

# **Spherically Seated Compression Plates**



The advantage of this type of compression plate set, which is comprised of a spherically seated upper compression plate and a fixed lower compression plate, is the ability of the upper spherically seated plate to self-align when contacting the specimen surface. This enables the application of a uniform load to non-parallel specimens such as finished products.

Spherically seated compression plate sets are available with diameters of 100 mm (3.9 in), 210 mm (8.3 in), and 310 mm (12.2 in). The surface hardness of both the upper and lower compression plate is 60 on the Rockwell HRC scale.

The upper plate attaches to a compression and bending loading jig and the bottom plate fits onto the table of the universal tester.

Spherically seated compression plates, which include a compression and bending loading jig in addition to the upper and lower plate set, are also available as kits in some regions. Please contact your local Shimadzu representative for details.

#### **Relevant Materials**

Plastics, Metals, Rubber, Lumber, Cement

#### **Relevant Specimens**

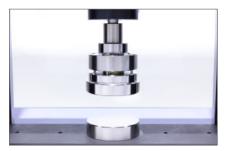
Cylinders, Cubes, Cuboids

### Operation

For best results, the specimen should be centered along the loading axis of the testing machine.



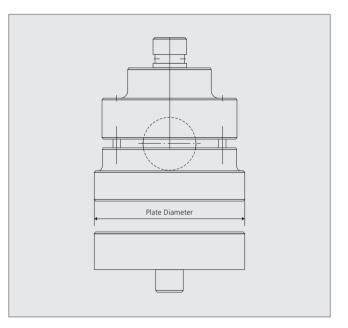
Connect the joint and plate, and fix by screw



Upper and lower compression plates should be mounted parallel

## **Specification**

Maximum Capacity			Plate Diameter	Applicable Specimen Diameter	Temperature Range	Upper Plate Mass
kN	kgf	lbf	mm (in)	mm (in)	°C (°F)	kg (lb)
250	25,000	55,000	310 (12.2)	0 to 310 (0 to 12.2)	0 to 40 (32 to 104)	66.0 (146)
250	25,000	55,000	210 (8.3)	0 to 210 (0 to 8.3)	0 to 40 (32 to 104)	42.5 (93.7)
250	25,000	55,000	100 (3.9)	0 to 100 (0 to 3.9)	0 to 40 (32 to 104)	3.8 (8.4)



# **Ordering Information**

P/N	Description		
	Spherically Seated Compression Plate Sets Includes: upper spherically seated compression plate and lower fixed compression plate		
346-50639-32	310 mm diameter spherically seated compression plate set		
346-50639-31	210 mm diameter spherically seated compression plate set		
346-50639-03	100 mm diameter spherically seated compression plate set		

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