

MAIN FEATURES

Flameproof encoders for applications within explosive and hazardous areas.

- Up to 10000 ppr with zero
- Several output types available
- Up to 28 V dc input voltage
- Output cable
- Several flanges available
- Up to 3000 rpm speed rotation
- Up to IP 65 sealing



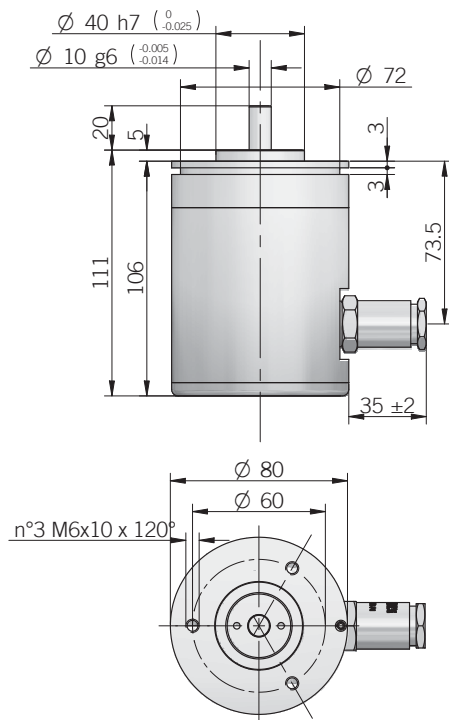
EN 60079-0:2006 / EN 60079-1:2007
 EN 61241-0:2006 / EN 61241-1:2004
 ATEX certificate number: CESI 04 ATEX 082



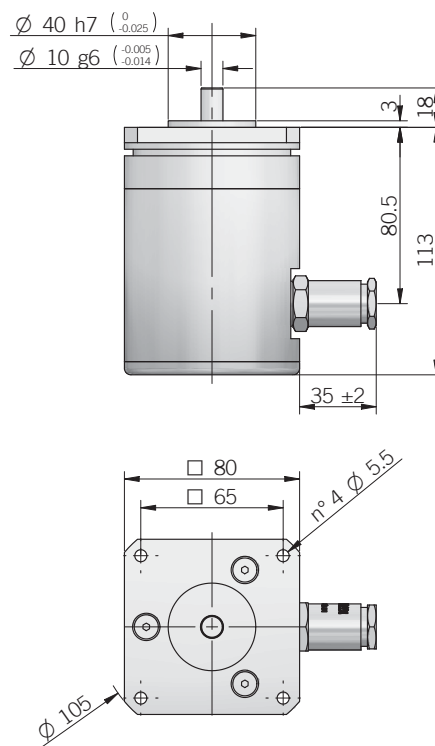
ORDERING CODE

EX 80 A 1000 Z 5/28 P 10 X 3 PR . XXX	
SERIES flameproof encoder EX	VARIANT XXX custom version
SIZE mm 80	OUTPUT TYPE PR radial cable output (standard length 1.5 m)
TYPE synchronous flange \varnothing 40 mm A square flange \square 65 mm D	MAX ROTATION SPEED 3 3000 rpm
RESOLUTION ppr from 1 to 10000 <i>N.B.: please directly contact our offices for pulses availability</i>	ENCLOSURE RATING X IP 65
ZERO PULSE without zero pulse S with zero pulse Z	SHAFT DIAMETER 6 mm 8 mm 10 mm
POWER SUPPLY (available only with L electronic output) 5 V DC 5 (available only with L or PC electronic output) 8 ... 24 V DC 8/24 5 ... 28 V DC 5/28	ELECTRONIC INTERFACE N NPN C NPN open collector P push-pull PC protected push-pull (AEIC-7272) L line driver

EX 80 A



EX 80 D



Electrical specifications

Resolution	from 1 to 10000 ppr
Power supply	5 V DC $\pm 10\%$ 5 ... 28 V DC $\pm 5\%$ 8 ... 24 V DC $\pm 5\%$ (reverse polarity protection)
Current consumption without load	80 mA max
Max load current	50 mA per channel 20 mA per channel (line driver)
Electronic interface for incremental signals	NPN NPN open collector push-pull line driver
Max output frequency	200 kHz
Counting direction	A leads B clockwise (shaft view)
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-3

Mechanical specifications

Shaft diameter	6 / 8 / 10 mm
Enclosure rating	IP 65 (IEC 60529)
Max rotation speed	3000 rpm
Max shaft load	200 N (20 Kgf) axial / radial
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibrations	10 G, 10÷2000 Hz (IEC 60068-2-6)
Bearings	n° 2 ball bearings
Bearings life	10 ⁹ revolutions
Body material	anodized aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	anodized aluminum
Operating temperature	-20° ... +50 °C
Storage temperature	-20° ... +70 °C
Weight	1200 g

Ex II 2GD Ex d IIC T6 Ex tD A21 IP65 T85°C

Ex II 2GD

II: group II: other than mines
2: category 2: zone 1 (GAS), zone 21 (DUST)
GD: gas, vapours, mist, cloud of dust

Ex d IIC T6

Ex d: flameproof enclosure safety type
IIC: gas subdivision IIC
T6: max surface temperature 85°C

Ex tD A21 IP65 T85°C

Ex tD: flameproof enclosure safety type
A: IP grade testing method
21: zone 21
IP65: protection grade IP65
T85°C: max surface temperature 85°C

Connections and standard colours

Function	Line driver	Push pull / Npn / Npn open collector
+V DC	brown	brown
0 V	gray	gray
Ch. A	green	green
Ch. A-	red	/
Ch. B	yellow	yellow
Ch. B-	pink	/
Ch. Z	blue	white
Ch. Z-	white	/
⊕	shield	shield