

# ATM60 SSI

Reliable, established and modular



**ABSOLUTE ENCODERS** 



Technical data overview	
Encoder design	Multiturn
Shaft type	Solid shaft, face mount flange Solid shaft, Servo flange Blind hollow shaft
Shaft diameter	
Solid shaft, face mount flange	10 mm
Solid shaft, Servo flange	6 mm
Blind hollow shaft	15 mm <sup>1)</sup>
Connection type	Male connector, M23, 12-pin, radial Cable, 12-wire, radial
Communication interface	SSI
Number of steps per revolution (max. resolu- tion)	
Max. resolution (number of steps per revolu- tion x number of revolutions)	12 bit x 12 bit (4,096 x 4,096)
Programmable/configurable	Over handheld programming tool

<sup>1)</sup> Collets for 6, 8, 10, 12, 14 mm and 1/4", 3/8" and 1/2" as accessories, separate order item. For 15 mm shaft diameter collet is not needed.

### **Product description**

The ATM60 absolute multiturn encoder from SICK has an SSI data interface and provides reliable positional information even in harsh ambient conditions, with a resolution of up to 25 bits. This product family, which is proven in its field, is based on the principle of magnetic mea-surement. The 13 bit singleturn range is scanned by a sensor using permanent magnetic elements. The 13 bit multiturn range consists of a magnetic reduction gear. Equipped with a zero set pushbut-ton, the encoder can be easily set to zero or to any other user-programmed value on site. Configuration of the SSI encoder is easy using the RS422 interface. With its magnetic scanning, rugged IP 67-rat-ed housing and high level of resistance to shock and vibration, the ATM60 is op-timally suited for use in harsh conditions.

#### At a glance

- Extremely rugged, tried-and-tested absolute multiturn encoder with a resolution of up to 25 bits
- · Mechanical interface: face mount flange, servo flange, blind hollow shaft, and extensive adapter accessories
- · Zero-set and preset functions via hardware or software
- · Electrical interface: SSI with gray or binary code type
- Electronically adjustable, configurable resolution
- Round axis functionality (optional) also for non-binary resolutions (per revolution) and decimal numbers (number of revolutions)
- Magnetic scanning

#### Your benefits

- · Fewer variants are required since one freely programmable encoder supports all singleturn and multiturn resolutions
- Versatility thanks to a variety of electrical connection adapters (cable, M23)
- · Maintenance-free encoder, long service life
- A base device with flexible application possibilities thanks to easily interchangeable collets for the blind hollow shaft
- Quick commissioning using the zero-set/preset function either at the press of the button on the device or via software
- · Safer applications thanks to highly reliable shock and vibration resistance
- · Worldwide availability and service

### Fields of application

• Measurement of absolute position in various machines and system such as wind power and solar plants, material transport equipment, textile machines, packaging systems, rollers, harbor facilities, printing machines

## **Ordering information**

Other models and accessories -> www.sick.com/ATM60\_SSI

- Mechanical design: Solid shaft, face mount flange
- Singleturn or multiturn version: Multiturn
- Mechanical design: Solid shaft face mount flange 10 mm x 19 mm
- Programmable/configurable:  $\checkmark$

Connection type	Туре	Part no.
Cable, 12-wire, radial, 1.5 m	ATM60-A4K12x12	1030002
Cable, 12-wire, radial, 10 m	ATM60-A4N12x12	1032915
Cable, 12-wire, radial, 3 m	ATM60-A4L12x12	1030003
Cable, 12-wire, radial, 5 m	ATM60-A4M12x12	1030004
Male connector, M23, 12-pin, radial	ATM60-A4A12x12	1030001

- Mechanical design: Solid shaft, Servo flange
- Singleturn or multiturn version: Multiturn
- Mechanical design: Solid shaft Servo flange 6 mm x 10 mm
- Programmable/configurable:  $\checkmark$

Connection type	Туре	Part no.
Cable, 12-wire, radial, 1.5 m	ATM60-A1K12x12	1030006
Cable, 12-wire, radial, 10 m	ATM60-A1N12x12	1032925
Cable, 12-wire, radial, 3 m	ATM60-A1L12x12	1030007
Cable, 12-wire, radial, 5 m	ATM60-A1M12x12	1030008
Male connector, M23, 12-pin, radial	ATM60-A1A0-K20	1034295
	ATM60-A1A12x12	1030005

- Mechanical design: blind hollow shaft
- Singleturn or multiturn version: Multiturn
- Mechanical design: blind hollow shaft 15 mm (Collets for 6, 8, 10, 12, 14 mm and 1/4", 3/8" and 1/2" as accessories, separate order item. For 15 mm shaft diameter collet is not needed.)
- Programmable/configurable:  $\checkmark$

Connection type	Туре	Part no.
Cable, 12-wire, radial, 1.5 m	ATM60-AAK12x12	1030010
Cable, 12-wire, radial, 10 m	ATM60-AAN12x12	1033169
Cable, 12-wire, radial, 3 m	ATM60-AAL12x12	1030011
Cable, 12-wire, radial, 5 m	ATM60-AAM12x12	1030012
Male connector, M23, 12-pin, radial	ATM60-AAA12x12	1030009

# 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



Online data sheet

