

# 通用型气密检漏仪

## Compact Air Leak Tester



## FL-800 系列

### Series

- 显示内容中英文切换, 操作简单
- 可进行多种模式的基准校正, 缩短检测时间, 提高检测精度
- 具有丰富的数据分析, 统计功能
- 具有容积自动检测功能(选购)
- 数据接口丰富, 可选择U盘接口、RJ45网口等



- Interface languages switched between Chinese and English
- Varied calibration methods ensures shorter testing time and higher accuracy
- Data analysis and statistics function
- Self-check function of the work volume (option)
- With rich interface, can choose U disk interface, RJ45 front-end port, etc





**设定键 Setting Button**  
测定条件, 判定标准等参数的设定  
Set detection parameters and judgment standard, etc.

**MASTER键 Master Button**  
基准检测开始  
Start master detection

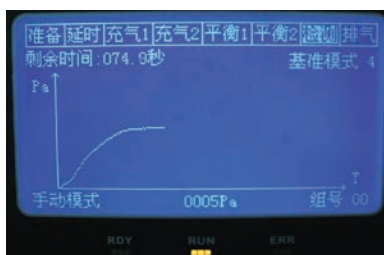
**CAL键 CAL Button**  
自动读取被测物容积  
Calculate the volume of measured work automatically

### 多种显示方式可供选择 Varied display units

- 测试结果可用 Pa, mL/min, Pa/min, Pa.cm<sup>3</sup>/sec, mL/s 显示
- 测试压力可用 kPa, kg/cm<sup>2</sup>, PSI, bar, MPa 显示
- Testing result unit: Pa, mL/min, Pa/min, Pa m<sup>3</sup>/sec, mL/S
- Test pressure unit: KPa, kg/cm<sup>2</sup>, PSI, bar, MPa

### 检测过程通过曲线显示

Display the measuring process thought curves



机器自动读取时时检测数据, 并使数据坐标化, 观察差压变化曲线, 判断泄漏变化趋势, 解析问题点

Real-time testing data can be read and displayed in the form of coordinate. Leak trend can be judged through differential pressure curve, thus to analyse questions easily

### 可保存最新的500组数据

Latest 500 groups of data can be saved



可对历史数据进行查询、分析, 便于质量分析

Historical data can be searched and analyzed to conduct quality analysis

- 可进行基准测试, 以得到当前环境下最合适的基准值, 缩短检测时间
- 32组参数切换功能, 不同的被测物对应不同的检测参数
- Master test is available to calculate the most appropriate master value under current ambient, and then reduce the test time
- 16 groups of parameters can be switched to ensure that different work has corresponding testing parameter

### 附加电控调压阀, 测试时间更短, 精度更高

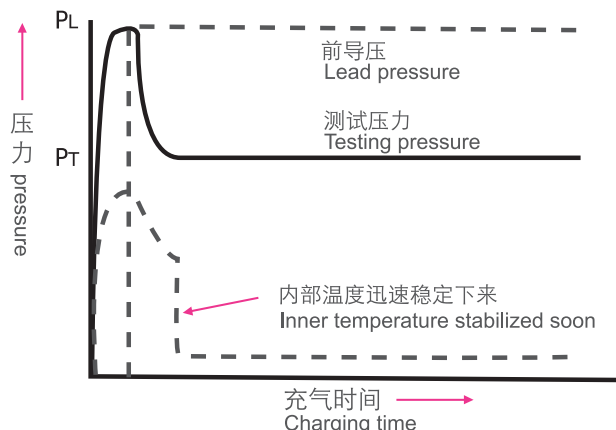
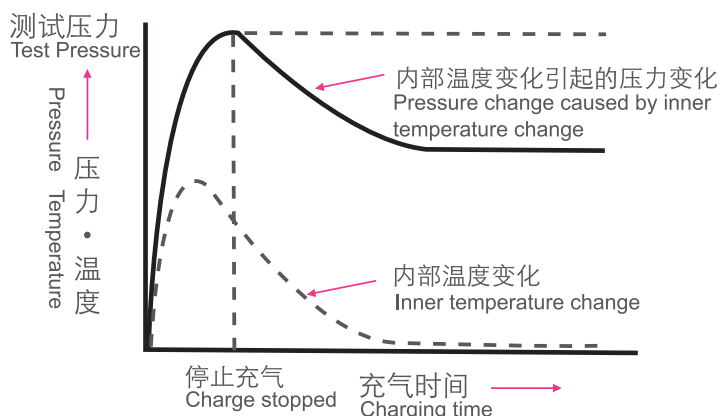
Additional electric control pressure regulating valve ensures shorter testing time and higher accuracy

