

MAIN FEATURES

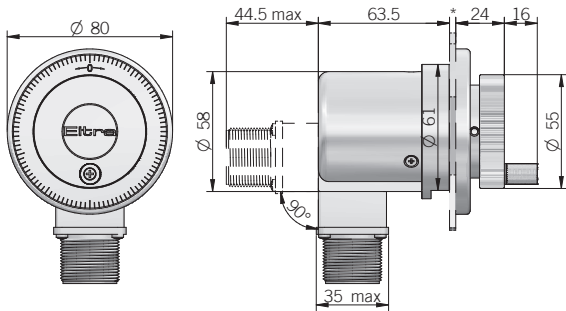
Electronic handwheel series designed for positioning on CNC machines with manual drive.

- 3 channel encoder (A / B / Z) up to 2500 ppr
- Power supply up to +28 VDC with several electronic interfaces available
- Up to 220 kHz output frequency
- Cable or connector output
- Solid shaft diameter up to 10 mm
- Mounting by fixing flange

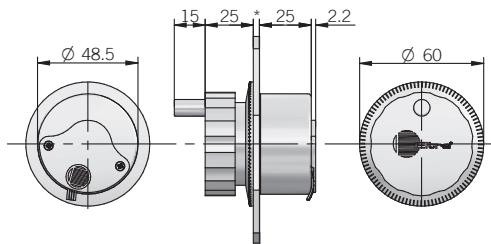


ORDERING CODE	EV	B	*S	100	S	5	N	10	P	R	.XXX
SERIES electronic handwheel EV											
MODEL fixing flange screw holes ϕ 56 mm B fixing flange screw holes ϕ 40 mm C											
Knob <i>* add to ordering code if without knob</i> S											
RESOLUTION (mod. B) see table ppr 100 to 2500 (mod. C) ppr 100 <i>see table for pulses availability</i>											
ZERO PULSE without zero pulse S (mod. B) with zero pulse Z											
POWER SUPPLY (with L electronic interface) 5 V DC 5 (with L or PC electronic interface) 8 ... 24 V DC 8/24 5 ... 28 V DC 5/28											
ELECTRONIC INTERFACE NPN N NPN open collector C push-pull P push-pull protected (AEIC-7272) PC line driver L (mod. B) power supply 5/28V - output RS-422 RS											
SHAFT DIAMETER (mod. C) mm 6 (mod. B) mm 10											
OUTPUT TYPE cable (standard length: mod. B = 1,5 m - mod. C = 0,3 m) P (mod. B) MIL connector M (mod. B) JIS-C-5432 connector J <i>female connector included, without female please add 162 as variant code</i>											
DIRECTION TYPE (mod. B) axial A radial R											
VARIANT custom version XXX											

EV B

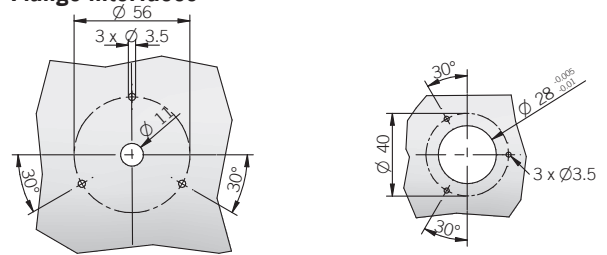


EV C



dimensions in mm

Flange interfaces



MECHANICAL SPECIFICATIONS	
Shaft diameter	Ø 6 / 10 mm
Enclosure rating	IP 64 (mod. B) (IEC 60529) IP 40 (mod. 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)
Body material	EN-AW 2011 aluminum
Shaft material	1.4305 / AISI 303 stainless steel
Housing material	PA 66 glass fiber reinforced (mod. B) nickel plated brass (mod. C)
Bearings	2 ball bearings
Bearings life	10 ⁹ revolutions
Operating temperature	-10° ... +60°C (+14° ... +140°F)
Storage temperature	-25° ... +70°C (-13° ... +158°F)
Weight	450 g (15,87 oz) mod. B 150 g (5,29 oz) mod. C

ELECTRICAL SPECIFICATIONS	
Resolution	from 100 to 2500 ppr (mod. B) 100 ppr (mod. C)
Power supply	5 = 4,5 ... 5,5 V DC 5/28 = 4,75 ... 29,4 V DC 8/24 = 7,6 ... 25,2 V DC (reverse polarity protection)
Current consumption without load	100 mA max
Max load current	N / C / P / PC = 50 mA / channel L = 20 mA / channel
Output type *	NPN / NPN open collector / push-pull / line driver
Max output frequency	200 kHz mod. B 150 kHz mod. C
Counting direction	A leads B clockwise (shaft view)
Electromagnetic compatibility	IEC 61000-6-2 IEC 61000-6-4

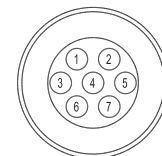
*output levels according to power supply, for further details please see under Technical basics section

EVA / EVB SERIES RESOLUTIONS	
100 - 200 - 360 - 500 - 512 - 720 - 1000 - 1024 - 1440 - 2000 - 2048 - 2500	

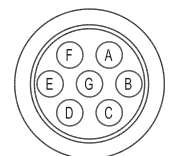
please directly contact our offices for other pulses, preferred resolutions in bold

CONNECTIONS								
Function	Cable output	Cable output	7 pin J output	7 pin J output	7 pin M output	7 pin M output	10 pin J output	10 pin M output
	N / C / P / PC	Line driver	N / C / P / PC	Line Driver no Zero	N / C / P / PC	Line Driver no Zero	Line Driver with Zero	Line Driver with Zero
+V DC	red	red	6	4	F	D	4 - 5	D - E
0 V	black	black	1	6	A	F	6	F
Ch. A	green	green	3	1	C	A	1	A
Ch. A-	/	brown	/	3	/	C	7	G
Ch. B	yellow	yellow	5	2	E	B	2	B
Ch. B-	/	orange	/	5	/	E	8	H
Ch. Z	blue	blue	4	/	D	/	3	C
Ch. Z-	/	white	/	/	/	/	9	I
⊖	shield	shield	7	7	G	G	10	J

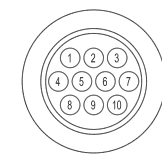
J connector (7 pin)
JIS-C-5432 Size 16
solder side view FV



M connector (7 pin)
Amphenol MS3102-E-16-S
solder side view FV



J connector (10 pin)
JIS-C-5432 Size 16
solder side view FV



M connector (10 pin)
Amphenol MS3102-E-18-1
solder side view FV

