ATEQ F600
Quick Start Guide

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We continuously work on improving our products. This is why information contained in this manual, the device and the technical specifications may be modified without prior notification.

Pictures and figures in this manual are non-contractual.

Safety advisory / Warranty

GOOD PRACTICES AND SAFETY INSTRUCTIONS

Safety recommendations

If the device is supplied with 100 / 240 V AC, it is mandatory to connect it to the ground with a good link to the ground, to protect against electric hazard or electrocution.

It is dangerous to change the status of the outputs.
They can control power actuators or other equipment (mechanical, pneumatic, hydraulic, electrical or other) which can cause serious personal injury and damage to surrounding material.

For safety and quality measurement reasons, it is important, before powering on the device, to ensure that it is air supplied with a minimum operating pressure (0.6 MPa ± 15%).

Recommendations for the test environment

Keep the test area as clean as possible.

Recommendations for operators

ATEQ recommends that the operators who use the devices have training and a level of qualification that correspond to the job to perform.

General recommendations

— Read the user manual before using the device.
— All electrical connections to the device must be equipped with safety systems (fuses, circuit breakers, etc.) adapted to the needs and in accordance with the applicable standards and rules.
— To avoid electromagnetic interference, electrical connections to the device must be shorter than 2 meters.
— Power supply plug must be grounded.
— Disconnect the device from the mains before performing any maintenance work.
— Shut off the compressed air supply when working on the pneumatic assembly.
— Do not open a connected device.
— Avoid splashing water on the device.

ATEQ is at your disposal for any information concerning the use of the device under maximum safety conditions.

We draw your attention to the fact that ATEQ cannot be held responsible for any accident related to a misuse of the measuring instrument, the workstation or non-compliance of the installation with safety rules.

In addition, ATEQ declines any responsibility for the calibration or the fitting of their instruments that is not done by ATEQ.

ATEQ also declines any responsibility for any modification (program, mechanical or electrical) of the device done without their written consent.

AIR QUALITY REQUIREMENTS

The air supplied into the device must be clean and dry. Even though the device is provided with a filter, the presence of dust, oil or impurities may cause malfunction.

Air quality requirements according to ISO standard 8573

The air must be clean and dry.

The presence of impurities, oil or humidity in the air may cause deterioration which will not be covered by the warranty.

When the instrument is working in vacuum conditions, impurities must be prevented from being drawn into its internal components.
For this purpose, we strongly recommend that a suitable airtight filter is installed between the part under test and the instrument.

ATEQ recommends the following characteristics for the air supplied into the device.

Air characteristics		ISO standard 8573 class
Grain size and concentration	0.1 µm and 0.1 mg/m^3	Class 1
Dew point under pressure	- 40°C dew	Class 2
Maximum concentration of oil	0.01 mg/m^3	Class 1

Recommended additional equipment

ATEQ recommends the installation of this additional equipment:
— Air dryer to provide dry air at less than - 40°C dew point
— 25 microns and 1/100 microns double filter.

Preamble

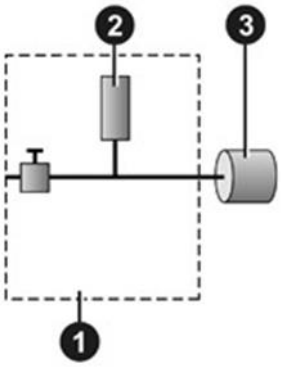
ATEQ F600, A UNIVERSAL LEAK TESTER

ATEQ F600 is a leak detector that tests the airtightness of parts.

ATEQ F600 can memorise 128 different test programs.

LEAK TEST

Leak test and Desensitized Mode



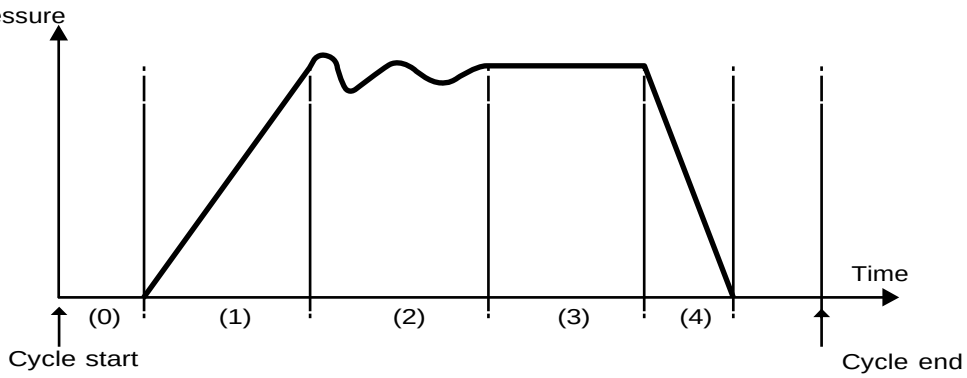
The test pressure is applied to the input of the test part **3**.
The measurement is performed by the pressure sensor **2**.

1 Device
2 Pressure sensor
3 Part under test

Desensitized Mode: there's no leak fullscale. The limit is the test Pressure.

PRINCIPLE OF A CYCLE

The measurement cycle is made of 4 main phases: fill, stabilization, test, dumping.



