

DFT SERIES

Digital Force Gauge

The CHATILLON® DFT Series are equipped with sophisticated force measurement capabilities including programmable test parameters and the ability to store up to 100 test readings in memory. The gauge features an easy-to-use and logical display hierarchy to guide users through operations. Dedicated function keys and intelligent display prompts also simplify gauge operation without compromising performance or functionality. The DFT gauge has a 1000 Hz sampling rate making it ideal for capturing peak readings. Using the integral RS232 serial communications, users can download data directly into popular office software including WORD®, EXCEL® and ACCESS® for custom reporting. A large, easy-to-read LCD display with adjustable contrast minimizes poor light conditions.

FEATURES

- Simple to Setup, Operate and Maintain
 - Dynamic Display Hierarchy
 - Dedicated Function Keys
 - Intelligent Prompts
 - Self-Diagnostics
- Powerful Data Management
 - 1000 Hz Sampling
 - Store Up to 100 Readings
 - Export to EXCEL, ACCESS and WORD
- RS232 Serial Data Communications
- Overload Capacity- 110% of Rated Capacity
- Hand-held or Test Stand Applications

SPECIFICATIONS

Accuracy:	$\pm 0.15\%$ of Full Scale ± 1 LSC
Selectable Units:	oz, g, lb, kg, N
Overload Capacity:	110% of rated capacity
Display:	LCD, 4-1/2 characters
Sampling:	1000Hz
Outputs:	RS232, Mitutoyo
Power:	AC Adapter, NiCd Battery Pack
Accessories:	Carrying Case, Attachments Extension Rod, Battery Charger
Weight:	2 lbs (0.9 kg)
Warranty:	1 Years



DFT Series Handheld Digital Gauge

SPECIFICATION
SS-FM-3113-0801
August 2001



Pharmaceuticals



Electronics



Medical Device

INTERNET

www.ametek.com
www.chatillon.com
www.lloyd-instruments.co.uk

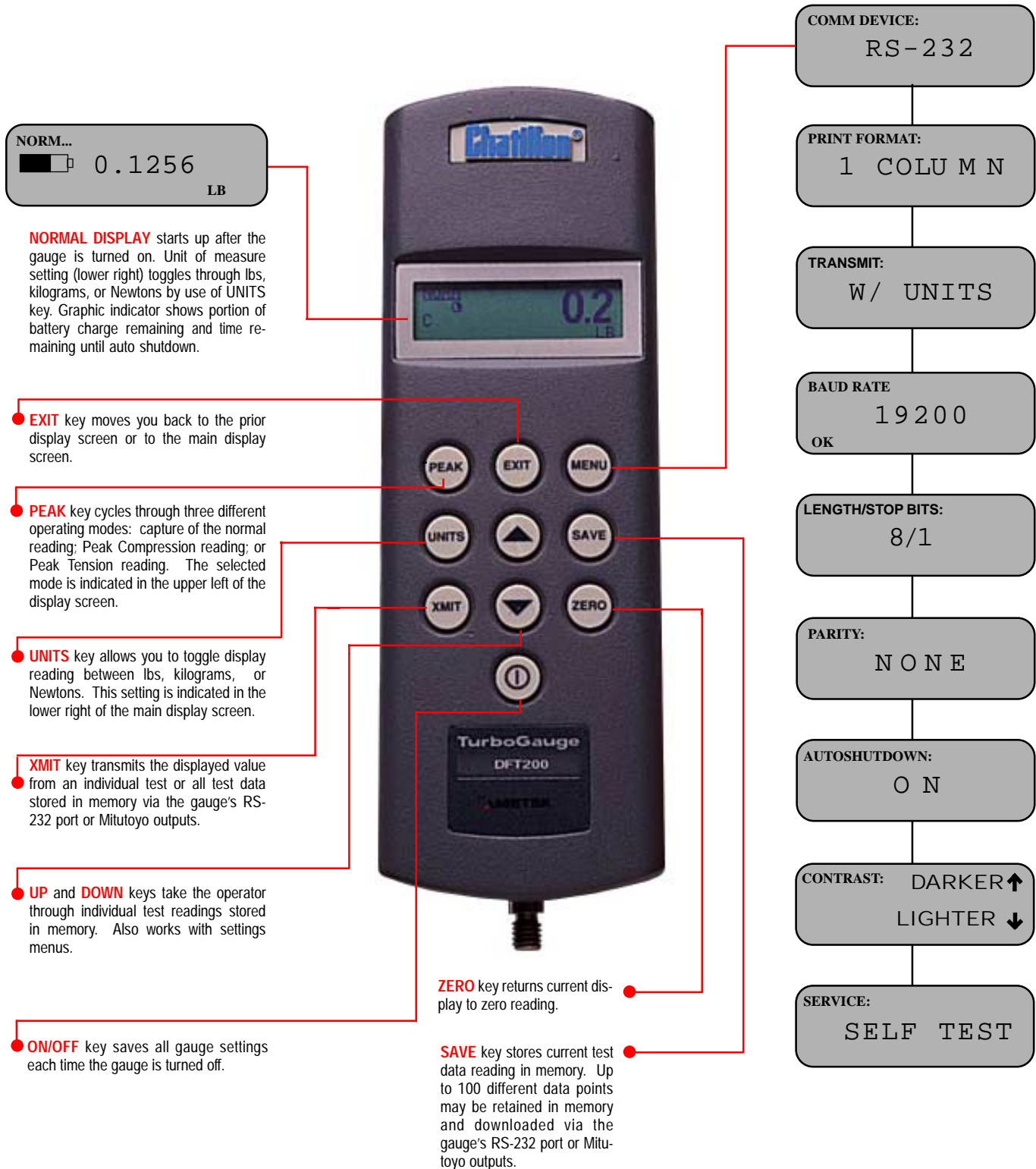
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EASY-TO-USE INTERFACE

