### **ENC Series** Optical Encoder





### **Rotary Specifications**

Electrical & Mechanical Operating Voltage	DC 5 $\pm$ 0.25V, 30 mA max.
Output Voltage	Logic high > 3V DC Logic low < 1V DC
Rotational Torque	265 gf-cm initially
Mechanical Life	300K cycles

### **Pushbutton Specifications**

Electrical & Mechanical Operating Voltage	DC 5V, 10 mA
Initial Contact Resistance	10 ohm max.
Actuation Force	600 ± 20% gf
Shaft Travel	$0.74 \pm 0.2$ mm
Contact Bounce	< 4 ms make, < 10ms break
Mechanical Life	300K cycles

### **Description**

The ENC series optical encoder switches are perfect for designers in the automotive, industrial and instrumentation industries. Featuring clear detent and a strong haptic feel, these incremental type switches are available in two channels, with 2 bit output – and provide designers with the long-lasting, high performance switch needed to be successful.

### **Features & Benefits**

- Clear detent/haptic feel
- Two channel, 2-bit code output
- Quadrature (Incremental type)
- Integrated pushbutton
- Panel mount with screw thread
- Cable and connector termination

### **Applications**

- Automotive interior control
- Industrial equipment
- Test & Instrumentation
- Medical equipment

#### **Environmental Data**

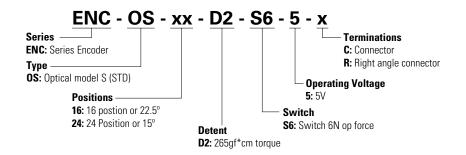
Operating Temperature	-40°C to 90°C
Operating Relative Humidity	<= 96 % RH, 40°C
Storage Temperature	-40°C to 90°C

### **Materials**

Actuator	Zinc Alloy
Housing Frame	ZITIC Alloy
Detent Rotor	POM, HB
Detent Spring	SUS
Housing Upper	PA66, V0
Housing Lower	POM, HB
Pushbutton Dome	SUS

### **Ordering Number**

Product specifications and technical information listed above are for standard offer on Optical Encoder. For special options and custom request, please contact your sales representative.



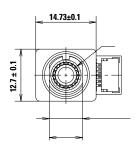


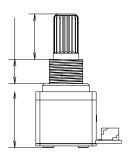
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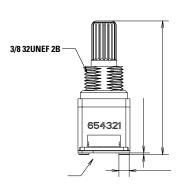


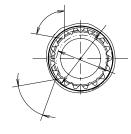
### Dimensions ENCOS16D2S65C

Part Number	Packaging
ENCOS16D2S65C	Tray

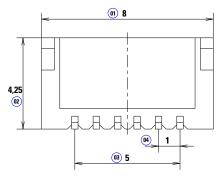


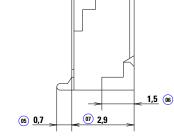


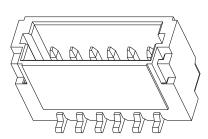




### **Header Socket**







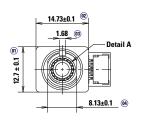
Notes: Recommended connector is JST 06SR-3S

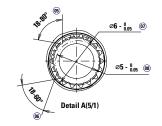
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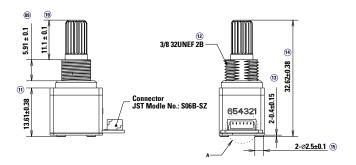


### ENCOS24D2S65R

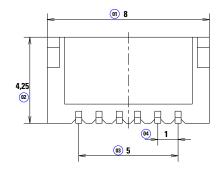
Part Number	Packaging
ENCOS24D2S65R	Tray

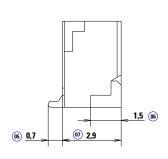


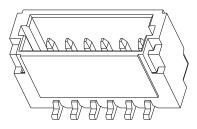




### **Header Socket**







Notes: Recommended connector is JST 06SR-3S

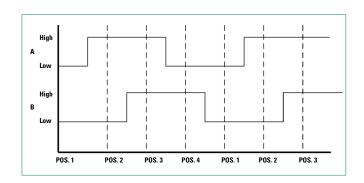


### **Operating Characteristics**

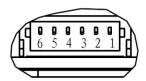
### **Output Logic Levels & Voltage by Position**

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Position	Output A		Output B	
1 OSITION	Logic Level	Voltage	Logic Level	Voltage
1	Low	<1.0	Low	<1.0
2	High	>3.0	LOVV	<1.0
3	High	>3.0	High	>3.0
4	Low	<1.0	riigii	>5.0

Notes: Regardless of the number of detents, the outputs repeat every four positions.



#### **Pinout Order & Function**



Pin	Function
1	Ground
2	Pushbutton
3	Pushbutton
4	Output B
5	Output A
6	Power (5V DC)

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