

## AGS 300

“Non-contact Hall-effect Sensing Technology”



- Hall-effect sensing technology
- Integrated into the gearbox
- Static measurement (zero-speed detection)
- Dual pulse output (inverted)
- Can be sealed
- Direct connection to the vehicle electrical system
- Direction detection capability (with 2 sensors)
- Different length options for compatibility with various gearbox types
- IP67 protection rating

AGS 300 series speed sensors convert the rotational speed of a gear into electrical pulses.

The speed data is detected by an integrated Hall-effect sensor.

The pulses generated by the Hall sensor are used by tachographs and in-vehicle control units to determine the vehicle’s distance traveled and real-time speed information.

When a speed sensor is used, the traditional mechanical speedometer cable connection is no longer required.

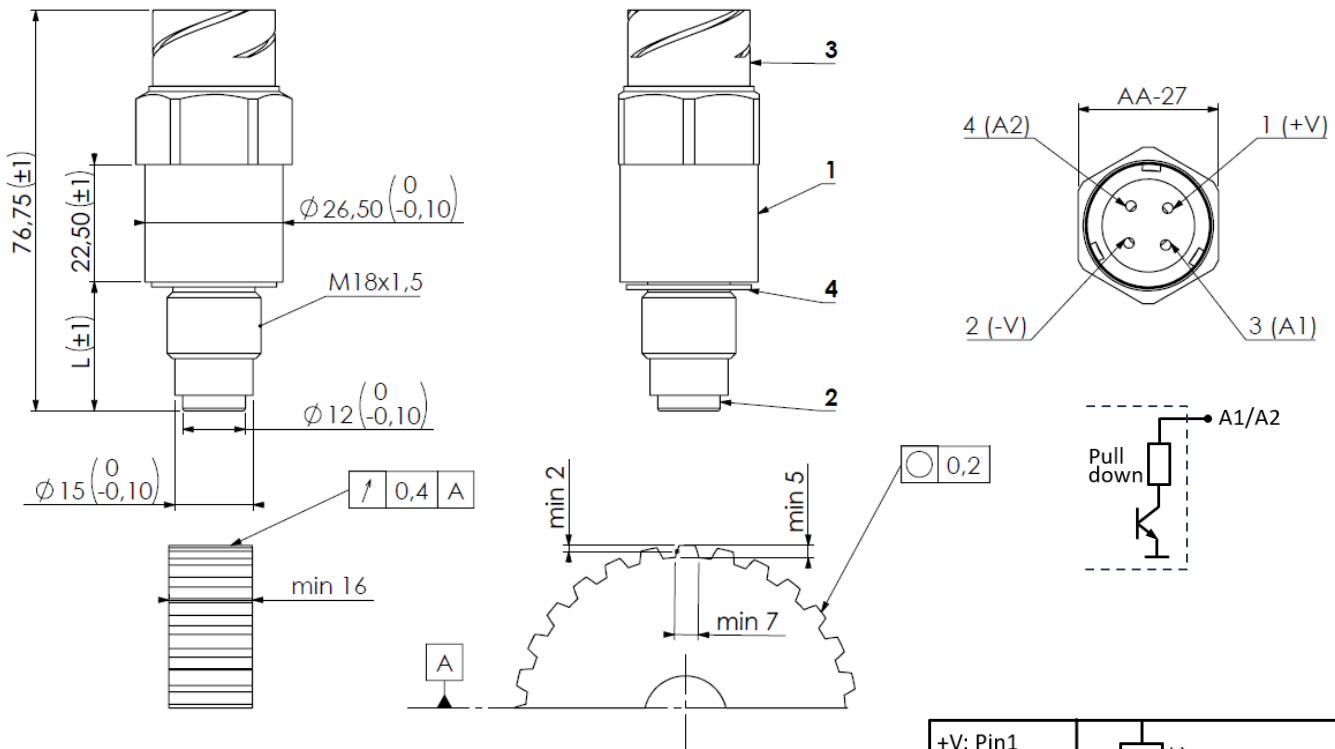
### Application Areas

- For tachographs / EU-type electronic tachographs KTCO 1318, FTCO 1319, and MTCO 1390 NEC
- General use in devices requiring electrical pulses (dual, inverted) for road speed and/or distance measurement

