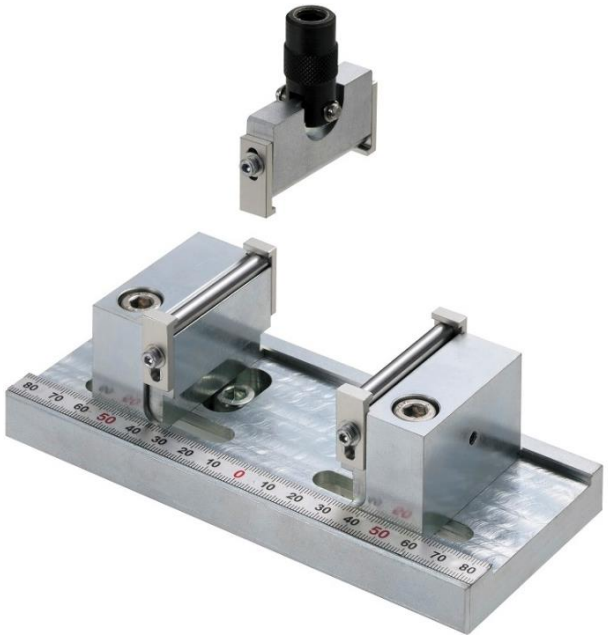
SENSEL MEASUREMENT
CAPTEURS, ELECTRONIQUES & ACQUISITION DE DONNEES

3-Point Bending Test Fixture

BT-500N / 5000N / 5000N-CB

- 3-Point Bend attachment for flexural, rigid, semi-rigid, snapping properties: for ceramics, glasses, composites, plastics, metals, or any sheet and round bar form materials.
- Interchangeable Loading Pins and adjustable bending span caters for wider range of measurement requirements.
- Partially compliant with ISO and JIS standard testing.



BT-5000N

Test Image with BT-5000N

Fixtures	Related Standard References
BT-5000N/ BT-5000N-CB	-**ISO 17138**: **2014** Fine ceramics (advanced ceramics, advanced technical ceramics) - Mechanical properties of ceramic composites at room temperature - Determination of flexural strength. (Corresponding part only) (Japanese Standards: **JIS R 1663**: **2017)** (Corresponding part only) **-IEC 60672-2 (1999)** Ceramic and glass insulating materials - Part 2: Methods of test. (Corresponding part only) (Japanese Standards: **JIS C 2141**: **1992**) (Corresponding part only)
BT-5000N	**-ISO 14704**: **2000** Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for flexural strength of monolithic ceramics at room temperature. (Corresponding part only) (Japanese Standards: **JIS R 1601**: **2008**) (Corresponding part only) **-JIS R 1602**: **1995** [Testing methods for elastic modulus of fine ceramics] (Corresponding part only)
BT-5000N-CB	**-ISO/FDIS 14215**: **1998** Fiber-reinforced plastic composites - Determination of flexural properties (Corresponding part only) (Japanese Standards: **JIS K 7017**: **1999**) (Corresponding part only) **-JIS K 7074**: **1988** Testing methods for flexural properties of carbon fiber reinforced plastics (Corresponding part only) **-JIS H 7406**: **1993** Test method for flexural properties of fiber reinforced metals (Corresponding part only)

How used Example		
Adjust bending span of the Supporting Anvils	Place the sample	Apply force from above
		

Specifications			
Model	BT-500N	BT-5000N	BT-5000N-CB
Image			
Description	Basic Milled Edge Anvil Limited Function	Standard types: Interchangeable Loading Pin options ※1	
Capacity	500N	5000N	5000N
Upper Anvil Radius	R2.5	R3	R5
Supporting Anvil Radius	R2.5	R3	R2
Max. Sample Widths	60mm	52mm	52mm
Fulcrum distance	25～120mm		
Dimensions	Refer to the details on Pages 5/6-6/6		
Weight ※2	Upper-loading Anvil: 100g Supporting Anvils: 2100g	Upper-loading Anvil: 130g Supporting Anvils: 2300g	Upper-loading Anvil: 150g Supporting Anvils: 2300g
Upper Anvil mounting screws	M6	M10	M10

