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Find the *Mark-10 BG2* at our website: *Click HERE*

Data Sheet Premium Digital Force Gauges Series BG

32-1041 REV 0



The Series BG Digital Force Gauge is an advanced force measurement instrument, with sophisticated measurement capabilities, data outputs, computer control capabilities, and a long list of features and configurable settings.

Specifications

Accuracy:	±0.2% of full scale ±1 digit
Sampling rate:	65 readings/s
Display rate:	2.5 updates/s in normal mode / 65 updates/s in peak mode
Power:	AC or rechargeable battery with Intelligent Power Management System (IPM), a 3-step system that warns the user via a "LO BAT" indicator and then powers off the gauge.
Battery life:	8-10 hours of continuous use
Selectable units of measurement:	lbF, N, kg/g (depending on model)
Outputs:	Standard
RS-232	Fully configurable up to 9600 baud. Includes Gauge Control Language (GCL) for full computer control of all functions.
Mitutoyo (Digimatic)	Serial BCD suitable for all Mitutoyo SPC-compatible devices
Analog	±1 VCD, ±0.25% of full scale at capacity. + for compression, - for tension.
General purpose I/O	Three open collector outputs and one input (utilizing Mitutoyo lines)
Set points	Three open collector lines (utilizing Mitutoyo lines)
Configurable settings:	Analog filter, digital filters, RS-232, outputs selection (other than RS-232), automatic output (RS-232), automatic shutoff, initial (default), averaging mode, calibration
Load cell deflection:	0.010 in [0.25 mm] at full capacity
Safe overload:	150% of full scale (display shows "----" at 110% and above)
Weight (gauge only):	BG012 - BG200: 0.95 lb [0.4 kg], BG500: 1.12 lb [0.5 kg]
Environmental requirements:	40° F - 100°F [5°C - 45°C], <96% humidity (non-condensating)
Thermal effects:	Zero: 0.03% of full scale/°C, Span: 0.01% of full scale/°C
Housing construction:	Aluminum
Included accessories:	Chisel, cone, V-groove, hook, flat, extension
Warranty	3 years (see individual statement for further details)

Features

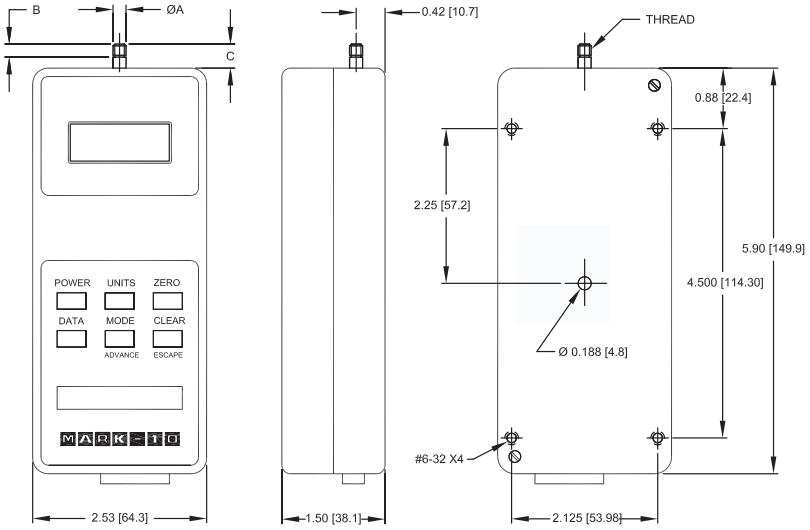
Data outputs	RS-232, Mitutoyo (Digimatic), and analog outputs. Automatic timed output (RS-232) included.
Set points	Programmable high and low force set points for triggering external devices (ex. motorized test stand, alarm, etc).
Data averaging	Calculates average force over a specified time (programmable)
External trigger	Useful for contact or switch activation force testing and data capture
Reversible housing	Housing can be reversed for handheld or test stand use

Optional Equipment

Output cables	Various data output cables are available
Hi / lo limits indicator 11-1022	Set limit conditions for a test - the indicator will display red lights for high and low limits, and a green light to indicate passing.
Overload protection module 11-1042	Protects the force gauge against overloads during motorized tests. Adjustable from 10% to 150% of gauge's full capacity. For use with motorized test stands.
Set point cable 09-1090	Stops test stand travel at programmable high and low set points for tension and compression forces. For use with motorized test stands.

Dimensions

in [mm]



	BG012 - BG200	BG500
ØA	0.200 [5.8]	0.375 [9.5]
B	0.19 [4.8]	0.44 [11.2]
C	0.35 [8.9]	0.68 [17.3]
Thread	#10-32	5/16-18

Ordering Information

Model No.	Capacity x Resolution
BG012	0.12 x 0.00005 lbF, 50 x 0.02 gF, 0.5 x 0.0002 N, 110V
BG025	0.25 x 0.0001 lbF, 100.00 x 0.05 gF, 1 x 0.0005 N, 110V
BG05	0.5 x 0.0002 lbF, 250 x 0.1 gF, 2.5 x 0.001 N, 110V
BG2	2 x 0.001 lbF, 1 x 0.0005 kgF, 10 x 0.005 N, 110V
BG5	5 x 0.002 lbF, 2.5 x 0.001 kgF, 25 x 0.01 N, 110V
BG10	10 x 0.005 lbF, 5 x 0.002 kgF, 50 x 0.02 N, 110V
BG20	20 x 0.01 lbF, 10 x 0.005 kgF, 100 x 0.05 N, 110V
BG50	50 x 0.02 lbF, 25 x 0.01 kgF, 250 x 0.1 N, 110V
BG100	100 x 0.05 lbF, 50 x 0.02 kgF, 500 x 0.2 N, 110V
BG200	200 x 0.1 lbF, 100 x 0.05 kgF, 1000 x 0.5 N, 110V
BG500	500 x 0.2 lbF, 250 x 0.1 kgF, 2500 x 1 N, 110V

For 220V operation, add suffix E to model number. Example: BG10E

MARK-10

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3 YEAR WARRANTY

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