

# ATLANTE

## Electronic limit switch



Sturdy electronic multi-turn magnetic absolute encoder that interfaces rotating elements and returns a signal according to the angular position.

### FEATURES

- Used in a variety of industrial sectors, from lifting to automation, to record absolute positions regardless of the system mechanics and of its complexity.
- Featuring integrated SSI interface.
- Designed for easy wiring.
- Accuracy guaranteed by 1024 points per revolution.
- IP protection degree: Atlante is classified IP 65 / IP 67 / IP 69K.
- Extreme temperature resistance: from -25°C to +80°C.
- High quality materials and components guarantee maximum mechanical life, precision and repeatability even in extreme conditions.

### OPTIONS

- Equipped with flange or, on request, with pinion gear and flange mounted on the side.

### CERTIFICATIONS

- CE marking.
- Complying with accident prevention regulation BGV C 1 (only for Germany).

## INTERNAL VIEW AND POSSIBLE ASSEMBLIES



## CERTIFICATIONS

Conformity to Community Directives	2014/30/UE Electromagnetic Compatibility (EMC) Directive
	2006/42/CE Machinery Directive
	2014/35/UE Low Voltage Directive (LVD)
Conformity to CE Standards	EN 61326-1 Electrical equipment for measurement, control and laboratory use - EMC requirements
	EN 60529 Degrees of protection provided by enclosures
BGV C 1	Regulations for the prevention of accidents BGV C 1 (only for Germany)
Markings and homologations	CE

## GENERAL TECHNICAL SPECIFICATIONS

Ambient temperature	Storage -25°C/+80°C
	Operational -25°C/+80°C
IP protection degree	IP 65 / IP 67 / IP 69K
Insulation category	Class II
Maximum rotation speed	6000 rpm
Connections	Male connector M12 8 PIN

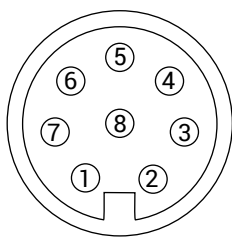
## ELECTRICAL SPECIFICATIONS

Power supply	4.5 ... 30 Vdc
Consumption without load	Typ. 80 mA (5 Vdc)
Initializing time	Typ. 170 ms after power on
Interface	SSI
Points per revolution	1024 / 10 bit
Number of revolutions	≤ 4096 / 12 bit
Accuracy	± 0.5%
Code	Binary
Code sequence	CW default, programmable
Inputs	SSI clock: Line receiver RS422 - Zero setting input, direction input
Output stage	SSI data driver for RS422
SSI clock frequency	Max. 2 MHz
Zero setting	High-impulse duration: ≥ 100 ms

## MALE CONNECTOR SPECIFICATIONS

Number of PINs	8
Insulation resistance	≥ 100 MΩ
Maximum voltage	0.8 kV
Wires	24 - 20 AWG
Contacts	CuZn
Mating	Female connectors, 8 PIN, M12, A-coded (Phoenix Contact 1513347)

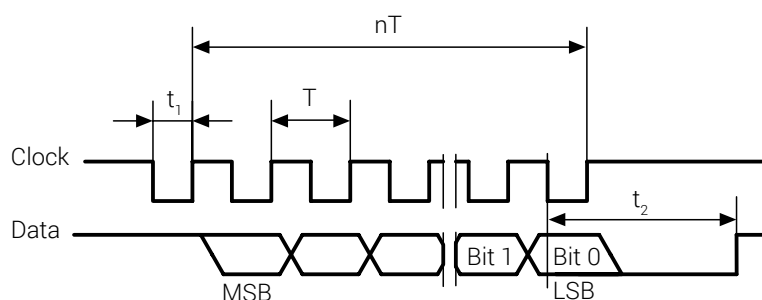
## MALE CONNECTOR ASSIGNMENT



Male connector  
(rear view)

Pin	Signal	Description
1	+Vs	Supply voltage
2	DIR	Input direction
3	Data+	Data signal
4	Data-	Data signal
5	Clock-	Clock signal
6	Clock+	Clock signal
7	SET	Zero setting
8	0 V	Supply voltage

