



HANDY DIGITAL FORCE GAUGE HF SERIES

The HF series can be used not only for simple measurement of tension/compression force but also used for various testing purposes; such as switch test, connector insertion/withdraw test, and fracture test. Measured result and statistical processed result can be output for printing on your printer* and also transmitted to your computer system.

*Text style printing by ASCII code.

Characteristics

▶ **COMPARATOR FUNCTION**

Initial input of the tolerance limit (upper/lower) enables the device to judge the measured result as GO/NG

▶ **MEMORY FUNCTION**

Measured results will be automatically memorized up to 256 measurements.

▶ **VARIOUS OUTPUT**

Various options are offered for outputs; CENTRONICS output, RS232C output, analog output, digital output and switch output.

▶ **STATISTICAL PROCESSING & PRINTING OF INSPECTION REPORT**

The HF series can calculate figures of the standard deviation and the process capability index and those figures can be printed out on your printer in form of the inspection report when the CENTRONICS interface (optional) is adopted.

▶ **MULTIPLE FUNCTIONS**

▶ **HIGH ACCURACY, HIGH RESOLUTION**



Initial setting on the device is possible for measurement of peak force, insertion/withdraw force, insertion compression peak force, withdraw extension peak force and holding force at contact point. Also, the device is applicable for setting of various printing modes, input of local NEWTON value and other various modes settings.

AUTOMATIC POWER OFF

The HF series have automatic power-off function to save battery and to keep the device safe. Power off time can be changed at the range of 01-99 min.

PEAK HOLD FUNCTION

Single operation can perform measurement of both compression peak data at insertion and extension peak data at withdraw.

EASY OPERATION

Buttons are well arranged for easy operation to perform multipurpose measurement.

The Hf series have achieved extremely high accuracy; such as $\pm 0.2\%FS$ of accuracy and $\pm 0.1\%FS$ of repeatable accuracy. And also, the HF series perform extremely high resolution. For example, the 10kgf capable device can indicate minimum 1 gf. it means 1/10000 resolution.

LOCAL NEWTON VALUE INPUT

The terrestrial gravitation varies with where measurement is performed. Measurement error by gravity difference will be eliminated inputting the local Newton value according to the measurement place.

RS232C SETTING FUNCTION

It is possible to set data bit length, baud rate, stop bit length and parity bit to connect with your computer.

UNIT CONVERSION

It is possible to convert the graduations of N, kgf (gf) or lbf on the device.

Specification

	Max. Load			
	N	Kgf	gf	lbf
HF-1	10.000	1.000	1000.0	2.204
HF-2	20.00	2.000	2000	4.408
HF-5	50.00	5.000	5000	11.02
HF-10	100.00	10.000	10000	22.04
HF-20	200.0	20.000	-----	44.08
HF-50	500.0	50.000	-----	110.2
HF-100	1000.0	100.000	-----	220.4

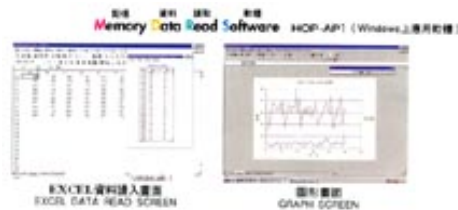
	Min. Resolution			
	N	Kgf	gf	lbf
HF-1	0.001	0.001	0.1	0.001
HF-2	0.01	0.001	1	0.001
HF-5	0.01	0.001	1	0.01
HF-10	0.01	0.001	1	0.01
HF-20	0.1	0.01	-----	0.01

HF-50	0.1	0.01	-----	0.1
HF-100	0.1	0.01	-----	0.1

- **MEASUREMENT UNIT** : N,Kgf,(gf),lb
- **ACCURACY** : $\pm 0.2\%$ F.S.
- **REPEATABILITY** : $\pm 0.1\%$ F.S.
- **RESPONSE SPEED** : 10~320HZ, 6 Steps
- **DISPLAY** : 4 DIGIT LCD DISPLAY
- **MEASUREMENT** : MAXIMUN VALUE
- MOMENT VALUE
- **SAMPLING** : 640TIMES PER SEC.
- **ALLOWABLE LOAD** : 150% (ALARM BUZZER AT 105%)
- **A/D CONVERTER** : A/D CONVERTER 16bit
- **OUTPUT** : 1. STANDARD : ANALOG OUTPUT ± 2 VHF
2. OPTIONAL : PRINTER CONNECTING, DIGIMATIC OUTPUT, CENTRONICS INTERFACE, CPMPARATOR CONNECTING, RS232C INTERFACE.
- **CONTINUOUS OPERATION TIME** : APPROX 10 HOURS(FULL CHARGED AT 25°C)
- **CHARGING TIME** : APPROX. 6 HOURS
- **OPERATION TEMPERATURE** : 0~+40°C
- **POWER** : NICAD BATTERY, A/C ADAPTOR FOR CHARGING
- **WEIGHT** : 500g
- **STANDARD ACCESSARIES** : ATTACHMENT, A/C ADAPTER, CABLES, CASE

Software

This optional software enables your computer to read the data stored in the Handy Force gauge. Pictures shown above are examples of processed data by Microsoft Excel



Application

