

## Heavydic Series Hollow Shaft Encoder with Overspeed Switch EX100R



### Description

Heavydic series heavy duty encoders EX100R are specifically designed to be used in various heavy industries and heavy-loaded shaft applications. It has perfect mechanical shock resistance, and is capable of withstanding higher axial and radial loads. It can be directly installed onto the drive shaft, with crutch arm or block-pin accessories for flexible connection. EX100P-WS series provide both incremental and speed limited switch output, which ensure not only precise control requirement but also heavy load safety.

### Features

- Crank arm or block-pin accessories provide greater flexibility in connection
- Optional stainless steel hollow shaft, "C" lock ring
- Compact hollow shaft design is both a space and cost-saver
- Heavydic design for better vibration-absorption performance
- Overspeed warning switch to ensure safety during operation
- Reverse connection protection and short circuit protection

### Mechanical Characteristics

Shaft diameter (mm)	Φ25H7/ Φ30H7/ Φ38H7/ Φ40H7/ Φ45H7
Protection class	IP66(Max)
Speed	3000(IP66)
Max load capacity of the shaft	100N axial 200N radial
Shock resistance	50G/11ms
Vibration resistance	10G 10...2000HZ
Bearing life	10 <sup>9</sup> revolution
Moment of inertia	approx.15x10 kgm <sup>2</sup>
Starting torque	<0.05Nm (without oil seal);<0.1Nm with oil seal
Body material	AL-alloy
Housing material	AL-alloy
Operating temperature	-20°C...+90°C
Storage temperature	-40°C...+100°C
Weight	approx.1800g

Resolution : 1024, 2048  
Attention: Others on request

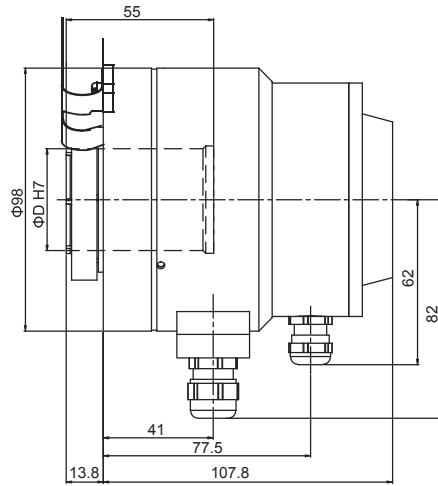
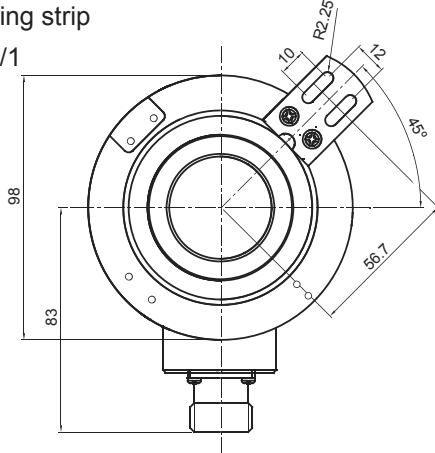
### Electrical Characteristics

Output circuit	RS422	Push-pull
Resolution	Max. 2048ppr	Max. 2048ppr
Supply voltage (VDC)	5±0.25or 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 T <sub>r</sub>	Max. 200ns	Max. 1μS
Fall time T <sub>f</sub>	Max. 200ns	Max. 1μS

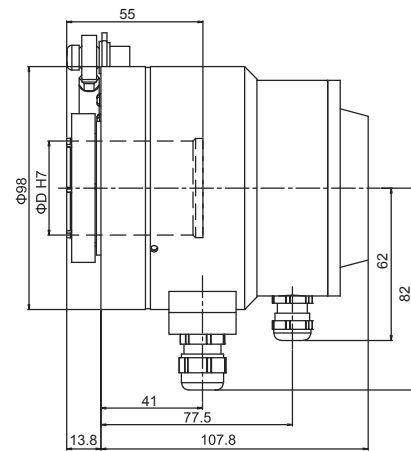
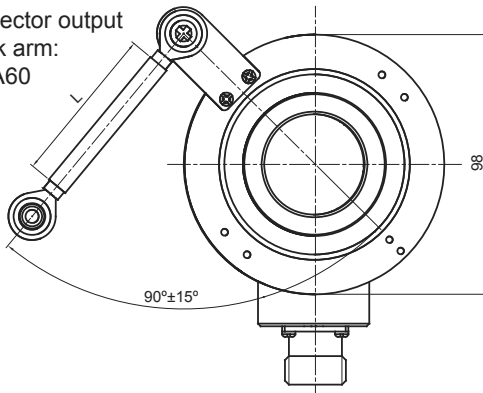
## Heavydic Series Hollow Shaft Encoder with Overspeed Switch EX100R