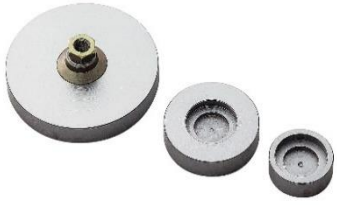
* The Loading Pin is a rod shaft that fixed with attachment on the force gauge side.
* For round bars, the rod-shaped samples, additional Attachment BT-CG is recommended, for stabilizing the sample during the operation, for safety and the accuracy. (Page 4/6 for more information)

※1) Interchangeable Loading Pin options, and Attachments: refer to page 4 for details.
※2) Force Gauge Load is inclusive of attachments: capacity of the force gauge unit means total load added.

*Example: Product configuration BT-500N
Code: 1B2001A For basic measurements up to 500N Digital force gauge: DST-500N Motorized test stand: MX-500N Optional attachment: BT-500N
***Example: Product configuration BT-5000N**
Code: 1B2002A Complies with the corresponding part of ISO 14704: 2000 and JIS R 1601: 2008 Digital force gauge: ZTS-5000N Motorized test stand: MX2-5000N Optional attachment: BT-5000N Optional cable: CB-518
***Example: Product configuration BT-5000N-CB**
Code: 1B2003A Complies with the corresponding part of JIS K 7074: 1988 Load-displacement measurement unit: FSA-5K2-5000N Optional attachment: BT-5000N-CB

BT-5000N Example1 Image

* For more information, the individual product specifications, refer to each product page on our website.
* The maximum load value of the force gauge varies depending on the measuring sample requirements.
* Depending on the sample characteristics, product configuration, and measurement requirements vary, contact our authorized distributor or us for more information.
* Avoid risks when measure samples that may scatter.

Related Products		
Compression Pin **PG-2/3/4/5**	Compression Plate Jig **A-40/60, S-40/60**	Urethane Hemispherical Compression Jig **UR-8S/8M**
Ideal for compression and penetration testing for small samples up to 200N.	For top-load and crush resistance testing up to 500N, available in Aluminum (A) / Steel (S).	To simulates the finger-like pressure for tests up to 50N
		
High Capacity Compression Jigs **PC-5040/5060/5100**	Compression Test Jig **PR-500N/2500N**	Thread Comversion Adapter **CA-F6T10** (CA-Series)
Ideal for the Compression and break resistance tests for Capacity up to 5000N.	Durability testing: up to 2500N, for heat-sealed packages, retort pouches, and cubical samples.	M6⇒M10 For use between Force-gauge and the Attachment (Upper Anvil)
		