0 Waiting phase
1 Fill phase
2 Stabilization phase
3 Test
4 Dumping

Your ATEQ F600

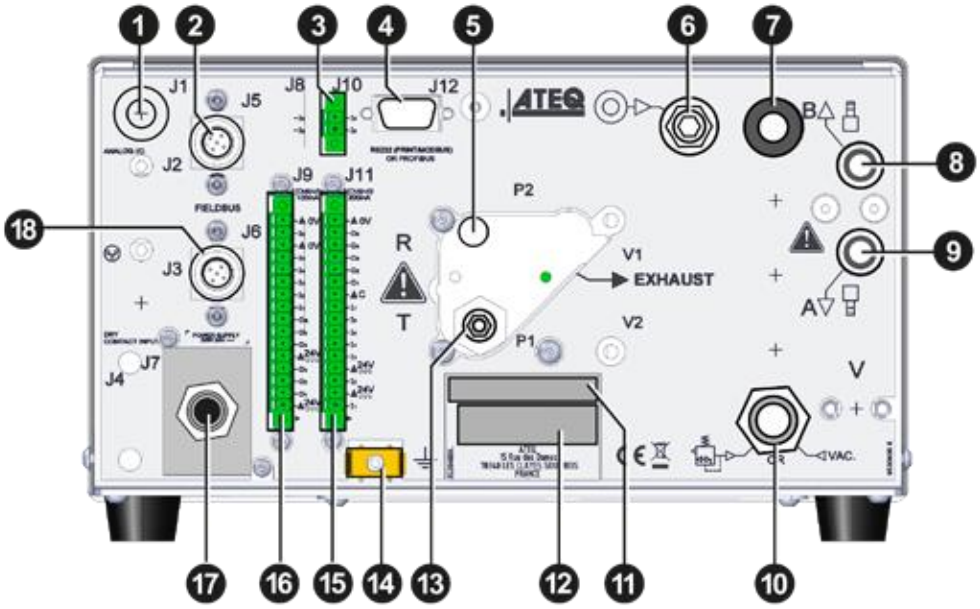
FRONT PANEL

The user interface is located on the front panel.

1 Display
2 Cycle keys
3 Navigation keys
4 USB connectors
5 Quick connector
6 Mechanical Regulator

For more information, refer to User interface.

CONNECTORS ON THE BACK PANEL (WITH ALL OPTIONS)



Ref	Name	Description
1	J1	Analog outputs - pressure and leak (option)
2	J5	Fieldbus connector (option)
3	J10	Program selection extension connector (option)
4	J12	Printer RS232 connector / Modbus (option) or Profibus (option)
5	-	Exhaust output
6	-	Input connector to the air filter (regulator air supply)
7	-	Pilot pressure input
8	B	Pneumatic output for B automatic connector option
9	A	Pneumatic output for A automatic connector option
10	-	Vacuum input (according configuration)
11	-	Part number / Serial number
12	-	Air supply energy information
13	T	Test part connector
14	-	Ground
15	J11	Relay board connector (digital inputs/outputs and 24 V DC - 2 A power supply)
16	J9	Outputs code board connector (digital inputs/outputs)
17	J7	Connector for 24 V DC - 2 A or 100 / 240 V AC power supply (according option provided)
18	J6	Fieldbus connector (option)

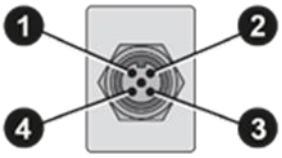
POWER SUPPLY CONNECTORS

The device can be connected to an external power supply (24 V DC - 2 A) or provided with an internal power supply (100 / 240 V A C) (option).

External supply

24 V DC connector (J7)

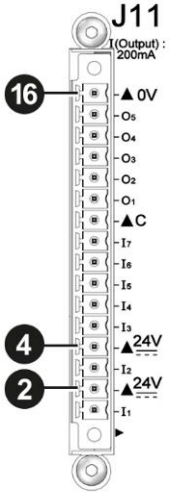
The device can be connected to a 24 V DC - 2 A power supply through a M12 4 pins type connector.



Pin number	Signal
1	Not connected
2	+ 24 V DC
3	Not connected
4	Ground: 0 V

24 V DC on the relay board connector (J11) (option)

The device can also be connected to a 24 V DC - 2 A power supply through J11 connector on the relay board.



Pin number	Signal
2	+ 24 V DC
4	+ 24 V DC
16	Ground: 0 V

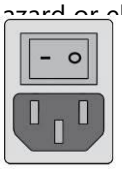
Apply 24 V DC to the pin **2** or **4**.

Internal supply only

100 / 240 V AC connector (J7) (option)

The device can be connected to a 100 / 240 V AC power supply (option).
This connector has a ON/OFF button

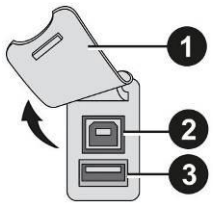
It is mandatory to connect the device to the ground with a good link to the ground, to protect
against electric hazard or electrocution.



1 ON
0 OFF

PC USB connectors (on front face)

USB connectors can be used for connecting miscellaneous compatible USB devices.
The USB connectors are located under the rubber cover **1** (see figure).



1 Rubber cover
2 USB connector to PC
3 USB connector to USB key

Do not connect two USB devices at the same time.

Do not use a cable longer than 2 m.

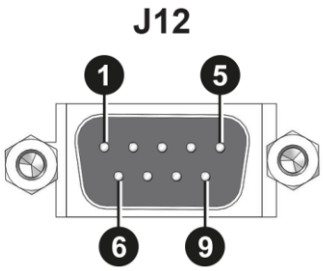
Push the rubber cover **1** slightly forward for an easy access to USB connectors **2** and **3**.