- 附加电控调压阀, 可以实现快速充气功能 (快速充气功能可以有效稳定压力、快速加压、消除热影响)
- 使用电控调压阀使得基准数据的重复性更好, 提高了检测精度, 缩短检测时间。允许同时设定32组不同的测试压力
- The additional electric control pressure regulating valve supplies with TURBO (Fast Charging) function that can effectively stabilize the pressure, conduct fast charging and eliminate heat effect
- The additional electric control pressure regulating valve supplies with better repeatability of master data, higher testing accuracy and shorter testing time. 32 groups of different testing pressure parameters are available simultaneously.

### 灵活多样的外部控制功能

Flexible remote control function

- 可设定端子的输出时序, 使外部控制更加灵活
- 可直接控制电磁阀驱动气缸
- Time sequence settings of terminals ensure more flexible remote control
- Control solenoid valves to drive cylinder directly



# 型号 Mode FL-800①-②③-④-⑤-⑥ (外围设备)

## ① 压力范围 Pressure Range

记号 Model	使用范围 Applied Range	显示范围 Indicated Range
HV	0.20~50.00kPa(绝压)	0.00~100.00kPa
V	-5~-100kPa	0.0~-100.0kPa
UL	0.5~20kPa	0.0~20.0kPa
L	10~200kPa	0~200kPa
M	50~700kPa	0~700kPa
H	100~990kPa	0~1000kPa
H1	0.2~2MPa	0~2.00MPa
H3	1~10MPa	0~10.0MPa
H4	2~20MPa	0~20.0MPa

## ② 泄漏检测范围 (H3, H4型参考别表)

Leak detection Range (Please see other Extra Form referring H3,H4 mode )

记号 Model	使用范围 Applied Range	显示范围 Indicated Range
1	小泄漏 Small Leakage	0~±2000Pa
2	中泄漏 Medium Leakage	0~±9999Pa

## 别表 Extra Form

记号 Model	使用范围 Applied Range	显示范围 Indicated Range
3	0.1~50.00kPa	0.00~50.00kPa
4	1~100kPa	0.0~100.0kPa
5	1~500kPa	0.0~500.0kPa
6	1~1000kPa	0~1000.0kPa

## ③ 容积校正功能 Volume Calibration Function

记号 Model	表示 Indication
1	带容积校正功能 Available
2	无容积校正功能 Null

备注: 仅UL、L、M、H带容积校正功能  
Note: Mode UL, L, M, H have Volume Calibration Function

## ④ 外置选购品 Options

记号 Model	内容 Content
FR22	UL用减压过滤装置(0.5~10.0kPa) specialized filter and regulator for ul range
PC-295	UL用减压过滤装置(0.5~20.0kPa) specialized filter and regulator for ul range
FR13	L用减压过滤装置 specialized filter and regulator for L range
FR15	M用减压过滤装置 specialized filter and regulator for M range
FR16	H用减压过滤装置 specialized filter and regulator for H range
FR17	H1用减压过滤装置 specialized filter and regulator for H1 range
FR19	H3用减压过滤装置 specialized filter and regulator for H3 range
FR20	H4用减压过滤装置 specialized filter and regulator for H4 range
FR10	V用减压过滤装置 specialized filter and regulator for V range
N	无减压过滤装置 without filter and regulator

## ⑤ 数据接口 Data Interface

记号 Model	内容 Content
1	标准款, 专用串口打印机接口 Standard type with specialized printer interface
3	U盘接口 (存储数据, 无通讯功能) USB Interface(Data storage function, without communication function)
4	RJ45网口 (TCP/IP协议) RJ45 front-end ports (TCP/IP)

## ⑥ 差压精度 Differential Accuracy

记号 Model	内容 Content
空	标准款, ±0.5%F.S. Standard type, ±0.5%F.S.
H	高精度款, ±( 1%R.D. +2Pa), 仅小泄漏款 High accuracy, ±( 1%R.D. +2Pa), Small Leakage

## 便捷的数据输出方式 Easy Data Output Method

USB输出, 可直接将检测数据写入U盘 (选购)  
USB Output. Data can be saved in USB disk directly(Optional)



