

Topydic Series Large Hollow Shaft Incremental Encoder EV150P



Description

Topydic series large hollow shaft encoders EV150P are widely used in industrial environments in which direct installation on the drive shaft for speed feedback is required. It delivers excellent performance in withstanding mechanical shock and higher axial and radial loads. Hollow shaft structure could be directly installed onto the drive shaft, and crutch arm or block-pin accessories provide greater flexibility to prolong the usability of the encoder. EV150P delivers resolution up to 2048 ppr, and guarantees both precise measurement control and safety in loading. It is the most recommended product for its high quality and affordability.

Features

- Crutch arm or block-pin accessories provide the greatest flexibility
- Resolution 2048 ppr, IP64 guarantees precision and safety
- Compact hollow shaft design is both a space and cost-saver
- Metal housing for greater shock resistance, compact structure is suited for confined mounting space
- Stainless steel hollow shaft $\Phi 60H7 - \Phi 80H7$, "C" lock ring
- Cable output or connector is flexible and easy for maintenance
The waterproof rubber ends ensures safety
- Reverse connection protection and short circuit protection

Mechanical parameters

Hollow shaft diameter	$\Phi 60H7 - \Phi 80H7$ mm
Protection class	IP64
Speed	3000 rpm
Max load capacity of the shaft	100 N axial 200 N radial
Shock resistance	50G/11 ms
Vibration resistance	10 G 10~2000 Hz
Bearing life	10^9 revolution
Moment of inertia	$<15 \times 10^{-6}$ kgm ²
Starting torque	<0.25 Nm max.
Body material	AL-alloy
Housing material	AL-alloy + green paint
Operating temperature	-20~+90 °C
Storage temperature	-40~+100 °C
Relative humidity/condensation	90%, Condensation not permitted
Weight	1800 g

Resolution: 1000, 1024, 2048

Attention: the products with above resolutions are available from stock, others on request.

Electrical parameters

Output circuit	RS422	Push-pull
Resolution	Max.2048 ppr	Max.2048 ppr
Supply voltage	5±0.25 or 10...30 VDC	10...30 VDC
Power consumption (no load)	≤80 mA	≤100 mA
Permissible load (channel)	±50 mA	±30 mA
Pulse frequency	Max.800 kHz	Max.800 kHz
Signal level high	Min.3.4 V	Min.U _b -1.8
Signal level low	Max.0.4 V	Max.2.0 V
Rise timeT _r	Max 200 ns	Max 1 μs
Fall timeT _f	Max 200 ns	Max 1 μs

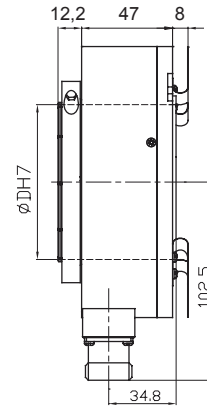
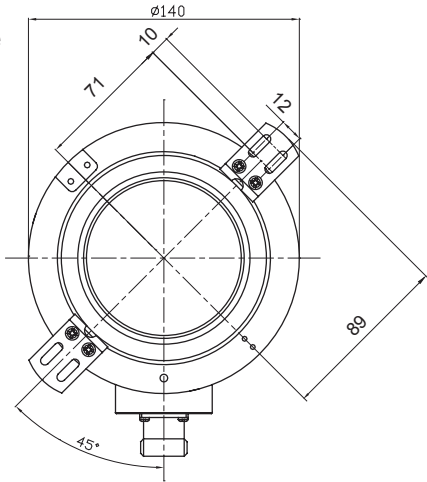
Terminal Assignment

Signal	0V	+U _b	A	\bar{A}	B	\bar{B}	Z	\bar{Z}	Shield
Color	WH	BN	GN	YE	GY	PK	BU	RD	$\frac{\square}{\square}$
Pin	10	12	5	6	8	1	3	4	PH