Only use this connection for temporary communication. Connection to a PC cannot be used permanently because the communication can be disconnected by the PC.

Printer RS232 connector / Modbus (option) or Profibus (option) (J12)

RS232 - SubD 9 pins male connector (printer)

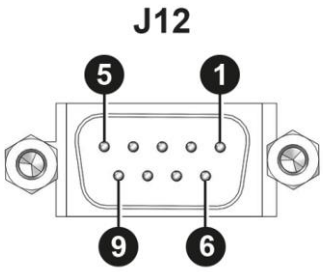
RS232 for printer, bar code reader, PC connection.



Pin number	Signal
1	Not used
2	RXD data input
3	TXD data input
4	Not used
5	Ground
6	Not used
7	RTS request to send
8	CTS clear to send
9	Not used

RS232 - SubD 9 pins female connector (Profibus) option

Profibus: SubD 9 pins female connector.

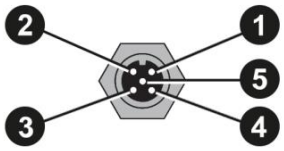


Pin number	Signal
1	PE (ground)
2	Not used
3	Data line A
4	Not used
5	Ground
6	Not used
7	Not used
8	Data line B
9	Not used

Devicenet connectors (J5) (J6) (option)

M12 type connector - 5 pins male connector (J5) (Devicenet input)

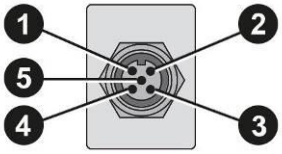
For connection to others ATEQ devices.



Pin number	Signal
1	Drain
2	V+
3	V-
4	CAN_H
5	CAN_L

M12 type connector - 5 pins female connector (J6) (Devicenet output)

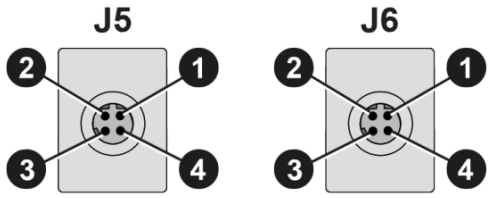
For connection to others ATEQ devices.



Pin number	Signal
1	Drain
2	V+
3	V-
4	CAN_H
5	CAN_L

Profinet connectors (J5 + J6) (option)

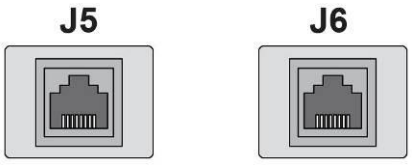
M12 D coded type connector - 4 pins female connector (J5 + J6)



Pin number	Signal
1	Ethernet Tx + (Transmit Data +)
2	Ethernet Rx + (Receive Data +)
3	Ethernet Tx - (Transmit Data -)
4	Ethernet Rx - (Receive Data -)

Profinet connectors (J5 + J6) (option)

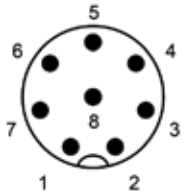
Standard connection Ethernet TCP / IP protocol.



One of these network protocols is available:
— Ethernet IP
— Profinet
— Ethercat (J5 = Input J6 = Output).

ANALOG OUTPUTS (OPTION)

M12 type connector - 8 pins female connector (J1)



Pin number	Signal
1	Ground Pressure
2	0 - 10 V DC Pressure
3	Ground Pressure (Diff)
4	0 - 10 V DC Pressure (Diff)
5	Signal contact event
6	Ground contact event
7	Other options
8	Other options

DIGITAL INPUTS/OUTPUTS

The 24V DC power supply for the digital inputs can be provided by 2 means:
— The internal power supply of the device (0.3 A max)
— An external power supply provided by the customer.

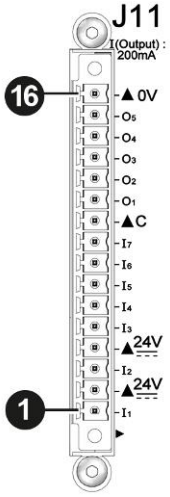
Inputs default mode is PNP. NPN mode is available on request.

Relay board connector (J11) (option)

Characteristics

— Inputs
- Activation: + 24 V DC.

— Outputs
- Dry contacts
- 60 V AC / DC max - 200 mA max.



Pin number	Inputs / outputs	Description
1	Input 1	RESET
2	+ 24 V DC	Common
3	Input 2	START
4	+ 24 V DC	Common
5	Input 3	Program selection
6	Input 4	Program selection
7	Input 5	Program selection
8	Input 6	Program selection
9	Input 7	Program selection (programmable input)
10	Output	Common floating output
11	Output	Pass part
12	Output	Tests fail part
13	Output	Negative Threshold measure Fail
14	Output	Warning
15	Output	End of cycle
16	0 V	Ground

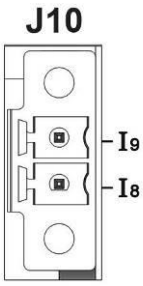
The device can be energized through the **J11** connector of the relay board (except if internal supply option)
0 V to the pin **16**.
24 V DC to the pin **2** or **4**.

Program selection extension connector (J10) (option)

The J10 connector is an extension of the J11 connector that enables the selection of 128 programs.

