SHIMPO INSTRUMENTS

FG-7000T Digital Torque Gauge

The FG-7000T Series digital torque gauges provide testing flexibility with their external torque sensor input. Torque sensors with standard chuck adapter are immediately recognized when connected to the display base and are available for your specific testing needs in 1 N-m (9 in-lb) 5 N-m (44 in-lb), 10 N-m (88 in-lb) capacities. The multiple-language FG-7000T's provide menu programming for easy selection and set-up of the instrument to your desired requirements. Four selectable modes of operation include: Track mode for live readings, Peak mode for displaying the maximum reading, First Peak where only the initial peak is recorded once a decrease is sensed and Preset which initiates user-programmed tolerance alarms for go/no go testing. The display has two selectable operations, numerical view with directional bar graph or graphical view with directional bar graph. In graphical view when alarm tolerances are set, the process is plotted in relation to the upper and lower limit graph lines. Combined with the go/no go icons, a simple pass/fail determination is recognized. These high-tech instruments can data log a reading at the push of a button for simple data acquisition or be set to continuous data storage. Data can be viewed on the screen, sent to the optional printer, or loaded to be analyzed and graphed on the free software program. The 1,000 point memory with definable groups allows for multiple tests to be recorded and easily separated upon loading. In addition, the comparator output can be set up for integration of the instrument into a quality system for repetitive testing such as on a production line. The FG-7000T's robust housings are designed to fit perfectly in the operator's hand for portable testing. The large back-lit, 180° auto-reversible display, CW/CCW directional bar graph, combined with the dual labeled key pad allows for usage of the gauge in various positions while still being able to easily view and operate. These various features make the FG-7000T the ideal torque instrument for various applications such as closing or opening analysis of containers, valves and door hardware, failure or destructive torque testing, or almost any torque testing requirement involving incoming quality inspection, finished goods testing to R&D.

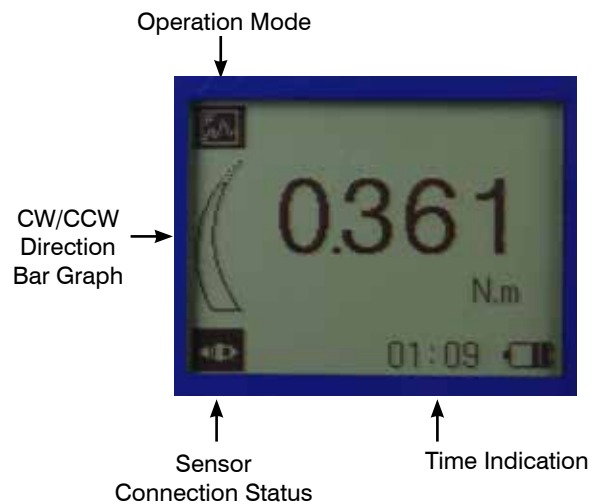**FG-7000T with Included Accessories and Carry Case**

Features

- Display operates in numerical or graph modes, both include a directional bar graph
- Graph mode combined with set point tolerances provides instant recognition of process relation to upper and lower limits
- Four Modes of Operation: Peak, First Peak Preset or Track Mode
- Memory with group categorization to easily separate your tests for review and later download
- Free software for viewing, graphing and analyzing data on PC
- Large, Backlit, Auto-Reversible display with various icons of test status aids user during testing
- Programmable High/Low tolerances combined with comparator NPN/PNP output allow usage in quality control production lines

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FG-7000T Series Specifications

Accuracy	± 0.3% F.S.
Selectable Units	N-m, N-cm, kgf-cm, lbf-in (Depending on Range)
Overload Capacity	120% of F.S. (LCD flashes beyond 110% of F.S.)
Measurement method	Peak, First Peak Preset or Track Mode
Data Sampling Rate	1000 Hz
Display	160*128 dot matrix LCD with LED Backlight
Display Update Rate	10 times/second
Resolution	(See page 2 Resolution Table)
Memory	1000 data
Set Point	Programmable high and low limits
Battery Indicator	Display flashes battery icon when battery is low
Power	3.6VDC 800mAH Ni-MH rechargeable batteries
Battery Life	Approximately 16 hours continuous use per full charge
Charger / Adapter	Universal USB/BM charger, Input: 110 ~ 240VAC
Temperature Effects	<0.054% per °F (0.03% FS per °C)
Outputs	USB, Serial Port RS-232, High & Low Limit NPN
Operating Temperature	14 to 104°F (-10 to 40°C)
Storage Relative Humidity	20 to 80%
Housing	Aluminum
Storage Temperature	-4 to 122°F (-20 to 50°C)
Oper. Relative Humidity	5 to 95%
Dimensions	5.7 x 2.9 x 1.4" (145 x 73 x 35.5 mm)
Product Weight	3.7 (1.7 kg)
Package Weight	5.5 (2.5 kg)
Warranty	1 year
Included Accessories	Key Chuck, AC Adapter/Charger, USB cable, calibration cert.

Ordering Details

Model		N-m	N-cm	kgf-cm	lbf-ft	lbf-in	Interface Type
FG-7000T-1	Capacity	1	100	10	-	8.9	Drill Chuck 1-10 mm (0.034 to 0.39 in)
	Resolution	0.001	0.1	0.01	-	0.005	
FG-7000T-2	Capacity	5	500	50	3.68	44.3	
	Resolution	0.001	0.1	0.01	0.001	0.01	
FG-7000T-3	Capacity	10	1000	100	7.38	88.5	Drill Chuck 2-13 mm (0.079 to 0.512 in)
	Resolution	0.01	1	0.1	0.001	0.01	

Operation Mode

CW/CCW Direction Bar Graph

Sensor Connection Status

Time Indication

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