## SSI SIGNAL OUTPUT



$$T = 0.5 \dots 10 \mu\text{s}$$

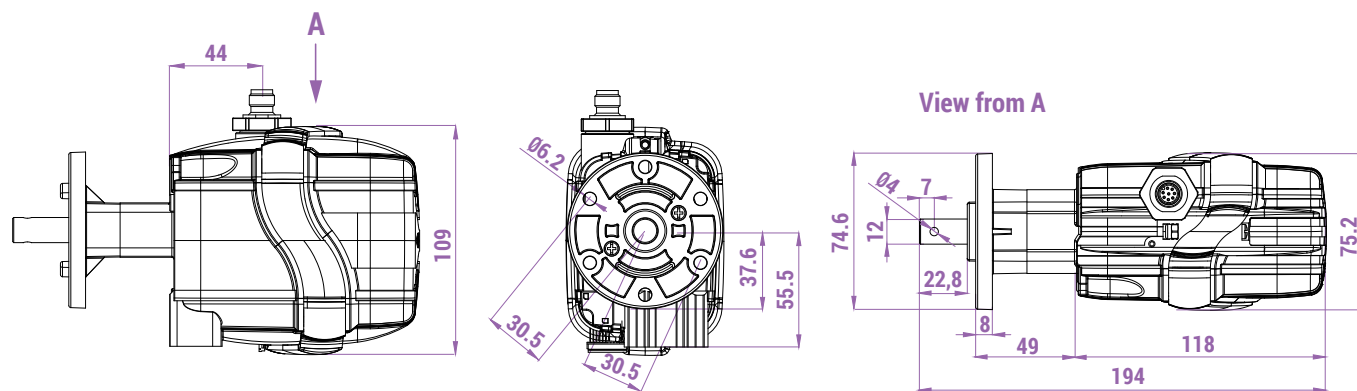
$$t_2 \leq 20 \pm 2 \mu\text{s}$$

$$t_1 = 0.25 \dots 5 \mu\text{s}$$

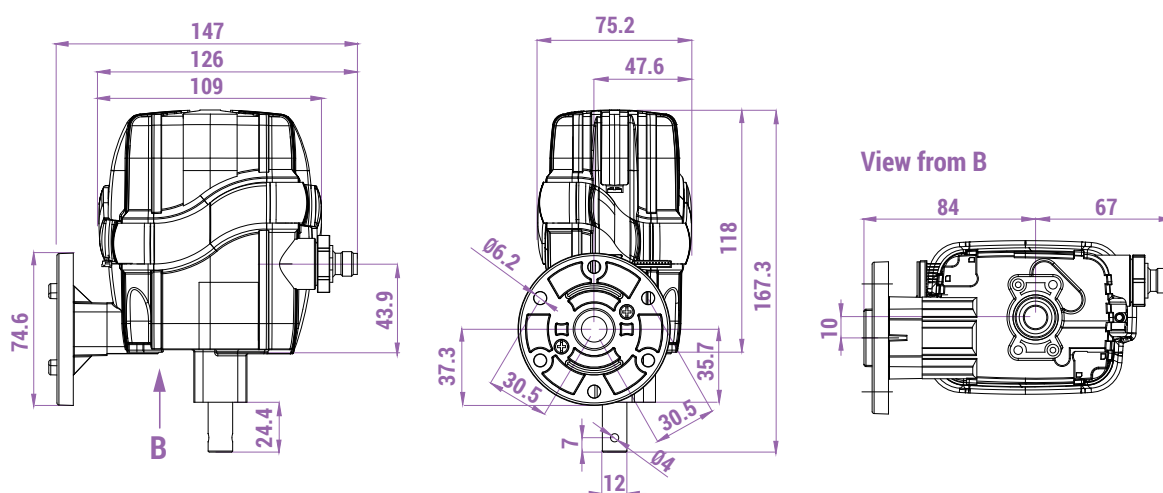
$$f_{\text{max.}} = 2 \text{ MHz}$$

## OVERALL DIMENSIONS (mm)

Standard Atlante



Atlante with lateral flange



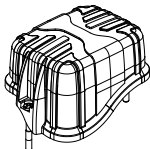
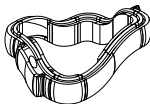

ASSEMBLY DRAWING



Refer to the following table for description of components: "Accessories".

COMPONENTS

Accessories

Ref.	Drawing	Description	Code
A1		Cover with screws	PA090017
A2		Tightening rubber	PRGU1500PE
A3		Female connector (not included, available on demand)	PRVV9505PE