

Hardmatic HH-300

SERIES 811 — Durometers for Rubber and Plastics Hardness Testing

Technical Data

- Designed in accordance with the ASTM D 2240, ISO868, ISO 7619, DIN 53 505, JIS K 6253, and JIS K 7215 specifications.
- Units are available in both Shore A and Shore D scales, and suit a wide variety of applications.
- The Digital Durometer is provided with data hold function, permitting the operator to make an error-free reading on the LCD screen.
- The Dial Durometer is provided with a peak retaining hand for error-free reading.

Optional Accessories

- 19BAA180:** Holding bar*
- 811-019:** Testing stand (Shore A)
- 811-012:** Testing stand (Shore D)
- 811-013:** Testing stand (Shore A)**
- 811-014:** Testing stand (Shore D)**
- 811-017:** Auxiliary weights (Shore A)
- 811-018:** Auxiliary weights (Shore D)

*Only available on Compact Type Durometer.
**Long-leg Type Durometer attachment is included.

Testing stand applications

These stands are used to mount Durometers. They allow constant-pressure hardness measurement by ensuring that the Durometer presses vertically on the workpiece surface at all times.

- Anyone can perform repeatable hardness measurement due to fewer possibilities of human error and measurement variations.
- The supplied weights can be attached directly to a Durometer and allow constant-pressure hardness measurement of large samples for which a stand cannot be used.
- The supplied weights are used for calibrating the spring tension of Durometers.



- Workstage dimension: $\varnothing 90\text{mm}$
- Maximum specimen height: 90mm



Refer to the Hardmatic HH-300 leaflet (E4137) for more details.

FEATURES

Digital / Dial Durometers are suitable for testing the nature of the following materials — natural rubber, neoprene, polyesters, P.V.C., leather, Thiokol, nitrite rubber, wax, vinyl, cellulose acetates, glass polystyrene, etc.



SPECIFICATIONS

Model No.	Digital	HH-336	HH-336-01	HH-332	HH-338	HH-338-01	HH-334
	Dial	HH-335	HH-335-01	HH-331	HH-337	HH-337-01	HH-333
Order No.	Digital	811-336	811-336-01	811-332	881-338	811-338-01	811-334
	Dial	811-335	811-335-01	811-331	881-337	811-337-01	811-333
Scale	Shore A			Shore D			
Applications	Natural rubber, soft elastomers, etc.				Hard elastomers, plastics, hard rubber, ebonite, etc.		
Resolution	0.5 (digital) or 1 (dial)				0.5 (digital) or 1 (dial)		
Range	HA: 10 - 90				HD: 20 - 90		
Standards	ASTM D 2240	✓		✓	✓		✓
	ISO 868	✓		✓	✓		✓
	ISO 7619	✓		✓	✓		✓
	DIN 53 505	—		✓	—		✓
	JIS K 6253	✓		✓	✓		✓
	JIS K 7215	✓		✓	✓		✓
Pressure foot	44x18mm		$\varnothing 18\text{mm}$		44x18mm		$\varnothing 18\text{mm}$
Spring force (mN)	550+75H (Hardness reading: 10-90)				444.5H (Hardness reading: 20-90)		
Indenter	Blunt taper (Tip diameter: 0.79mm)				Sharp point (Tip curvature: $0.1 \pm 0.01\text{mm}$)		
Tip angle	$35^\circ \pm 0.25^\circ$				$30^\circ \pm 0.5^\circ$		
Indenter diameter					1.25mm		
Indenter protrusion					2.5mm		
Functions	Digital: Data hold, Zero -setting, SPC output, Power ON/OFF (Power supply: SR44 x 1 pc.) Analog Durometer: Peak retaining hand						
Type	Compact		Long-leg		Compact		Long-leg
Dimensions (WxDxH)	Digital	60x28.5x151mm		60x28.5x193mm		60x28.5x151mm	
	Dial	56x33.5x144mm		56x33.5x186mm		56x33.5x144mm	
Mass	Digital	290g		310g		290g	
	Dial	300g		320g		300g	