

## Air Leak Tester that is Sophisticated yet Easy-to-Use

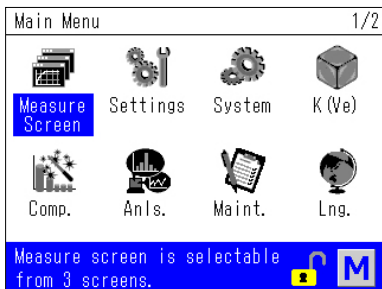


# AIR LEAK TESTER LS-R700

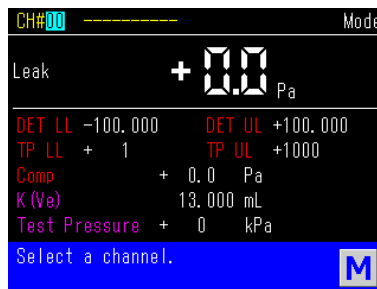
### ■ Features

- Easy-to navigate and intuitive interface with simple menu configuration
- Waveform Display of Test pressure and Differential pressure
- Mastering feature provides highly accurate test results

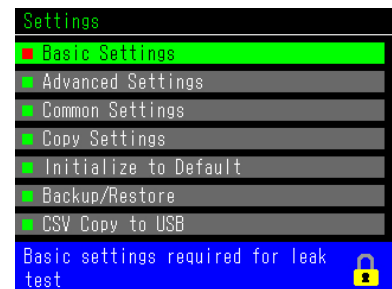
- User selectable multi-language capability: English, Japanese and Chinese
- USB Port for easy test data management



Intuitive operation makes test parameter programming easy.



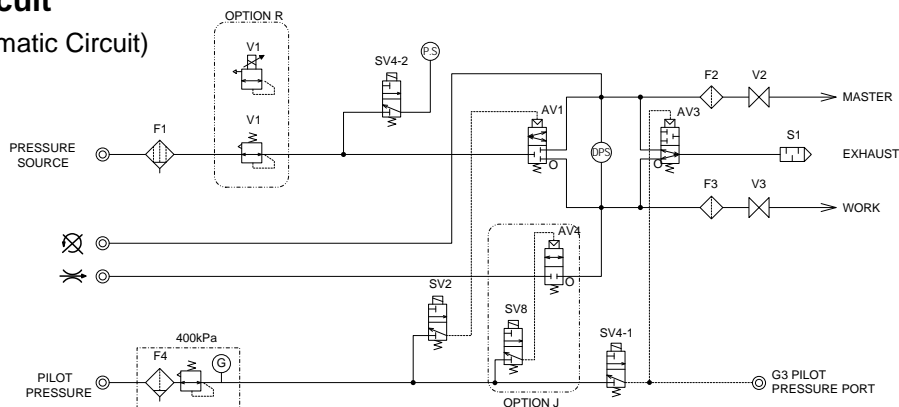
Measurement screens are selectable among 3 depending on the situation.



Settings Menu is easy-to-follow. The Guidance Bar at the bottom gives you a simple explanation what the item is.

Display	Color 3.5-inch LCD Selectable from 6 different measurement screens	Sensor Protection	Air-Blow (Intelligent Pneumatic Circuit): The pneumatic circuit is cleaned at the end of every leak test.
Intelligent Pneumatic Circuit	Comes with self-check features: Sensor sensitivity, Air-valve performance		External Exhaust Valve Ready: Valve is sold separately.
K(Ve) Automatic Setup	K(Ve) can be setup using Leak Master to measure leak coefficient to convert measured pressure to a flow rate.	Exhaust Interference Prevention	Exhaust timing will be controlled for the cases where multiple cavities are tested simultaneously.
Leak Limits	Two sets of leak limits: Medium/Small leaks on Work-side (UL/UL2) and Master-side (LL/LL2)	Charge Hold	Tester pressurizes the tested part continuously. Used to locate leaks.
Electro-pneumatic Control of Test Pressure	For the models come with Electro-pneumatic regulator, different test pressure can be set independently for each channel.	Serial Communication	RS-232C: (Rear panel) USB: (Front panel)
Noise Reduction NR	Eliminates noise by repeating the DET stage when readings falls between DET UL and DET UL2. (For canceling Cycle over settings)	Other Display	Error Code, I/O Monitor, Channel Title, Counter
Inspection and Calibration	Offset and span check of Differential Pressure Sensor (DPS) Offset and span check of Pressure Sensor (PS)	Mastering Settings	Maximum Idle Time, Day of Week, Interval, Iteration, Consecutive Triggers, Mastering Limits
Compensation	Mastering, Auto-Drift Compensation, Fixed Compensation	Quick Mounting Brackets	Tester can be mounted/removed with only two screws. Good for mounting the tester in the limited space.
Self-check	Air-operated valve performance, DPS/PS Offset, CPU performance and others	Control I/O	Both for NPN-PNP Phoenix Contact connector: wire connection can be done with a flat-bladed screwdriver.

