

DFGS-R SERIES

Digital Force Gauge

The CHATILLON® DFGS-R Series features a dedicated remote loadcell with force measurement accuracy of +0.15% of full scale +1LSC. All modes feature RS232 serial data and MITUTOYO communications and an internal sampling rate of 5000 Hz. Other features include programmable high/low limits, pushbutton calibration and an analog output for graphing the force curve. Available with user-selectable units (oz, g, lb, kg, N). A large, easy-to-read LCD display indicates current and peak values, gauge settings and gauge status. A selectable auto-shutoff helps promote battery life. Gauges come with accessories, battery charger and carrying case. Capacities from 8ozf (2.5N) to 1000 lbf (5kN).

FEATURES

- Dedicated Remote Loadcell
- Up to 1000 lbf (5 kN)
- Simple Pushbutton Operation
- Rugged All-Metal Housing
- 5000Hz Sampling Rate
- RS232 Serial Data Communications
- Overload Capacity- 110% of Rated Capacity
- Hand-held or Test Stand Applications

SPECIFICATIONS

Accuracy:	±0.15% of Full Scale ±1 LSC
Selectable Units:	lb, kg, N
Overload Capacity:	110% of rated capacity
Display:	LCD, 4-1/2 characters
Sampling:	1000Hz
Outputs:	RS232, Mitutoyo, 12-Pin Hirose
Power:	AC Adapter, NiCd Battery Pack
Accessories:	Carrying Case, Attachments and Battery Charger
Weight:	2 lbs (0.9 kg)
Warranty:	1 Years



DFGS-R Series with Dedicated Remote Loadcell

SPECIFICATION
SS-FM-3212-1101
November 2001



Pharmaceuticals



Electronics



Medical Device

INTERNET
www.force-gauge.net

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ORDERING INFORMATION

Remote Dedicated Loadcell Models

Model	Capacity
DGGS-R-250G	8 ozf x 0.005 ozf 250 gf x 0.1 gf 2.5 N x 0.001 N
DFGS-R-2	2 lbf x 0.001 lbf 1 kgf x 0.001 kgf 10 N x 0.01 N
DFGS-R-10	10 lbf x 0.005 lbf 5 kgf x 0.005 kgf 50 N x 0.05 N
DFGS-R-50	50 lbf x 0.02 lbf 25 kgf x 0.01 kgf 250 N x 0.1 N
DFGS-R-100	100 lbf x 0.05 lbf 50 kgf x 0.05 kgf 500 N x 0.5 N
DFGS-R-200	200 lbf x 0.1 lbf 100 kgf x 0.1 kgf 1000 N x 1 N
DFGS-R-500	500 lbf x 0.2 lbf 250 kgf x 0.1 kgf 2500 N x 1 N
DFGS-R-1000	1000 lbf x 0.5 lbf 500 kgf x 0.5 kgf 5000 N x 5 N



The DFGS Series is ideal for hand-held use or for use with a test stand like the LF Plus Series. LF Plus test stand shown with DFA Series force gauge.

Add "-220V" after the model number if you require 220V operation, e.g. DFGS-R-2-220V.

TEST STAND GAUGE ADAPTER KITS

Test Stand Type	Availability	Part No.	Notes
LTS Series	Optional	NC000300	
LTC Series	Optional	NC000300	
HTC Series	Optional	NC000225	
TT Tester	N/A	N/A	
LTCM-6 Series	Optional	NC000300	
TCM201 Series	Optional	NC000300	
TCD200 Series	Optional	NC000300	
LFPLUS Series	Optional	SPK/LFM/0011	
LRX Series	N/A	N/A	Not Compatible
LRXPLUS Series	N/A	N/A	Not Compatible
LR5KPLUS Series	N/A	N/A	Not Compatible

