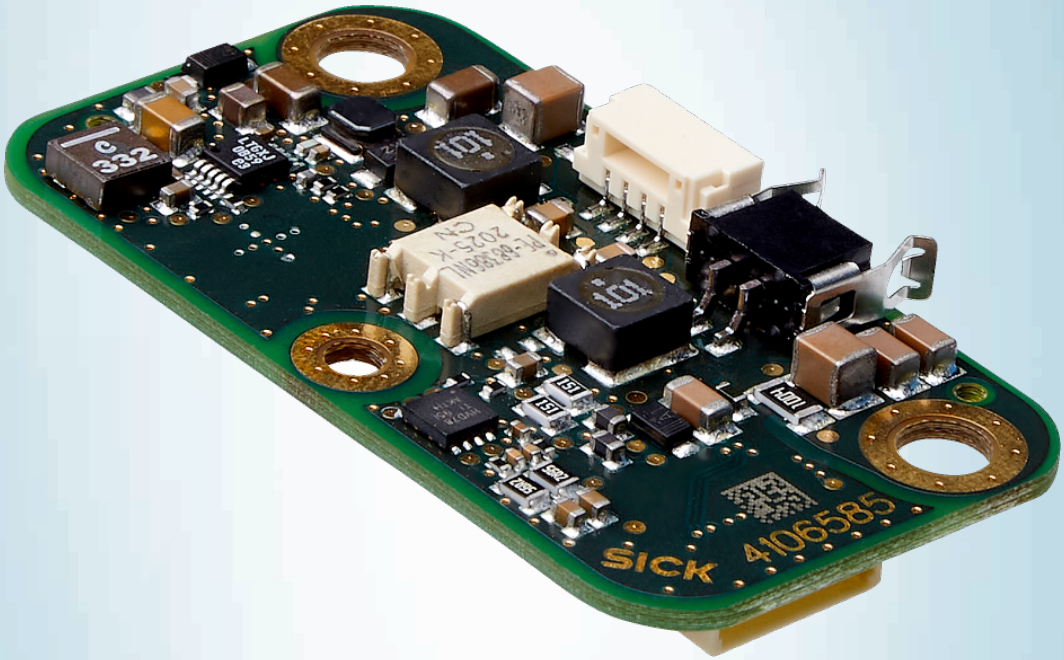
Product data sheet



AD-HF2DSL02

sCon

MOTOR FEEDBACK SYSTEMS ROTARY HIPERFACE®

SICK
Sensor Intelligence.

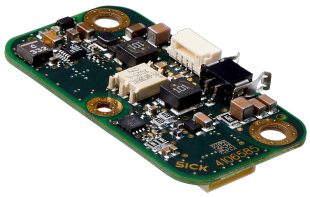


Illustration may differ

Ordering information

Type	Part no.
AD-HF2DSL02	2123676

Other models and accessories ➜ www.sick.com/sCon

Detailed technical data

Performance

Speed when switching on/resetting the motor feedback system	≤ 0.5 min⁻¹
Interpolation factor	13 bit

Interfaces

Communication interface	HIPERFACE DSL®
Initialization time	≤ 1.3 ms [1]
Measurement external temperature resistance	32-bit value, without prefix (1 Ω) 0 ... 209,600 Ω [2]
Maximum cable length	0.2 m [3]
Input signal	
Signal type	HIPERFACE®

[1] From reaching a permitted operating voltage.
[2] Without sensor tolerance; at –40 °C ... +160 °C: NTC +-2K; PTC+-3K (KTY84-130/PT1000). For additional conversion function of PT1000 to KTY84/130, see technical description.
[3] HIPERFACE® input signal.

Electrical data

Connection type	Male connector, male connector, 4-pin, 8-pin, output, Input
Supply voltage	7 V ... 12 V
Warm-up time voltage ramp	Max. 180 ms [1]
Current consumption	80 mA (without load) [2]
MTTF: mean time to dangerous failure	≤ 190 years (EN ISO 13849) [3]

[1] Duration of voltage ramp between 0 and 7.0 V.
[2] Current rating applies when using interface circuit suggestions as shown in HIPERFACE DSL ® manual (8017595).
[3] 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	≤ 10 g