DFT Series Gauges put a powerful INTEL® microprocessor in your palm, allowing you to collect up to 100 reviewable data readings in memory, then download them via the gauge's RS-232 port. You follow a simple hierarchy of display prompts to change gauge settings. The DFT Series' architecture will enable you to add features and functions as technologies emerge, thus preventing gauge obsolescence. As your needs evolve, so can the features of your gauge.

Pressing the **MENU** key cycles the display through nine different screens, allowing you to adjust gauge settings (below)

Settings are adjusted by using the UP and DOWN keys. Use of EXIT key takes operator back to normal startup screen.



SPECIFICATIONS

Accuracy: ±0.15% of Full Scale

Data Storage

Stores up to 100 readings

Sampling Rate

1000 samples per second

Deflection

0.010-inch (0.254mm) maximum for full load

Safe Overload

Gauge will display "OVERLOAD" when the force applied exceeds 116% of the gauge capacity.

Maximum Overload

150% of gauge capacity. Load cell deformation may occur when overload exceeds 150%. Note: Gauge reading will not exceed 121%. If you feel the gauge may have exceeded the gauge capacity, contact your local AMETEK Representative.

Tare Capacity

10% in order to utilize full scale (in lb Mode); can tare more than 10%, however, user may not have the use of gauge's full scale capacity during testing

Analog Output

0 to ±2.0Vdc full scale, accurate to ±0.015V

Digital Input/Output

+5V signal when High or Low setpoint is reached

Display

32 x 122 pixel LCD dot matrix, Adjustable contrast

Display Refresh

250mS refresh in Normal and Peak modes

Keypad

Six dedicated function keys with labels: LIMITS, EXIT, SAVE, XMIT, ZERO and ON/OFF.

Four dynamic function keys which change based on display context.

Keys feature audible and tactile feedback.

Data Collect Mode

100 samples per second

Communications

Bi-directional RS-232 serial data communications, transmits up to 100 data points per second. User-selectable baud rates from 300 to 115,200. MITUTOYO output.

