

ATLANTE

Electronic limit switch



Sturdy **electronic multiturn magnetic absolute encoder** that interfaces with rotating elements and returns a signal according to the angular position.

FEATURES

- Used in a variety of industrial sectors, from lifting to automation. Designed to record absolute positions regardless of the mechanic of the system 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 IP65, IP67 and IP69K.
- Extreme temperature resistance: from -25°C to +80°C.
- Made with high quality materials and components to guarantee long mechanical life, precision and repeat accuracy 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, IP67, IP69K
Insulation category	Class II
Maximum rotation speed	6000 rpm
Connections	Male connector 8 PIN M12

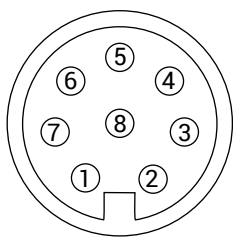
ELECTRICAL SPECIFICATIONS

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	± 0.4° (20 ± 15 °C) tbc
	± 0.5° (-40... +85 °C) tbc
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	Connector, 8 PIN, female connector M12, A-coded (Phoenix Contact 1513347)

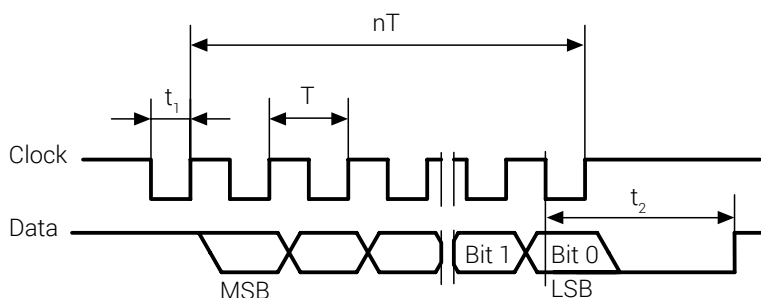
MALE CONNECTOR ASSIGNMENT



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

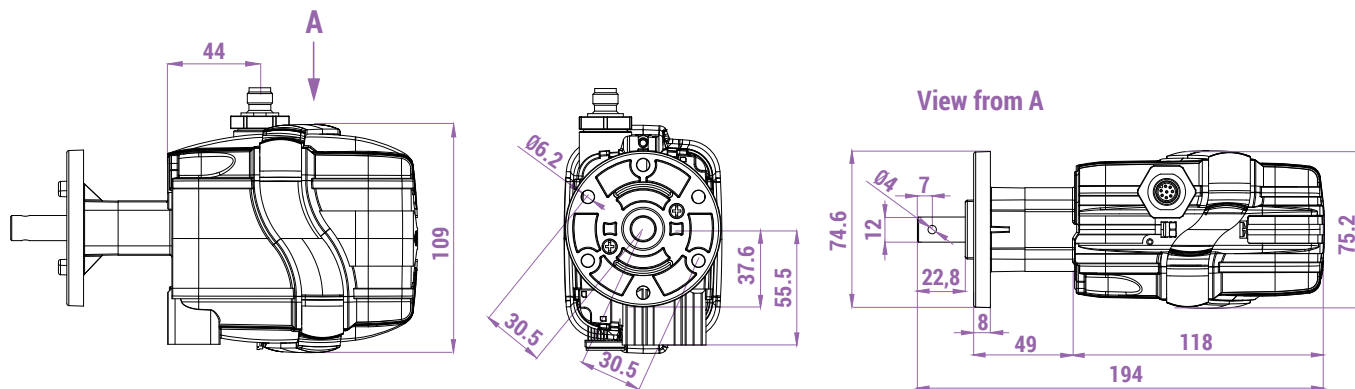
SSI SIGNAL OUTPUT



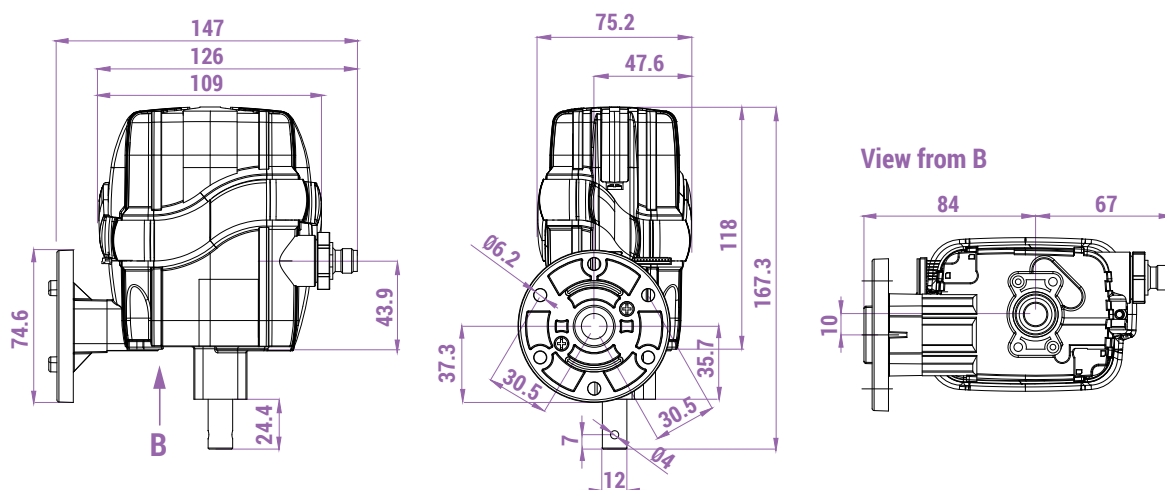
$T = 0.5 \dots 10 \mu s$
 $t_2 \leq 20 \pm 2 \mu s$
 $t_1 = 0.25 \dots 5 \mu s$
 $f_{max.} = 2 \text{ MHz}$

OVERALL DIMENSIONS (mm)

Standard Atlante



Atlante with lateral flange



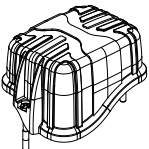
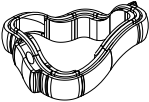

ASSEMBLY DRAWING



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