024	1200	2500
500	1000	1080	2048	

Accessories

Connectors and cables

11106863	Extension cable gland M16 to M20
HEK 8	Sensor cable for encoders

Mounting accessories

DMS 6	Torque arm size M6
-------	--------------------

Diagnostic accessories

HENQ 1100	Analyzer for encoders
-----------	-----------------------

Incremental encoders

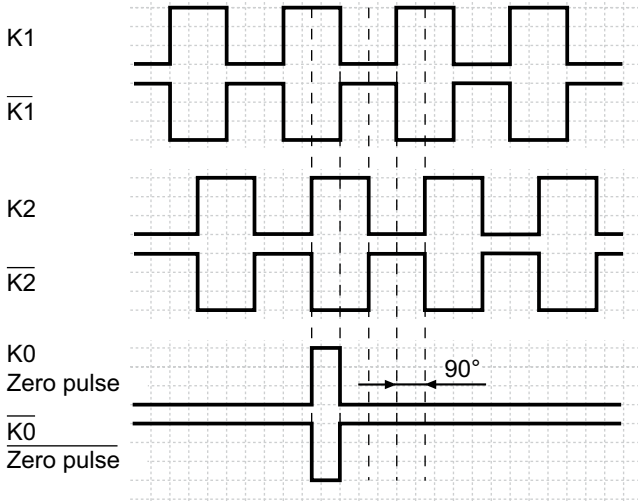
Ex approval ATEX II 2 G Ex d e IIC T6 Gb and IECEx Ex d e IIC T6 Gb

250...2500 pulses per revolution

EEx HOG 161 - incremental

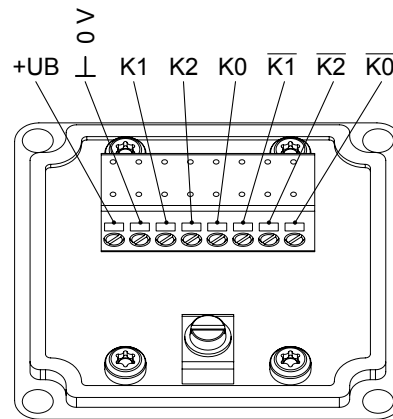
Output signals

At positive rotating direction

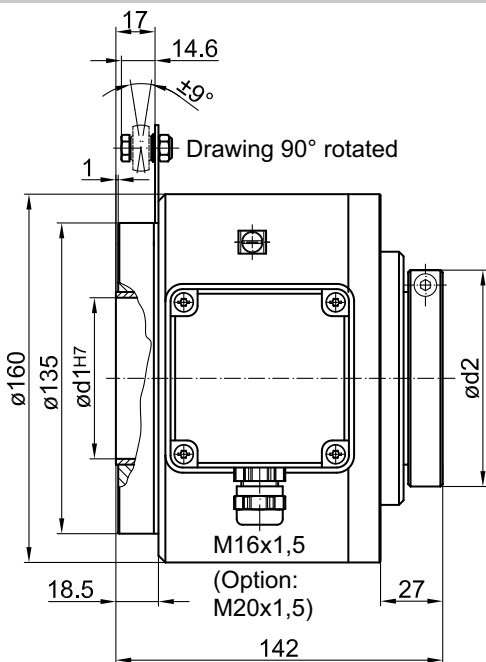


Terminal assignment

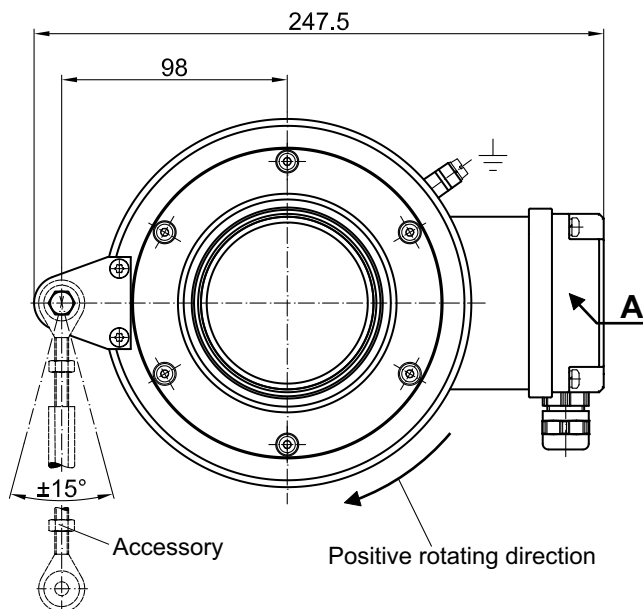
View A - Connecting terminal



Dimensions



ød1	ød2
30	51
38	59
40	60.5
42	64
48	68.5
50	70.5
55	76
60	81
65	86.5
70	94



Incremental encoders

Ex approval ATEX II 2 G Ex d e IIC T6 Gb and IECEx Ex d e IIC T6 Gb
250...2500 pulses per revolution

EEx HOG 161 - incremental