GAUGE ADAPTERS

Adapters	Capacity	Availability	Part No.	Notes
Chisel Point, #10-32	100 lbf (500 N)	Optional	SPK-FMG-008A	
Chisel Point, 5/16-18	500 lbf (2.5 kN)	Optional	SPK-FMG-008B	
Point Adapter, #10-32	100 lbf (500 N)	Optional	SPK-FMG-009A	
Point Adapter, 5/16-18	500 lbf (2.5 kN)	Optional	SPK-FMG-009B	
Notch Adapter, #10-32	100 lbf (500 N)	Optional	SPK-FMG-010A	
Notch Adapter, 5/16-18	100 lbf (500 N)	Optional	NC000721	5/8 inch (15mm) notch size
Notch Adapter, 5/16-18	500 lbf (2.5 kN)	Optional	SPK-FMG-010B	
Notch Adapter, 5/16-18	500 lbf (2.5 kN)	Optional	NC000725	1.0-inch (25mm) notch size
Flat Adapter, #10-32	100 lbf (500 N)	Optional	SPK-FMG-011A	
Flat Adapter, 5/16-18	500 lbf (2.5 kN)	Optional	SPK-FMG-011B	
Flat Disc, 5/16-18		Optional	NC000751-1	3.25 x 0.5 inch (83 x 12mm)
Flat Disc, 5/16-18		Optional	NC000751-2	3.25 x 0.25 inch (83 x 6mm)
Rectangular Fixture, 5/16-18		Optional	NC000730-1	3.5 inch (89mm) diameter
Rectangular Fixture, 5/16-18		Optional	NC000738-1	0.75 inch (19mm) diameter