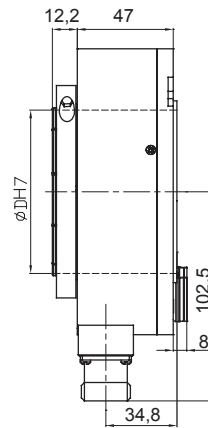
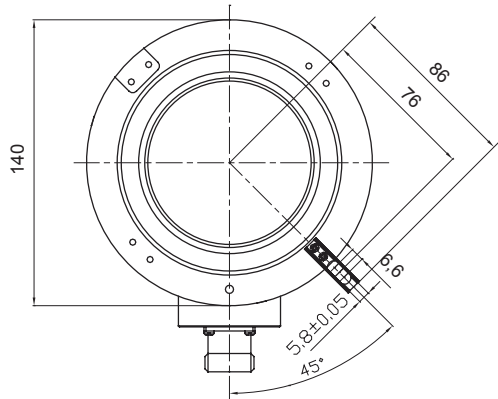
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Dimensions (mm)

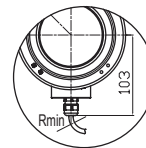
EV150P
Double-wing fixing plate
E41350013



EV150K
Long torque support slot:
E41350035
Block pin:
E41220002

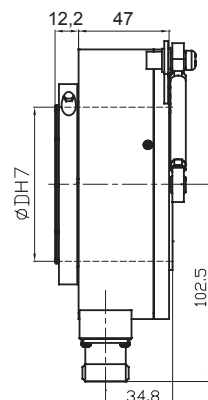
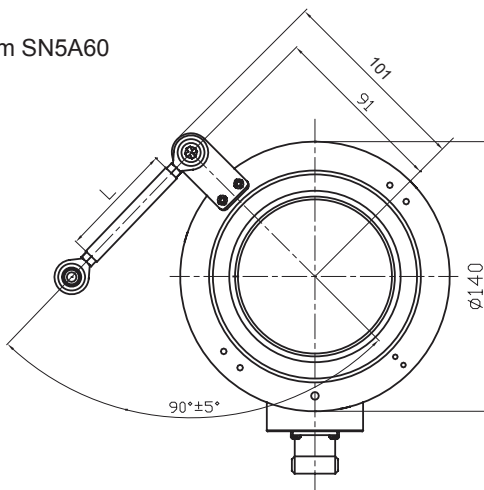


Cable output



Rmin
Fix installation: 55mm
Draw installation: 70mm

EV150R
Torque arm SN5A60



Crutch arm order
SN5A XX
(30,60,90means length)



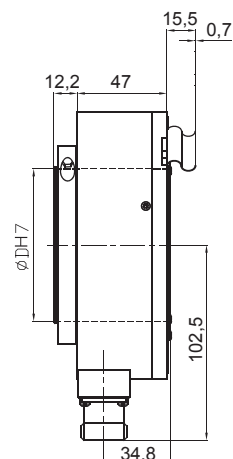
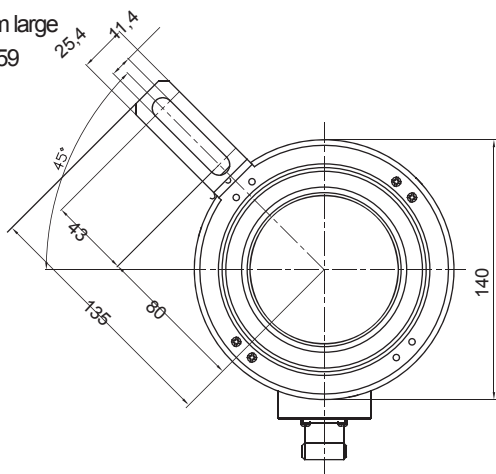
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Dimensions (mm)

EV150H

Tether arm large

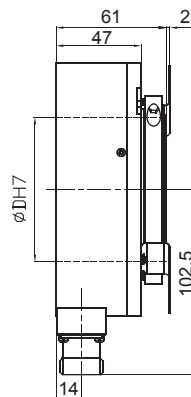
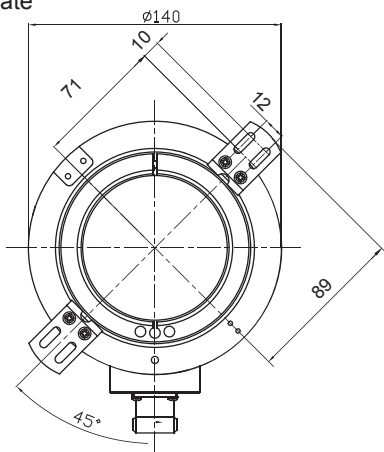
E41350059