Characteristics

— Inputs
- Activation: + 24 V DC.



Pin number	Inputs / outputs	Description
18	Input 8	Program selection from 33 to 64 (programmable input)
19	Input 9	Program selection from 65 to 128 (programmable input)

Program selection (J11 and J10)

The connectors J11 and J10 (option) enable you to select a program from digital inputs. Combinations of connector pins to activate for program selection.

Program number	J11					J10	
	Pin 5 (input 3)	Pin 6 (input 4)	Pin 7 (input 5)	Pin 8 (input 6)	Pin 9 (input 7)	Pin 1 (input 8)	Pin 2 (input 9)
1	0	0	0	0	0	0	0
2	1	0	0	0	0	0	0
3	0	1	0	0	0	0	0
4	1	1	0	0	0	0	0
5	0	0	1	0	0	0	0
6	1	0	1	0	0	0	0
7	0	1	1	0	0	0	0
8	1	1	1	0	0	0	0
9	0	0	0	1	0	0	0
10	1	0	0	1	0	0	0
11	0	1	0	1	0	0	0
12	1	1	0	1	0	0	0
13	0	0	1	1	0	0	0
14	1	0	1	1	0	0	0
15	0	1	1	1	0	0	0
16	1	1	1	1	0	0	0
17 to 32	X*	X	X	X	1	X	X
33 to 64	X	X	X	X	X	1	X
65 to 128	X	X	X	X	X	X	1

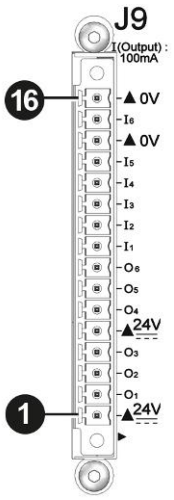
***** X is equal to 0 or 1 in function of the program number.

Valve codes and auxiliary outputs board connector (J9) (option)

Characteristics

— Outputs
- 24 V DC - 100 mA max per output.

— Inputs
- Activation: + 24 V DC.



Pin number	Inputs / outputs	Description
1	+ 24 V DC	Common (outputs 1, 2, 3)
2	Ouput 1	Open collector
3	Ouput 2	Open collector
4	Ouput 3	Open collector
5	+ 24 V DC	Common (outputs 4, 5, 6)
6	Ouput 4	Open collector
7	Ouput 5	Open collector
8	Ouput 6	Open collector
9	Input 1	Programmable input
10	Input 2	Programmable input
11	Input 3	Programmable input
12	Input 4	Programmable input
13	Input 5	Programmable input
14	0 V	Ground
15	Input 6	Programmable input
16	0 V	Ground

Pneumatic connectors used to connect the part under test are located on the back panel of the device.

Pneumatic supply

The pneumatic supply has to meet specific requirements recommended by ATEQ. Refer to Good practices and safety instructions section.
A specific filter may be necessary.

The air is supplied via the filter located on the back panel of the device.

Metal air filter

The metal filter is used for 1 MPa (145 PSI) range.
The maximum pressure admissible is 1.2 MPa (174 PSI).

Plastic air filter

The plastic filter is used for 0.5 MPa (72.5 PSI) range (direct and indirect modes) or 2 MPa (290 PSI) range (for pilot valves input).
The maximum pressure admissible is 690 kPa (100 PSI).

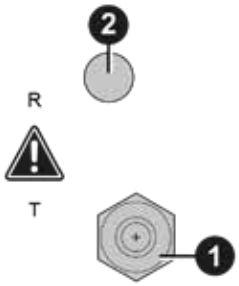
Quick connector (on front face) (option)

Use this function to check the calibration.

As this connector is part of the measurement circuit, all its connections must be air tight.

Test outputs

The output enables parts to be connected (test)



1 Test connector
2 Exhaust output
Mettalic fitting available for test (**1**) connector:
— 1/4 mm
— 2/4 mm
— 2.7/4 mm
— 3/5 mm
— 4/6 mm
— 6/8 mm

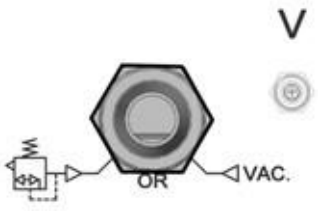
Other input

1 Pilot pressure input or test pressure input (according configuration)

Pneumatic output 0.6 MPa (87 PSI) (option)

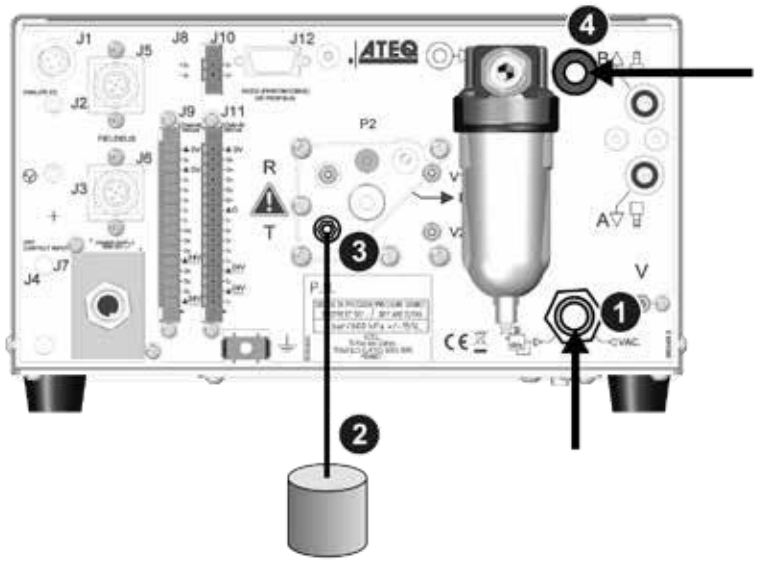
A and B: automatic connectors option. These connectors are used to drive pneumatic caps on the part under test.

