

# DUV60E-D4KZHAZAS03

DUV60

MEASURING WHEEL ENCODERS

**SICK**  
Sensor Intelligence.

Illustration may differ

### Ordering information

| Type               | Part no. |
|--------------------|----------|
| DUV60E-D4KZHAZAS03 | 1088470  |

Other models and accessories → [www.sick.com/DUV60](http://www.sick.com/DUV60)



### Detailed technical data

#### Features

|                                  |                                                                                                                                                                                                                                                       |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Special device</b>            | ✓                                                                                                                                                                                                                                                     |
| <b>Specialty</b>                 | Mil Spec Circular type 3101F14S-6P, 6-pin connector, terminated to 500 mm cable<br>1500 pulses per revolution<br>Accessory cable (part no.: 2056420) included in box with encoder<br>Mounting holes in bracket compatible with anti anti-static brush |
| <b>Standard reference device</b> | DUV60E-D4KKHADA, 1085779                                                                                                                                                                                                                              |

#### Performance

|                                 |                                    |
|---------------------------------|------------------------------------|
| <b>Pulses per revolution</b>    | 1,500                              |
| <b>Resolution in pulses/mm</b>  | 5 pulses/mm                        |
| <b>Measuring step</b>           | 90° electric/pulses per revolution |
| <b>Measuring step deviation</b> | ± 18°, / pulses per revolution     |
| <b>Error limits</b>             | Measuring step deviation x 3       |
| <b>Duty cycle</b>               | 0.5 ± 5 %                          |
| <b>Initialization time</b>      | < 5 ms <sup>1)</sup>               |

<sup>1)</sup> Valid positional data can be read once this time has elapsed.

#### Interfaces

|                                       |                 |
|---------------------------------------|-----------------|
| <b>Communication interface</b>        | Incremental     |
| <b>Communication Interface detail</b> | HTL             |
| <b>Number of signal channels</b>      | 2 channel, A, B |

#### Electrical data

|                                              |                                                                       |
|----------------------------------------------|-----------------------------------------------------------------------|
| <b>Operating power consumption (no load)</b> | 120 mA                                                                |
| <b>Connection type</b>                       | Cable, with male connector, MS, 6-pin, universal, 0.5 m <sup>1)</sup> |
| <b>Power consumption max. without load</b>   | ≤ 1.25 W                                                              |
| <b>Supply voltage</b>                        | 4.5 V ... 30 V                                                        |
| <b>Load current max.</b>                     | ≤ 30 mA, per channel                                                  |
| <b>Maximum output frequency</b>              | 60 kHz                                                                |
| <b>Reference signal, number</b>              | 1                                                                     |

<sup>1)</sup> The universal connection is rotatable so that it is possible to position the connector in the radial or axial direction.

<sup>2)</sup> This product is a standard product and does not constitute a safety component as defined in the Machinery Directive. Calculation based on nominal load of components, average ambient temperature 40°C, frequency of use 8760 h/a. All electronic failures are considered hazardous. For more information, see document no. 8015532.

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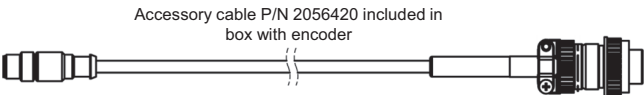
- 1) The surface of a measuring wheel is subject to wear. This depends on contact pressure, acceleration behavior in the application, traversing speed, measurement surface, mechanical alignment of the measuring wheel, temperature, and ambient conditions. We recommend you regularly check the condition of the measuring wheel and replace as required.
- 2) Based on an encoder with a plug connector output and urethane rollers, no mounting necessary (arm mount).
- 3) Only applies to variants with spring arm mounting.