Hook, #10-32	50 lbf (225 N)	Optional	SPK-FMG-012A	
Hook, #10-32	100 lbf (500 N)	Optional	SPK-FMG-012B	
Hook, Swivel, #10-32	20 lbf (112 N)	Optional	ML3867	
Hook, Swivel, #10-32	100 lbf (500 N)	Optional	ML3850	
Hook, 5/16-18	500 lbf (2.5 kN)	Optional	SPK-FMG-012C	
Hook, Swivel, 5/16-18	500 lbf (2.5 kN)	Optional	ML3868	
Hook, with Clasp, 5/16-18	500 lbf (2.5 kN)	Optional	NC002500	
Extension Rod, #10-32		Optional	SPK-FMG-013A	
Extension Rod, 5/16-18		Optional	SPK-FMG-013B	
Adapter, #10-32F to 5/16-18M		Optional	P-10020	Required for 5/16 Fixtures
Coupling, #10-32 to 6M		Optional	NC002652	For metric probes/grips



Chisel Point



Point Adapter



Notch Adapter



Flat Adapter



Hook



Specialty Fixtures for Ergonomics

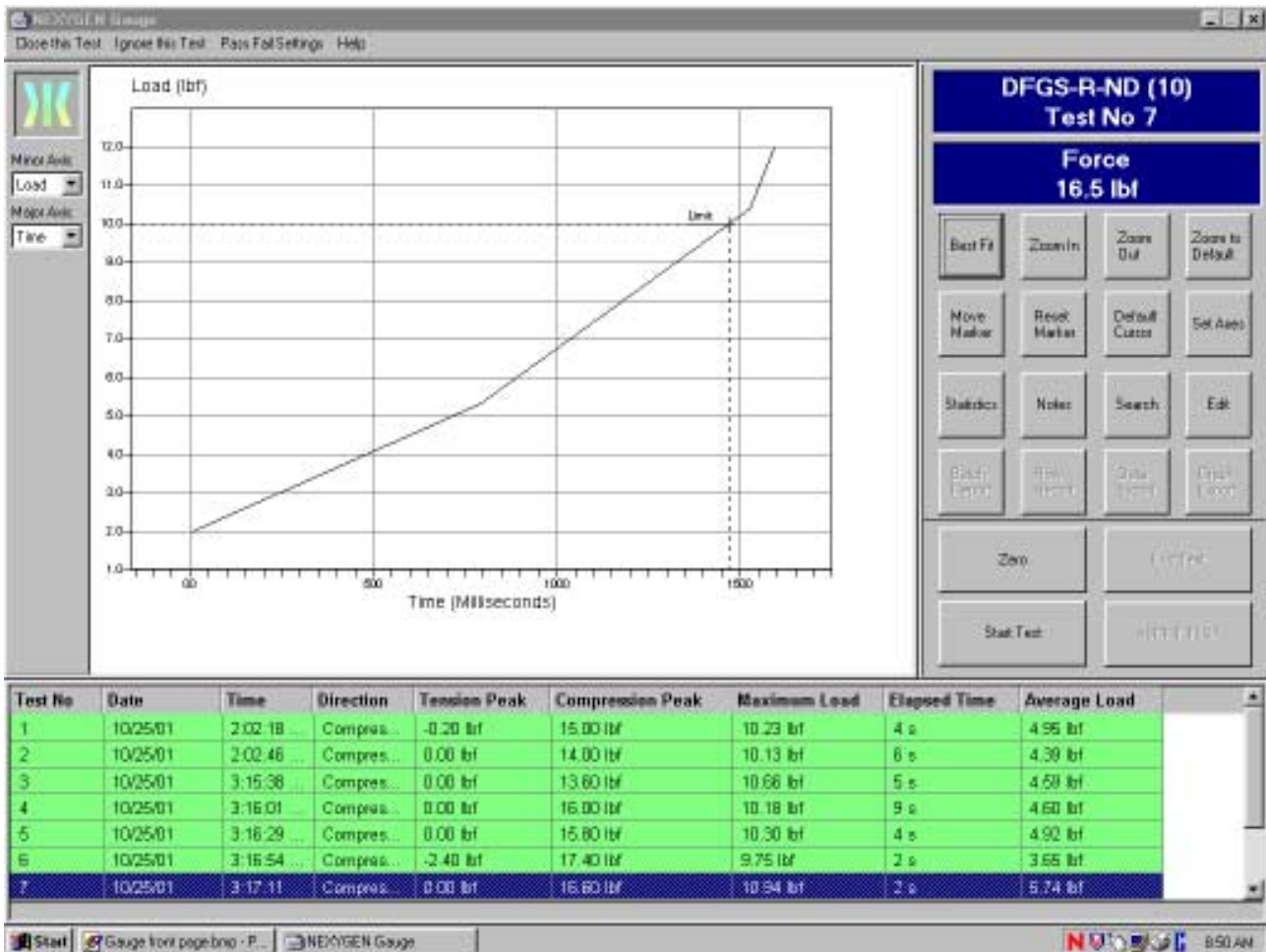
The DFGS Series can be equipped with specialty fixture for ergonomic testing, muscle strength testing and job task analysis applications. Shown are various fixtures including rectangular fixtures and flat discs.

