

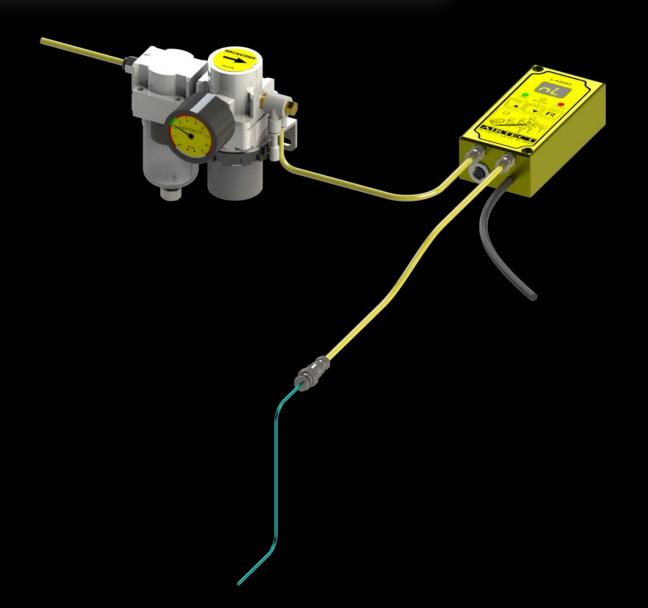
Plastic Leak Alarm System

INSTALLATION GUIDELINES

DETECT YOUR NOZZLE AND HOT RUNNER LEAKS EARLY!



LA500 INSTALLATION



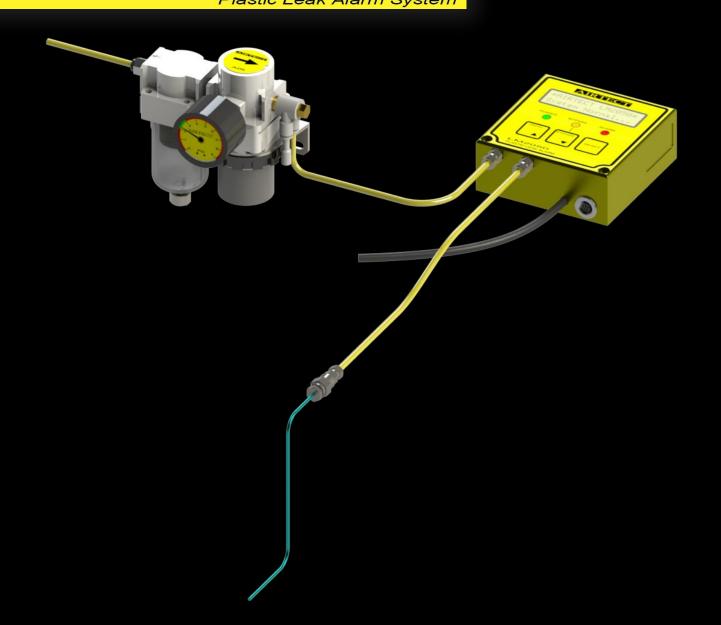


LA500 PRACTICAL INSTALLATION





LM2050 INSTALLATION





LM2050 PRACTICAL INSTALLATION

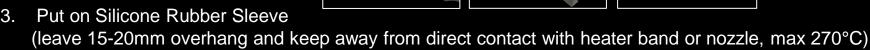




LM2050 and LA500 NOZZLE SENSOR TUBE INSTALLATION

FULL CUTTING RECOMMENDATIONS SHOWN LATER

- File Sensor Tube Flat
- 2. Ensure 1mm Clear Hole in Centre



- 4. Place close to nozzle...customer can decide depending on how soon an indication they need.
- 5. Fix the Sensor Tube securely!



