

Tabletop Force Gauge Calibration Unit TFCU series

- A tabletop calibration unit for checking measurement accuracy of force gauges
- Ideal tool for the in-house force gauge calibration and daily inspection
- For compression and tension forces and accuracy checks up to 500N
- Applicable to Digital and Mechanical force gauges

The precision-type PSM series mechanical force gauge is included in this package as a standard instrument.
(*Except for TFCU-Z.)

Yearly calibration at a calibration laboratory is recommended.

*The Force gauge for Calibration is not included.



Tabletop Force Gauge Calibration Unit Stand




The handle operation moves the force gauge left and right for Calibration, enabling smooth and sensitive movement and adjustment.

Images of Use: Checking the compression direction accuracy of the ZTA series *1/*2

<p>Mount the ZTA and PSM on the stand for the (push-force) measuring shafts facing each other. Attach the Flat Tip to the force gauge measuring shafts.</p>	<p>After adjusting the zero point and zero resetting, turn the handle to push the Flat Tips of PSM with that of ZTA.</p>	<p>Check the accuracy of the ZTA by comparing the indicated force values on the PSM and ZTA.</p>

*1 Recommended to use the same capacity range of both force gauges.

*2 For the digital force gauge compression calibration, please remove the plastic nut from the measuring shaft and use the included metal nut.

Images of Use: Checking the tensile direction accuracy of the ZTA series *3		
		
Mount the ZTA and PSM on the stand for the (pull-force) measuring shafts facing each other. Attach the Small Hook to the force gauge measuring shafts.	After adjusting the zero point and resetting to zero, turn the handles to hook each other's hooks and pull them together with the PSM and ZTA.	Check the accuracy of the ZTA by comparing the indicated force values on the PSM and ZTA.

*3 Recommended to use the same capacity range of both force gages.

Specifications						
Model	TFCU-20N	TFCU-50N	TFCU-100N	TFCU-200N	TFCU-500N	TFCU-Z
Included PSM force gauge**1	PSM-20N	PSM-50N	PSM-100N	PSM-200N	PSM-500N	- **2
Dimensions	Please refer to the [Dimensions]					
Weight	Stand: Appx. 7.3kg / PSM: Appx. 660g					
Max. Force Value for Stand Use	500N **3					
Included Accessories	Metal nut for compression calibration/Operation manual					
	PSM series Standard Accessories **4 Calibration Certificate with Traceability Chart					-

**1 The accuracy of PSM force gauge is within $\pm 0.1\%$ F.S.

**2 Model #TFCU-Z is a model with a Calibration Stand Only. PSM force gauge not included.

If you want to use other force gauges as a reference instrument, please select Model #TFCU-Z and a force gauge that meets your requirements. A special custom-made attachment is required to use a digital force gauge as a reference instrument. Please contact us for details.

**3 The maximum force value of the entire calibration unit varies depending on the force gauge mounted.

**4 PSM series standard accessories: 8 pcs standard attachments in a storage case. Please refer to the specification sheet of PSM series for details.

[Attachable force gauge] *1**

Digital Force Gauge		Mechanical Force Gauge		
ZTA/ZTS series	DST/DSV series	FB/FS series	PS/PSS series	PSM series
				

***1 Older model with the stand mounting holes on the back can be mounted (4pcs screw holes for M4 female screws, with mounting pitch 100mm x 40mm). Custom-made attachments are available for Separate Sensor Model force gauges. Please contact us for details.

[Related services]