Air supply input for options



Instant fitting: 6 mm diameter
— Vacuum input for vacuum range

Direct mode - Vacuum

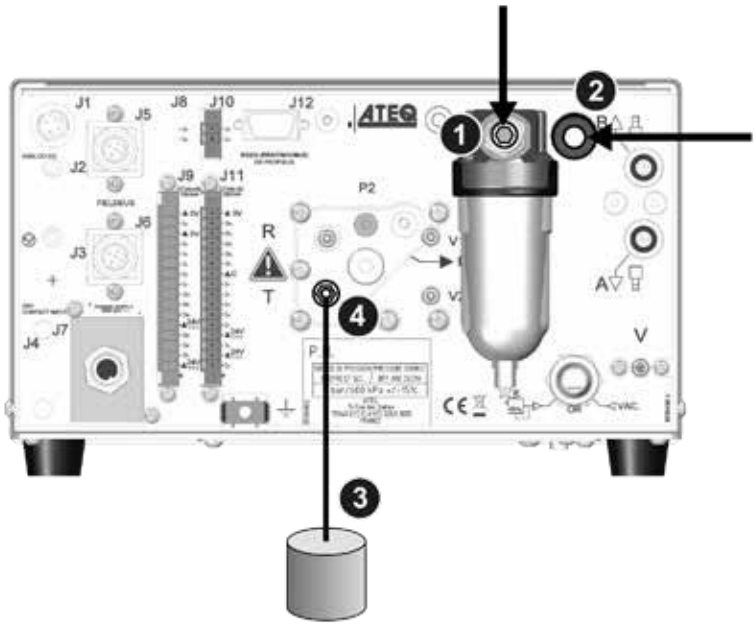


Connections

Connection	Option / description
Vacuum to **1**	Connection to the vacuum (option)
3 to **2**	Connection of the test output to the part under test
Air supply to **4**	Connection of the air supply (0.6 MPa (87 PSI)) for pneumatic output option only (see Pneumatic output 0.6 MPa (87 PSI) (option))

Direct mode

Maximum pressure: 1 MPa (145 PSI)



Connections

Connection	Option / description
Regulator air supply to **1**	Connection of the regulator air supply to the filter input (1.2 MPa (174 PSI))
Air supply to **2**	Connection of the air supply (0.6 MP a (87 PSI)) for pneumatic output option only (see Pneumatic output 0.6 MP a (87 PSI) (option))
4 to **3**	Connection of the test output to the part under test

User interface

OVERVIEW

The user interface comprises a display and user keys located on the front panel.

1 Display
2 Cycle keys
3 Navigation keys

KEYS

Cycle keys

The cycle keys are used to start and to stop a measurement cycle.

Key	Name	Function
▶	**Start**	On the **Program** screen, starts a measurement cycle and opens the **Measurement cycle** screen.
■	**Reset**	Stops the measurement cycle in progress and returns to the **Program** screen.

Cycle keys

The navigation keys are used to select menus/options and change parameter values.

Key	Name	Function
	Up key	Scrolls up or increases numerical values.
	Down key	Scrolls down or decreases numerical values.
OK	**OK**	Returns to the **MAIN MENU** screen or opens menus and options, validates parameters.
ESC	**Esc**	Returns to previous screen (until the **Program** screen), escapes without modifying parameters.

Smart keys

Smart key is a programmable key that provides direct access to a function selected by the user.

Key	Name	Function
	Smart key	Starts a measurement cycle (default, programmable).

This key is programmable through the **MAIN MENU** screen:
MAIN MENU > **CONFIGURATION** > **MISCELLANEOUS** > **SMART KEY**

DISPLAY

The device uses 4 main screens.

The Program screen

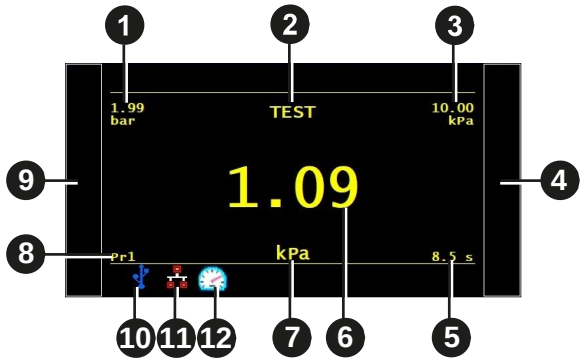
Use the **Program** screen to select a test program.

1 Current program name (here **NAME**)
2 Current program number (here **001**)
3 Test type (here **LEAK TEST**)

Access at startup of the device or by pressing several times **Esc** ESC.

The Measurement cycle screen

The **Measurement cycle** screen displays the different values of the current test (or last one).

