

## Topydic Small Hollow Shaft Incremental Encoder EV40P



### Descriptions

Topydic series small shaft incremental encoder-EV40P delivers outstanding performance in mechanical shock-resistance and is capable of withstanding higher axial and radial loads so as to meet various industrial environments. Its special position of cabling fits to the limited installation space. Combining advanced signal processing technology with multiple types of electrical output, EV40P is capable of matching various upper control computers.

### Features

- Stainless steel shaft ensures safety and stability in operation
- Optional types of flange connection offers more flexibility
- Metal casting housing for greater shock resistance
- Side cabling design greatly saves the installation space and simplifies wiring
- Reverse connection protection; short circuit protection

### Mechanical Characteristics

Shaft diameter (mm)	Φ6H7/Φ8H7
Protection class	IP66 standard, IP67 optional
Max. speed/ minute	6000
Max. load capacity of the shaft	60N axial 100N radial
Shock resistance	50G/11ms
Vibration resistance	10G 10~2000HZ
Bearing life	10 <sup>9</sup> revolution
Moment of inertia	1.9×10 <sup>-6</sup> kgm <sup>2</sup>
Starting torque	<0.08Nm
Body material	Al-alloy
Housing material	Zn-alloy
Operating temperature	-20°C...+85°C
Storage temperature	-25°C...+100°C
Weight	110g

Regular resolution: **10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 360, 400, 500, 512, 600, 800, 1000, 1024, 1200, 1250, 2000, 2500, 4000, 5000**

Note: Bold part is normally in stock. Other resolution are available only upon request.

### Electrical Characteristics

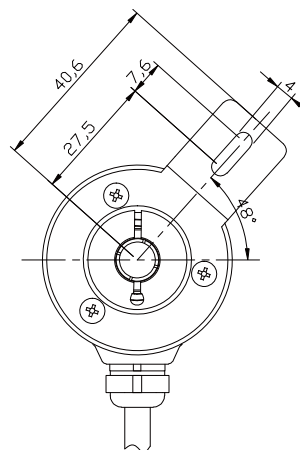
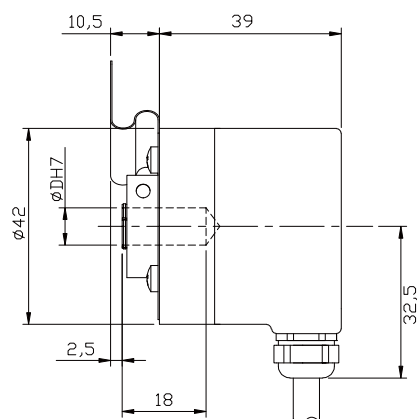
Output circuit	RS422	Push-pull
Resolution	Max. 5000ppr	Max. 5000ppr
Supply voltage (Vdc)	5±0.25 or 10-30	10-30
Power consumption (no load)	≤80mA	≤125mA
Permissible load (channel)	±50mA	±80mA
Pulse frequency	Max. 800kHz	Max. 800kHz
Signal level high	Min. 3.4V	Min. Ub-1.8
Signal level low	Max. 0.4V	Max. 2.0V
Rise time Tr	Max. 200ns	Max. 1μs
Fall time Tf	Max. 200ns	Max. 1μs



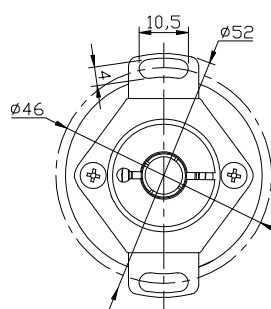
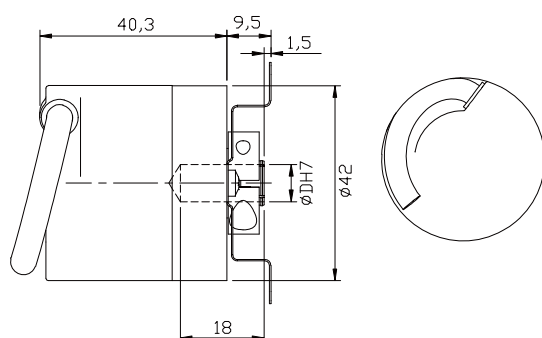
## Topydic Small Hollow Shaft Incremental Encoder EV40P

Dimension (mm)

EV40H



EV40W side pre-wired cable



## Topydic Small Hollow Shaft Incremental Encoder EV40P

Order Code:

EV	40	P	6	—	L5	P	R	—	1024	TP	XXXX
Series	Housing diameter 40mm=housing diameter	Flange type P=with single-wing fixing plate W=with double-wing fixing plate H=long fastening arm	Shaft diameter 6= Φ6mm 8= Φ8mm				Outlet direction R=radial				XXXX=Special code Customized cable length CN00XX=cable length e.g. CN0010=1m CN0015=1.5m CN0020=2m
								Side output cable length TP=0.5m Note: If blank here, it means P=0.5m			
								Resolution Pulse/r: ≤5000 Note: for other available pulse options please contact us for further information.			
										</	

<sup>1)</sup> When the voltage supply within the limited range and only one signal channel is connected improperly at certain moment:  
if UB=5V, it's permitted to connect to signal channels, 0V or UB;  
if UB>5V, it's permitted to connect to signal channels or 0V.