

Incremental encoders

EX approval ATEX EEx d IIC T4

Resolution 5...5000 pulses

X 700 - incremental



X 700 with EX-proof housing

Features

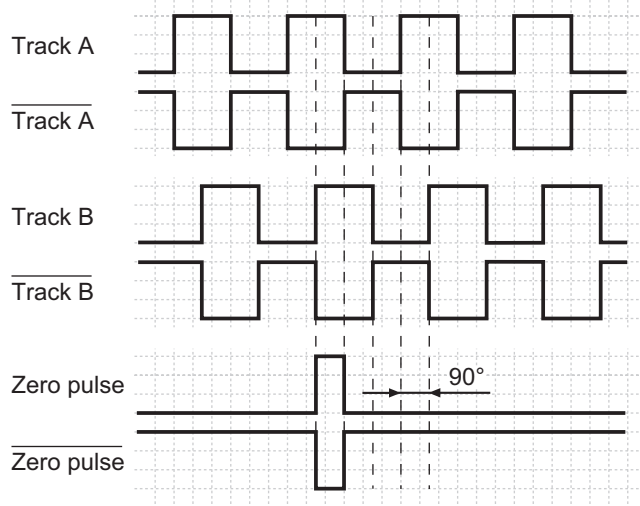
- Encoder incremental / ATEX
- Optical sensing
- Resolution max. 5000 ppr
- Clamping flange / shaft $\varnothing 10$ mm
- Explosion-proof in line with EEx d IIC T4
- Area of application: EX I/II 2 GD / ATEX 133213X
- Material stainless steel

Technical data - electrical ratings

Voltage supply	4.75...30 VDC
Reverse polarity protection	Yes
Consumption w/o load	≤ 50 mA
Resolution (steps/turn)	5...5000
Reference signal	Zero pulse, width 90°
Sensing method	Optical
Output frequency	≤ 300 kHz
Output signals	A 90° B, N + inverted
Output circuit	Push-pull short-circuit proof
Interference immunity	DIN EN 61000-6-2
Emitted interference	DIN EN 61000-6-4

Output signals

Clockwise rotating direction when looking at flange.



Optional: other reference impulse.

Technical data - mechanical design

Housing	$\varnothing 70$ mm
Shaft	$\varnothing 10$ mm (clamping flange)
Flange	Clamping flange
Protection DIN EN 60529	IP 67
Operating speed	≤ 6000 rpm
Starting torque	≤ 0.04 Nm
Admitted shaft load	≤ 60 N axial ≤ 50 N radial
Materials	Housing: stainless steel Flange: stainless steel
Operating temperature	$-25...+70^\circ\text{C}$
Relative humidity	95 % non-condensing
Resistance	DIN EN 60068-2-6 Vibration 10 g, 12-2000 Hz DIN EN 60068-2-27 Shock 100 g, 6 ms
Weight approx.	1300 g
E-connection	Cable 2 m (other length upon request)

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Part number

X 700.I 1

See part number (pulses)

E-connection

32 Cable 2 m, axial

34 Cable 5 m, axial

Voltage supply / signals

1 4.75...30 VDC / push-pull

2 5 VDC / RS422

Flange / Shaft

1 Clamping flange / $\varnothing 10$ mm IP 67

Part number (pulses)

49 (5)	40 (60)	09 (250)	22 (1000)
36 (10)	41 (100)	13 (360)	23 (1024)
50 (25)	57 (128)	14 (400)	26 (1500)
39 (50)	06 (200)	15 (500)	28 (2000)

Other pulse numbers upon request.

Example: ordering key 23 = 1024 pulses

Terminal assignment

Core no.	Core colour	Assignment
#1	white	GND
#2	brown	UB
#3	green	Track A
#4	yellow	Track B
#5	grey	Track N
#6	pink	Track A inv.
#7	blue	Track B inv.
#8	red	Track N inv.

Trigger level

Outputs	Push-pull short-circuit proof
Output level High	>UB -1.4 V (I = -20 mA)
Output level Low	<0.5 V (I = 20 mA)
Load High	<20 mA
Load Low	<20 mA

Dimensions