EV150RP

Double-wing fixing plate

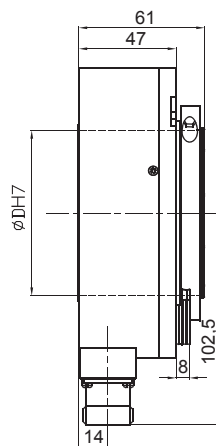
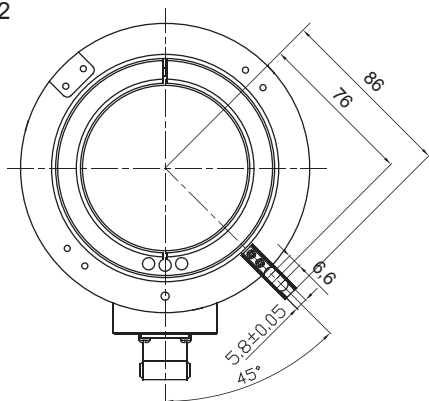
E41350013



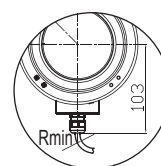
EV150RK

Long torque support slot: E41350035

Block pin: E41220002



Cable output

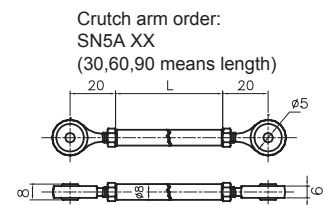
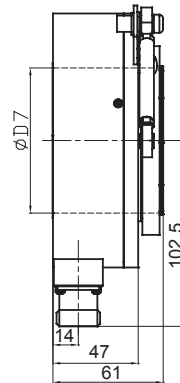
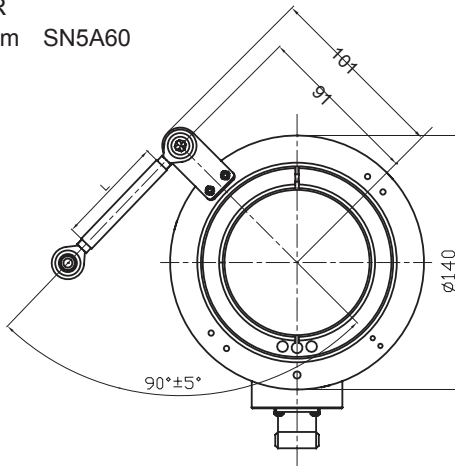


Rmin
Fix installation: 55mm
Draw installation: 70mm

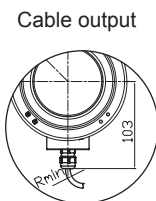
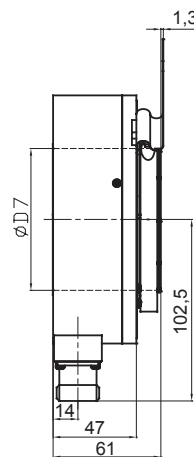
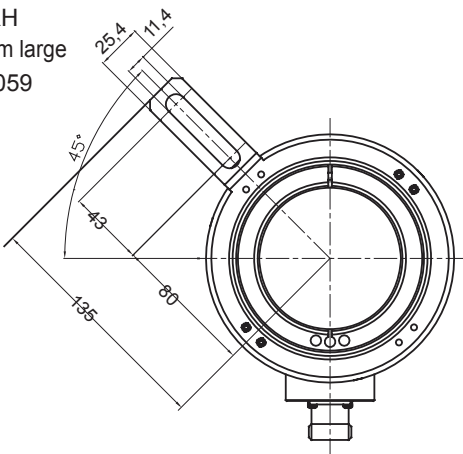
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Dimensions (mm)