## TECHNICAL FEATURES

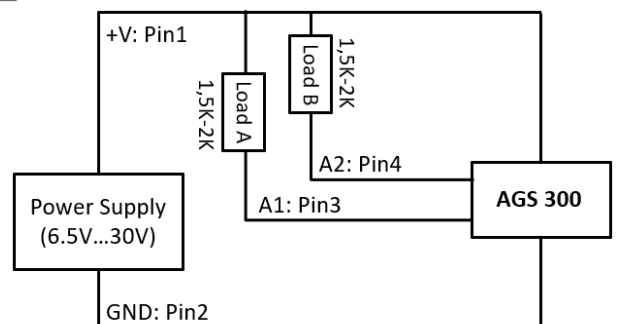
<b>Length (L)</b>	25mm (optional others)	
<b>Output</b>	Double pulse (inverted)	
<b>Signal Type</b>	Square	
<b>Output Resistance</b>	Open collector	
<b>Operating Voltage</b>	6,5...30VDC	
<b>Current Consumption (max)</b>	5mA @6,5VDC / 11mA @24VDC / 13mA @30VDC	
<b>Connection</b>	Unearthed	
<b>Frequency</b>	0...4kHz	
<b>Output signal A1</b>	$U_L \leq 1.9 \text{ V}$ (1 mA)	
<b>Output signal A2</b>	inversion of A1	
<b>Impulse Wheel</b>	Min. 2m	
<b>Minimum Distance</b>	0.8mm	
<b>Maximum distance</b>	2.5mm	
<b>Sensor Connection</b>	M18x1,5 thread	
<b>Torque (wrench size)</b>	max. 50 Nm (SW 27)	
<b>Material</b>	Case	AISI 304L
	Cap	Aluminum
	Connector (ISO 15170)	PBT
	Washer	AISI 304L
<b>Operating Temperature</b>	-40°C ... +150°C	
<b>Storage Temperature</b>	-40°C ... +150°C	
<b>Protection Class</b>	IP67	
<b>Short-circuit Protection</b>	Yes	
<b>Reverse polarity Protection</b>	Yes	
<b>EMC Protection</b>	TS EN IEC 61326-1	

## MECHANICAL DIMENSIONS (mm) and ELECTRICAL CONNECTIONS

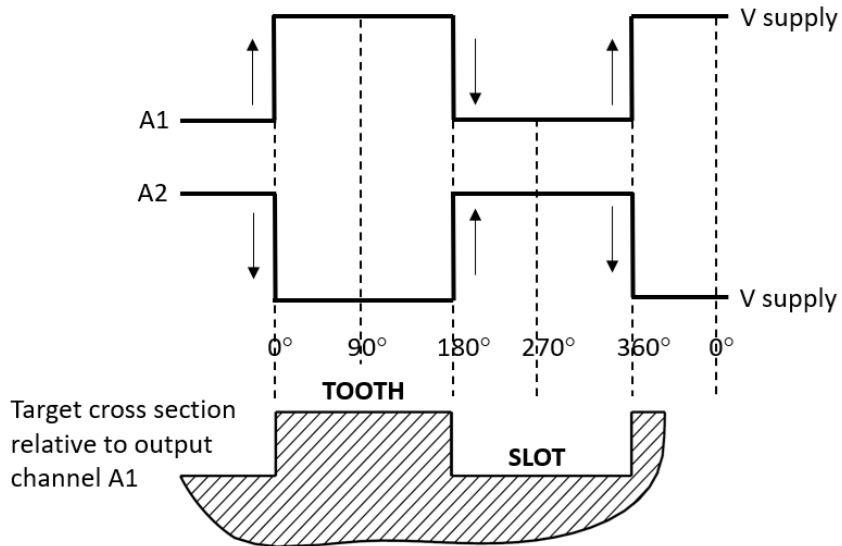


<b>Length (L)</b>	25mm (optional others)
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	Part Name	Material
1	AGS300 Case	AISI 304L
2	AGS300 Cap	Alüminyum
3	AGS300 Connector (ISO 15170)	PBT
4	AGS300 Washer	AISI 304L



## SENSOR OUTPUT SIGNAL



### OUTPUT SIGNALS

<b>Signal A1</b>		$U_L \leq 1.9 \text{ V}$ (1 mA) At tooth : High Level
<b>Signal A2</b>		inversion of A1
<b>Output resistance Pull up Pull down</b>		Open collector, $I_{\text{sink}} < 2 \text{ mA}$ 1.5 K $\Omega$

### IMPULSE WHEEL

<b>Material</b>	Ferromagnetic material
<b>Minimum distance</b>	0.8mm
<b>Maksimum distance</b>	2.5mm

## ORDER CODE

### Electrical Connection

**S175** : AMP DIN 72585 / 4 pin connector

### Model

AGS 300

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XXX

### Length (L)

**25** : 25mm (Standard)

\*Optional others