打印机  
Printer



快换接头  
Quick connector

## 外围设备 External Option

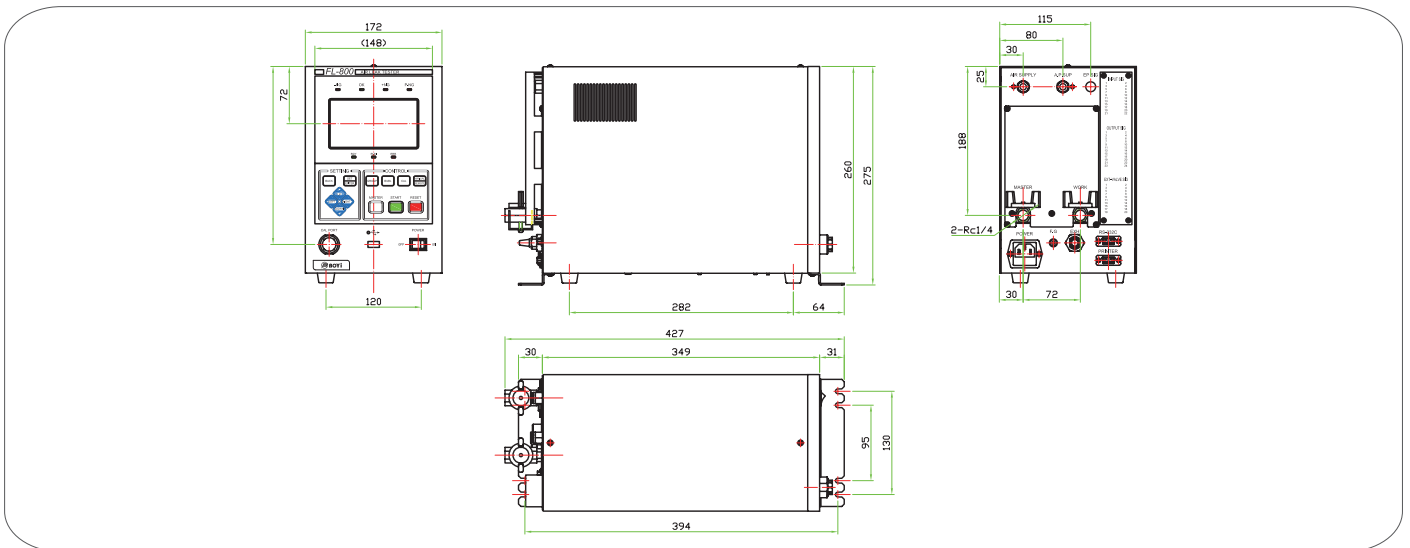
型号 Model	产品名称 Product Name	备注 Remark
C1	校正器 Calibrator	校正容积 0.1mL 0.1mL, Calibration Volume: 10mL~200mL
C3	校正器 Calibrator	校正容积 1.0mL 1.0mL, Calibration Volume: 10mL~200mL
C5	校正器 Calibrator	校正容积 5.0mL 5.0mL, Calibration Volume: 10mL~200mL
SP-TL4015S	打印机 Printer	串口打印机 Serial Printer
RS-C	串口电缆 Serial Cable	9针串口电缆, 1.5m 9 Pin Serial Cable, 1.5m
FCU800-24	旁路充气 Charge By-pass Unit	24V 驱动, 400kPa驱动压, 只用于UL,L,M型 Drive voltage of 24V, drive pressure of 400kPa, only for UL, L, M model
FEU800-24	旁路排气 Exhaust By-pass Unit	24V 驱动, 400kPa驱动压, 只用于UL,L,M型 Drive voltage of 24V, drive pressure of 400kPa, only for UL, L, M model
APU	自动压力/流量控制器 Electro Pneumatic Regulator	用于FL-800UL、L、M型 For model FL-800 UL, L&M
FFM-110	定流量发生器 Standard Leak	根据测试压和泄漏率决定 Depend on test pressure and leak rate
RM-01	外控操作盒 External Operation Box	STRT, RESET, 组号等信号控制的专用设备 Specialized equipment to control signals of START, RESET, Group NO., etc.
RM-03	外控输出转接设备 External Transfer Equipment	将集电极输出转换为继电器输出 Convert the collector output to relay output
S800	800串口分析软件 800 serial analysis software	
MP-01	快换接头 Quick connector	用于检漏仪与被测物进气口的快速连接, Rc1/4, 用于FL-800L、M、H型 It is used for fast connection between leak detector and air inlet of tested object, Rc1/4, for model FL-800L, M&H



