

Main characteristics

Explosionproof encoders for applications within explosive and hazardous areas.

- Up to 10.000 ppr with Zero
- Several output types available.
Up to 28 Vdc input voltage
- Up to 300 kHz frequency response
- Output cable
- Several flanges available
- Up to 3.000 rpm speed rotation



EN 50.014 / EN 50.018
CESI certificate number: CESI 04 ATEX 082



Ordering code

Full stop to separate special versions

EX 80 A 1000 Z 5/28 P 10 X 3 P R . XXX

explosionproof encoder
by EExd IIC T6 standard

EX

Special version
code numbered
from 001 to 999

XXX

body dimension 80

Type of flanges

mod. EX80A A

mod. EX80D D

R radial

P Cable output
standard cable output 1,5 m
G threaded union 1/2" Gas

R.P.M.

3 3000

Resolutions

PPR: from 1 to 10000

Please, directly contact our offices for pulses availability

Enclosure rating

X standard IP65

Zero pulse

without zero pulse S

with zero pulse Z

Shaft diameter

10 ø 10 mm

Output types

N NPN

C NPN OPEN COLLECTOR

P PUSH PULL

L LINE DRIVER

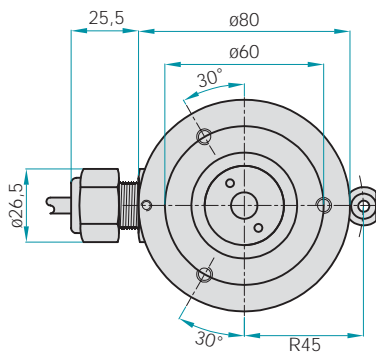
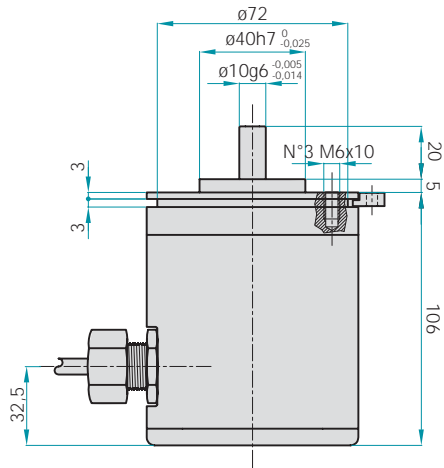
For optionals about output types please refer to incremental outputs section

Input voltage

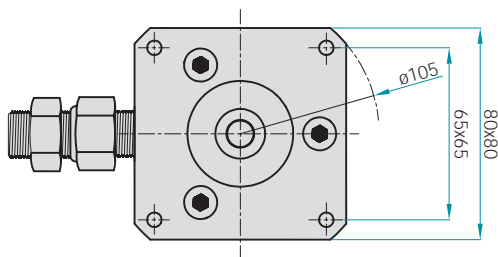
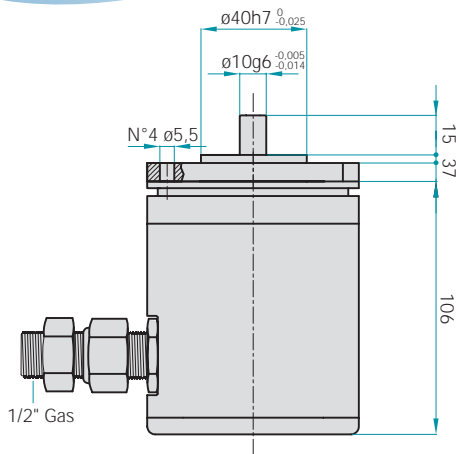
input voltage 5 ÷ 28

LINE DRIVER only available with input voltage 5 Vdc or 8 ÷ 24 Vdc

EH 80A



EX 80D



Electrical specifications

Resolution	from 1 to 10000 PPR
Input voltage	5 ÷ 28 Vdc LINE DRIVER only available with input voltage 5 ÷ 28 Vdc
Input current with no output load	100 mA Max
Source and sink current	50 mA for channel 20 mA for channel with LINE DRIVER
Output types	NPN / NPN OPEN COLLECTOR / PUSH PULL / LINE DRIVER
Output frequency	100 KHz Max
Frequency response	$F = \frac{RPM \times Resolution}{60}$

Mechanical specifications

Shaft diameter	10 mm g6 $\begin{pmatrix} -0,005 \\ -0,014 \end{pmatrix}$
Shaft speed	3000 RPM
Shock	50 G for 11 msec (with plastic disc) 20 G for 11 msec (with glass disc)
Vibrations	10G 10 ÷ 2000 Hz
MAX shaft load	200 N (20 Kp) axial 200 N (20 Kp) radial
Bearings life	10 ⁹ revolutions
Bearings	n°2 ball bearings
Shaft material	Steel AISI303
Housing material	Aluminium D11S - UNI9002/5
Operating temperature	0° ÷ +60°C
Storage temperature	-25° ÷ +70°C
Weight	1200g

Explosionproof encoder EExdIIC T6



EN 50.014 / EN 50.018
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EExdIIC T6

EEx: Electrical system for explosive and hazardous areas

d: Explosionproof box

II: Electrical system which can operate in hazardous areas except for the mines where "grisou" gas is present

C: Type of protection based on the special interstice designed to have the maximum security on the explosionproof encoder (MESG C=maximum security)

T6: Maximum encoder surface temperature 85° C