

MAIN FEATURES

Electronic handwheel series designed for positioning on CNC machines with manual drive.

- Resolution up to 10000 ppr with zero signal
- Several electronic output configurations available
- Up to 28 V DC power supply
- Output frequency up to 100 kHz
- Cable or connector output
- Several flanges available

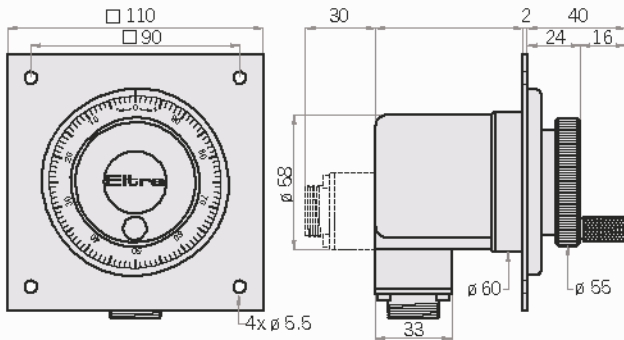


OTHER PRODUCTS

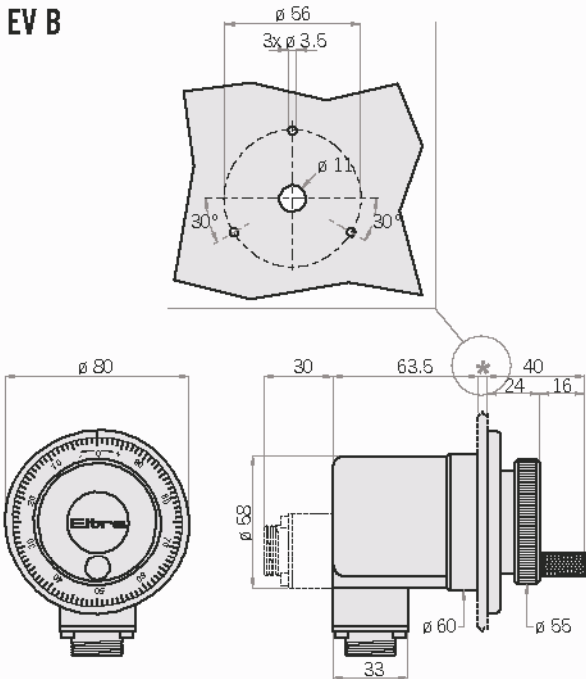
ORDERING CODE

EV	A	M	100	Z	5	L	10	M	R	.	XXX
SERIES										VARIANT	
electronic handwheel EV										XXX custom version	
TYPE										OUTPUT DIRECTION	
square flange □ 90 mm A										A axial (EV A / B)	
fixing flange ø 11 mm B										R radial	
fixing flange ø 28 mm C										OUTPUT TYPE	
KNOB										P cable output (standard length 1.5 m) (EV A / B)	
with knob M										cable output (standard length 0.3 m) (EV C)	
without knob S										MM connector output M	
RESOLUTION										JJ connectore output	
(EV A / B) ppr from 1 to 10000										SHAFT DIAMETER	
(EV C) ppr 100										6 mm (EV C)	
<i>N.B.: please directly contact our offices for pulses availability</i>										10 mm (EV A / B)	
ZERO PULSE										OUTPUT TYPE	
without zero pulse S										N NPN	
with zero pulse Z										C NPN open collector	
POWER SUPPLY										P push-pull	
(available only with L electronic output) 5 V DC 5										PC protected push-pull (AEIC-7272)	
(available only with L or PC electronic output) 8 ... 24 V DC 8/24										L line driver	
5 ... 28 V DC 5/28											

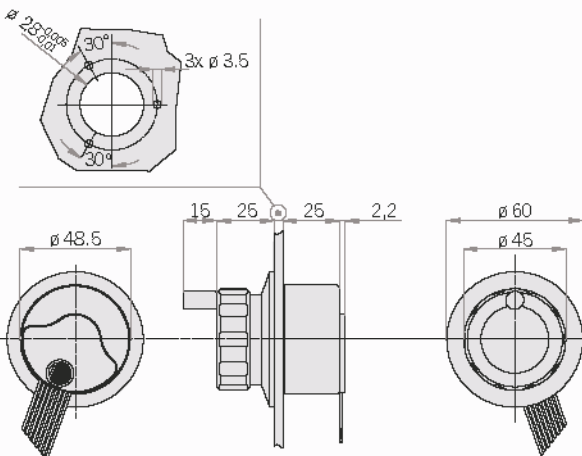
EV A



EV B



EV C



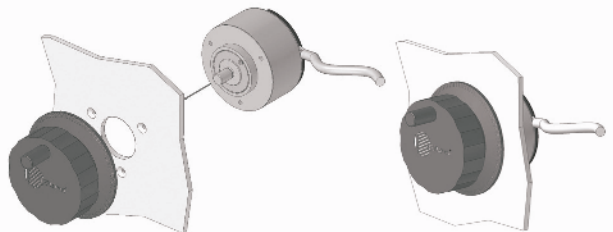
Electrical specifications

Resolution	from 1 to 10000 ppr (EV A / B) 100 ppr (EV C)
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	100 mA max
Max load current	50 mA for channel 20 mA for channel (line driver)
Output type	NPN / NPN open collector / push-pull / line driver
Max output frequency	100 kHz
Counting direction	A leads B clockwise (shaft view)
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-4

Mechanical specifications

Shaft diameter	ϕ 6 mm (EV C) ϕ 10 mm (EV A / B)
Enclosure rating	IP 64 (EV A / B) (IEC 60529) IP 40 (EV C) (IEC 60529)
Mechanical indexes per turn	100
Shock	50 G, 11 ms (IEC 60068-2-27)
Vibration	10 G, 10 ... 2000 Hz (IEC 60068-2-6)
Shaft material	1.4305 / AISI 303 stainless steel
Body material	EN-AW 2011 aluminum
Housing material	PA 66 glass fiber reinforced (EV A / B) stainless steel (EV C)
Bearings	2 ball bearings
Bearings life	10 ⁹ revolutions
Operating temperature	-10° ... +60°C
Storage temperature	-25° ... +70°C
Weight	150 g (EV C) 450 g (EV A / B)

Example of EV C application



Connections and standard colours

Function	Push pull / Npn / Npn open collector	Line driver
+VDC	red	red
0 V	black	black
Ch. A	green	green
Ch. A-	/	brown
Ch. B	yellow	yellow
Ch. B-	/	orange
Ch. Z	blue	blue
Ch. Z-	/	white
⊥	shield	shield