

Fixed Compression Plates



Fixed compression plates, or platens as they are otherwise known, are versatile testing accessories, applicable to compression and cycle testing a diverse range of materials and finished products. Hardened faces, surface hardness of 60 on the Rockwell HRC scale, ensure minimal wear, preserving surface smoothness.

These general-purpose fixed compression plates are available in diameters of 50 mm (2.0 in), 100 mm (3.9 in), and 200 mm (7.9 in). Lower compression plates fit into the table of the universal tester. Upper 50 mm and 100 mm compression plates attach directly to compression and bending loading jigs.

For 200 mm upper compression plates, an additional screw joint is required. This joint attaches the plate to compression and bending loading jigs and should be ordered to match the capacity of the compression and bending loading jig.

Fixed compression plate kits, which, in addition to upper and lower compression plates, include a compression and bending loading jig, are available in certain regions. Please contact your local Shimadzu representative for information about fixed compression plate kits.

Relevant Materials

Plastics, Metals, Rubber, Lumber, Cement

Relevant Specimens

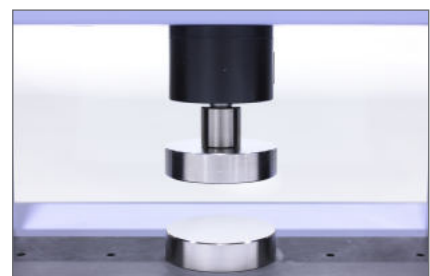
Cylinders, Cubes, Cuboids

Operation

Obtaining good quality compression test results requires a load evenly distributed over the specimen. In order to achieve this load distribution, the specimen should be aligned with the loading axis of the tester and the upper compression plate should be mounted parallel with the lower compression plate.



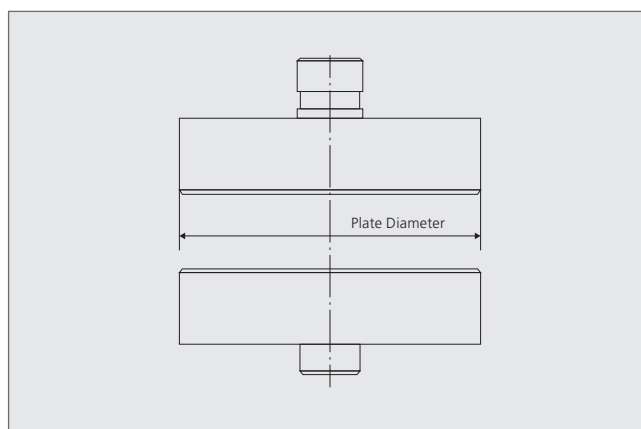
Connect the joint and plate, and fix by screw



Upper and lower compression plates should be mounted parallel

Specification

Maximum Capacity			Plate Diameter	Plate Thickness	Applicable Specimen Diameter	Temperature Range	Upper Plate Mass
kN	kgf	lbf	mm (in)	mm (in)	mm (in)	°C (°F)	kg (lb)
250	25,000	55,000	200 (7.9)	40 (1.6)	0 to 200 (0 to 7.9)	0 to 40 (32 to 104)	9.9 (22)
250	25,000	55,000	100 (3.9)	25 (0.98)	0 to 100 (0 to 3.9)	0 to 40 (32 to 104)	1.6 (3.5)
250	25,000	55,000	50 (2.0)	25 (0.98)	0 to 50 (0 to 2.0)	0 to 40 (32 to 104)	0.5 (1.1)



Ordering Information

P/N	Description
Fixed Compression Plate Sets Includes: upper and lower fixed compression plates	
343-08224-17	200 mm diameter fixed compression plate set ^{Note 1}
343-08095	100 mm diameter fixed compression plate set
343-08224-29	50 mm diameter fixed compression plate set
200 mm Fixed Compression Plate Screw Joints	
345-08502-05	200 mm upper fixed compression plate screw joint for AG-X Plus series 250 kN and 300 kN and AGS-X series 300 kN compression and bending loading jigs
345-08502-04	200 mm upper fixed compression plate screw joint for AG-X Plus series and AGS-X series 100 kN compression and bending loading jigs
345-08502-03	200 mm upper fixed compression plate screw joint for AG-X Plus series and AGS-X series 50 kN compression and bending loading jigs
345-08502-02	200 mm upper fixed compression plate screw joint for AG-X Plus series and AGS-X series 10 kN and 20 kN compression and bending loading jigs
345-08502-01	200 mm upper fixed compression plate screw joint for AG-X Plus series and AGS-X series 5 kN and lower compression and bending loading jigs

Note 1: Additional screw joints are required to mount 200 mm fixed compression plates to compression and bending loading jigs.

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