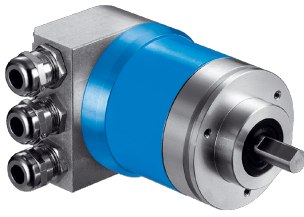


ATM60

Reliable, established and modular

SICK
Sensor Intelligence.



Technical data overview

Encoder design	Multiturn
Shaft type	Solid shaft, Servo flange Solid shaft, face mount flange Blind hollow shaft
Shaft diameter	Solid shaft, Servo flange 6 mm Solid shaft, face mount flange 10 mm Blind hollow shaft 15 mm ¹⁾
Connection type	Male connector, M23, 12-pin, radial Cable, 12-wire, radial Bus adapter for CANopen Bus adapter for PROFIBUS Bus adapter for DeviceNet
Communication interface	SSI CANopen PROFIBUS DP DeviceNet™ (depending on type)
Number of steps per revolution (max. resolution)	
Max. resolution (number of steps per revolution x number of revolutions)	SSI, programmable 13 bit x 13 bit (8,192 x 8,192) 13 bit x 11 bit (8,192 x 2,048) 12 bit x 12 bit (4,096 x 4,096) 13 bit x 12 bit (8,192 x 4,096) 11 bit x 13 bit (2,048 x 8,192) CANopen, programmable 13 bit x 13 bit (8,192 x 8,192) PROFIBUS DP, DPV0, programmable 13 bit x 13 bit (8,192 x 8,192) DeviceNet™, programmable 13 bit x 13 bit (8,192 x 8,192)
Programmable/configurable	Over handheld programming tool Over PLC-Engineering-Tool (depending on type)
Operating temperature range	-20 °C ... +85 °C
Enclosure rating	IP67 (IEC 60529) With shaft seal ²⁾ IP43 (IEC 60529) Without shaft seal, on encoder flange not sealed ²⁾ IP65 (IEC 60529) Without shaft seal, on encoder flange sealed ²⁾ (IEC 60529) Without shaft seal, on encoder flange not sealed ²⁾ IP66 (IEC 60529) Without shaft seal, on encoder flange sealed ²⁾

¹⁾ 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.

²⁾ With mating connector fitted.

Product description

The ATM60 absolute multitrans encoder from SICK reliably delivers position information with a resolution of up to 26 bits, even under harsh ambient conditions. This product family proven in the field is based on a magnetic measurement principle. The 13 bit

singleturn area is scanned by a sensor by means of permanent magnetic elements. The 13 bit multiturn area consists of a magnetic reduction gear. Equipped with the zero set pushbutton, the encoder can be conveniently set to zero or a user-programmed value on site. With magnetic scanning, its rugged housing in accordance with enclosure rating IP67 and high shock and vibration resistance, the ATM60 SSI is ideal for use under harsh condition.

At a glance

- Extremely rugged multiturn absolute encoder with up to 26 bits
- Solid shaft with face mount or servo flange, blind hollow shaft, adapter accessories
- Zero-set and preset functions via hardware/software
- Communication interface: SSI, DeviceNet, PROFIBUS DP or CANopen
- Electronically adjustable, configurable resolution
- Magnetic scanning

Your benefits

- Reduction in variants due to one encoder for all resolutions, single- and multiturn freely programmable
- Variable thanks to various electrical connection options
- Maintenance-free encoder, long service life
- A base model with flexible application possibilities thanks to the easily exchangeable collets for the blind hollow shaft
- Fast commissioning thanks to zero-set/preset function at the touch of a button on the device or with software
- Reliable applications thanks to high permissible shock and vibration values
- Worldwide availability and service

Fields of application

Measurement of absolute position in various machines and systems such as wind power and solar plants, material handling equipment, textile machines, packaging plants, rollers, port facilities, printing machines

Ordering information

Other models and accessories → www.sick.com/ATM60

- **Mechanical design:** Solid shaft, Servo flange
- **Singleturn or multiturn version:** Multiturn
- **Shaft diameter:** 6 mm
- **Programmable/configurable:** ✓

Communication interface	Communication Interface detail	Connection type	Type	Part no.
CANopen	-	Bus adapter for CANopen ¹⁾	ATM60-C1H13x13	1030025
DeviceNet™	-	Bus adapter for DeviceNet ¹⁾	ATM60-D1H13x13	1030018
PROFIBUS DP	DPVO	Bus adapter for PROFIBUS ¹⁾	ATM60-P1H13x13	1030014
SSI	-	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-A1A12x12	1030005

¹⁾ Order bus adapter separately.

- **Mechanical design:** Solid shaft, face mount flange
- **Singleturn or multiturn version:** Multiturn
- **Shaft diameter:** 10 mm
- **Programmable/configurable:** ✓

Communication interface	Communication Interface detail	Connection type	Type	Part no.
CANopen	-	Bus adapter for CANopen ¹⁾	ATM60-C4H13x13	1030024
DeviceNet™	-	Bus adapter for DeviceNet ¹⁾	ATM60-D4H13x13	1030017
PROFIBUS DP	DPVO	Bus adapter for PROFIBUS ¹⁾	ATM60-P4H13x13	1030013
SSI	-	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-A4A0-K06	1032949
			ATM60-A4A0-K08	1032969
			ATM60-A4A0-K09	1032982
			ATM60-A4A0-K17	1033860
			ATM60-A4A0-K19	1033876
			ATM60-A4A0-K30	1034763
			ATM60-A4A0-K32	1034845
ATM60-A4A12x12	1030001			

¹⁾ Order bus adapter separately.

- **Mechanical design:** blind hollow shaft
- **Singleturn or multiturn version:** Multiturn
- **Shaft diameter:** 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:** ✓

Communication interface	Communication Interface detail	Connection type	Type	Part no.
CANopen	-	Bus adapter for CANopen ¹⁾	ATM60-CAH13x13	1030026
DeviceNet™	-	Bus adapter for DeviceNet ¹⁾	ATM60-DAH13x13	1030019
PROFIBUS DP	DPVO	Bus adapter for PROFIBUS ¹⁾	ATM60-PAH13x13	1030015
SSI	-	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

¹⁾ Order bus adapter separately.

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