Mechanica Systems

Steering Torque meter

On site evaluation of steering Parameters.



Enabling easy measurement of steering parameters at your fingure tips.

Why Steering Torque Angle Sensors?

Evaluation of steering effort and self centring efficiency are important parameters for R & D, product development and vehicle testing applications as per national / international standards.

Specially designed for evaluation of above parameters of Steering system as per standards requirements & on site data analysis and display.

It has large LCD display with high speed data acquisition & storage hardware.

Steering Torque Meter Benefits

- Support / exceeds the requirements of steering testing as per IS 11948 : 1999 for steering effort measurement
- Execute & instantly display the result of self centring efficiency as per IS: 13507 : 1992 & EMV Guidelines DIN 40839
- Data storage facility enables the valid results to be downloaded to PC via SEES software.
- Easy integration of torque & encoder analog output with other data acquisition systems.

Steering Torque Meter

Technology

Steering Torque Meter measures the Torque and Angle at real time base, using strain gauge technology and encoder as a basic sensors. The state of the art hardware & real time data storage make it one of the most reliable, accurate and advance system.

The display provides batch wise information of steering effort, time at the event of the max. torque, direction of rotation in case of evaluation of steering effort in tabular format.

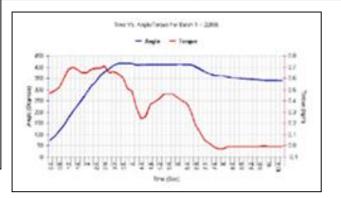
The same equipment can be engineered for self centring efficiency evaluation test. After execution of test, the display provides immediate results of the test conducted. The max wheel lock angle & subsequent return angle after 3 seconds of period is recorded. It displays the percentage efficiency, max. wheel lock angle & minimum angle.

Display & Software

The stored data can be downloaded by SEES user friendly software in PC in Excel format. The SEES software is powerful software provides graphical tool to plot the graph of all standard parameters i.e. Torque, Angle and time. User can plot graph of above parameter i.e. Time v/s Torque, Angle v/s Torque or Time v/s Angle. Also the stored data in excel format allows user to process further as per end requirements.

<u>Equipment</u>

- Steering Torque / Angle Sensor with dummy Steering wheel.
- The processor and display.
- Easy adoptability with suitable fixturing clamps to actual wheel
- Vacuum cups to hold stator with wind shield.



Features

- Suitable for mechanical as well as power assisted steering systems.
- Easy adoptability to any car & heavy duty(all class) vehicle steering wheel.
- No limitation on the Steering Wheel rotation.
- Rotary electronics with Torque amplifier eliminating noise.
- On site results as well as batch wise storage of data with date, time markings.
- Feeding of actual steering wheel dia. directly displays the effort.
- In built RTC (real time clock) & High speed data scanning and acquisition.
- The results can be viewed in various engineering unit.
- Selectable data sampling rate.

Steering Torque Angle Meter



1.	Range / Capacity	0 – 10 & 0 -25 Kg m for Torque.
		Angle :- endless number of turn.
2.	Excitation voltage	+ 7 V DC from the MECHANICA digital Torque Angle Meter.
3.	Overload	50% of the rated capacity.
4.	Linearity	0.15% of FSD
5.	Bridge Resistance	350 Ohms Nominal
6.	Operating Temp.	0° C to 50° C
7.	Operating supply	12 V dc (battery)
8.	Display	Alphanumeric Graphics backlit LCD display for the angle,
0.	Display	Torque and other parameters.
9.	Real Time Clock	Built in. The date & time is seen on the LCD display.
10	Data storage	Upto 10 batch readings can be stored in the non-volatile
	Data storage	memory in IS Mode or NORMAL Mode.
11.	Print (Hard Copy)	The saved batch readings can be printed on 24 column printer.
12.	Torque Display	0.01 kg m resolution
13.	Angle Display	0.1 degree resolution
14.	Analog Output	Torque & encoder pulse train output are provided.

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