Square

Flat Type Square

Instruction Manual

To ensure correct use, please read this instruction manual carefully before use. After reading, keep it in a safe place where the user can always refer to it.

OBISHI KEIKI SEISAKUSHO Co., Ltd.

Safety Precautions

※Before use, please read this instruction manual carefully and use the product correctly.

※The precautions shown here are intended to ensure the safe and proper use of the product and to prevent any potential hazards to the user.

※The precautions are categorized into three levels — **Danger, Warning, and Caution** — to clearly indicate the severity and urgency of potential harm or damage that may occur if the product is mishandled.

<table>
<tr><th colspan="3">For Safe and Proper Use</th></tr>
<tr><td colspan="3">This instruction manual includes various symbols and pictograms throughout the text to ensure correct use of the product and to prevent harm or damage to the user.

The symbols and their meanings are as follows.

● Please read the text after fully understanding the symbols and their meanings.
● After reading, be sure to keep this manual in a place where anyone using the product can easily refer to it at any time.
● All of these are safety-related instructions, so please be sure to follow them.</td></tr>
<tr><td colspan="2">⚠ Danger</td><td>This indicates situations where incorrect handling could result in imminent risk of death or serious injury.</td></tr>
<tr><td colspan="2">⚠ Warning</td><td>This indicates situations where incorrect handling could potentially result in death or serious injury.</td></tr>
<tr><td colspan="2">⚠ Caution</td><td>This indicates situations where incorrect handling may result in injury to persons or only property damage.</td></tr>
<tr><td rowspan="3">Examples of symbols</td><td>  </td><td>The △ symbol indicates the presence of danger, warning, or caution messages, with specific precautions described within the figure.
(The left figure is used to indicate general danger, warning, or caution without specifying details.)</td></tr>
<tr><td>  </td><td>The ○ symbol indicates prohibited actions, with specific precautions described within or below the figure.
(The figure on the left is used for general prohibition notices without specifying particular actions.)</td></tr>
<tr><td>  </td><td>The ● symbol indicates mandatory actions, with specific instructions detailed within the figure.
(The figure on the left is used for general mandatory actions or instructions without specifying details.)</td></tr>
</table>

Type Flat Square Instruction Manual

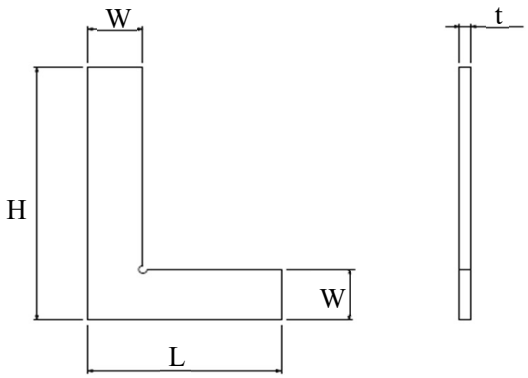
1. Product Features

・This product is manufactured in accordance with JIS B7526.

・It is used for measuring right angles.

・It can be used for right angle verification of jigs and fixtures, right angle verification when attaching jigs and fixtures, and measurement of right angles on products.

2. External View



3. Specifications

Grade 1 Hardened

Code No.	Nominal	Size (H×L×W×t mm)	Squareness (μm)	Mass (kg)
FA101	75	75×50×18×3	±14	0.1
FA102	100	100×70×20×4	±15	0.1
FA104	150	150×100×25×5	±18	0.2
FA105	200	200×130×25×8	±20	0.5
FA107	300	300×200×30×8	±25	0.9
FA108	400	400×200×40×8	±30	1.5

FA109	500	500×300×40×8	±35	2.1
FA110	600	600×325×50×11	±40	4.0
FA111	750	750×400×50×11	±48	5.0
FA112	1000	1000×550×60×12	±60	9.0
FA113	1500	1500×700×65×12	±85	14.0
FA114	2000	2000×1000×80×12	±110	24.0