Power

Rechargeable 8-hour NiCad battery, or continuous AC operation using battery charger supplied (110Vac or 220Vac)

Battery Life

8-10 hours of continuous operation between charges

Temperature Range

40° to 110°F (5° to 45°C)

Temperature Stability

0.03% per °F

ORDERING INFORMATION

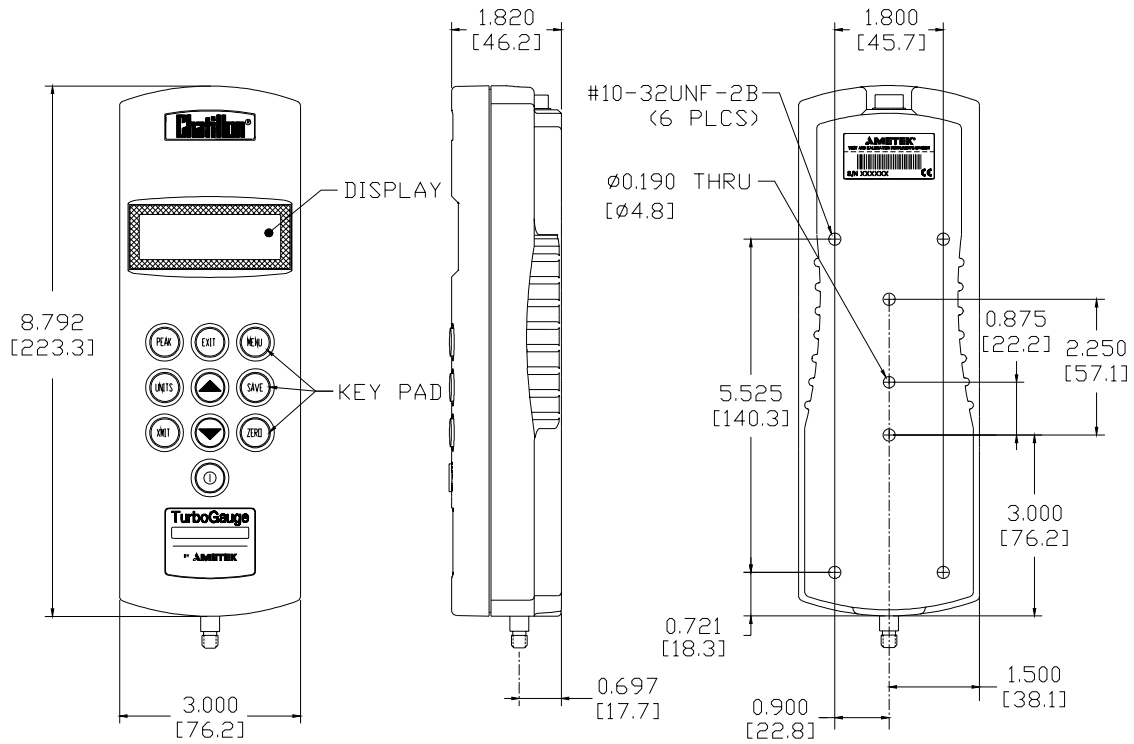
Model	Capacity x Resolution
DFT2	2 lbf x 0.002 lbf
	1 kgf x 0.001 kgf
	10 N x 0.01 N
DFT10	10 lbf x 0.01 lbf
	5 kgf x 0.005 kgf
	50 N x 0.05 N
DFT50	50 lbf x 0.05 lbf
	25 kgf x 0.02 kgf
	250 N x 0.2 N
DFT100	100 lbf x 0.1 lbf
	50 kgf x 0.05 kgf
	500 N x 0.5 N
DFT200	200 lbf x 0.2 lbf
	100 kgf x 0.1 kgf
	1000 N x 1 N
DFT500	500 lbf x 0.5 lbf
	250 kgf x 0.2 kgf
	2500 N x 2 N

Add "-220V" after the model number if you require 220V operation, e.g. DFT2-220V.

