



DFX 3 Series

Digital Force Gauge



**WILLRICH PRECISION
INSTRUMENT**
THINK MEASUREMENT... THINK WILLRICH

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Functions and Features

The DFX3 Series from Chatillon is a powerful and easy-to-use digital force gauge designed for handheld or test stand use. Whether performing basic force measurements or capturing peak values in tension and compression, the DFX3 delivers dependable, accurate results. Its compact design, full-color display, and advanced usability make it ideal for quality assurance, production, and field applications.

Test Results – Clear and Accurate

The DFX3 is designed for fast, easy force measurements with on-screen results – ideal for routine production testing.

- ◀ Live Force Readings in tension or compression, displayed with precision and unit of measure.
- ◀ Peak Force Capture automatically detects and holds the highest value observed during the test – ideal for break or limit testing.
- ◀ Timestamped Results ensure each reading is linked to a precise moment, simplifying audit trails and quality reporting.
- ◀ On-Gauge Storage of up to 100 readings.

Battery Life – Built for Long Workdays

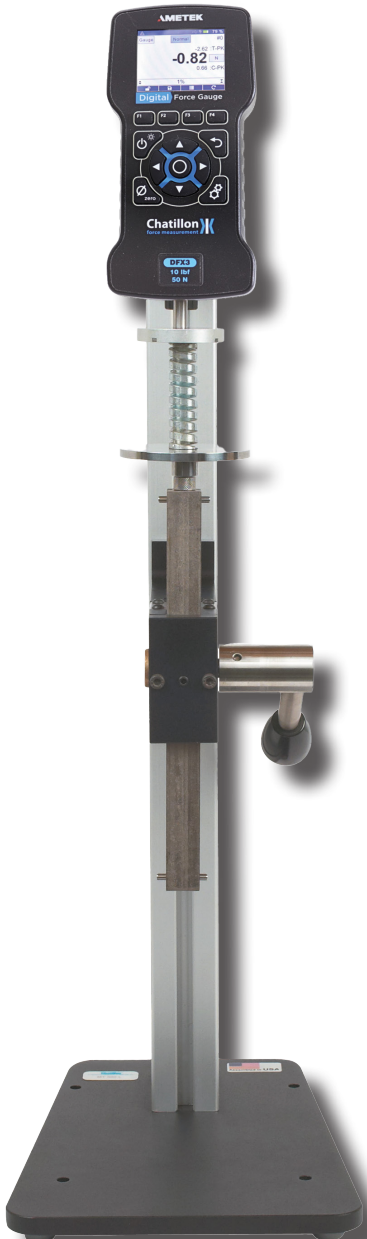
The extraordinarily long battery life of the DFX3 reduces the need for continuous recharging. The dimming functionality of the DFX3 provides a battery life of 30 hours when the dimming is off while turning the dimming on will provide a full 40 hours of battery life

Accessories – Ready for Every Application

The gauge has either #10-32 or 5/16-18 male threads depending on the gauge capacity. As standard the gauge is supplied with Flat adapter and Hook. A wide assortment of optional accessories are available:

- ◀ Extension rods, pointed and chisel tips, notch adapters
- ◀ Eye-end adapters, pistol grips
- ◀ Test stand adapters for MT and TT series

Quick accessory changes make the DFX3 adaptable for virtually any handheld or fixture-mounted test setup.



Expect more...

Intuitive Operation with Smart Interface

The DFX3 features a single-layer user interface – no complex menu diving. Setup and testing are fast and frustration-free:

- ◀ Dedicated function keys adapt to the operation being performed
- ◀ Large, full-color LCD offers clear visuals of results, modes, and system status
- ◀ Display can be inverted for overhead or inverted mounting

Users can operate confidently with minimal training, improving productivity and reducing operator error.

Dependable, Accurate Measurements

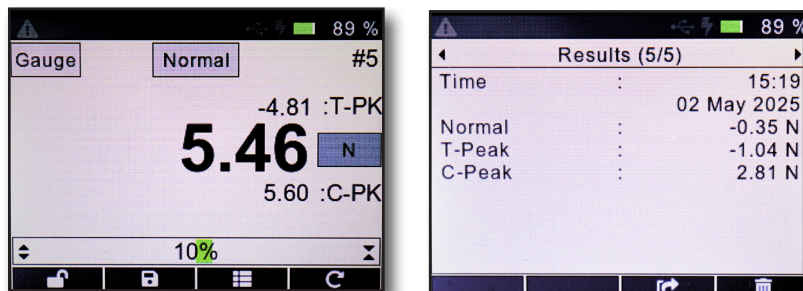
At the heart of the DFX3 is an integral loadcell sensor engineered for repeatable, high-accuracy results.