# 本机的参数 Parameters

测定方式 Measuring Method	差压比较式、直压检测式气密检漏仪 Differential Pressure ,Direct Pressure Measuring Method		
差压传感器 Differential Pressure Sensor	$\pm 2\text{kPa}/2\text{V}(\pm 10\text{kPa}/2\text{V})$ , 标准款精度 $\leq \pm 0.5\% \text{F.S.}$ /高精度款 $\leq \pm (1\% \text{R.D.} + 2\text{Pa})$ , 传感系数 $4 \times 10^{-6} \text{mL} / \text{Pa}$ $\pm 2\text{kPa}/2\text{V}(\pm 10\text{kPa}/2\text{V})$ , Standard type Accuracy $\leq \pm 0.5\% \text{F.S.}$ /High Accuracy $\leq \pm (1\% \text{R.D.} + 2\text{Pa})$ , Sensor Coefficient: $4 \times 10^{-6} \text{mL} / \text{Pa}$		
直压传感器 Direct Pressure Sensor	HV 型范围 HV Mode Range	100kPa(绝压absolute pressure)	精度 $\leq \pm 0.5\% \text{F.S.}$ Accuracy $\leq \pm 0.5\% \text{F.S.}$
	V 型范围 V Mode Range	-100kPa	精度 $\leq \pm 0.5\% \text{F.S.}$ Accuracy $\leq \pm 0.5\% \text{F.S.}$
	UL 型范围 UL Mode Range	20kPa	精度 $\leq \pm 1\% \text{F.S.}$ Accuracy $\leq \pm 1\% \text{F.S.}$
	L 型范围 L Mode Range	200kPa	精度 $\leq \pm 0.5\% \text{F.S.}$ Accuracy $\leq \pm 0.5\% \text{F.S.}$
	M 型范围 M Mode Range	700kPa	精度 $\leq \pm 0.5\% \text{F.S.}$ Accuracy $\leq \pm 0.5\% \text{F.S.}$
	H 型范围 H Mode Range	990kPa	精度 $\leq \pm 0.5\% \text{F.S.}$ Accuracy $\leq \pm 0.5\% \text{F.S.}$
	H1 型范围 H1 Mode Range	2MPa	精度 $\leq \pm 0.5\% \text{F.S.}$ Accuracy $\leq \pm 0.5\% \text{F.S.}$
	H3 型范围 H3 Mode Range	10MPa	精度 $\leq \pm 0.25\% \text{F.S.}$ Accuracy $\leq \pm 0.25\% \text{F.S.}$
H4 型范围 H4 Mode Range	20MPa	精度 $\leq \pm 0.25\% \text{F.S.}$ Accuracy $\leq \pm 0.25\% \text{F.S.}$	
被测物侧容积 Work Side Volume	4.5mL	Approx. 4.5mL	
基准物侧容积 Master Tank Volume	4.5mL	Approx. 4.5mL	
测定精度 Measuring Accuracy	50mL标准被测物1mL/min的测试条件下, 测试数据在0.95~1.05mL/min以内 The test result can be within 0.95 ~ 1.05mL/min on leaks of 1 mL/min in 50 mL standard test pieces		
显示 Display	LCD显示(蓝色背光), 有效显示尺寸W107mm×D57mm LCD with Blue Back Light, Display Dimension W107×D57mm		
外部输入/输出 External input/output	控制用输入端子22P、控制用输出端子24P、电磁阀控制端子20P、RS-232输入输出。可选输出: 打印机输出(CENTRONIC标准) Input control terminal 22P, Output control terminal 24P, Solenoid valve control terminal 20P, RS-232 Input/Output. Optional output: Printer (CENTRONIC Standard)		
组号设定机能 Groups Setting	0~31ch (合计32通道)	0~31channels (total 32ch)	
温、湿度范围 Temperature & Humidity	0~40°C 45~85%RH无结露	0~40°C 45~85%RH with no precipitation	
电源电压 Power Supply	AC 100~240V, 50/60Hz		
外观尺寸 External Dimension	W172mm×H260mm×D350mm		
重量 Weight	约9kg	Appro.9kg	

## 外形尺寸 Dimension (mm)



主要产品 ● 气密检漏仪 ● 数字压力表 ● 流量计 ● 自动压力、流量控制器 ● 密封性能检测专用设备

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