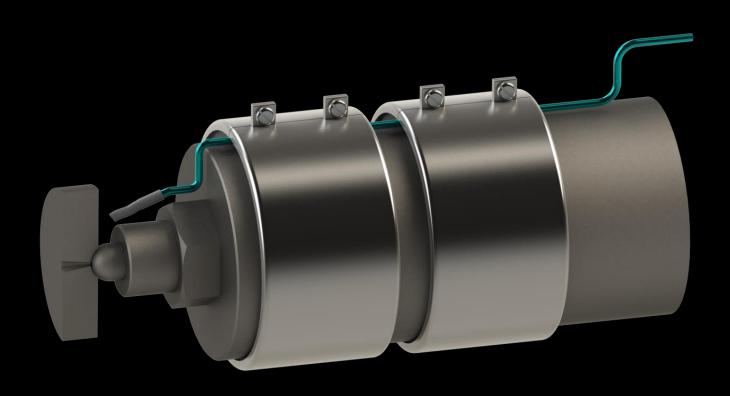








LM2050 and LA500 NOZZLE SENSOR TUBE INSTALLATION





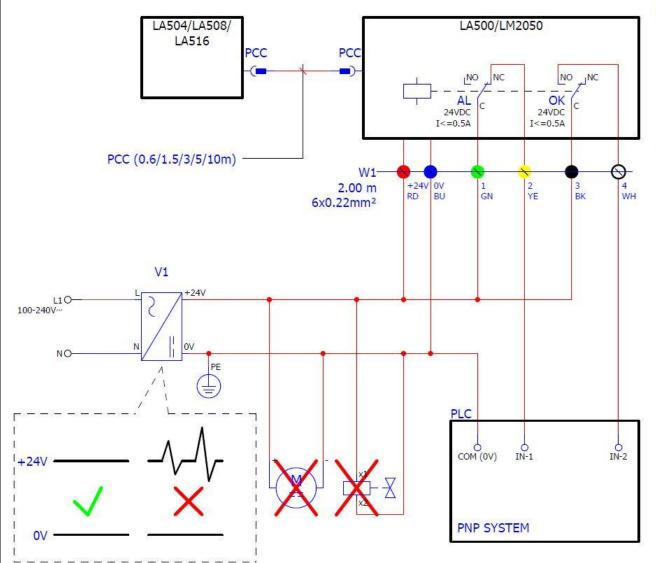
LM2050 and LA500 PRECTICAL SENSOR TUBE INSTALLATION





LM2050 and LA500 ELECTRICAL SCHEMATIC

(single nozzle and multi-zone)





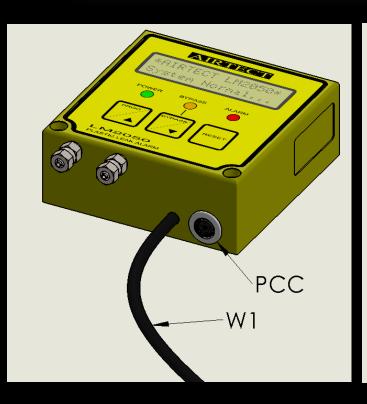


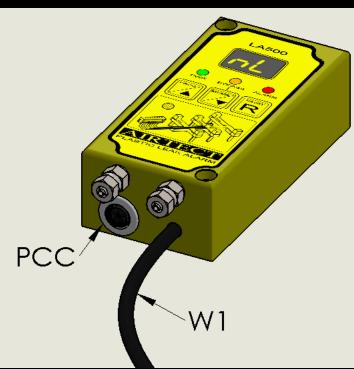


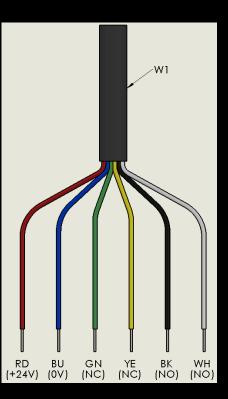


LM2050 and LA500 ELECTRICAL SCHEMATIC

(single nozzle and multi-zone)