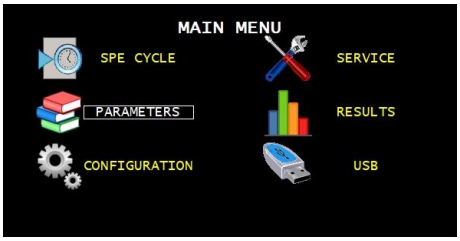


1 Test pressure measurement
2 Test result or step phase
3 Test reject value
4 Vertical line test result
5 Remaining time of the current phase or ready status
6 Measurement value
7 Measurement unit
8 Current program
9 Vertical line test result
10 USB connection
11 External supervision
12 Software processing of the measurement

The MAIN MENU screen

The **MAIN MENU** screen gives access to different sections for managing the device and the test parameters.

Access: from the **Program** screen, press OK.



Option	Description
SPE CYCLE	Specific procedures necessary to ensure the proper operation of measurement cycles (for example, adjustment of a pressure regulator).
PARAMETERS	Parameters of the test programs.
CONFIGURATION	General configuration of the device.
SERVICE	Maintenance of the device.
RESULTS	Test results, backup and display options.
USB	USB connection functions (backup, restore).

Starting up

POWER UP

1. Make sure that all the necessary connections are in place.
Electrical: such as power supply, inputs/outputs
Pneumatic: including line pressure supply

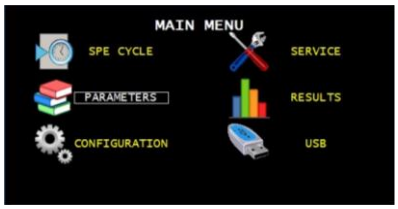
2. Power up your device.
When power-up is completed, the **Program** screen is displayed with last program used on screen.

PREPARING A PROGRAM

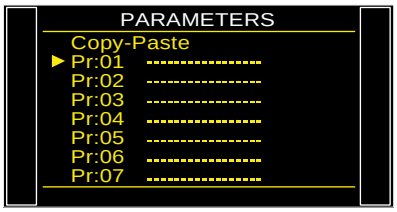
Use this procedure to configure a new test program.
On the **MAIN MENU** screen:

ACCESSING THE PARAMETERS

1. Select **PARAMETERS** using the **up/down** keys and then press OK.

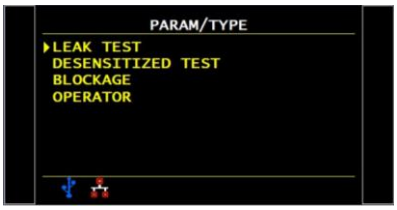


The program list is displayed.



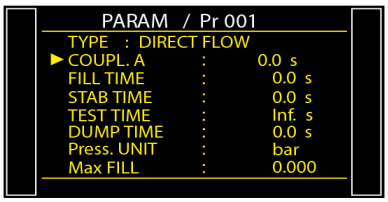
ACCESSING THE PARAMETERS

2. Select the program to configure and press OK.
A list of the available measurement types is displayed:
— **LEAK TEST** type
— **DESENSITIZED TEST** type (option)
— **BLOCKAGE** type (option)
— **OPERATOR** type (option)



ACCESSING THE PARAMETERS

3. Select a measurement type and press OK.
The parameters of the selected measurement type are Displayed.



4. Define the measurement cycle parameters.
See: Modifying a parameter.

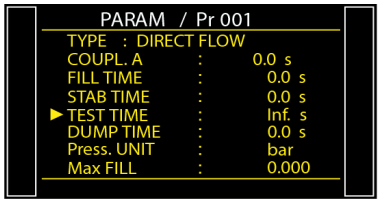
MODIFYING A PARAMETER

Use this procedure to complete the test program setup.

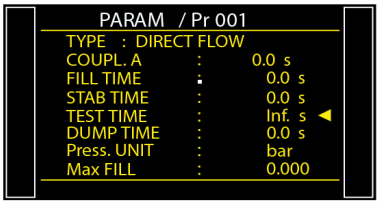
The protection of the parameters is configurable. If the icon is displayed at the bottom of the screen, you must insert the USB unlocking device or enter a password before modifying a parameter.

On the **PARAMETERS** screen of the program (see: Preparing a program):

1. Press **up/down** to select the parameter to modify, and then press **OK**.

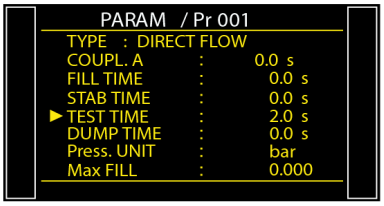


An arrow is displayed on the right of the parameter being modified.



2. Use the **up/down** keys to modify the parameter value, and press OK to validate.

The arrow returns to the left of the modified parameter.



3. Repeat these steps until all parameters are set.

4. To return to the **MAIN MENU** screen, press **Esc** as many times as necessary.

SELECTING A PROGRAM

If necessary, you can select another program.

1. Press **up/down** .

STARTING AND STOPPING CURRENT CYCLE

Use the front panel keys to start/stop a measurement cycle.
With the desired program displayed on the **Program** screen:

STARTING A MEASUREMENT CYCLE

1. Press **Start** .

The cycle phases of the program are successively displayed:

FILL
STABILISATION
TEST
DUMP

At the end of the cycle, the results are displayed and **READY** appears at the bottom right of the screen.

During the measurement cycle, you may press OK to access the **MAIN MENU** screen and set parameters for a next measurement cycle.

STOPPING A CYCLE

2. Press **Reset** to immediately stop the current measurement cycle and return to the **Program** screen.

User adjustments

OPTIONS OF THE MENUS

SPE CYCLE menu

Use this menu to carry out specific procedures necessary to ensure the proper operation of specific measurement cycles.

