

# ATM90

Reliable, established and modular







#### Technical data overview

TCOTTTIOUT GGTG OVET VIEW					
Encoder design	Multiturn				
Shaft type	Through hollow shaft				
Shaft diameter	12 mm 1/2" 16 mm				
Connection type	Male connector, M23, 12-pin, radial Cable, 12-wire, radial Bus adapter, 3x, M14, 7-pin, radial Cable gland				
Communication interface	SSI / PROFIBUS DP (depending on type)				
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)				
Programmable/configurable	Over handheld programming tool Over PLC-Engineering-Tool (depending on type)				
Operating temperature range	-20 °C +80 °C (depending on type)				
Enclosure rating	IP65 (IEC 60529) With shaft seal <sup>1)</sup>				

<sup>1)</sup> With mating connector fitted.

#### **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: 🗸

Communica- tion interface	Communication Interface detail	Shaft diameter	Connection type	Туре	Part no.
PROFIBUS DP DPV0	DPVO	1/2"	Bus adapter, 3x, M14, 7-pin, radial	ATM90-PUF11x13	1032897
				ATM90-PUF12x12	1032661
				ATM90-PUF13x11	1032655
				ATM90-PUF13x13	1030043
			Cable gland <sup>1)</sup>	ATM90-PUG11x13	1032900
				ATM90-PUG12x12	1032664
				ATM90-PUG13x11	1032658
				ATM90-PUG13x13	1030046
		12 mm	Bus adapter, 3x, M14, 7-pin, radial	ATM90-PTF11x13	1032896
				ATM90-PTF12x12	1032660
			ATM90-PTF13x11	1032654	
			ATM90-PTF13x13	1030042	
			Cable gland <sup>1)</sup>	ATM90-PTG11x13	1032899
				ATM90-PTG12x12	1032663
				ATM90-PTG13x11	1032657
			ATM90-PTG13x13	1030045	
		16 mm	Bus adapter, 3x,	ATM90-PXF11x13	1032898
		M14, 7-pin, radial	ATM90-PXF12x12	1032662	
				ATM90-PXF13x11	1032656
			ATM90-PXF13x13	1030044	
		Cable gland <sup>1)</sup>	ATM90-PXG11x13	1032901	
				ATM90-PXG12x12	1032665
			ATM90-PXG13x11	1032659	
			ATM90-PXG13x13	1030047	

<sup>&</sup>lt;sup>1)</sup> Metrisch M16 x 1,5; SW17.

Communica- tion interface	Communication Interface detail	Shaft diameter	Connection type	Туре	Part no.
SSI -	-	1/2"	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	
	12 mm	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	
	16 mm	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	

<sup>&</sup>lt;sup>1)</sup> Metrisch M16 x 1,5; SW17.

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