



Smart encoders &amp; actuators

# A41 Series Light Duty Incremental Encoders

## Features

- Compact industrial encoders
- Solid or hollow shaft version
- 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)
- High resolution up to 4096 PPR
- IP64 environmental rating



## A41 Series Medium Duty Incremental (Quadrature) Encoders

| Part Number                         | Price    | Pulses per Revolution | Dimensional Drawing | Shaft Type  | Body Diameter | Input Voltage | Cable               | Output                                                                                            |
|-------------------------------------|----------|-----------------------|---------------------|-------------|---------------|---------------|---------------------|---------------------------------------------------------------------------------------------------|
| <a href="#">A41S-0100-HZCP6-AL2</a> | \$98.00  | 100                   | <a href="#">PDF</a> | 1/4" Solid  | 41mm          | 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="#">A41S-0200-HZCP6-AL2</a> | \$92.00  | 200                   | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41S-0360-HZCP6-AL2</a> | \$92.00  | 360                   | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41S-0500-HZCP6-AL2</a> | \$92.00  | 500                   | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41S-1000-HZCP6-AL2</a> | \$99.00  | 1000                  | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41S-1024-HZCP6-AL2</a> | \$99.00  | 1024                  | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41S-2000-HZCP6-AL2</a> | \$99.00  | 2000                  | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41S-2048-HZCP6-AL2</a> | \$99.00  | 2048                  | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41S-3600-HZCP6-AL2</a> | \$99.00  | 3600                  | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41S-4096-HZCP6-AL2</a> | \$99.00  | 4096                  | <a href="#">PDF</a> | 1/4" Hollow |               |               |                     |                                                                                                   |
| <a href="#">A41H-0100-HZCP6-AL2</a> | \$103.00 | 100                   | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41H-0200-HZCP6-AL2</a> | \$97.00  | 200                   | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41H-0360-HZCP6-AL2</a> | \$97.00  | 360                   | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41H-0500-HZCP6-AL2</a> | \$97.00  | 500                   | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41H-1000-HZCP6-AL2</a> | \$103.00 | 1000                  | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41H-1024-HZCP6-AL2</a> | \$103.00 | 1024                  | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41H-2000-HZCP6-AL2</a> | \$103.00 | 2000                  | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41H-2048-HZCP6-AL2</a> | \$103.00 | 2048                  | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41H-3600-HZCP6-AL2</a> | \$103.00 | 3600                  | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |
| <a href="#">A41H-4096-HZCP6-AL2</a> | \$103.00 | 4096                  | <a href="#">PDF</a> |             |               |               |                     |                                                                                                   |

## Accessories - A41 Series

### Accessories for A41 Series Encoders

| Part Number             | Price   | Description                                                                                                                                        |
|-------------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">PF4266</a>  | \$12.00 | Lika Electronic round mounting flange, 48mm bolt hole circle, metal. For use with Lika Electronic A41 series encoders. Mounting hardware included. |
| <a href="#">LKM-386</a> | \$9.00  | Lika Electronic servo mount clamp, metal. For use with Lika Electronic AQ58 and A41 series encoders. Mounting hardware included.                   |

**PF4266**



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## Specifications - A41 Series

| Electrical Specifications            |                                                                                                  |
|--------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Resolution (PPR)</b>              | 100, 200, 360, 500, 1000, 1024, 2000, 2048, 3600, 4096                                           |
| <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                                                  |
| <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")                                                                                 |
| <b>Shaft Loading (axial, radial)</b> | 20N maximum                                                                                      |
| <b>Shaft Rotational Speed</b>        | 6000 rpm maximum                                                                                 |
| <b>Starting Torque (@20°C)</b>       | 0.1 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>                        | Anticorodal, UNI EN AW-6082                                                                      |
| <b>Housing</b>                       | Fiberglass epoxy resin                                                                           |
| <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>                    | IP64                                                                                             |
| <b>Operating Temperature Range</b>   | -25°C to 85°C (-13°F to 185°F)                                                                   |
| <b>Storage Temperature Range</b>     | -25°C to 85°C (-13°F to 185°F)<br>(98% relative humidity without condensation)                   |
| <b>Approvals</b>                     | CE, UKCA, <sub>c</sub> UR <sub>us</sub> , RoHS                                                   |