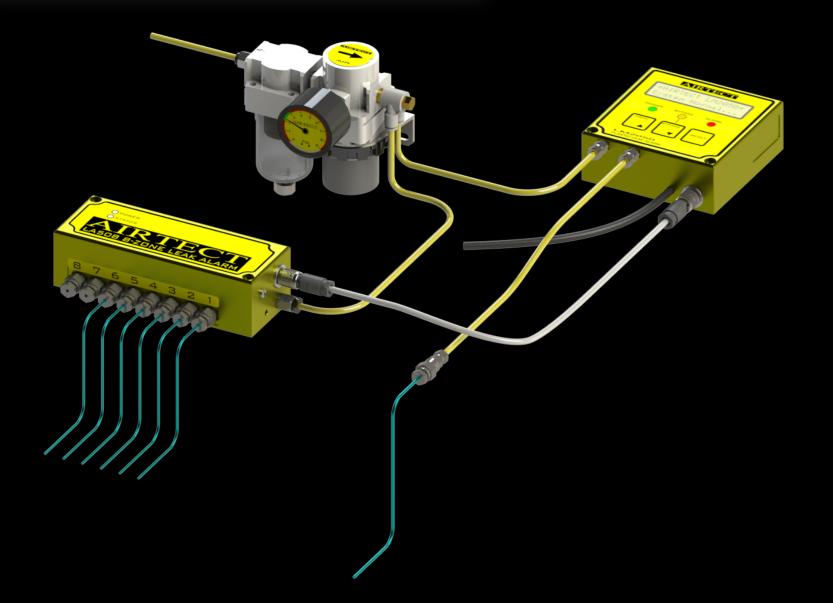






LM2050 INSTALLATION

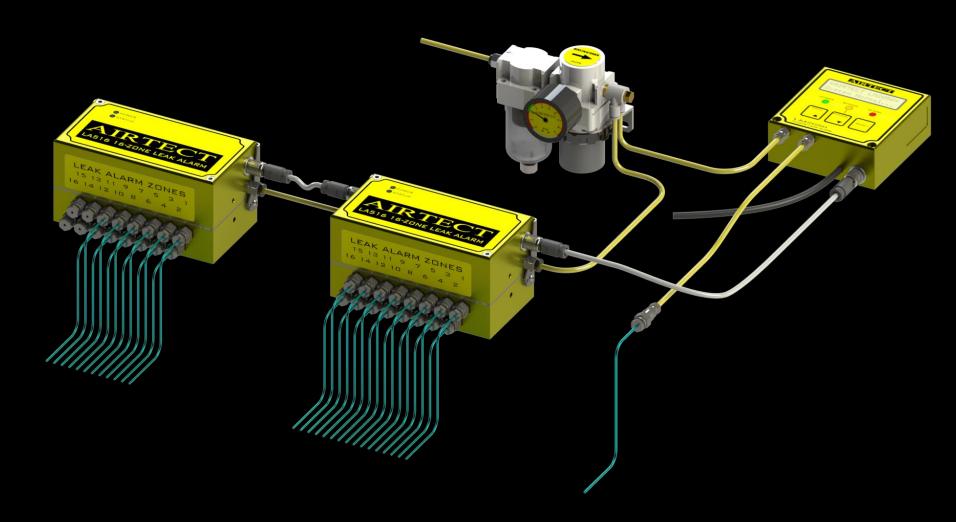
(single nozzle and 8-zone leak detection)





LM2050 INSTALLATION

(single nozzle and 32-zone leak detection)





LM2050 PRACTICAL INSTALLATION

(single nozzle and multi-zone leak detection)