<table>
<tr><th colspan="4">Optional Accessories</th></tr>
<tr><td colspan="2">R4 Interchangeable Loading/Supporting Pins(3ps set)
BT-SH-R4</td><td colspan="2">R5 Interchangeable Loading/Supporting Pins(3ps)
BT-SH-R5</td><td>The groove guide (2pcs set)
BT-CG</td></tr>
<tr><td colspan="2">R=4 for BT-5000N</td><td colspan="2">R=5 for BT-5000N</td><td>Stablize round bar form samples: avoid rolling off the supporting anvils.</td></tr>
<tr><td colspan="2"> 
R=4</td><td colspan="2"> 
R=5</td><td rowspan="2"> 
2pcs set</td></tr>
<tr><td>Applicable Standards</td><td>・ASTM D 790
・JIS C 2141 (1992)</td><td>Applicable Standards</td><td>・ISO/FDIS 14125
・JIS K 7017 (1988)
・JIS C 2141 (1992)</td></tr>
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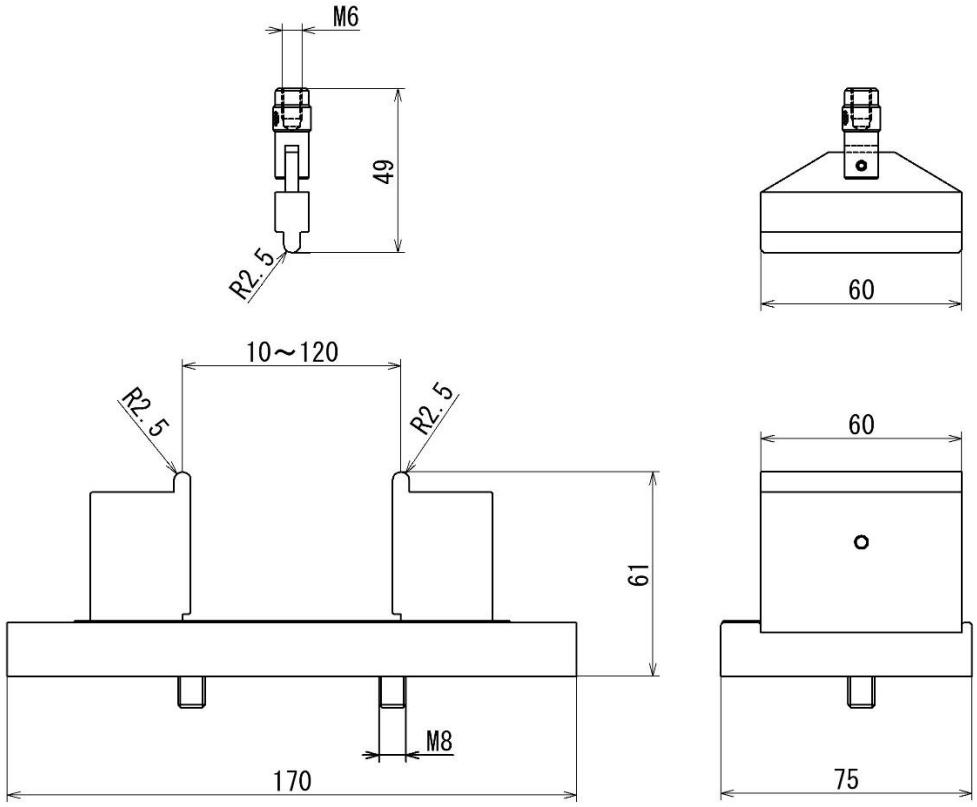
*R4 and R5: Not applicable as BT-5000N-CB Supporting Anvil.

Possible range of custom made			
Model	**BT-500N**	**BT-5000N**	**BT-5000N-CB**
R of Interchangeable Pin ※1		Loading Pin: R3.0~5.0 Supporting Pins: R3.0~5.0	Loading Pin: R3.0~5.0 Supporting Pins: R1.5~3.0
Material of interchangeable Pin		Stainless, Ceramic	
Max. width of Upper Anvil	100mm		
Max. width of Supporting Anvil	100mm		