With mechanical overload protection up to 150% of full scale and advanced internal monitoring, the DFX3 not only measures force but also tracks overload history – a powerful tool for preventive maintenance and long-term reliability.

The dynamic color-coded load bar displays:

- ◀ Real-time force magnitude
- ◀ Force direction (tension/compression)
- ◀ Overload warning as you approach capacity
- ◀ These visual cues support safer, more controlled testing and reduce the risk of loadcell damage.

Results – Always at Hand



Color Display

A large, easy-to-read full color LCD can display readings, icons, and visually indicate gauge or test status using various colors.

Function Keys

The rubber keypad features dedicated and dynamic function keys.

The function keys correspond to displayed options and guide the user during operation.

Cursor Keys

Use the cursor keys for set-up, navigation, mode, and unit change.

Ordering

Choose the Right Model for Your Application

The DFX3 Series is available in a range of capacities to suit your specific testing needs. Whether you're measuring light forces or high-capacity loads, each model delivers the same high level of accuracy, reliability, and ease of use. Use the table below to identify the model that best fits your application, and choose between standard or NIST-certified versions for traceable calibration.

Models

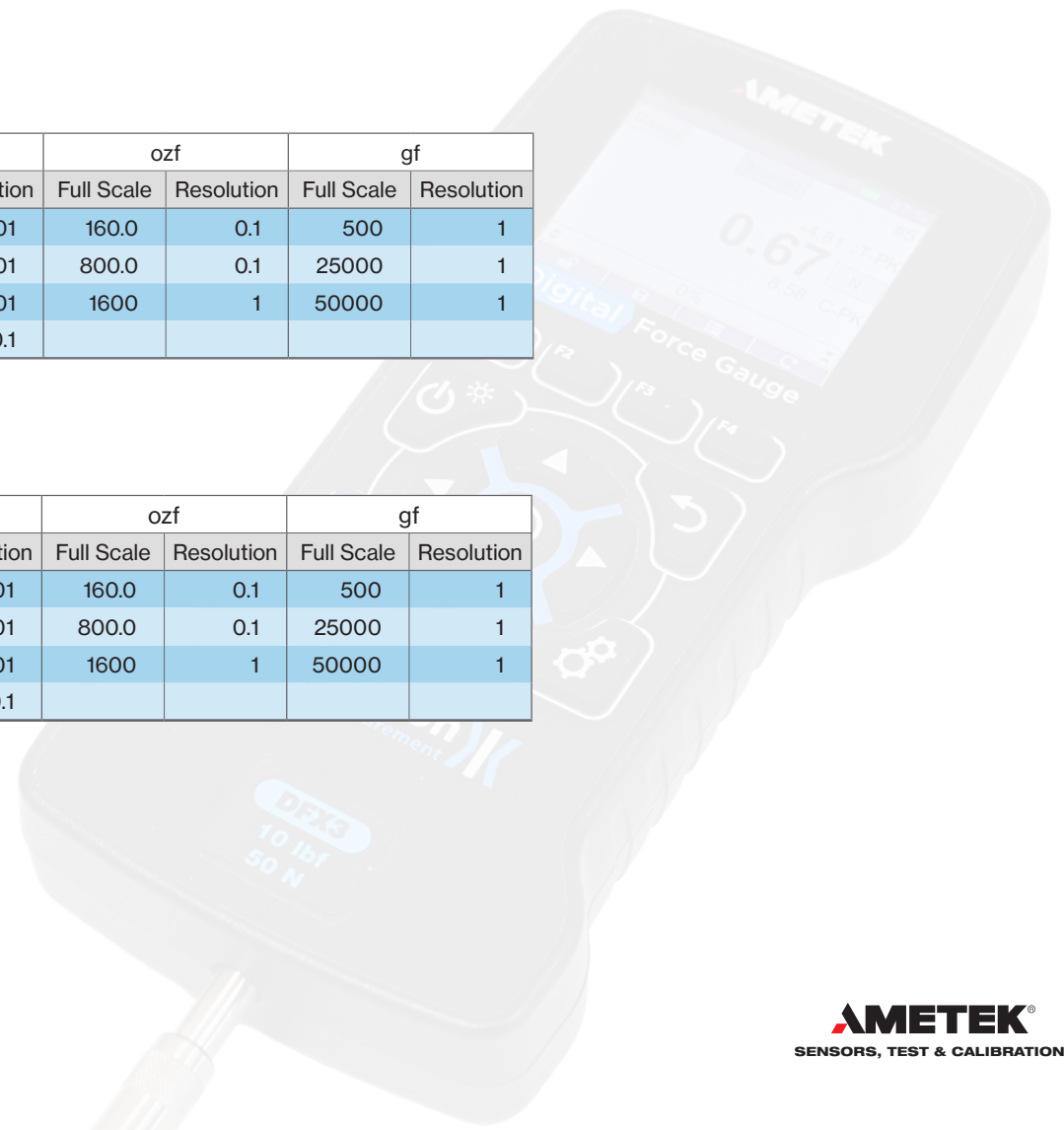
DFX3 Accuracy: 0.3% of FS

Model	lbf		N		kgf		ozf		gf	
	Full Scale	Resolution	Full Scale	Resolution	Full Scale	Resolution	Full Scale	Resolution	Full Scale	Resolution
DFX3-010	10.00	0.01	50.00	0.01	5.000	0.001	160.0	0.1	500	1
DFX3-050	50.00	0.01	250.0	0.1	25.00	0.01	800.0	0.1	25000	1
DFX3-100	100.0	0.1	500.0	0.1	50.00	0.01	1600	1	50000	1
DFX3-200	200.0	0.1	1000	1	100.0	0.1				

With Certificate of Calibration (NIST)

Model	lbf		N		kgf		ozf		gf	
