

## 933A Life Cycle Test Station

**The Model 933A Life Cycle Tester is a cost effective, generic test platform used to perform cycling of keypads, keyboards, membranes, switches, or any product requiring fatigue testing.** The system consists of a control box, air cylinder with test stand, and software installed by the user in a standard computer. It features a single analog channel used to measure contact resistance and bounce (expandable to four), and an air cylinder with a silicone rubber tip to simulate activation of a finger. The air cylinder may be supplied in various throw lengths, diameters even environmentally sealed. The control box allows for adjusting the velocity, force and acceleration of the cylinder.

A user-friendly Windows™ software environment allows the user to create test parameters for the unit under test (UUT), i.e., specified resistance, bounce time, number of cycles, allowed fails, cycles/second, etc. The configuration is then transferred to the control box for stand-alone or PC based operation.

Testing of the UUT is as simple as operating to a predefined number of cycles. During cycling the 933A may test for: resistance, contact bounce, total number of fails, total consecutive fails and then compare test results to the user specified parameters. The system may stop testing if a specified number, or consecutive number of failures of test parameters have occurred.



### Features

- *Maximum Test Cycles*
- *Cycles per Second*
- *Maximum Test Failures*
- *Maximum Sequential Failures*
- *Maximum and minimum resistance*
- *Maximum contact bounce time*

## 933A Specifications

<b>Force</b>	0-5 lbs (Other ranges available)
<b>Contact Resistance Range</b>	0 - 1k, 0 - 10k, 0 - 100k
<b>Contact Bounce Time (per ASTM 1661)</b>	25 $\mu$ sec - 65msec
<b>Counters</b>	1 - 65,000,000
<b>Power Requirements</b>	12 Vdc (Power supply supplied) 115/220 Vac

## Ordering Details

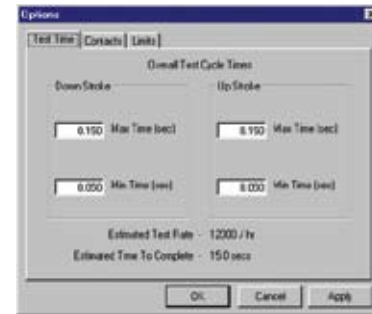
<b>933A</b>	Life Cycle Test System Includes: Windows-Based software Operations instructions, Control Box, Pneumatic hose, Standard Cylinder (0-6.5 lb), Power Supply 110V (0-9 kg; 2.5 g resolution)
-------------	--

## Options

<b>-220V</b>	Power Supply 220V
<b>-CYC</b>	External cycle counter on Control Box
<b>01</b>	Standard 10 cycle/sec, 7/16" Diameter, 0 - 6.5 lbs*
<b>02</b>	High temp/long life, 7/16" Diameter, 0 - 6.5 lbs*
<b>03</b>	19 cycles/sec, 5/16" Diameter, 0 - 3.4 lbs*
<b>04</b>	6 cycles/sec, 9/16" Diameter, 0 - 11 lbs*
<b>05</b>	3.5 cycles/sec, 3/4" Diameter, 0 - 20 lbs*
<b>06</b>	1.5 cycles/sec, 1 1/16" Diameter, 0 - 40 lbs*

\* Force @ 45 PSI

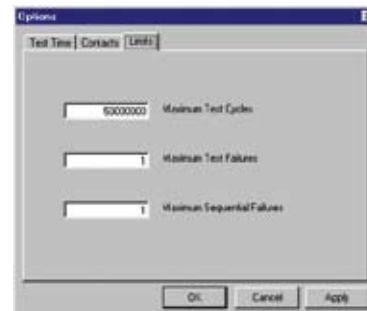
Windows™ and Excel are registered trademarks of MicroSoft Corporation.



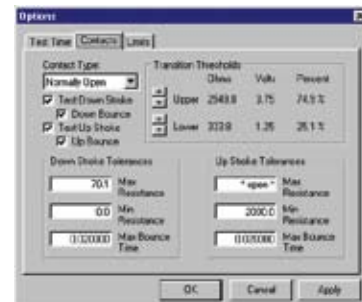
Screen Image - Configure Test Time



Screen Image - Test Result



Screen Image - Configure Test Limit



Screen Image - Configure Contact Testing



Screen Image - Main

DISTRIBUTED BY:

A **Nidec** Group Company  
**SHIMPO** - All for dreams