ACCESSORIES

Adapters	Capacity	Availability	Part No.	Notes
Chisel Point, #10-32	100 lbf (500 N)	Standard	SPK-FMG-008A	DFT2 thru DFT100
Chisel Point, 5/16-18	500 lbf (2.5 kN)	Standard	SPK-FMG-008B	DFT200 thru DFT500
Point Adapter, #10-32	100 lbf (500 N)	Standard	SPK-FMG-009A	DFT2 thru DFT100
Point Adapter, 5/16-18	500 lbf (2.5 kN)	Standard	SPK-FMG-009B	DFT200 thru DFT500
Notch Adapter, #10-32	100 lbf (500 N)	Standard	SPK-FMG-010A	
Notch Adapter, 5/16-18	100 lbf (500 N)	Optional	NC000721	5/8 in (15mm) diameter notch
Notch Adapter, 5/16-18	500 lbf (2.5 kN)	Standard	SPK-FMG-010B	
Notch Adapter, 5/16-18	500 lbf (2.5 kN)	Optional	NC000725	1.0 in (25mm) diameter notch
Flat Adapter, #10-32	100 lbf (500 N)	Standard	SPK-FMG-011A	DFT2 thru DFT100
Flat Adapter, 5/16-18	500 lbf (2.5 kN)	Standard	SPK-FMG-011B	DFT200 thru DFT500
Flat Disc, 5/16-18		Optional	NC000751-1	3.25 x 0.5 in (83 x 12mm)
Flat Disc, 5/16-18		Optional	NC000751-2	3.25 x 0.25 in (83 x 6mm)
Rectangular Fixture, 5/16-18		Optional	NC000730-1	3.5 in (89mm) diameter
Rectangular Fixture, 5/16-18		Optional	NC000738-1	0.75 in (19mm) diameter
Hook, #10-32	50 lbf (225 N)	Standard	SPK-FMG-012A	DFT2 thru DFT10
Hook, #10-32	100 lbf (500 N)	Standard	SPK-FMG-012B	DFT50 thru DFT100
Hook, 5/16-18	500 lbf (2.5 kN)	Standard	SPK-FMG-012C	DFT200 thru DFT500
Hook, with Clasp, 5/16-18	500 lbf (2.5 kN)	Optional	NC002500	
Extension Rod, #10-32		Standard	SPK-FMG-013A	DFT2 thru DFT100
Extension Rod, 5/16-18		Standard	SPK-FMG-013B	DFT200 thru DFT500
Shaft Adapter, # 10-32 to 5/16-24		Optional	SPK-DFT-068A	
Shaft Adapter, 5/16-18 to 5/16-24		Optional	SPK-DFT-068B	
Test Stand Gauge Adapter Kits		Availability	Part No.	Notes
MT Series		Optional	NA	
LTS Series		Optional	NA	
LTC Series		Optional	NA	
HTC Series		Optional	HTCK-2	
LTCM-6		Optional	SPK-FM200-019	Standard with Test Stand
LTCM-6E		Optional	SPK-FM200-019	Standard with Test Stand
TCM201 Series		Optional	SPK-FM200-019	Standard with Test Stand
TCD200 Series		Optional	SPK-FM200-019	Standard with Test Stand
LFPLUS Series		Optional	SPK/LFM/0003	
Application Software		Availability	Part No.	Notes
NEXYGEN GAUGE Software		Optional	40/0785	
Interface Cables		Availability	Part No.	Notes
Personal Computer, 25-pin D, 6ft (2m)		Optional	NC000652	
Personal Computer, 25-pin D, 10ft (3m)		Optional	NC000652-1	
Personal Computer, 25-pin D, 20ft (7m)		Optional	NC000652-3	
Personal Computer, 9-pin D, 6ft (2m)		Optional	NC000850-1	
Personal Computer, 9-pin D, 10ft (3m)		Optional	NC000850-2	
MITUTOYO, 10-pin		Optional	NC000654	
MITUTOYO, RS232		Optional	NC000697	
TCM201, 9-pin D		Optional	ENC0125	
TCD200, 9-pin D		Optional	NC000647	
Miscellaneous		Availability	Part No.	Notes
Protective Carrying Case		Standard	SPK-FMG-073	
Battery Charger, 115V		Standard	SPK-FMG-069A	Standard with 115V models
Battery Charger, 230V		Standard	SPK-FMG-069B	Standard with 220V models
Hex Key, 7/64-inch		Standard	SPK-FMG-015	
Operators' Manual		Standard	SPK-DFT-072	
Flash Memory Upgrade Kit		Optional	E80-715	

DIMENSIONS



E96-190

AMETEK

TEST AND CALIBRATION INSTRUMENTS

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**ISO 9001
 Manufacturer**

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