



Smart encoders &amp; actuators

# A50 Series Medium Duty Incremental Encoders

## Features

- Small size hollow shaft encoders, 1/4" and 3/8"
- Ideally suited for motor feedback applications
- Extended standard operating temperature from -40°C to 100°C
- Universal output circuit: 5–30 VDC Push-Pull (Totem Pole), or NPN/PNP open collector (HTL), or Line Driver (TTL)
- Quadrature output signals with index (ABZ, /ABZ)
- IP65 environmental rating



## A50 Series Medium Duty Incremental (Quadrature) Encoders

Part Number	Price	Pulses per Revolution	Dimensional Drawing	Shaft Type	Body Diameter	Input Voltage	Cable	Output
<a href="#">A50H-0360-HZCP6-RL2</a>	\$105.00	360	<a href="#">PDF</a>	1/4" Hollow	50mm	5–30 VDC	2m (6.5 ft) pigtail	Universal circuit: Push-Pull (Totem Pole), or NPN/PNP open collector (HTL), or Line Driver (TTL)
<a href="#">A50H-1000-HZCP6-RL2</a>	\$105.00	1000	<a href="#">PDF</a>					
<a href="#">A50H-1024-HZCP6-RL2</a>	\$105.00	1024	<a href="#">PDF</a>					
<a href="#">A50H-2048-HZCP6-RL2</a>	\$105.00	2048	<a href="#">PDF</a>					
<a href="#">A50H-0360-HZCP9-RL2</a>	\$105.00	360	<a href="#">PDF</a>	3/8" Hollow				
<a href="#">A50H-1000-HZCP9-RL2</a>	\$105.00	1000	<a href="#">PDF</a>					
<a href="#">A50H-1024-HZCP9-RL2</a>	\$105.00	1024	<a href="#">PDF</a>					
<a href="#">A50H-2048-HZCP9-RL2</a>	\$105.00	2048	<a href="#">PDF</a>					

## Accessories - A50 Series

### Accessories for A50 Series Encoders

Part Number	Price	Description
<a href="#">KIT-C50</a>	\$9.00	Lika Electronic encoder mounting plate, replacement, metal. For use with Lika Electronic A50 series encoders. Mounting hardware included.



**KIT-C50**



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# A50 Series Medium Duty Incremental Encoders

## Specifications - A50 Series

Electrical Specifications	
<b>Resolution (PPR)</b>	360, 1000, 1024, 2048
<b>Output Signals</b>	Quadrature output signals with index (ABZ, /ABZ)
<b>Counting Frequency</b>	100kHz maximum
<b>Output Circuits</b>	Universal circuit: Push-Pull (Totem Pole), or NPN/PNP open collector (HTL), or Line Driver (TTL)
<b>Power Supply</b>	+5VDC to +30VDC
<b>Consumption</b>	70mA (typical)
<b>Output Current (each channel)</b>	40mA maximum
<b>Protection</b>	Against inversion of polarity and short circuit (except inductive circuit)
<b>EMC</b>	Electro-magnetic immunity according to EN61000-4-2 and EN61000-4-4
Mechanical Specifications	
<b>Shaft Diameter</b>	Ø 6.35 mm (1/4"), 9.52 mm (3/8")
<b>Shaft Loading (axial, radial)</b>	20N maximum
<b>Shaft Rotational Speed</b>	6000 rpm maximum
<b>Starting Torque (@20°C)</b>	≤0.25 Ncm (typical)
<b>Bearings Life</b>	10 <sup>9</sup> rev. min
<b>Electrical Connections</b>	Cable output 2m (6.5 ft)
<b>Weight</b>	100g (3.5 oz)
Materials	
<b>Flange</b>	Zamak 15, UNI EN1774
<b>Housing</b>	Zamak 15, UNIT EN1774
<b>Bearings</b>	ABEC 5
<b>Shaft</b>	Stainless steel, non-magnetic, UNI EN 4305
Environmental Specifications	
<b>Shock</b>	250g, 6ms acc. to CEI EN 60068-2-27
<b>Vibrations</b>	10g, 5-2000 Hz acc. to CEI EN 60068-2-6
<b>Protection</b>	IP65
<b>Operating Temperature Range</b>	-40°C to 100°C (-40°F to 212°F)
<b>Storage Temperature Range</b>	-40°C to 100°C (-40°F to 212°F) (98% relative humidity without condensation)
<b>Approvals</b>	CE, UKCA, cUR <sub>us</sub> , RoHS