



SHUB10-0ZA87010

sHub

MOTOR FEEDBACK SYSTEMS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
SHUB10-0ZA87010	1107310

Other models and accessories → www.sick.com/sHub

Detailed technical data

Features

Items supplied	Cable (part number: 2115196) included with delivery
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Safety-related parameters

MTTF_D (mean time to dangerous failure)	140 years (EN ISO 13849) ¹⁾
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¹⁾ 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.

Performance

Position	Measurement principle	Acceleration sensor
Vibration	Measuring range	± 50 g
	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 Ω) 0 ... 209.600 Ω

Electrical data

Connection type	Female connector, 8-pin
Supply voltage	7 V ... 12 V
Warm-up time voltage ramp	Max. 180 ms
Current consumption	≤ 300 mA

Mechanical data

Weight	≤ 250 g
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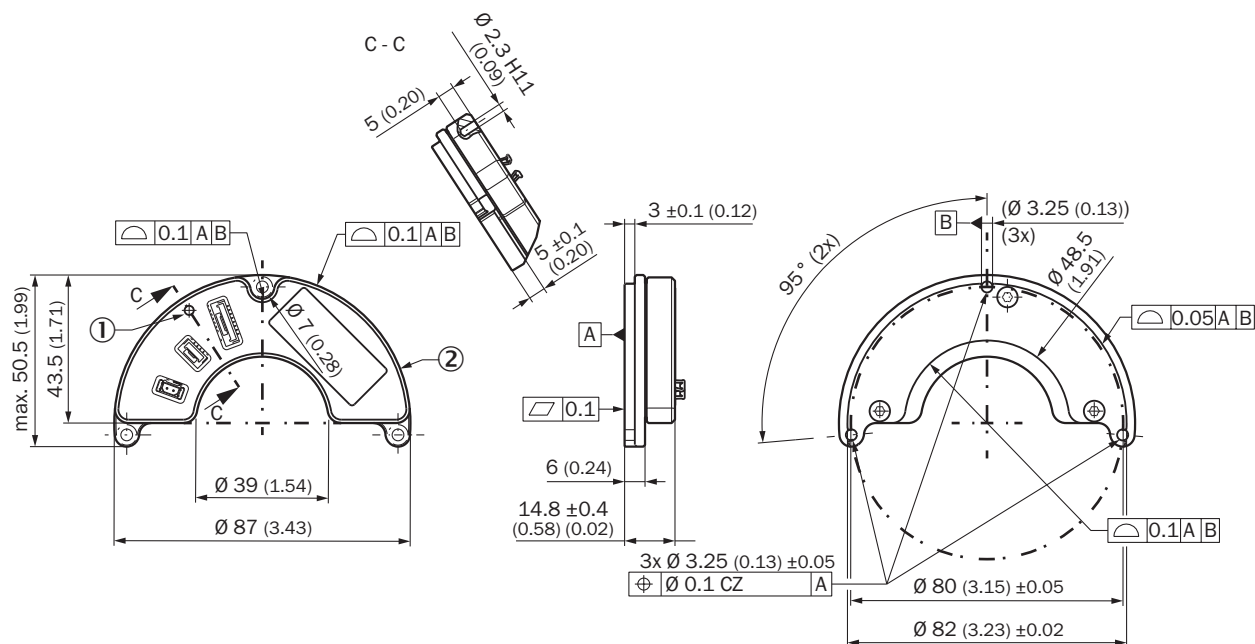
Ambient data

Operating temperature range	-40 °C ... +115 °C
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

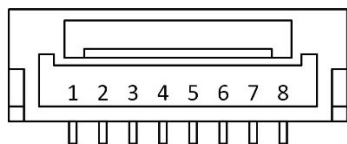
ECLASS 5.0	27270590
ECLASS 5.1.4	27270590
ECLASS 6.0	27270590
ECLASS 6.2	27270590
ECLASS 7.0	27270590
ECLASS 8.0	27270590
ECLASS 8.1	27270590
ECLASS 9.0	27270590
ECLASS 10.0	27273805
ECLASS 11.0	27273901
ECLASS 12.0	27273901
ETIM 5.0	EC001486
ETIM 6.0	EC001486
ETIM 7.0	EC001486
ETIM 8.0	EC001486
UNSPSC 16.0901	41112113

Dimensional drawing (Dimensions in mm (inch))



PIN assignment

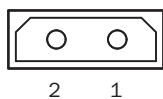
SHub® / encoder female connector



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+

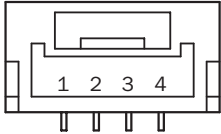
JST BM08B-GHS-TBT (LF) (SN)
 Device pin assignment

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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com