

# Sensistor ILS500

# Leak Detection System

The new Sensistor ILS500 Leak Detection System is a fully integrated leak testing system that controls tooling, tracer gas handling, test sequencing and leak testing with a new, easy to use color touch display. The compact instrument helps you get a fast start for your leak testing by guiding you through the setting of parameters. It controls the gas handling so that you have gas at the right time, the right place and at the right pressure. It makes a gross leak test before spending any tracer gas unnecessary and also assures that the used tracer gas is evacuated after the test. The tooling in your fixture is controlled by the ILS500, and the complete system is able to execute orders from a PLC or other type of computer.

With the dual probe possibility, you are able to first leak test an object with the automatic probe and immediately thereafter do leak locating with the hand probe. The Sensistor ILS500 is the perfect system for solutions ranging from manual sniffing to being a key component in a fully automatic system.

The ILS500 is also avaliable as a filler version only. The filler version excludes the hydrogen detector and can be used to fill helium tracer gas in combination with helium leak detectors. All ILS500 models are available as both standard and high pressure.

### FEATURES AT A GLANCE

- Fully integrated leak testing system, includes gas handling, tooling control and leak detection
- Fast test procedure set up, guided installation on color touch display
- Reliable leak detection, highly selective and sensitive hydrogen sensor
- Dual probe possibility enables manual leak locating after chamber test
- Fast sensor reaction and fast recovery for fast testing and short cycle times
- Simple user interface makes the ILS500 easy to learn and to operate



Sensistor ILS500 Leak Detection System



Sensistor ILS500 F Leak Detection Filler

#### IMPROVEMENTS AT A GLANCE

- Incorporates the latest model of the hydrogen leak detector Sensistor ISH2000 (V6.2)
- New color touch screen for easy setting of the functions
- New hand probe P50 with multi-function button, leak indication and LED-lights
- Hand probe sensor can be changed by the operator
- Number of recipes increased to more than 100
- Ready interface to communicate with the helium sensing INFICON T-Guard
- Downloads and back-ups through USB port
- Possibility to customize password levels

# **SPECIFICATIONS**

Minimum detectable leak rate Detection Mode with P50 standard probe Analysis Mode with P50 standard probe	$1\times10^{-7}$ mbarl/s or cc/s with 5% $H_2$ 0.5 ppm $H_2$ ; $5\times10^{-7}$ mbarl/s or cc/s with 5% $H_2$		
Start time	1 min		
Calibration	External reference leak or calibration gas		
Supplies	Electrical: Mains Voltage: Single Phase, 85-260 V (ac) / 47-63 Hz Current: 1.0 A @ 100 V (ac) / 0.45 A @ 230 V (ac) Power Rating: 120 W max. / 33 W typical average		
	Compressed Air: Pressure: 0.35 – 0.7 MPa (50 – 100 psi). Peak Consumption @ 0.6 MPa (87 psi): 240 l/min (508 SCFH)		
	Tracer gas: Recommended Composition: 5% H <sub>2</sub> / 95% N <sub>2</sub> Pressure: 0.005 – 1.0 MPa (0.72 – 145 psi)		
Pneumatic	Evacuation: Max Vacuum: -85 kPa (-12.3 psi) Capacity: 0.4 s/l to -50 kPa (-7.2 psi), 1.5 s/l to -80 kPa (-11.6 psi)		
	Filling: Capacity at 1 MPa supply: 0.1 s/l to 0.1 MPa (14.5 psi), 0.5 s/l to 0.6 MPa (87 psi)		
	Tooling Output Valves: Valve type: Normally closed, 3/2 valve Qn: 160 std I/min. Cv: 0.16 USGPM/psi		
	Gas and Air Connection: Female ISO 3/8 in. (ISO to NPT 3/8 in. adapters included)		
Environment	Temperature: 10° — 40°C (50° — 100°F) Humidity: 85% RH (non-condensing)		
Dimension (H x W x D)	295 mm x 275 mm x 330 mm (12 in. x 11 in. x 13 in.)		
Weight	17.6 kg (38.8 lb.)		
Communication ports	Ethernet: RJ45 RS232: male, 9 pin, D-sub		
I/O port signals	Output Capacity: max. 0.5 A / output (max. 2.5 A total), 24 V (dc) logic		

# **ORDER INFORMATION**

	Part no.		Part no.	
ILS500 versions		Accessories		
Sensistor ILS500*	590-570	AP29ECO Sampling Probe	590-035 (3cc/sec sample flow)	
Sensistor ILS500 HP*	590-572		590-036 (1cc/sec sample flow)	
Sensistor ILS500 F	590-571	No-Stop Maintenance Kit	590-680	
Sensistor ILS500 FHP	590-573	Spare Parts		
Accessories		Sensor for hand probe	590-292	
Hand Probe P50	590-780	C21 Probe Cables	590-161 (3 m, 9.8 ft.)	
Hand Probe P50 Flex	590-790		590-175 (6 m, 19.6 ft.)	
Robot Probe R50	590-920		590-165 (9 m, 29.5 ft.)	
Active Holder for hand probe	590-635	Reference leaks	See separate data sheet	

<sup>\*</sup>complete with Hand Probe P50 and 3 m probe cable C21  $\,$ 