## ■ Pneumatic Circuit (Intelligent 1 Pneumatic Circuit)



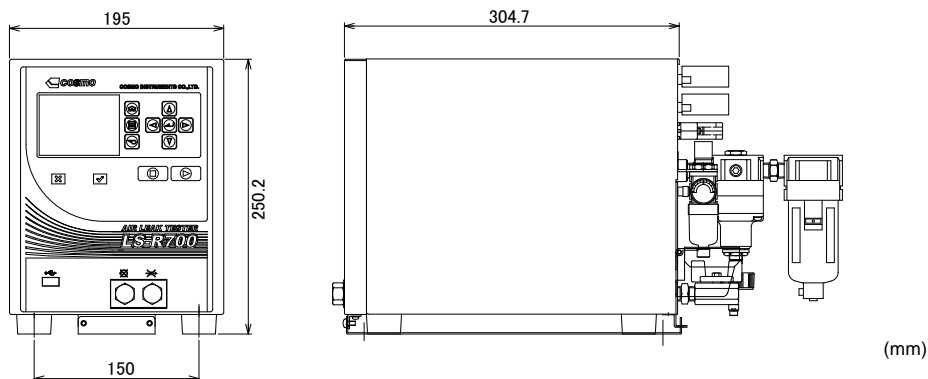
## ■ Specifications

Differential Pressure Sensor (Standard)	Resolution	0.1 Pa	Test Pressure source	Clean air regulated to the test pressure. The source pressure must be sufficiently higher than the test pressure.		
	Display Range	±999.9Pa (Accuracy Guaranteed: ±1000Pa)		Pilot Pressure	Clean air regulated from 400 to 700 kPa	
	Reading Accuracy	±2.5% of rdg ±1Pa 50Pa or lower: ±2Pa	Tube Diameter		Rc(PT) 1/4: Test pressure, WORK and MASTER ports 6mm quick disconnect fitting: Pilot pressure	
	Proof Pressure	5 MPa			CPU	SH-2A 144MHz DRAM 8MB
Display Unit	Test Pressure Unit	kPa, MPa, PSI, kg/cm <sup>2</sup> , bar, mbar, mmHg, cmHg, inHg	RS-232C (DB 9 pins)	I/F fixed length	Test parameters are transmitted as well as test results.	
	Leak Unit	Pa, kPa, mL/s, mL/min, L/min, Pa·m <sup>3</sup> /s, E-3 Pa·m <sup>3</sup> /s, Pa/s, Pa/min, *Pa/s, *Pa/min mmH <sub>2</sub> O, inH <sub>2</sub> O, mmHg, in <sup>3</sup> /min, in <sup>3</sup> /d, , ft <sup>3</sup> /h		ID/F fixed length		Only test results are transmitted
	K(Ve) Unit (Leak Coefficient)	mL, L, in <sup>3</sup> , ft <sup>3</sup>		Other formats		
Leak Display	4 digits	Sampling Rate: 10 times/s	USB Port	Test Data Output	Judgment, Leak, Test pressure, Channel#, Timers and others	
Leak Limit Range	±999.9Pa			Test Parameters	Copy all the test parameters in a csv file	
Number of Channels	32 channels (#0 to #31)				Accessories	
Timers	Up to 999.9 s (Resolution: 0.1 s)			Oil mist separator and regulator for Test pressure, Filter regulator for Pilot pressure, Quick mounting brackets, Control I/O connector, Power cord, Inspection Record, Operation manual, Traceability related documents		
Power Source	100 to 240 VAC ±10% at 50/60 Hz, 80 VA max					
Ambient Temperature	5~45 °C					
Humidity	80 %RH or less / no dew condensation					
Mass	Approx. 10 kg (Standard model)					

## ■ LS-R700 – ABC-D

<b>A</b>	Pneumatic Circuit	<b>A1:</b> Intelligent 1 Pneumatic Circuit, <b>A2:</b> Intelligent 1 Pneumatic Circuit <b>AS1:</b> Small Volume A1 Circuit, <b>AS01:</b> Micro Volume Circuit, <b>C:</b> Secondary Pressure Circuit			
<b>B</b>	Pressure Range	Precision Regulator	<b>L02:</b> 5 to 20kPa, <b>L:</b> 10 to 100kPa, <b>M:</b> 50 to 800kPa, <b>V:</b> -5 to -100kPa, <b>H20:</b> 2.0MPa or lower (H20 models come with no regulator.)		
		EP Regulator	<b>LR:</b> 10 to 95kPa, <b>MR:</b> 50 to 800kPa, <b>VR:</b> -5 to -75kPa		
<b>C</b>	Options	<b>J:</b> Leak Master Ready, <b>B:</b> Bypass Circuit Ready			
<b>D</b>	Power Cord	<b>VA:</b> 125VAC/7A Length: 3m, <b>VE:</b> 250VAC/10A Length: 2m (CE conformed)			

## ■ External Appearance



\* Information in this document is correct as of July 2013. The specifications are subject to change without prior notice.

**Cosmo Instruments Co., Ltd.**

<http://www.cosmo-k.co.jp/>

**Head Office:**

2974-23 Ishikawa, Hachioji, Tokyo 192-0032

Phone: +81-(0)42-642-1357 Fax: +81-(0)42-646-2439

**Overseas Contact:**

China, USA, Korea, Taiwan, Malaysia, Thailand, Indonesia

Vietnam, India, Brazil, Germany, Australia, UK

LS-R700-985B1-D