	Full Scale	Resolution	Full Scale	Resolution	Full Scale	Resolution	Full Scale	Resolution	Full Scale	Resolution
DFX3-010-NIST	10.00	0.01	50.00	0.01	5.000	0.001	160.0	0.1	500	1
DFX3-050-NIST	50.00	0.01	250.0	0.1	25.00	0.01	800.0	0.1	25000	1
DFX3-100-NIST	100.0	0.1	500.0	0.1	50.00	0.01	1600	1	50000	1
DFX3-200-NIST	200.0	0.1	1000	1	100.0	0.1				

All models include a rechargeable battery, USB cable, and standard accessories. Optional accessories can be ordered separately—see [Accessories page](#) for details



Accessories

Expand Your Testing Capabilities

The DFX3 Series is designed to adapt to a wide range of force measurement applications. With a comprehensive selection of optional accessories – including precision tips, extension rods, grip handles, and test stand adapters – you can tailor your setup for handheld or mounted use. Each accessory is engineered for durability and compatibility, ensuring seamless integration and reliable performance across various testing environments. Whether you're measuring tension, compression, or peak force, the right accessory makes all the difference.

Accessories List (◆ Indicates an accessory included with the gauge.)

Adapters

Flat Adapter, 110 lbf	◆ SPK-FMG-011A
Flat Adapter, 550 lbf	◆ SPK-FMG-011B
Hook, 50 lbf	◆ SPK-FMG-012A
Hook, 110 lbf	◆ SPK-FMG-012B
Hook, 550 lbf	◆ SPK-FMG-012C
Chisel Point, 110 lbf	SPK-FMG-008A
Chisel Point, 550 lbf	SPK-FMG-008B
Point Adapter, 110 lbf	SPK-FMG-009A
Point Adapter, 550 lbf	SPK-FMG-009B
Notch Adapter, 110 lbf	SPK-FMG-010A
Notch Adapter, 550 lbf	SPK-FMG-010B
Load Cell Shaft Protector	SPK-DFG3-001
#10-32 to 5/16-18 Adapter	P-10020

Extension Rods

Extension Rod, 6" (152mm), #10-32	SPK-FMG-013A
Extension Rod, 6" (152mm), 5/16-18	SPK-FMG-013B

Carrying & Storage

Carrying Case	◆ SPK-DF-118
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Handles

