

Series MF Mechanical Force Gauge

Operation Manual

Nidec



Warning

Do not operate or store instrument in the following locations:

Explosive areas, near water, oil, dust or chemicals; areas where the temperatures can exceed 104°F (40° C)

Take precaution to not drop the force gauge. Damage to the sensor may occur.

Do not modify, disassemble or attempt to repair the unit. Send to the factory for proper repair.

If upon delivery damage to the unit is detected, do not operate the unit. Notify the shipping carrier immediately to obtain damage claim instructions.

Only measure forces that are in line with the measuring shaft. Do not attempt to take any measurements (tension or compression) at any angle. Failure to keep measurements in line will damage the instrument.

Do not exceed capacity of unit.
Accuracy may be affected if unit is exposed to high humidity, dust or extreme shock.

The MF mechanical force gauge is a direct reading, dial type instrument designed for measuring tension and compression forces. All models are housed in a rugged, aluminum, ergonomically designed housing which makes these instruments ideal for material testing, manufacturing, quality control and laboratory environments.

Overload capacity is 165 lbs (75 kg) for all models.

1. Tension Sensing - Measure tensile forces using the hook attachments.
2. Measure Switch - Use this switch to select real time or peak force.
3. Tare Ring - Rotate tare ring to compensate the attachment's weight.
4. Compression Sensing - Measure compressive forces with following attachments: flat head, conical head, chisel head and notched head.



SPECIFICATIONS

Accuracy: $\pm 0.2\%$ F.S.

Display Analog: 2" in diameter (50 mm); rotatable 360° for taring purposes

Live/Peak Mode: Selectable

Needle Update: Immediate

Threaded Insert: Eight M3 inserts

Stroke: 10 mm

Overload Capacity: 165 lbs (75 kg)

Product Weight: 1.6 lbs (0.73 kg)

Package Weight: 4 lbs (1.81 kg)

Included Accessories: Carrying case and attachments (flat-head, hook, chisel, notched head, cone head, extension rod, large hook and large V-hook)



NIDEC-SHIMPO CORPORATION

English Dial Model	MF-2	MF-5	MF-10	MF-20	MF-30	MF-50	MF-100
Capacity	2 lb	5 lb	10 lb	20 lb	30 lb	50 lb	100 lb
Dial Graduation	0.01 lb	0.025 lb	0.05 lb	0.1 lb	0.2 lb	0.25 lb	0.5 lb

Metric Dial Model	MF-1KG	MF-2KG	MF-3KG	MF-5KG	MF-10KG	MF-20KG	MF-30KG	MF-50KG
Capacity	1 kg	2 kg	3 kg	5 kg	10 kg	20 kg	30 kg	50 kg
Dial Graduation	0.005 kg	0.01 kg	0.02 kg	0.025 kg	0.05 kg	0.1 kg	0.2 kg	0.25 kg

OPERATION

1. Use "selector button" to select average (real time) or peak mode.
2. Add proper attachment to push or pull measuring end.
3. Rotate tare ring to read"0". Adjustment should be made under the same conditions as those used when measuring actual load.
4. To select average mode, push button down and turn all the way counter clockwise.
5. To select peak mode, turn button all the way clockwise. To reset to zero, push button slightly.

Note: When in average mode you can still freeze the indicator needle when desired measurement is reached by turning selector all the way clockwise.



Optional MFP-Handle
Ideal for Heavy Loads

DIMENSIONS

