

## In-Plane Compression Test Jigs for Composite Materials

In-plane compression test jigs for composite materials are specially designed for testing the in-plane strength properties of thin, rigid plastics, both non-reinforced and reinforced, and other composite materials. Specimens are held in the jigs in a vertical direction and a compressive force is applied to the specimen's end surface.

Two in-plane compression test jigs for composite materials are available: an ASTM D695 and ASTM D3846 compliant jig and a JIS K7076 (method A) and JIS K7018 (method 1) compliant jig. A 100 mm (3.9 in) diameter spherically seated compression plate set is used to apply the compressive force and should be ordered along with the jigs.

In certain regions, kits are available comprising one type of in-plane compression test jig for composite materials, a 100 mm diameter spherically seated compression plate set, and a compression and bending loading jig matched to a specific model universal tester. Please consult with your local Shimadzu representative for further information.

Additional items needed for operation:

- 100 mm diameter spherically seated compression plate set

### Relevant Materials

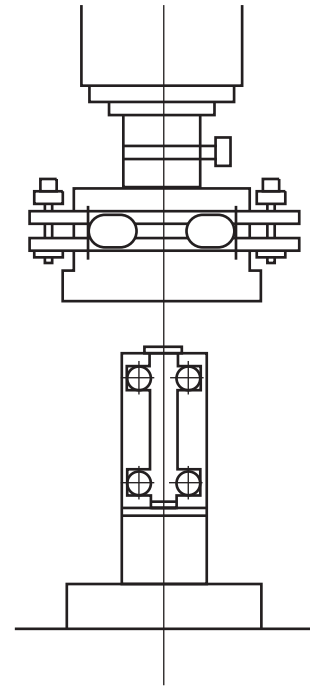
Plastics, Composites

### Relevant Standards

ASTM D695, ASTM D3846, JIS K7018 (Method 1), JIS K7076 (Method A)

### Operation

The specimen is inserted into the jig and the top plate is tightened onto the specimen. The jig is oriented so the compressive force is applied to the end of the specimen and centered with respect to the testing axis.

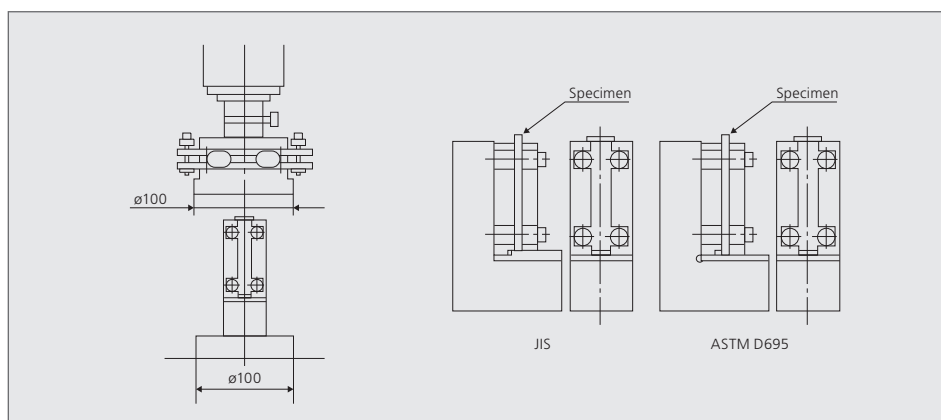


# Specification

Maximum Capacity			Applicable Specimen Size <small>Note 1 &amp; 2</small>			Plate Diameter	Temperature Range	Upper Plate Mass
			Width	Length	Thickness			
kN	kgf	lbf	mm (in)	mm (in)	mm (in)	mm (in)	°C (°F)	kg (lb)
<b>ASTM D695 and ASTM D3846 Compliant In-Plane Compression Test Jig for Composite Materials</b>								
5	500	1,100	19.0 (0.75)	79.4 (3.1)	3.2 (0.125)	100 (3.9)	-10 to 60 (14 to 140)	3.8 (8.4)
<b>JIS K7018 (Method 1) and JIS K7076 (Method A) Compliant In-Plane Compression Test Jig for Composite Materials</b>								
5	500	1,100	12.5 (0.49) 19 (0.75)	78 (3.1) 77 (3.0)	2 (0.079) 2 to 3 (0.079 to 0.12)	100 (3.9)	-10 to 60 (14 to 140)	3.8 (8.4)

Note 1: ASTM D695 specimen size is shown.

Note 2: JIS K7076 method A specimen sizes are shown.



# Ordering Information

P/N	Description
<b>In-Plane Compression Test Jigs for Composite Materials</b>	
343-06754-04	ASTM D695 and ASTM D3846 compliant in-plane compression test jig for composite materials
343-06754-05	JIS K7018 (method 1) and JIS K7076 (method A) compliant in-plane compression test jig for composite materials
<b>Accessories</b>	
346-50639-03	100 mm diameter spherically seated compression plate set

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