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## Manual Durometer PCE-DX-A & PCE-DX-AS



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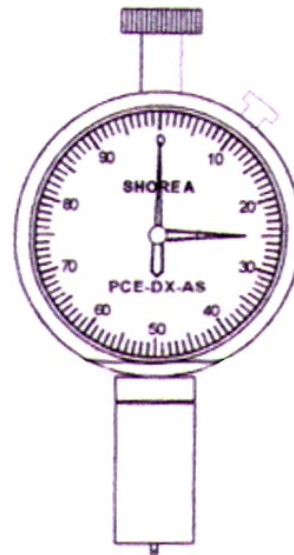
# SHORE A Durometer Manual

The hardness of plastics is most commonly measured by the Shore Durometer, which using either the Shore A or Shore D scale, is the preferred method for rubbers/elastomers and is also commonly used for 'softer' plastics such as polyolefins, fluoropolymers, and vinyls. The Shore A scale is used for 'softer' rubbers, while the Shore D scale is used for 'harder' ones.

It is available in DIN 53505, ASTM D2240, ISO/R868, JIS R7215.

## Specifications

- ▶ Indenter: Cone 35°  $\phi$  1.3mm;
- ▶ Depth of indentation: 0 - 2.5 mm;
- ▶ Test pressure approx.: 12.5 N;
- ▶ Measuring spring force: 0.55 - 8.065 N;
- ▶ Display range: 0 - 100 Scale;
- ▶ Scale diameter: 55 mm;
- ▶ Weight, net (gross): approx. 250 g(300g);
- ▶ Dimensions: 26 x 62 x 115 mm (L x W x H);



## Method of measurement

Shore Durometer, like many other hardness tests, measures the depth of an indentation in the material created by a given force on a standardized presser foot. This depth is dependent on the hardness of the material, its viscoelastic properties, the shape of the presser foot, and the duration of the test. SHORE durometers allows for a measurement of the initial hardness, or the indentation hardness after a given period of time. The basic test requires applying the force in a consistent manner, without shock measuring the hardness (depth of the indentation). If a timed hardness is desired, force is applied for the required time and then read. The material under test should be a minimum of 6.4 mm (.25 inch) thick.

## Maintenance

Put it back to packing box after testing. Do not store it in following Conditions: wet area, dusty area, oil or chemicals.