

ACS36-K1K0-K01

ACS/ACM36

ABSOLUTE ENCODERS

SICK
Sensor Intelligence.



Illustration may differ

Ordering information

Type	Part no.
ACS36-K1K0-K01	6053311

Other models and accessories → www.sick.com/ACS_ACM36



Detailed technical data

Performance

Number of steps per revolution (max. resolution)	2,979
Resolution per measuring step	5.4 µA ... 40.2 µA ¹⁾
Measurement range	0° ... 360°, programmable
Minimum measuring ranges	≥ 35°
Accuracy	± 0.2 % based on the programmed angle ¹⁾

¹⁾ See measuring step diagram/calculation formula for details.

Interfaces

Communication interface	Analog
Communication Interface detail	Current
SSI	
Code sequence parameter adjustable	CW (clockwise) ¹⁾

¹⁾ Default clockwise - CCW possible via Keyboard programming.

Electrical data

Connection type	Cable, radial, 1.5 m
Supply voltage	19 ... 33 V DC
Power consumption	< 80 mA
Reverse polarity protection	✓
MTTFd: mean time to dangerous failure	900 years (EN ISO 13849-1) ¹⁾
Electrical wiring	3-wire

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 40°C, frequency of use 8760 h/a. All electronic failures are considered hazardous. For more information, see document no. 8015532.

Mechanical data

Mechanical design	Solid shaft, Servo flange
Shaft diameter	6 mm
Shaft length	12.4 mm
Weight	0.1 kg
Shaft material	Stainless steel 1,4305

Flange material	AlMgSi
Housing material	AlMgSi
Material, cable	PVC
Start up torque	0.5 Ncm
Operating torque	0.2 Ncm
Permissible Load capacity of shaft	20 N / axial 40 N / radial
Moment of inertia of the rotor	10 gcm ²
Bearing lifetime	1 x 10 ⁶ revolutions
Angular acceleration	≤ 500,000 rad/s ²
Operating speed	≤ 3,000 min ⁻¹

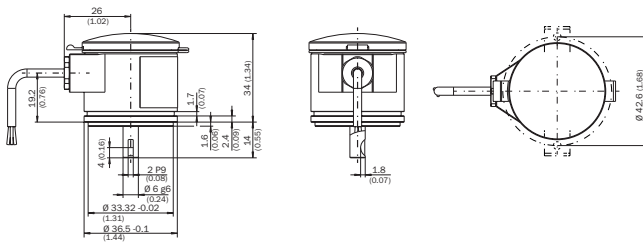
Ambient data

EMC	EN 61000-6-2 EN 61000-6-4
Enclosure rating	IP65
Permissible relative humidity	90 %
Operating temperature range	-30 °C ... +80 °C
Storage temperature range	-40 °C ... +100 °C, without package
Resistance to shocks	25 g, 11 ms (EN 60068-2-27)
Resistance to vibration	4 g, 5 Hz ... 100 Hz (EN 60068-2-6)

Classifications

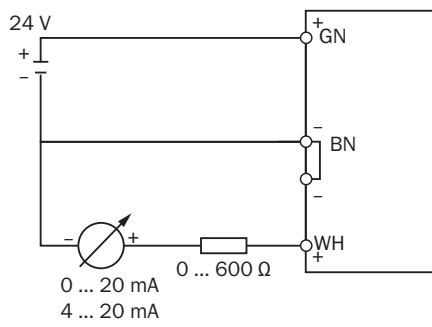
ECl@ss 5.0	27270502
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ECl@ss 10.0	27270502
ECl@ss 11.0	27270502
ETIM 5.0	EC001486
ETIM 6.0	EC001486
ETIM 7.0	EC001486
UNSPSC 16.0901	41112113

Dimensional drawing (Dimensions in mm (inch))



Electrical wiring

Current output



3-wire technology

At a supply voltage of 18 V, the internal resistance of the measuring device must not exceed 600 ohm.

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