Label	Special cycle	Description of the cycle
none	Volume compute	Special cycle to determine volume parameter
Regulator Adj.	Regulator adjustment	Pressurize the part and allow to adjust pressure Levels
Infinite Fill	Infinite fill	Pressurize the part with an infinite fill time
Piezo auto zero	Piezo auto zero	Auto zero cycle on the piezo sensor

TO START SPECIAL CYCLES...

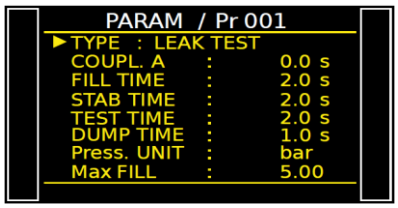
1. On the **SPECIAL CYCLE MENU** screen, select a cycle, and press OK to validate.
2. Press **Start** to execute the cycle.
3. To stop the current cycle press **Reset**.

Some parameters are displayed when specific functions are activated.

Label	Special cycle	Description of the cycle
Volume Comp	Volume compute	Special cycle to determine volume parameter
ATR Learning Cycle	-	Special cycle to define ATR variable offset

PARAMETERS menu

Use this menu to configure the measurement cycle associated to each test program.



Default parameters of the type tests

Label	Parameter	Description
COUPL. A or **COUPL. B**	Coupling time	Required times when instrument manage automatic jigs
FILL TIME	Fill time	Time to pressurise the part under test
STAB TIME	Stabilization time	Time to stabilise the pressure on the test and reference parts
TEST TIME	Test time	Time for leak measurement
DUMP TIME	Dump time	Time to vent the part to atmosphere
Press. UNIT	Pressure units	Pressure unit (bar, mbar, PSI, Pa, kPa, MPa)
Max FILL	Maximum fill pressure	Maximum level of the fill pressure
Min FILL	Minimum fill pressure	Minimum level of the fill pressure
LeakUnit	Reject unit	Measurement units
Test FAIL	Test fail	Upper leak rate limit for the test part. Above this limit, the part is considered as defective.
NEG. FAIL	Negative Fail	Under Negative Threshold the part is considered as defective (since V3.003)
FUNCTIONS	Functions	Access to additional functions

Some parameters are displayed when specific functions are activated.

Label	Parameter	Description
INTER-CYCLE	Inter cycle time	Time between two automatically chained programs (Sequence function)
Max PreFILL	Max pre fill pressure	Maximum level of the pre fill pressure (Pre fill function)
OFFSET	Leak offset	Leak offset value
PRE DUMP	Pre dump time	Time to dump the part under test (Pre fill function)
PRE-FILL	Pre fill time	Time to pressurise the part under test (Pre fill function)
REJECT CALC.	Reject calculation	Define raw unit to calculate flow unit (Flow unit)
Set FILL	Set fill	Fill pressure instruction (Fill function or electronic pressure regulator)
Set PreFILL	Pre fill pressure	Pre fill pressure instruction (Pre fill function)
VOLUME	Test volume	Complete volume of the test part (Flow unit)
Volume UNIT	Volume unit	Volume unit of the test part (Flow unit)

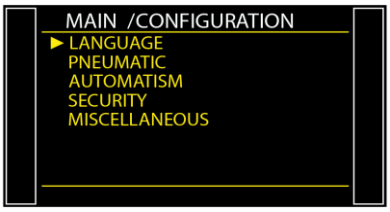
Additional functions

Label	Function	Description
24V OUTPUTS	Auxiliaries output 24 V	Available outputs for external automatism
ABSOLUTE	Absolute	Display the absolute value of the results
ATF	ATF time	Absorb the important leak variations at the defined time
ATR0 / **ATR1** / **ATR2** / **ATR3**	ATR 0 - 3	Specific filters on leak measurement
AUTO CONNECT	Automatic connector	Function to manage automatic jigs
BUZZER	Buzzer	Buzzer activation configuration
BYPASS	Bypass	External fast filling valve management
CODE READER	Bar code reader	Bar code configuration
CUT OFF	Cut off	All the measurements that are lower than the configured rate have the value 0
DISP. OPT.	Display option	Display of an additional information on a second line
DISPLAY MODE	Display Mode	Leak measurement resolution
DUMP OFF	Dump off	Avoids dumping
END OF CYCLE	End of cycle	Several automatism case depending on fail part management
EXT. DUMP	External dump	Dumping is managed by an external valve not internal
FILL MODE	Fill types	Special filling methods
FILTER	Filtering	Stabilize the measurement values
FLOW LEVEL	Flow level	Add a minimum fail parameter
NAME	Name	Program customization
NEG. THRESHOLD	Negative Threshold	Allows to display and use a new parameter NEG.FAIL (since V3.003)
NO NEGATIVE	No Negative	Replace negative value per 0
OFFSET	Leak offset	Leak offset value
PEAK HOLD	Peak hold	Give as result, the highest flow during the test time
PR:SEQUENCE	Sequencing	Allowed program automatic sequencing
PRE-FILL	Pre-fill types	Special filling methods
PRESS.CORR.	Pressure correction	Calculates leak at a defined pressure value
PRESSURE DROP	Pressure drop	Pressure drop mode function in the Desensitized mode
REWORK LIMIT	Rework limits	Additional levels for specific reworkable parts
SIGN	Sign	Return opposite result
STAMPING	Stamp	Pneumatic or electric output to identify the part
STD CONDITIONS	Standard conditions	Standard conditions correction with parameters
SYNC. TEST	Synchro test	A programmable input allows to pass from Stabilization to Test phase
TEST TIME*100	Longer test time	Allowed longer test time (1s = 100s)
UNITS	Units	Access to International System or American or Custom Units
VALVE CODES	Valve codes	Available outputs for external automatism

Some functions are available depending on software version.