STANDARD ACCESSORIES

Accessories	Availability	Part No.	Notes
Protective Carrying Case	Standard	SPK-DFGS-032	
Battery Charger, 115V	Standard	SPK-DFGS-028A	Standard with 115V models
Battery Charger, 220V	Standard	SPK-DFGS-028B	Standard with 220V models
Hex Key, 7/64-inch	Standard	SPK-FMG-015	
Operators' Manual	Standard	SPK-DFGS-031	

GAUGE APPLICATION SOFTWARE

Software	Availability	Part No.	Notes
NEXYGEN GAUGE Software (Single User)	Optional	40/0739	Single User License
NEXYGEN GAUGE Software (5 Pack)	Optional	40/0739/5	5 User License
NEXYGEN GAUGE Software (10 Pack)	Optional	40/0739/10	10 User License

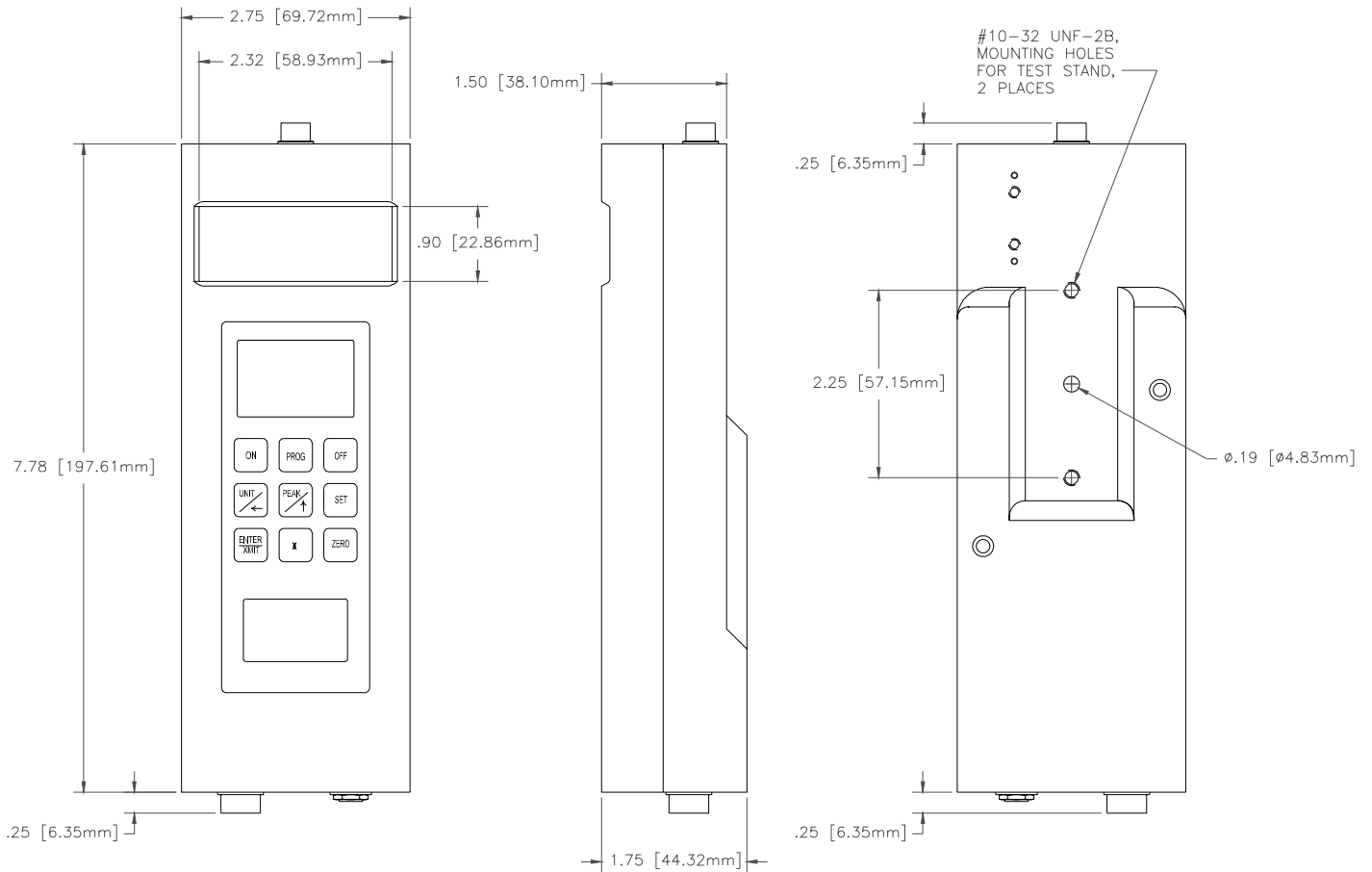


NEXYGEN GAUGE software allows you to collect load measurements from your force gauge and display and analyze results information in both tabular and graphical formats. You can automatically create reports in WORD or EXCEL and define pass/fail conditions. You can change the size of your graph, overlay graphs, add notations, etc.

INTERFACE CABLES

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	Require when using NEXYGEN
Personal Computer, 9-pin D, 10ft (3m)	Optional	NC000850-2	Require when using NEXYGEN
MITUTOYO, 10-pin	Optional	NC000654	
MITUTOYO, RS232	Optional	NC000697	
TCM201, 9-pin D	Optional	ENC0125	
TCD200, 9-pin D	Optional	NC000647	

