

# SHUB10-0ZA87010

EDS/EDM35

MOTOR FEEDBACK SYSTEMS ROTARY HIPERFACE DSL®





## Ordering information

| Туре            | Part no. |
|-----------------|----------|
| SHUB10-0ZA87010 | 1107310  |

Other models and accessories → www.sick.com/EDS\_EDM35

Illustration may differ



#### Detailed technical data

#### **Features**

#### Performance

| Vibration             |  |
|-----------------------|--|
| Measurement principle | Acceleration sensor  |
| Bandwidth             | 10 kHz   |
| Resolution            | 13 bit   |
| Measuring step        | 24.4 mg / digit  |
| Maximum sample rate   | 32 kS/s, synchronous to position sampling of the EDS/EDM35 |
| Signal noise density  | 25 μg / √Hz  |

#### Interfaces

| Code sequence                               | Increasing, when turning the shaft For clockwise rotation, looking in direction "A" (see dimensional drawing) |
|---|---|
| Communication interface                     | HIPERFACE DSL®  |
| Initialization time                         | ≤ 500 ms  |
| Measurement external temperature resistance | 32-bit value, without prefix (1 $\Omega$ ) 0 209.600 $\Omega$   |

#### Electrical data

| Supply voltage                       | 7 V 12 V                               |
|--------------------------------------|--|
| Warm-up time voltage ramp            | Max. 180 ms                            |
| Current consumption                  | ≤ 300 mA                               |
| MTTF: mean time to dangerous failure | 140 years (EN ISO 13849) <sup>1)</sup> |

<sup>1)</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 60°C, frequency of use 8760 h/a. All electronic failures are considered hazardous. For more information, see document no. 8015532.

#### Mechanical data

| Weight | ≤ 250 g |
|--------|---------|
|        |         |

#### Ambient data

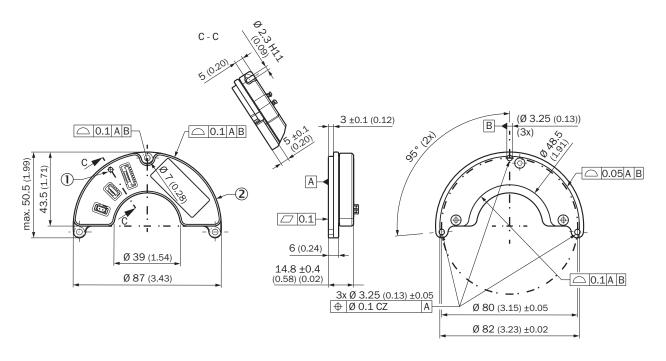
| Storage temperature range | -40 °C +125 °C, without package |
|---------------------------|---------------------------------|
|---------------------------|---------------------------------|

| Relative humidity/condensation              | 90 %, Condensation not permitted                        |
|---|---|
| Resistance to shocks                        | 100 g, 6 ms (according to EN 60068-2-27)                |
| Frequency range of resistance to vibrations | 50 g, 10 Hz 2,000 Hz (EN 60068-2-6)                     |
| EMC   | According to EN 61000-6-2, EN 61000-6-4 and IEC 61326-3 |
| Enclosure rating                            | IP40, with mating connector inserted (IEC 60529-1)      |

#### Classifications

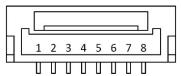
| ECLASS 5.0     | 27270590 |
|----------------|----------|
| ECLASS 5.1.4   | 27270590 |
| ECLASS 6.0     | 27270590 |
| ECLASS 6.2     | 27270590 |
| ECLASS 7.0     | 27270590 |
| ECLASS 8.0     | 27270590 |
| ECLASS 8.1     | 27270590 |
| ECLASS 9.0     | 27270590 |
| ECLASS 10.0    | 27273805 |
| ECLASS 11.0    | 27273901 |
| ECLASS 12.0    | 27273901 |
| 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

SHub® / encoder female connector



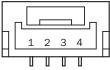
| PIN                         | Signal                |
|-----------------------------|-----------------------|
| 1                           | Encoder_US+           |
| 2                           | Encoder_GDN           |
| 3                           | Encoder_DSL-          |
| 4                           | Encoder_DSL+          |
| 5                           | Encoder_RxD+          |
| 6                           | Encoder_RxD-          |
| 7                           | Encoder_TxD-          |
| 8                           | Encoder_TxD+          |
| JST BM08B-GHS-TBT (LF) (SN) |                       |
|                             | Device pin assignment |

Temperature sensor male connector



| PIN | Signal                |
|-----|-----------------------|
| 1   | T+                    |
| 2   | T- / GND              |
|     | Harwin M80-8820242    |
|     | Device pin assignment |

DSL female connector



| PIN                   | Signal       |
|-----------------------|--------------|
| 1                     | Not assigned |
| 2                     | US+ / DSL+   |
| 3                     | GND/DSL-     |
| 4                     | Not assigned |
| JST BM04 B-GHS-GB-TBT |              |
| Device pin assignment |              |

# 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."

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