O Ring Material Tester

Purpose:

- Verify an O-Ring at moment of installation
- Check for mislabelled O-Rings
- Verify new O-Rings
- Sorting applications
- Differentiate between known O-Rings
- Sturdy stainless steel tubular construction is safe to carry in tool boxes
- Pocket clip for easy access

It will indicate the material composition of 100, 200, 300 and 400 series O-Rings of 60 to 80 Durometer which are already known to be either Viton®, Kalrez®, Nitrile or EPDM. The O-Rings must be within their rated shelf life and be unused and undamaged.

How it works:

The tester itself is a tube with a controlled or specific weight inside it. The weight falls a controlled distance. To determine an O-Ring's rubber compound, place the O-Ring on a stable table or surface. Place the tester over the O-Ring and raise the weight all the way to the top of the tube (as far as it will go). Release the weight and let it drop onto the O-Ring . It will bounce. The height of the first bounce will rise to one of the four calibrated ranges. The highest is EP (Ethylene Propylene). The next is Nitrile. The next is Kalrez®. The lowest graduation is Viton®. This indicates your rubber compound.

LABELLED GRADUATIONS

The height of the FIRST bounce indicates the O-Ring:

Highest Graduation — EP ethylene propylene O-Rings are compatible with most water based chemicals from 70 ° F to +300 ° F.

Third Graduation — NITRILE. Also know as Buna-N. These O-Rings are good for most plumbing applications from -30 ° F to +225 ° F.

Second Graduation — KALREZ®. Also known as perfluorocarbon, compatible with most aggressive chemicals from 0 ° F to +600 ° F.

Lowest Graduation — VITON®. This composition is also called fluorocarbon. Viton O-Rings are generally compatible with most petroleum based liquids from -15 ° to +400 ° F.

The results obtained through the use of this device have been consistent and repeatable in our evaluations. However, since a degree of user technique is required we cannot be responsible for specific results.