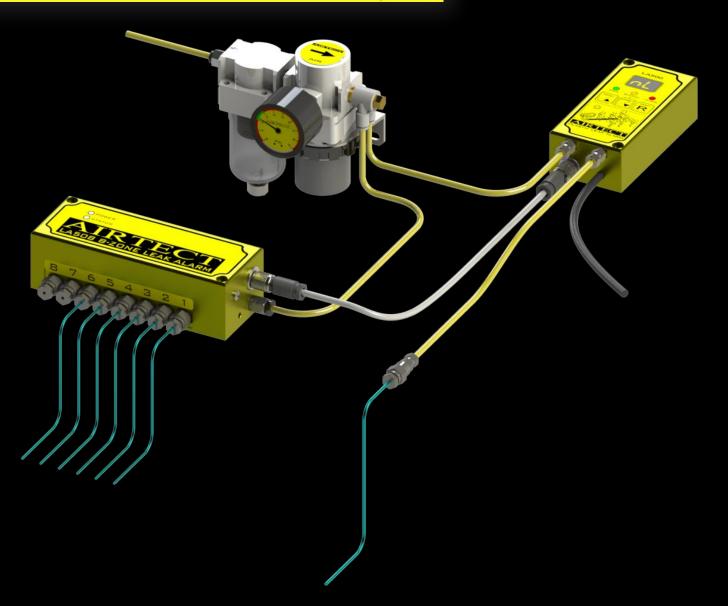




LA500 INSTALLATION

(single nozzle and 8-zone leak detection)



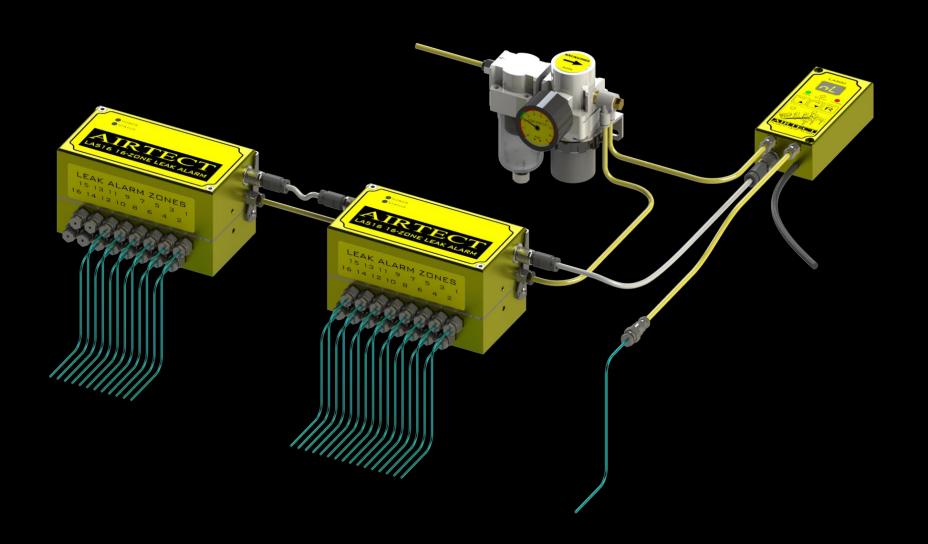




LA500 INSTALLATION

(single nozzle and 32-zone leak detection)

Plastic Leak Alarm System





INSTALLATION GUIDELINES:

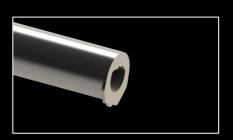
- 1. The DC Power Source must be interference free. This means no Electromagnetic Interference (EMI) caused by solenoids and servomotors etc.
- 2. The internal interlock relay contacts have a capacity to switch loads of 24Vdc at a maximum current of 0.5A.
- 3. Ensure neat workmanship and run the wiring and plastic tubing within the machine enclosure where possible.
- 4. Ensure that both ends of all sensor tubes are cut neatly so as to provide a clear inner sensor tube diameter of 0.8mm (for 1.6mm tube) and 1mm (for 2mm tube).
- 5. When using expansion manifolds (LA504, LA508 etc) ensure the LA500 or LM2050 has been programmed to accept the manifold/s and that it/they are connected, otherwise a communication alarm will be displayed and vice-versa if the LA500 or LM2050 has not been programmed and a manifold is connected, a communication alarm will be displayed.
- 6. Electrical power should only be switched on AFTER the sensor tube installation is complete and the air supply is energised to allow the 'self teaching' function to work.
- 7. When using Modular systems, the manifolds must be mounted on the manifold base before applying electrical power as all mould leak sensor installations will be somewhat different.