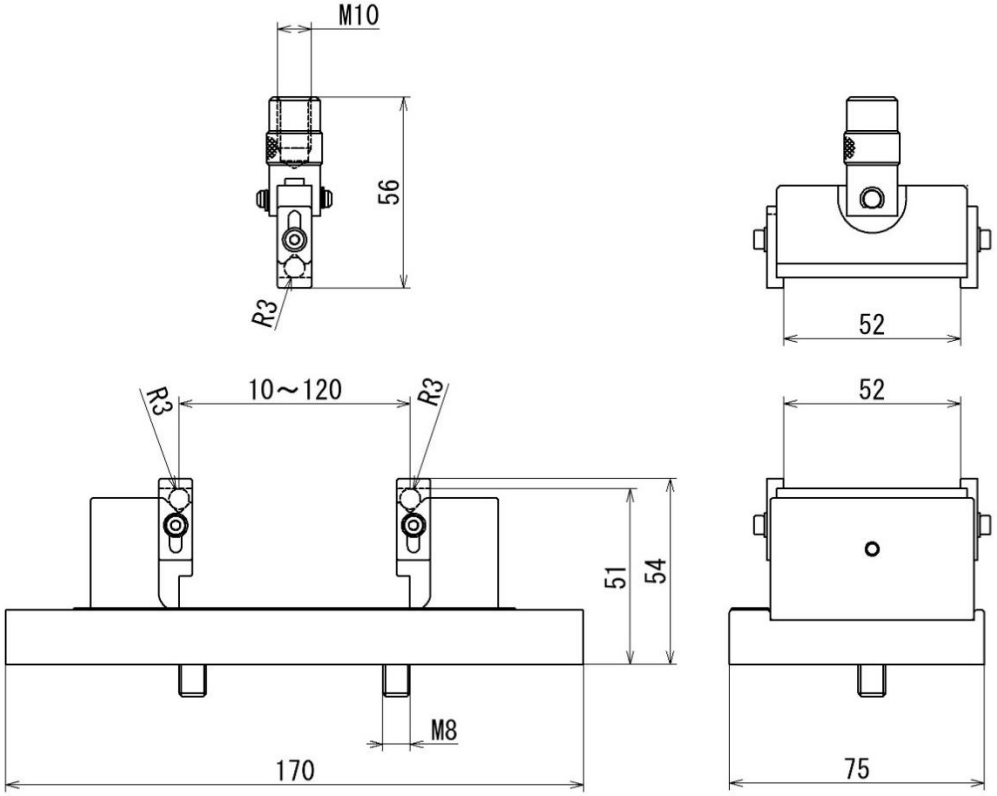
※1 Available fulcrum radius, caters each with R0.5 units.

[Dimensions]

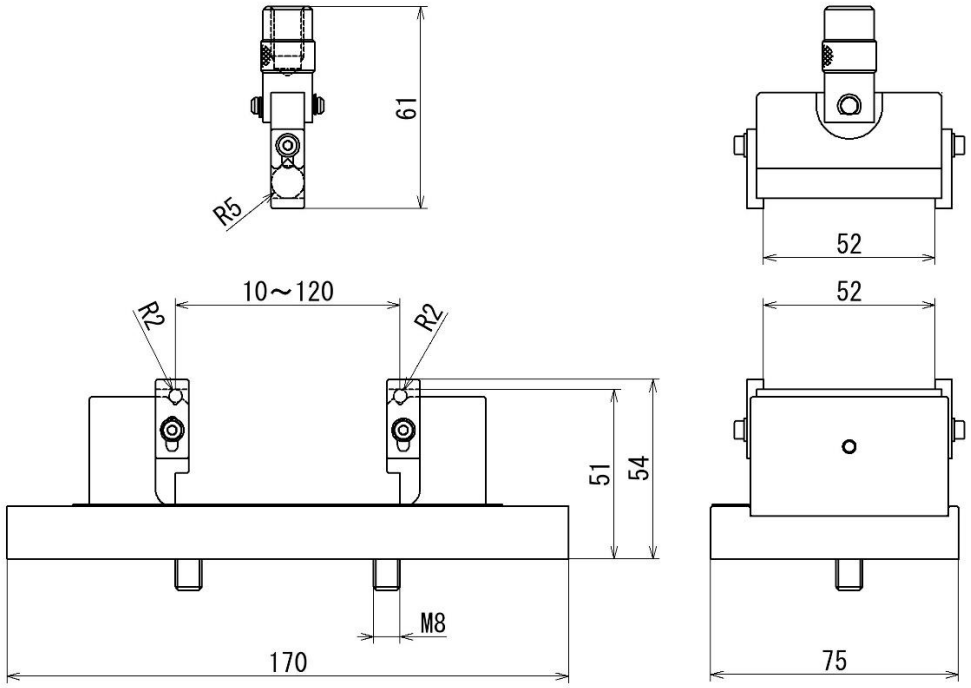
BT-500N



BT-5000N



BT-5000N-CB



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.
- A force gauge and the Test-stand (both sold separately) are required to use this product.
- Some samples may not be suitable to measure with this product.