

Inductive Speed Sensor IS-T

This sensor is designed for incremental measurement of rotational speed of a turbo charger.

The inductive sensor consists of a bar magnet with a soft magnetic pole pin supporting an induction coil with two connections. When a ferromagnetic ring gear turns past this sensor, it generates a voltage in the coil which is directly proportional to the periodic variation in the magnetic flux. The rotational speed is reflected on a periodic interval between the voltage's zero transition points.

The main benefit of this sensor is robustness, a very compact design and high temperature resistance.



Application

Application	speed
Target wheel air gap AG	0.5 mm
Operating temp. range (sensing head)	-40 ... 230 °C
Storage temperature range	0 ... 100 °C
Max. vibration	800 m/s ² max. 80 h

Mechanical Data

Magnetic pole	round
Bore diameter	6.3 mm
Tightening torque	1.4 Nm
Weight w/o wire	14 g
Installation depth L ₂	20 mm

Electrical Data

Coil resistance	30 Ω
Inductance max.	2.6 mH

Connectors and Wires

Connector	ASL 6-06-05SN-HE
Mating connector	ASL 0-06-05PN-HE
Pin 1	-
Pin 2	Gnd
Pin 3	Sig
Pin 4	-
Pin 5	Scr

Various motorsport and automotive connectors available on request.

Sleeve	DR-25
Wire	AWG 24
Wire length L	10 ... 100 cm

Please specify the required wire length with your order.

Application Hint

This inductive speed sensor IS-T is developed for wheels made of ferromagnetic material by turbo charger.

If a wheel with different dimensions is used (see Environment), the technical function has to be tested individually.

Please contact our technical consultancy for more information.

Please find further application hints in the offer drawing (<http://www.bosch-motorsport.com>).

Part Number

Speed Sensor IS-T

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