MANIFOLD LED INDICATIONS POWER LED SHOULD BE CONTINUOUSLY LIT (NORMAL) STATUS LED SHOULD FLASK EVERY 3-4 SECONDS (NORMAL) STATUS LED WILL FLASH QUICKLY FOR COMMUNICATION 'DATA ERROR' WARNING STATUS LED WILL FLASH RED / GREEN QUICKLY FOR 'INTERNAL SENSOR ERROR' WARNING



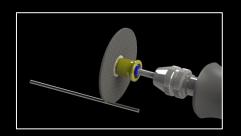
SENSOR TUBE CUTTING RECOMMENDATIONS





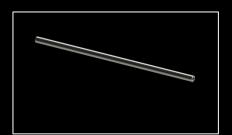






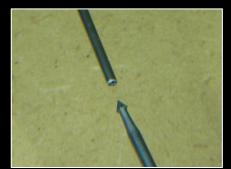










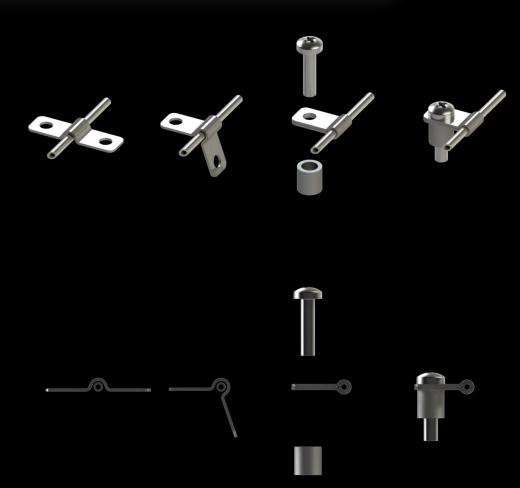






