

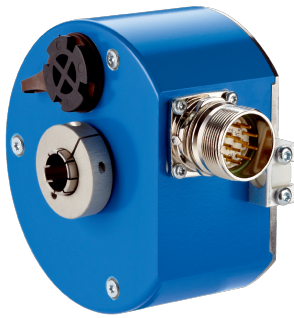


ATM90

Reliable, established and modular

ABSOLUTE ENCODERS

SICK
Sensor Intelligence.



Technical data overview

Encoder design	Multiturn
Shaft type	Through hollow shaft
Shaft diameter	12 mm 1/2" 16 mm (depending on type)
Connection type	Male connector, M23, 12-pin, radial Cable, 12-wire, radial Bus adaptor, M14, 7-pin, radial Cable gland (depending on type)
Communication interface	SSI / PROFIBUS DP (depending on type) (depending on type)
Communication Interface detail	DPV0
Number of steps per revolution (max. resolution)	
Max. resolution (number of steps per revolution x number of revolutions)	
SSI, programmable	12 bit x 12 bit (4,096 x 4,096)
PROFIBUS DP, DPV0, 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) 11 bit x 13 bit (2,048 x 8,192) (depending on type)
Programmable/configurable	Over handheld programming tool Over PLC-Engineering-Tool (depending on type) (depending on type)

Product description

The ATM90 rounds out the ATM60 product family with hollow shaft variants. The ATM90 functions reliably even under harsh ambient conditions. Its rugged, mechanical design ensures maximum reliability and long service life. The magnetic singleturn scanning allows for a resolution of max. 13 bit within one revolution. The output or recording of the number of revolutions, max. 13 bit, is performed by a mechanical, almost wear-free gear. This means the ATM90 does not need a battery. Its short installation depth of 60 mm, combined with high shock and vibration resistance, makes the ATM90 perfect for use in applications with high mechanical loads and pronounced climatic fluctuations.

At a glance

- Extremely rugged multiturn absolute encoder with up to 26 bits
- Through hollow shaft with thin installation depth
- Zero-set and preset functions via hardware/software
- Communication interface: SSI, PROFIBUS DP
- 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
- 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
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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/ATM90

- **Mechanical design:** through hollow shaft
- **Singleturn or multiturn version:** Multiturn
- **Programmable/configurable:** ✓

Mechanical design	Connection type	Type	Part no.
Through hollow shaft 1/2"	Bus adaptor, 3x, M14, 7-pin, radial	ATM90-PUF11x13	1032897
		ATM90-PUF12x12	1032661
		ATM90-PUF13x11	1032655
		ATM90-PUF13x13	1030043
	Cable gland ¹⁾	ATM90-PUG11x13	1032900
		ATM90-PUG12x12	1032664
		ATM90-PUG13x11	1032658
		ATM90-PUG13x13	1030046
	Cable, 12-wire, radial, 1.5 m	ATM90-AUK12x12	1030035
	Cable, 12-wire, radial, 3 m	ATM90-AUL12x12	1030036
	Cable, 12-wire, radial, 5 m	ATM90-AUM12x12	1030037
	Male connector, M23, 12-pin, radial	ATM90-AUA12x12	1030034
	Through hollow shaft 12 mm	Bus adaptor, 3x, M14, 7-pin, radial	ATM90-PTF11x13
ATM90-PTF12x12			1032660
ATM90-PTF13x11			1032654
ATM90-PTF13x13			1030042
Cable gland ¹⁾		ATM90-PTG11x13	1032899
		ATM90-PTG12x12	1032663
		ATM90-PTG13x11	1032657
		ATM90-PTG13x13	1030045
Cable, 12-wire, radial, 1.5 m		ATM90-ATK12x12	1030031
Cable, 12-wire, radial, 3 m		ATM90-ATL12x12	1030032
Cable, 12-wire, radial, 5 m		ATM90-ATM12x12	1030033
Male connector, M23, 12-pin, radial		ATM90-ATA12x12	1030030

¹⁾ Metrisch M16 x 1,5; SW17.

Mechanical design	Connection type	Type	Part no.
Through hollow shaft 16 mm	Bus adaptor, 3x, M14, 7-pin, radial	ATM90-PXF11x13	1032898
		ATM90-PXF12x12	1032662
		ATM90-PXF13x11	1032656
		ATM90-PXF13x13	1030044
	Cable gland ¹⁾	ATM90-PXG11x13	1032901
		ATM90-PXG12x12	1032665
		ATM90-PXG13x11	1032659
		ATM90-PXG13x13	1030047
	Cable, 12-wire, radial, 1.5 m	ATM90-AXK12x12	1030039
	Cable, 12-wire, radial, 3 m	ATM90-AXL12x12	1030040
	Cable, 12-wire, radial, 5 m	ATM90-AXM12x12	1030041
	Male connector, M23, 12-pin, radial	ATM90-AXA12x12	1030038

¹⁾ Metrisch M16 x 1,5; SW17.

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:

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