



# EA40T / U

## ABSOLUTE ENCODERS FOR TOOL CHANGE TURRETS

### Absolute encoders

The encoders of the 40T models found their applications in the field of machine tools and are specifically suitable for being assembled on turrets for tool change (8 or 12 positions).

It is interesting to note the timing system between encoder and turret through an led situated on the cover, that visualizes the position of the first tool making the assembly easy and quick for the operator.

The main characteristics are:

- Easy assembly
- Protection IP 66
- Different electronic configurations with power supply up to 24 Vdc
- Turret configuration at 8 and 12 position turn



### Ordering codes

**EA 40 T 12 B 8/24 R P 6 S 3 P R . XXX**

In case of particular Customer variant- separate by a full stop

**EA** = Absolute encoder

**40** = Body dimension

**T** = mod.EA40T  
**U** = mod.EA40U  
Type of flanges

**8**  
**12**  
Turn position

**B** = binary  
Code

**5**  
**8 ÷ 24**  
Encoder power supply (Vdc)

**N** = NPN  
**C** = NPN OPEN COLLECTOR  
**R** = PNP  
**U** = PNP OPEN COLLECTOR  
Electronics output configuration

**XXX** = Particular Customer variants indicated by a progressive number from 001 to 999

**R** = radial  
**A** = axial

**P** = output cable (standard length 0.5 m)

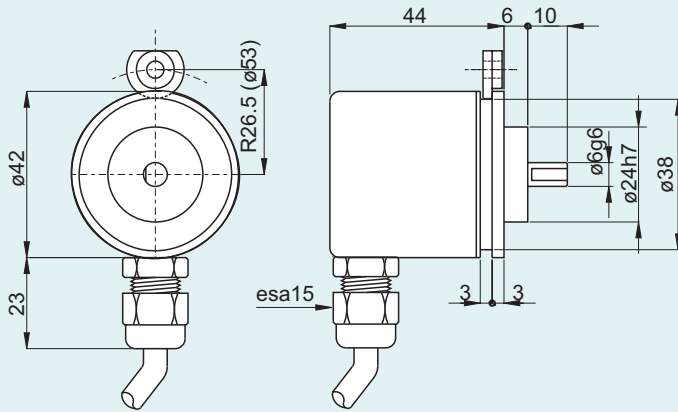
**3** = 3000 max R.P.M.

**S** = standard IP66 Protection

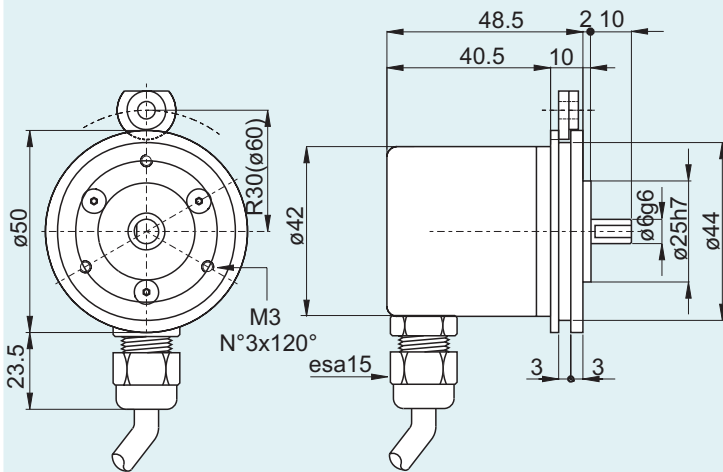
**6** = ø6 mm Shaft diameter

**N** = Negative logic  
**P** = Positive logic

### EA40T



### EA40U



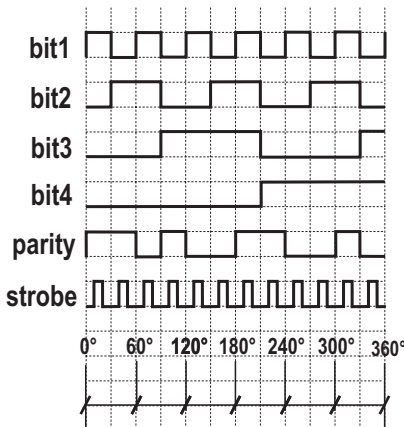
### Electronic Characteristics

Turn position	8 / 12
Power supply	5 Vdc / 8 + 24 Vdc
Current consumption without load	100 mA
Max commutable current	40 mA per channel
Electronic output configuration	NPN / NPN OPEN COLLECTOR / PNP / PNP OPEN COLLECTOR
Max output frequency	Max 50 KHz

### Mechanical Characteristics

Shaft diameter (mm)	ø6 g6
Protection	IP66 - Standard
R.P.M. Max	3000 continuous
Max shaft load	5N (0.5 Kp) axial 5N (0.5 Kp) radial
Shock	50 G per 11 msec
Vibrations	10G 10 + 2000 Hz
Bearings life	10 <sup>9</sup> revolutions
Bearing	n°2 ball bearings
Shaft material	Stainless steel AISI303
Body material	AluminiumD11S - UNI 9002/5
Cover material	Special plastic reinforced with glass fibre
Operating Temperature	0° + +60°C
Storage Temperature	-25° + +70°C
Weight	100 g

### Output signal configuration



Up to 8 pos./turn

Up to 12 pos./turn

Cable colour	WHITE	YELLOW	GREEN	VIOLET	RED	BLACK	BROWN	BLUE
Turn position	bit1	bit2	bit3	bit4	Parity	Strobe	+ Vdc	0 Volt
1	•				•	⌋		
2		•			•	⌋		
3	•	•				⌋		
4			•		•	⌋		
5	•		•			⌋		
6		•	•			⌋		
7	•	•	•		•	⌋		
8				•	•	⌋		
9	•			•		⌋		
10		•		•		⌋		
11	•	•		•	•	⌋		
12			•	•		⌋		