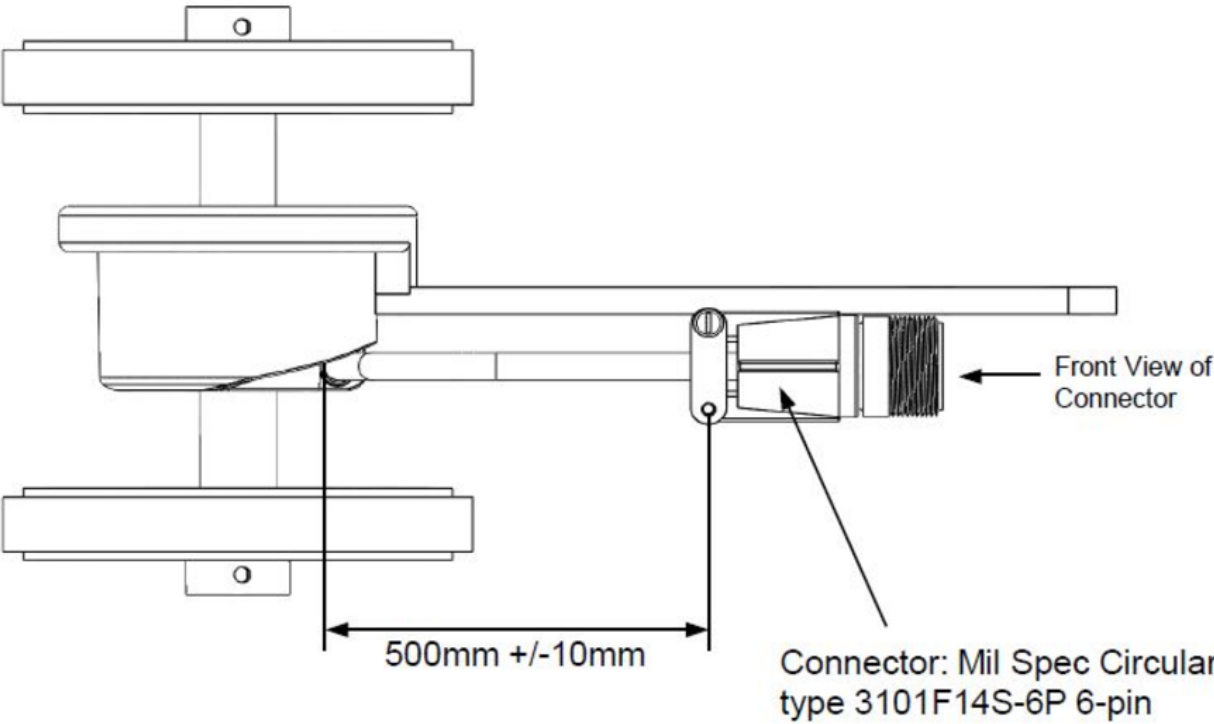
## 3

Classifications

|                |          |
|----------------|----------|
| ECLASS 5.0     | 27270501 |
| ECLASS 5.1.4   | 27270501 |
| ECLASS 6.0     | 27270590 |
| ECLASS 6.2     | 27270590 |
| ECLASS 7.0     | 27270501 |
| ECLASS 8.0     | 27270501 |
| ECLASS 8.1     | 27270501 |
| ECLASS 9.0     | 27270501 |
| ECLASS 10.0    | 27270790 |
| ECLASS 11.0    | 27270707 |
| ECLASS 12.0    | 27270504 |
| ETIM 5.0       | EC001486 |
| ETIM 6.0       | EC001486 |
| ETIM 7.0       | EC001486 |
| ETIM 8.0       | EC001486 |
| UNSPSC 16.0901 | 41112113 |

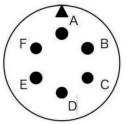
Dimensional drawing (Dimensions in mm (inch))





PIN assignment

| MS 6-Pin | Signal | Description           |
|----------|--------|-----------------------|
| A        | COM    | Ground connection (-) |
| B        | Us     | Supply voltage (+)    |
| C        | -      | Not connected         |
| D        | A      | Channel A             |
| E        | B      | Channel B             |
| F        | -      | Not connected         |



Front Face of Pin Insert

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

**For us, that is “Sensor Intelligence.”**

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)