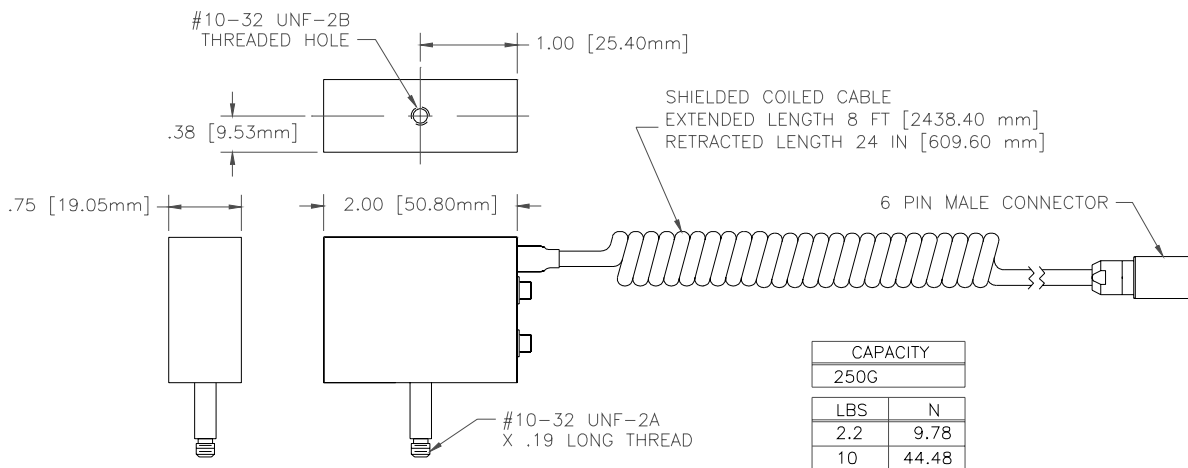
DFGS-R Series Schematic



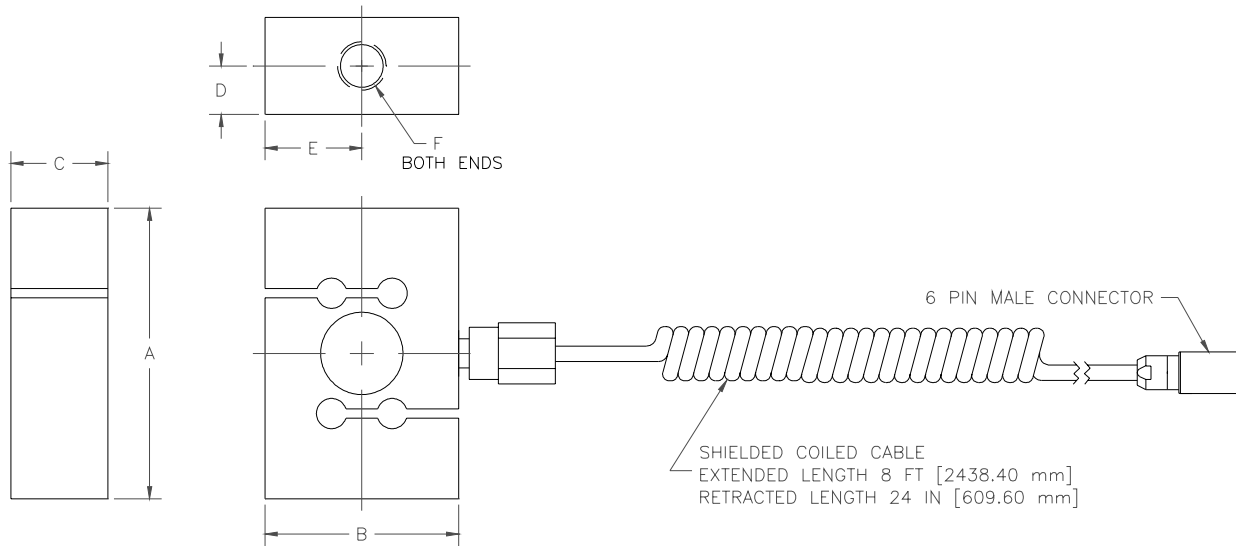
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CAPACITY	
250G	
LBS	N
2.2	9.78
10	44.48



CAPACITY		A		B		C		D		E		F
LBS	N	IN	mm	IN	mm	IN	mm	IN	mm	IN	mm	THREAD
50	222.4	2.50	63.50	2.00	50.80	.63	16.00	.313	7.95	1.00	25.40	1/4-28
100	444.8	2.50	63.50	2.00	50.80	.63	16.00	.313	7.95	1.00	25.40	1/4-28
200	889.6	2.50	63.50	2.00	50.80	.63	16.00	.313	7.95	1.00	25.40	1/4-28
500	2224.1	3.00	76.20	2.00	50.80	1.00	25.40	.500	12.70	1.00	25.40	1/2-20
1,000	4448.2	3.00	76.20	2.00	50.80	1.00	25.40	.500	12.70	1.00	25.40	1/2-20
2,000	8896.4	3.00	76.20	2.00	50.80	1.00	25.40	.500	12.70	1.00	25.40	1/2-20
5,000	22241.0	4.25	107.95	3.00	76.20	1.00	25.40	.500	12.70	1.50	38.10	3/4-16
10,000	44482.0	4.75	120.65	3.50	88.90	1.00	25.40	.500	12.70	1.75	44.45	3/4-16

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