

TSB

TORQUE & SPEED BOX

FEATURES

- Supplies power for up to 2 Torque Sensors (TM or TS Series) at the same time
- Torque analog output: $\pm 5V$ ($\pm 10V$) for connection to data acquisition system or an analog input display
- TTL output (speed)
- Power supply: 100/240VAC, 50/60Hz

DESCRIPTION

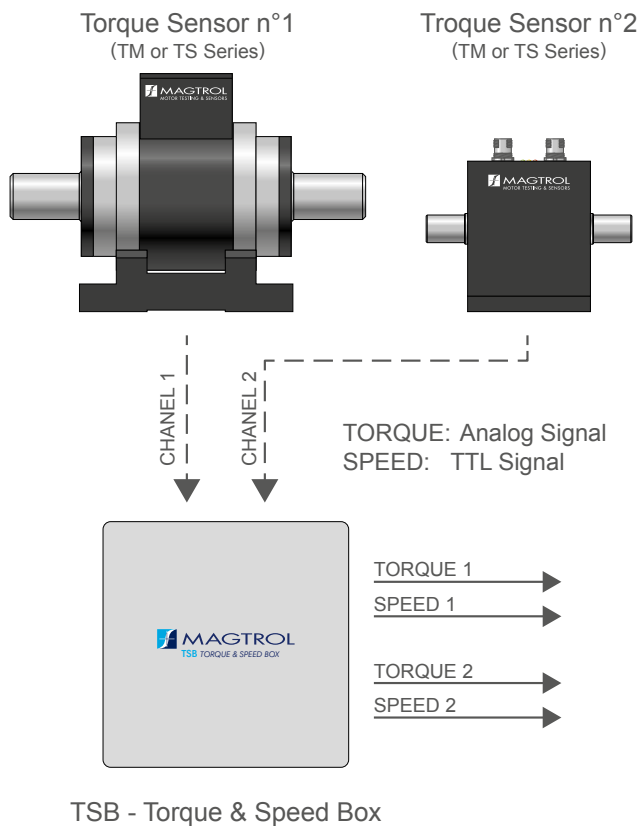
The TSB Torque & Speed Box provides power supply for up to 2 TM Series or TS Series Torque Transducers in parallel. It also provides a $\pm 5V$ analog output for the torque and TTL output for speed (60PPR^{a)} for TM Series and 360PPR^{a)} single track for TS Series). The outputs can be connected respectively to a voltmeter and frequency meter.

a) PPR means Puls Per Revolution

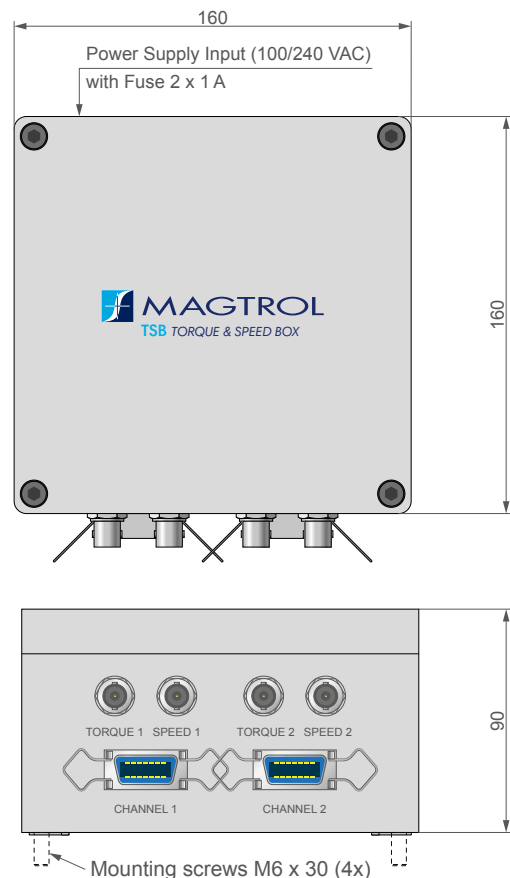


Fig. 1: TSB | Torque & Speed Box

SYSTEM CONFIGURATION



DIMENSIONS



RELATED PRODUCTS

TS & TM SERIES - IN-LINE TORQUE SENSOR



Fig. 3: TM313 & TS 106
In-line Torque Sensor

Magtrol's In-Line Torque Transducers deliver precise torque and speed measurement over a very broad range. Each model has an integrated conditioning electronic module providing 0 to ±10VDC torque output and an open collector speed output or TTL

TM Series Torque Transducers are very reliable, providing high overload protection, excellent long term stability and high noise immunity. All transducer models employ our unique non-contact differential transformer torque measuring technology. This measuring technology offers many benefits, most notably that no electronic components rotate during operation. To provide customers with several price/performance options, Magtrol offers three torque transducer models: basic model (TMB Series), high accuracy (TM Series) and high speed with high accuracy (TMHS). The integrated electronic circuit, supplied by single DC voltage, provides torque and speed signals without any additional amplifier. The transducer is a stand-alone measuring chain.

TS Series In-Line Torque Sensors provide extremely accurate torque and speed measurement. Each model has an integrated conditioning electronic module providing 0VDC to ±5VDC (±10VDC), as well as a USB interface which can be directly connected to a computer. The sensor is delivered with software allowing easy connection and data acquisition. A speed encoder provides 360PPR (Pulse Per Revolution) in Tach A, Tach B and Index reference Z (1 PPR). TS Series sensor models are strain gauge-based measuring systems with imbedded telemetry signal transmission. Available torque ranges from 0.05N·m to 100N·m. Higher torque ranges will be available soon.

CABLE ASSEMBLY

CABLE FOR TM SERIES



6 Poles / Axial SOURIAU connector

14 Pin connector

ORDERING NUMBER	ER 113 / 0
1 : Cable length 5 m	
2 : Cable length 10 m	
3 : Cable length 20 m	

Example: Cable for connection with TM Series, 10 meter length would be ordered as : ER 113/02

CABLE FOR TS SERIES



M12 x 1 / 8 Poles /
Straight connector

14 Pin connector

ORDERING NUMBER	ER 121 / 0
4 : Cable length 3 m	
1 : Cable length 5 m	
2 : Cable length 10 m	
3 : Cable length 20 m	

Example: Cable for connection with TS Series, 3 meter length would be ordered as : ER 121/04

ORDERING INFORMATION

ORDERING NUMBER	P/N 854-038-000-01X
TSB - Torque & Speed Box	