

## PTC® Type R Durometers: Description



The *Type R* was recently introduced in [ASTM D2240](#). The *Type R* directly addresses two significant issues:

- standardization of the presser foot configuration,
- harmonization with other standards, specifically ISO 7619.


*Type R* is a designation, rather than a true 'type'. The *Type R* designation specifies a presser foot diameter of  $18 \pm 0.5$  mm ( $0.71 \pm 0.02$  in) in diameter, while the spring forces and indenter configurations of the 'parent type' (previously enumerated in ASTM D2240) remain unchanged.

Durometers of the same type (scale), having different presser foot configurations, will produce different test determinations on most materials, in many cases this is a noteworthy difference.

The specification of the presser foot configuration as *Type R* allows an industry-wide basis for direct comparison of durometer hardness determinations. This is important in that there are fewer variables introduced, which is especially significant between customer and supplier, as well as between laboratories.

The ASTM D2240 *Type R* designation, while allowing users to conform to the requirements of ISO 7619 and DIN 53505, is far more comprehensive. *Type R* requires the use of an operating stand and, while specifying the presser foot configuration, allows these parameters to be employed with any ASTM D2240 durometer type (scale), thus the 'parent' relationship of the existing types.

The *Type R* designation is expressed as Type xR, where 'x' is the D2240 parent type, and 'R' indicates conformance to the presser foot and operating stand requirements e.g., aR; dR; etc.

 It is important to note that while the ASTM D2240 *Type R* designation requires the use of an operating stand, a *Type R* durometer may be used as a hand-held instrument and comply with the parent ASTM D2240 specification, as well as those of ISO 7619, ISO 868 (types A & D), DIN 53505, and other methods.

The PTC® ASTM D2240 *Type R* durometers allow incredible flexibility ... from day-to-day process controls, to strict compliance to the requirements of international QA/QC!

## PTC® Type R Durometers: Available Models

Presently, the PTC® *Type R* durometers employ the [PTC® Model 478/479](#) constant load style durometer operating stand. Each durometer model maintains all of the quality features enumerated in that model's specific page. A [text link](#) to the durometer's page is provided for the convenience of immediate reference.



### PTC® e2000 *Type R* Durometer Pricing Information

Digital Model	Analog Model
<a href="#">511aR</a>	<a href="#">501aR</a>
<a href="#">511bR</a>	<a href="#">501bR</a>
<a href="#">512cR</a>	<a href="#">502cR</a>
<a href="#">512dR</a>	<a href="#">502dR</a>
<a href="#">512doR</a>	<a href="#">502doR</a>
<a href="#">511oR</a>	<a href="#">501oR</a>
<a href="#">Please Submit a RFQ</a>	<a href="#">Please Submit a RFQ</a>
Price includes durometer and operating stand.	
Certificates of calibration are included.	

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