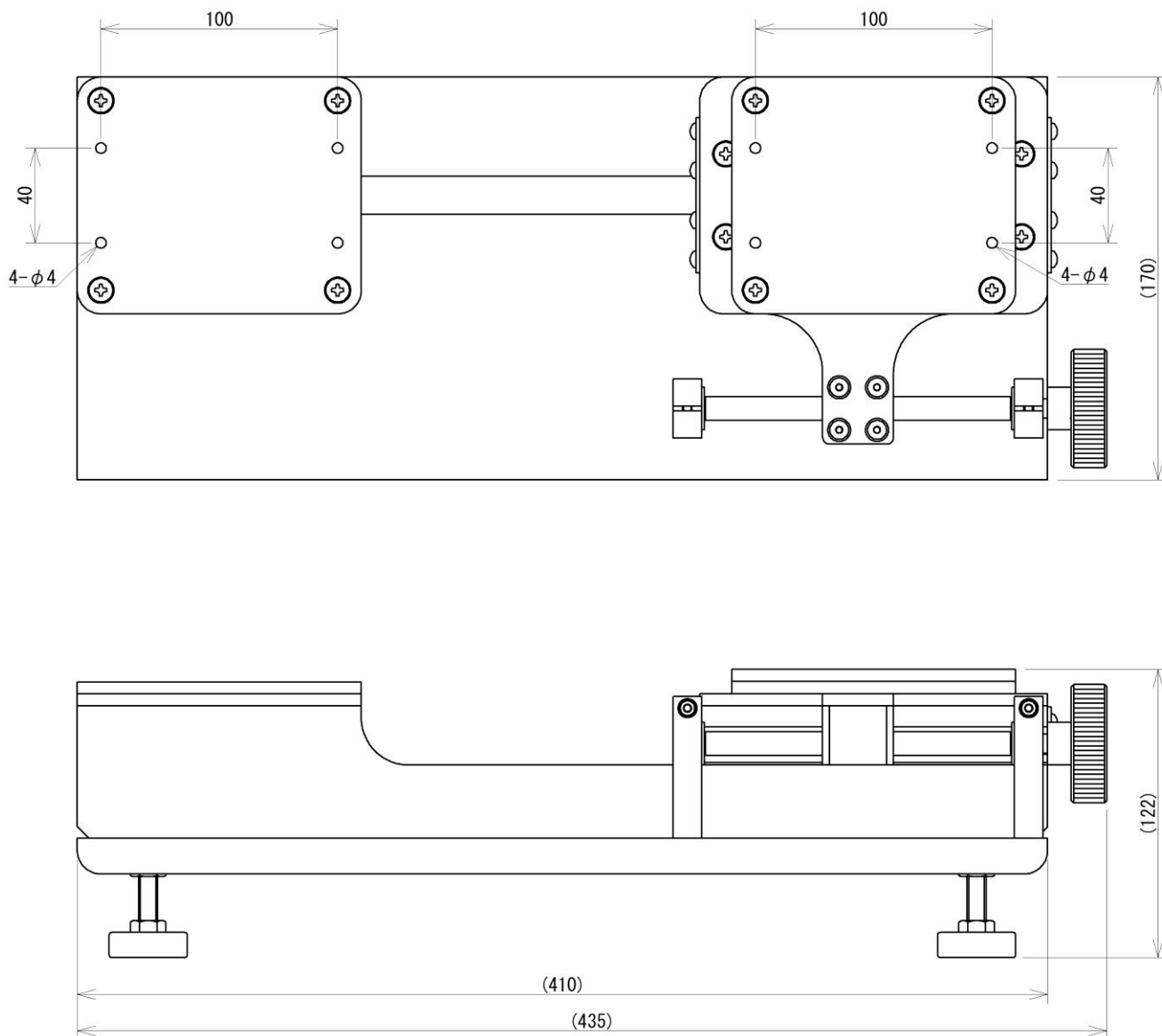
Calibration services at IMADA Calibration Laboratory: IMADA factory Calibration and ISO/IEC 17025 accredited Calibration	
<p style="text-align: center;">Calibration certificate (ISO/IEC 17025 Accredited Calibration)</p>	<p>Calibration services are available for IMADA force gauges. We can also issue a calibration certificate, traceability chart, and other documents.</p> <p>[Manufacturer calibration] IMADA's certified calibration technician performs Calibration under IMADA's specialized calibration procedures at the in-house Calibration laboratory. IMADA's in-house Calibration applies to all of its measuring instruments.</p> <p>[ISO/IEC 17025 Accredited Calibration] IMADA's certified Calibration Technician performs Calibration at IMADA's Calibration Laboratory, accredited under procedures approved by PJLA, an ISO/IEC 17025 accreditation body. Please refer to the IMADA website for the ISO/IEC 17025 accredited calibration details.</p> <p>Calibration Service: https://www.forcegauge.net/en/service/calibration</p>