CONFIGURATION menu

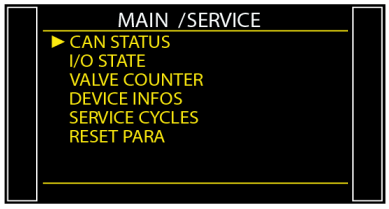
Use this menu to configure your ATEQ device.



Label	Function	Description
LANGUAGE	Language	Selection of the language displayed on the screen
PNEUMATIC	Pneumatics	Configuration of the pneumatics functions of the device
> **ELEC. REG.**	-	Activation of the electronic regulator
> **PERM. REG**	-	The electronic regulator is active every time
> **Press. UNIT**	-	Pressure unit by default for the new programs
> **DUMP LEVEL**	-	Allows negative alarm flow level (same for all programs)
> **BLOW MODE**	-	Blowing mode when test cycle is not running (option)
> **EXT. DUMP**	-	Configuration of the external dump (option)
> **DUMP OFF**	-	Remove dump time parameter on the selected program that becomes 0 second
AUTOMATISM	Automatism	Configuration of the different communications between the device and its environment
> **RS232**	-	Configuration of the communication type on the RS232 port
> **USB**	-	Configuration of the connection type on the USB port
> **Date & Time**	-	Setup of the built-in clock
> **OUTPUTS CONFIG.**	-	Configuration of the programmable outputs
> **INPUTS CONFIG.**	-	Configuration of the programmable inputs
> **CODE READER**	-	Bar code reader configuration
SECURITY	Security	Security functions
> **ACCESS**	-	Parameters access mode (key or password)
> **START OFF**	-	Deactivation of the **Start** ▶ on the instrument front panel. Programs can only be started from the instrument relay board.
MISCELLANEOUS	Miscellaneous	
> **SMART KEY**	-	Configuration of the assigned function to the **Smart key** SMART KEY

SERVICE menu

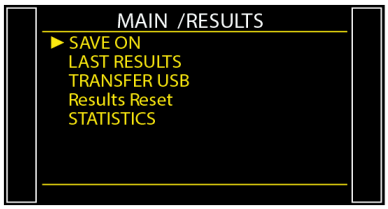
Use this menu to do the maintenance of your device (status check, internal tests...).



Label	Function	Description
CAN STATUS	Internal network state	State of the internal network of the device
I/O STATE	Inputs/outputs state	State of the inputs/outputs
VALVE COUNTER	Valves wear function	Approximate state of the valves wear
DEVICE INFOS	Device information	Information about the device, program version, built in components etc.
SERVICE CYCLES	Special service cycles	Allows to display more special cycles to carry out device internal tests
RESET PARA	Parameters reset	Reset to factory configuration

RESULTS menu

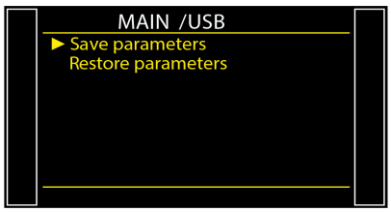
In this section, manage measurements results.



Label	Function	Description
SAVE ON	-	Define memory location (internal or external USB stick)
LAST RESULTS	Results display	Last 1500 results carried out by the device
TRANSFER USB	Results transfer	Transfer all results to USB stick on CSV file
Results Reset	Results erasing	The results are lost after the reset!
STATISTICS	Results statistics	Statistics for each program

USB menu

This section describes save and restore parameters on an external USB device.



Label	Description
Save parameters	Save parameters on an external USB memory device for restoring later
Restore parameters	Restore parameters from an external USB memory device

Specifications

CHARACTERISTICS

Technical characteristics of the device.
Main characteristics:

Characteristics	Values
Case dimensions: Height x Width x Depth	150 x 250 x 270 mm (5.91 x 9.84 x 10.63")
Overall dimensions	150 x 250 x 360 mm (5.91 x 9.84 x 14.17")
Format	Half 19-inch rack
Mass	About 8 kg (17.6 lbs)
Electrical power supply	— 100 / 240 V AC - 50 W - 50/60 Hz — 24 V DC - 2 A.
Overvoltage category	II
Pneumatic air supply (0 to 0.5 MPa (0 to 72.5 PSI) range)	Air supply: 0.6 MPa (87 PSI) ± 15%
Protection air supply (0.6 to 1 MP a (87 to 145 PSI) range)	— Regulator input: 1.2 MPa (174 PSI) ± 10% — Valves supply: 0.6 MPa (87 PSI) ± 15%
Pneumatic connections: (inside / outside diameters)	2.7/4 to 6/8 mm
Operation temperature	+5 °C to + 45 °C (+ 41 °F to 113 °F)
Storage temperature	0 °C to +60 °C (32 °F to 140 °F)
Operation altitude	Up to 2000 m (6500 ft)
Relative humidity	80 % at 31 °C (87 °F) and 50 % at 40 °C (104 °F)