### Dimension (mm)

EX100R  
 Mounting spring strip  
 E41350013A/1



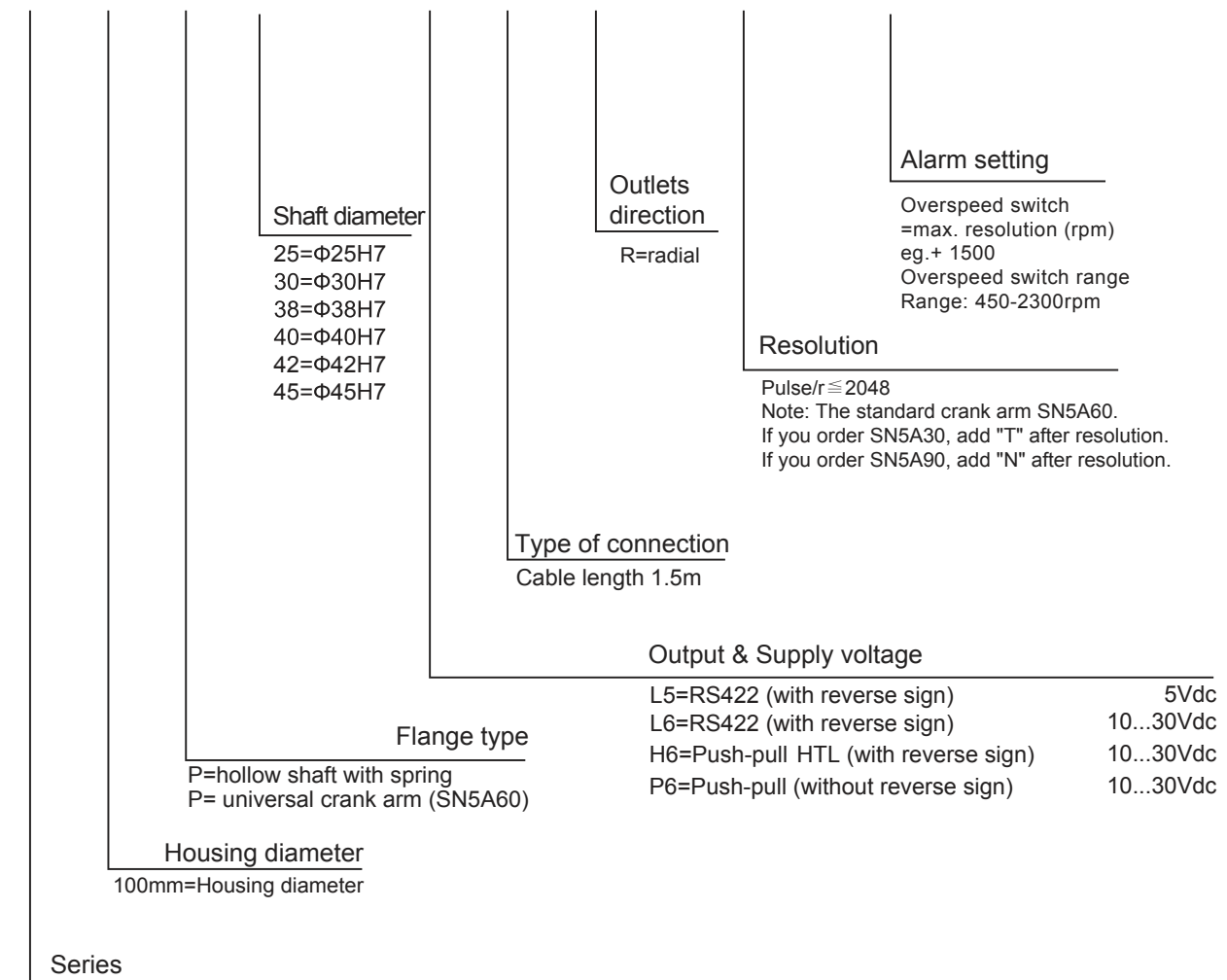
EX100R  
 Connector output  
 Crank arm:  
 SN5A60



## Heavydic Series Hollow Shaft Encoder with Overspeed Switch EX100R

Order Code:

EX 100 R 30 - L5 P R - 1024 + 1500



Diameter	Lock ring	Screw
Φ25	E41230036	M3×8
Φ30	E41230040	M3×8
Φ38	E41230042	M3×8
Φ40	E41230038	M3×8
Φ42	E41230049	M3×8
Φ45	E41230039	M3×8