D-Type Flat Square

Grade 2　non-hardened

Code No.	Nominal	Size (H×L×W×t　mm)	Squareness (μm)	Mass (kg)
FB101	75	75×50×18×3	±27	0.1
FB102	100	100×70×20×4	±30	0.1
FB104	150	150×100×25×5	±35	0.2
FB105	200	200×130×25×6	±40	0.35
FB107	300	300×200×30×6	±50	0.6
FB109	400	400×200×40×8	±60	1.5
FB111	500	500×255×40×8	±70	1.8
FB112	600	600×300×40×8	±80	2.5
FB113	1000	1000×500×50×10	±120	5.5
FB114	1500	1500×700×65×12	±170	14.0
FB115	2000	2000×1000×80×12	±220	24.0

4. Instructions for Use

1) As shown in Figure 2.A, place the square upright on a Reference Surface Plate or similar, and press the Precision Surface against the workpiece to perform the measurement. At this time, check the gap between the square and the workpiece by the amount of light passing through or by using a thickness gauge.

2）As shown in Figure 2.B, measure the right angle by placing the side face of the square against the workpiece. It can also be used as a reference when setting up parts..

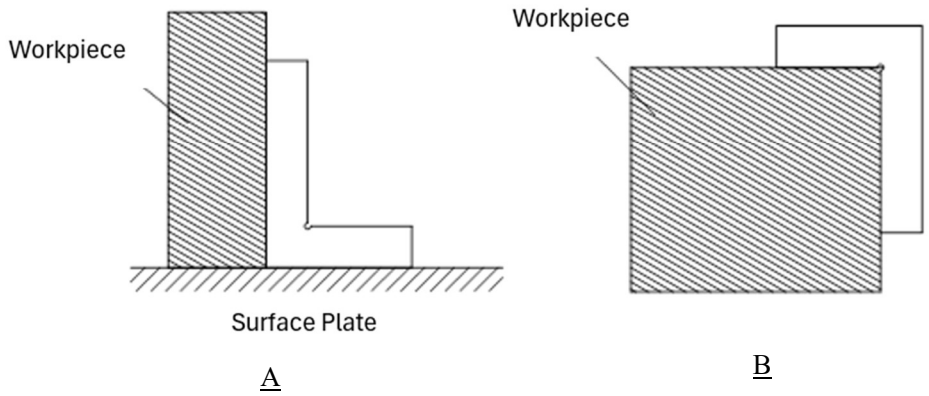


Figure 2 Instructions for Using the Engineer's Square

5. Precautions for Use

① Clean the Precision Surface and the measurement surface of the workpiece before use.

● ② Handle the instrument carefully during use and storage to avoid impact or shock.

③ Allow the instrument to acclimate to the ambient temperature before use.

④ Do not use or store the instrument in places with drastic temperature changes.

● ⑤ After use, always apply rust prevention treatment and store the instrument in its storage case.

⑥ Check the instrument for abnormalities before use in the following cases:

・When the instrument has been dropped.

・When an object has been dropped onto the instrument.

⑦ If there are scratches or damage, have the instrument repaired and inspected. Remove minor scratches on the Precision Surface locally with an Arkansas stone or similar before use.

⑧ Check the accuracy regularly before using the product.

△ ⑨ If the product has sharp parts, please handle it carefully to avoid injuring your fingers or other parts of your body.

△ ⑩ Wear protective gloves and safety glasses as necessary to prevent injury while working.

△ ⑪ Do not use this product if it is damaged or deteriorated, as it may cause injury or accidents.

△ ⑫ If an injury occurs, give first aid immediately and seek medical attention if necessary.

Contact Information

JIS Certified Factory

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JQA-QMA11294

ISO9001 Certified (JQA-QMA11294)

Head Office and Factory

Design, development, manufacturing, and calibration services for precision measuring instruments (levels, surface plates, straight edges, reference measuring instruments, square rulers, blocks, dial gauge stands, comparators, angle measuring instruments, bench centers, squareness measuring instruments).