Ambient data

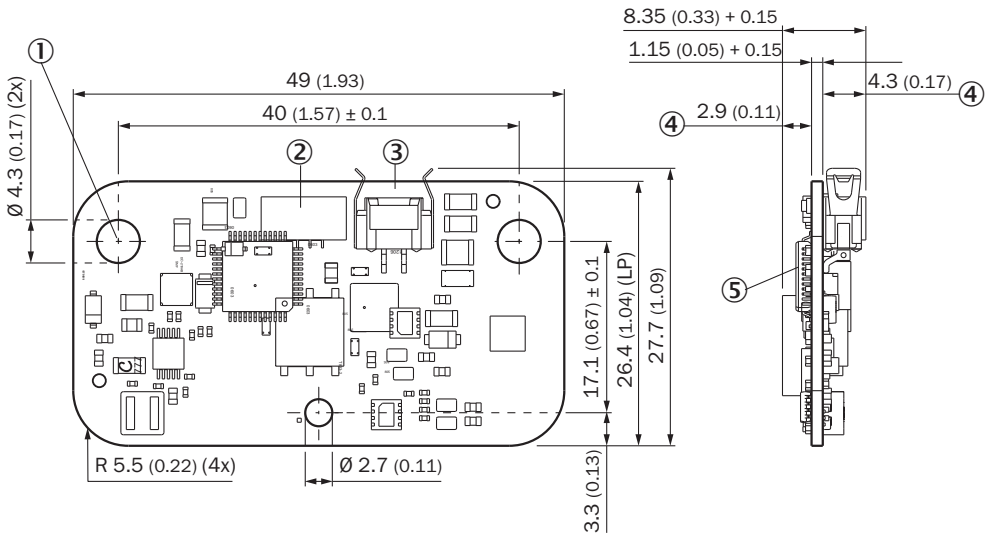
Operating temperature range	–30 °C ... +115 °C
Storage temperature range	–40 °C ... +125 °C, without package
Relative humidity/condensation	90 %, Condensation not permitted

Enclosure rating	IP00

Classifications

eCl@ss 5.0	27270590
eCl@ss 5.1.4	27270590
eCl@ss 6.0	27270590
eCl@ss 6.2	27270590
eCl@ss 7.0	27270590
eCl@ss 8.0	27270590
eCl@ss 8.1	27270590
eCl@ss 9.0	27270590
eCl@ss 10.0	27273805
eCl@ss 11.0	27273901
eCl@ss 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))

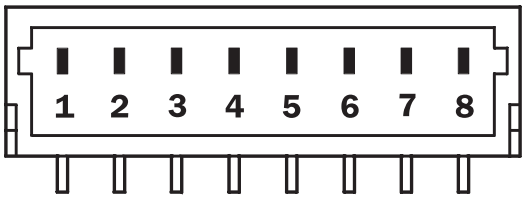


When installing/attaching the sCon® interface converter, designing the support surface as a dome is recommended. In order to guarantee the recommended distance of 1.0 mm to all electronic components from an EMC standpoint, the diameter of the domes must not exceed 8 mm. Since the sCon® interface converter can be mounted on either side, the minimum height of the domes must be 3.9 mm or 5.3 mm.

① Bore holes for fixing screws
② HIPERFACE DSL® male connector-female connector
③ Temperature sensor female connector
④ Max. component height
⑤ HIPERFACE® male connector-female connector

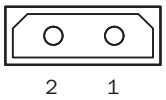
PIN assignment

HIPERFACE® pin assignment



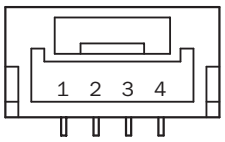
PIN	Signal	Wire colors (cable connection)	Explanation
1	U_S	Red	Supply voltage
2	+ SIN	White	Process data channel
3	REFSIN	Brown	Process data channel
4	+ COS	Pink	Process data channel
5	REFCOS	Black	Process data channel
6	GND	Blue	Ground connection
7	Data +	Gray or yellow	Parameter channel RS 485
8	Data -	Green or purple	Parameter channel RS 485
The GND connection (0 V) of the supply voltage is not connected to the housing			

PIN assignment temperature sensor



PIN	Signal	Explanation
1	T+	Thermistor connection
2	T-	Thermistor connection (to ground)
Recommended outer diameter of set of stranded wires: 2.2 mm ± 0.1 mm		
Recommended mating connector: Harwin M80-8990205		

HIPERFACE DSL® pin assignment



PIN	Signal	Explanation
1		Not connected - no function
2	$+U_S$/DSL+	Supply 7 V ... 12 V
3	GND/DSL-	Ground connection
4		Not connected - no function
Recommended outer diameter of set of stranded wires: 2.8 mm ±0.3 mm		
Recommended mating connector: JST (GHR-04V-S)		

Recommended accessories

Other models and accessories ➜ www.sick.com/sCon

Brief description	Type	Part no.
Plug connectors and cables		
Head A: female connector, JST, 8-pin, straight Head B: female connector, JST, 8-pin, straight Cable: HIPERFACE®, unshielded, 0.1 m	DDL-0J08-G0M1XB6	2117842

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