EV150RR
Torque arm SN5A60

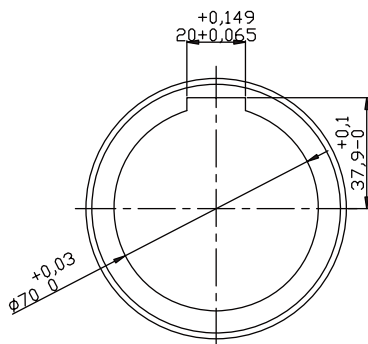


EV150RH
Tether arm large
E41350059



Rmin
Fix installation: 55mm
Draw installation: 70mm

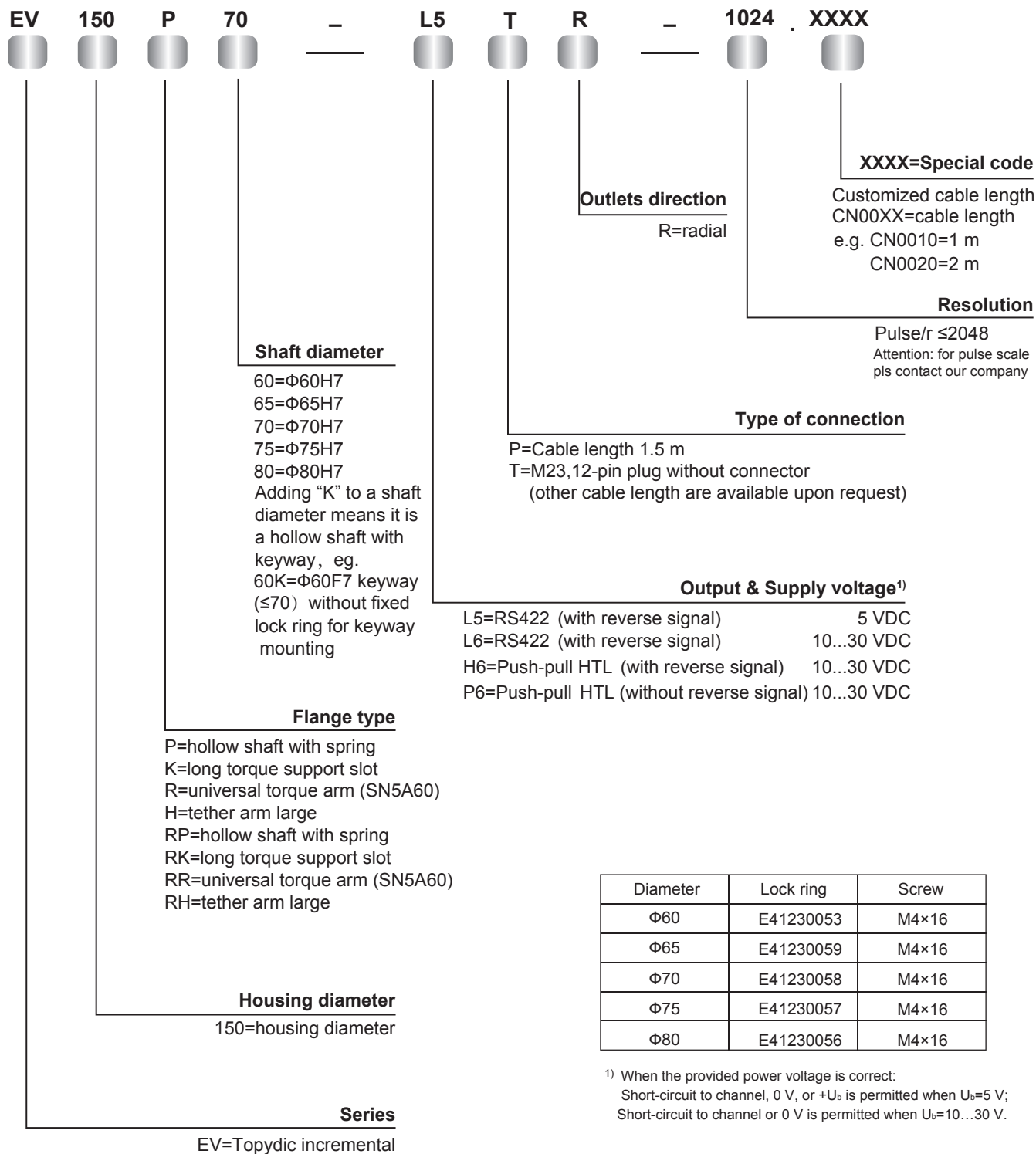
Keyway shaft



EV150P Keyway

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Order Code:



Connector order:
matching "T" connector: TMSP1612F