Handle Assembly, DF3	SPK-DF3-HANDLE
Handle Assembly, DF3 Series	6873
Grip Handle, MSC/FCE Rev. A	NC002825
Screw, Flat Head Socket Cap Rev.	E08-257
Pistol Grip	SPK-FMG-141

Grips & Hooks

Swivel Hook, 50 lbf	ML3867
Swivel Hook, 110 lbf	ML3850
Swivel Hook, 225 lbf	ML3869
Swivel Hook, 550 lbf	ML3868
Hook, Latch	NC002500

Test Stand Adapters

MT150 Series, 150lbf	SPK-MT-001
MT500 Series, 500 lbf	SPK-MT-0004
LTCM Series, 100 lbf	Not Required
TT Tester, 500 lbf	NC002582

Mounting & Coupling Adapters

Kit, DF Metric Couplers #10-32_M6; 5/16-18_M6; M8_5/16-18	SPK-TCM-033
Coupling #10-32 Female to M6x1mm Female Rev	NC002652
Coupling 5/16-18 Female to M6x1mm Female Rev	NC002658
Adapter, Threaded, M8x1.25 to 5/16x18, DFG3	NC003256

Power & Connectivity

Battery Charger, Universal, with Cable	◆ SPK-DF3-UNIV
Cable, USB-C/USB-A, 3 FT, Black	6885
Adapter, Wall Mount, AC/DC, 5V, 5W, USB-A	6886
Kit, AC Adapter for P/N 6886	6887

Notes

Accessories are capacity dependent.

Accessories used with capacities below 110 lbf (500N) will generally have a #10-32 thread.

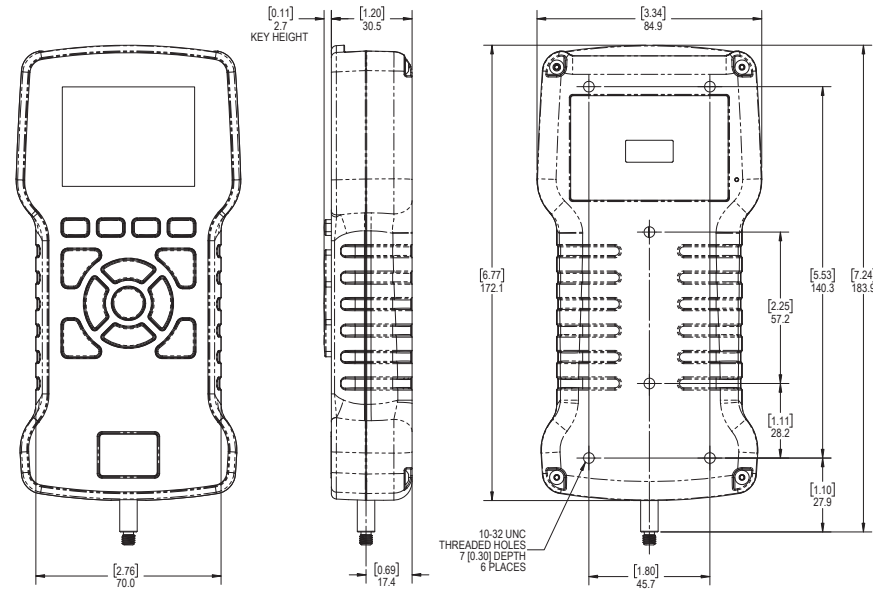
Accessories for higher capacities generally have a 5/16-18 thread.

Dimensions and Specifications

Specifications

Accuracy	±0.3 % of Full Scale
Certification	Certificate of Conformance (std.)
Data Sampling Rate	1000 Hz
Peak Capture Rate	up to 1000 Hz
Tare Capacity	110% full scale
Overload Protection	150% full scale
Display Characteristics	Color LCD Display
Automatic Shutoff. Adjustable in 1 minute intervals and may be disabled	
Power	Battery (Lithium Ion) or via the USB-C port
Battery Life	With Dimming On: 40 Hours
.....	With Dimming Off: 30 Hours
Instrument Weight	1.1 lbs (0.5 kg)
Shipping Weight	4 lbs (2 kg)
Warranty	1 year
Operating Temperature	40 to 110°F (5 to 45°C)
Relative Humidity	20% to 85%

Dimensions



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