[Related products]

Calibration Kit (Customized product 1T041)	
<p style="text-align: center;">Image of use (The Weight is not provided.)</p>	<p>IMADA in-house Calibration Kit using weights. Three Items used: - Calibration Stand / Plate / Compression jig.</p> <p>IMADA does not provide the required calibration weights. Please arrange your own for In-house Factory Calibration, which requires weights traceable to national standards.</p>
Calibration kit for Screw Cap Torque Testers (Customized product #1T048)	
<p style="text-align: center;">Image of use (The Weight is not provided.)</p>	<p>A calibration kit for screw cap torque testers DTXS/A series Designed for in-house calibration and daily inspections of the IMADA torque gauges.</p> <p>IMADA does not provide the required calibration weights. Please arrange your own for In-house Factory Calibration, which requires weights traceable to national standards.</p>

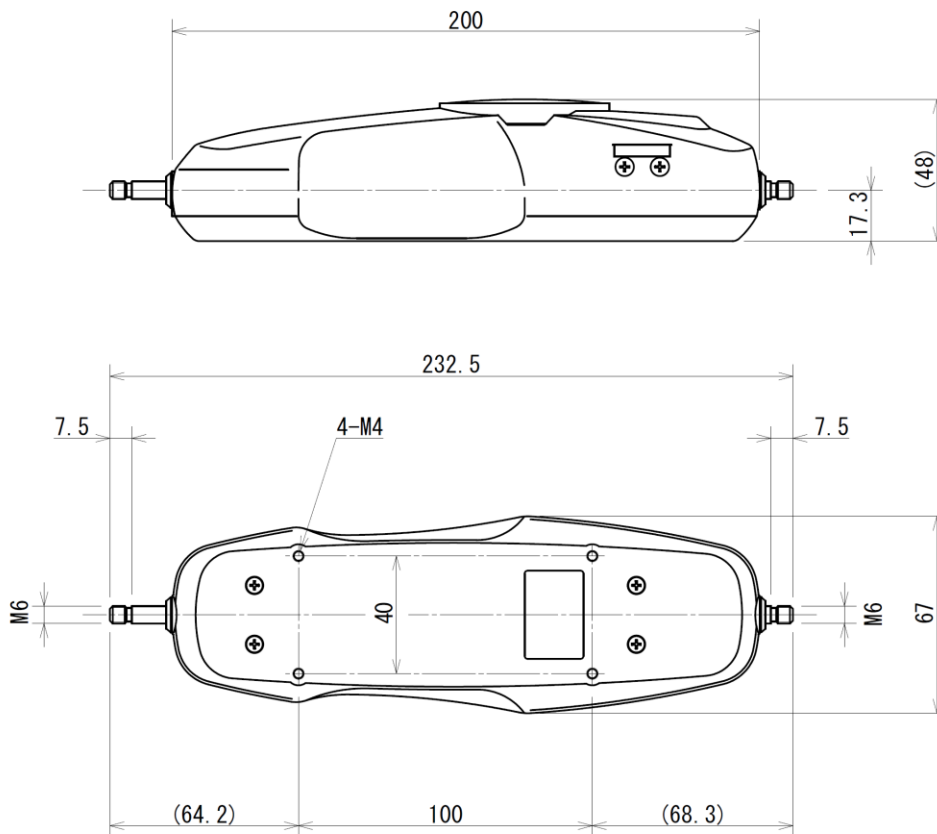
[Dimensions]

Stand



Unit: mm

PSM series



Unit: mm

[Cautions]

- Information in this document is subject to change without prior notice.
- This document is product descriptions and handling precautions, and do not guarantee various characteristics or safety.
- This product is designed for force measurement purpose only.
- Do not copy and use this content without authorization.

IMADA CO., LTD

99 Jinnoshinden-cho aza Kanowari Toyohashi
Aichi Japan 441-8077
Tel: +81-(0)532-33-3288
Fax: +81-(0)532-33-3866
E-mail: info@forcegauge.net
Website: <https://www.forcegauge.net/en/>



Visit our website for more information on a wide range of product specifications, measurement applications and videos.