STAINLESS TUBE BRACKET INSTALLATION

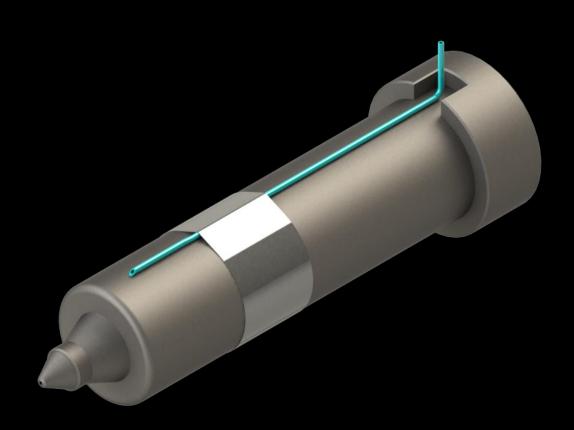
Plastic Leak Alarm System





SENSOR TUBE INSTALLATION RECOMMENDATIONS

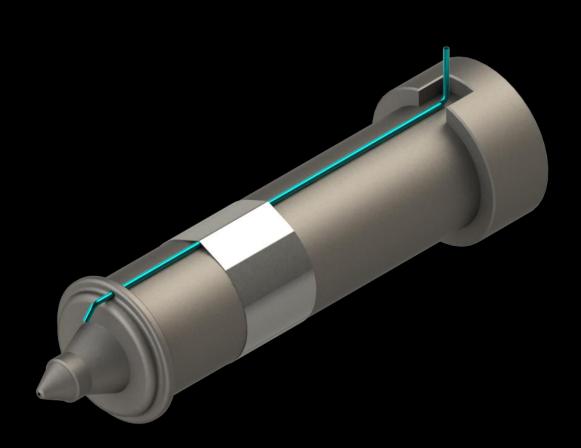
Plastic Leak Alarm System





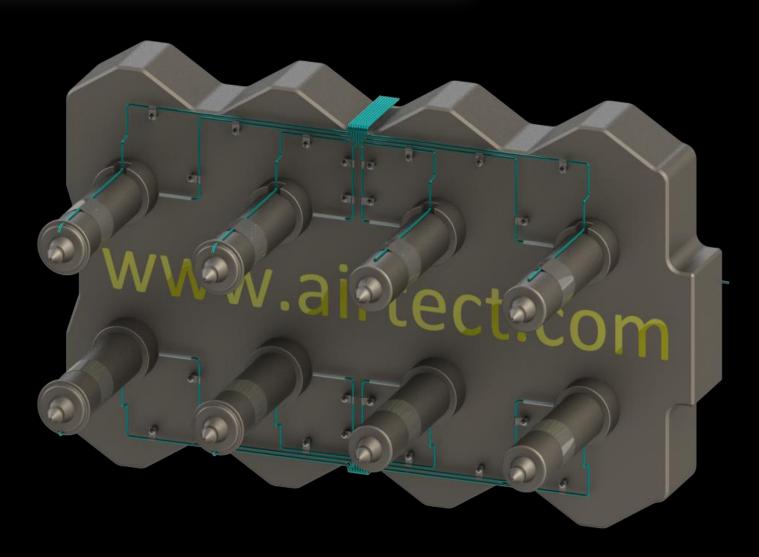
SENSOR TUBE INSTALLATION RECOMMENDATIONS (NOZZLE WITH RING)





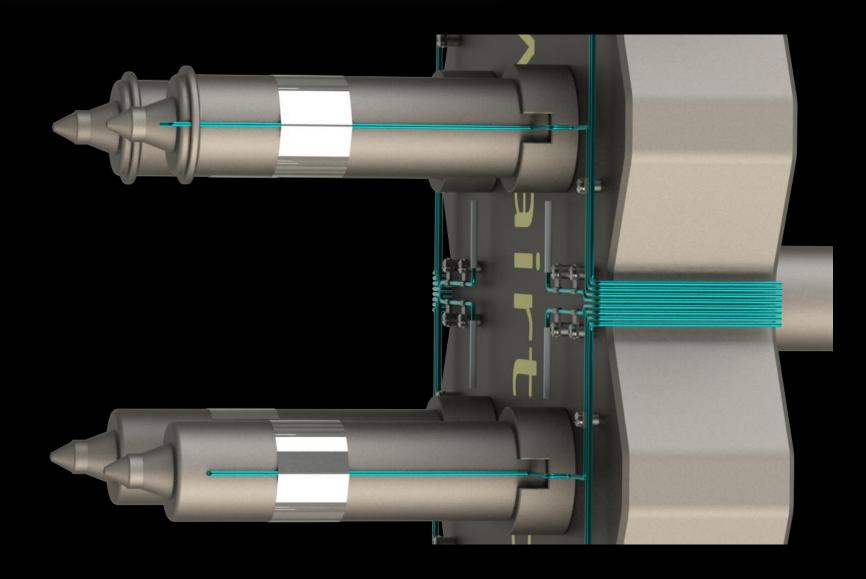
Plastic Leak Alarm System

SENSOR TUBE INSTALLATION RECOMMENDATIONS
16 ZONE, 8 at NOZZLE TIPS + 8 on MANIFOLD



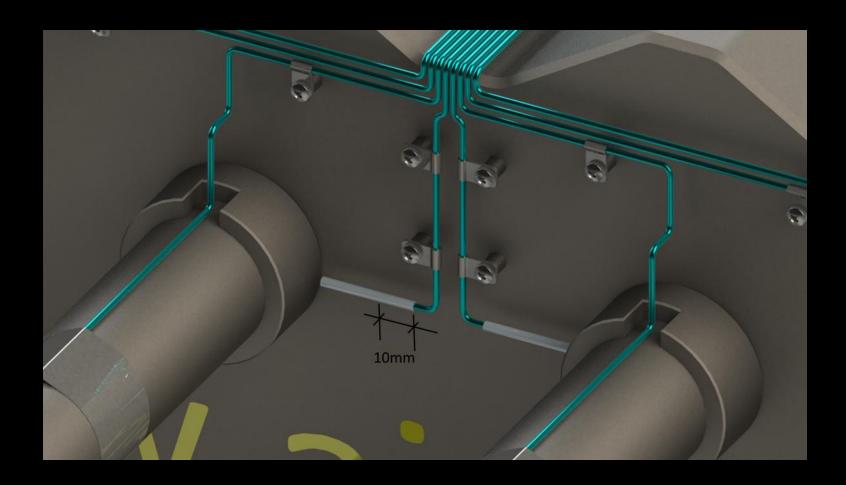


SENSOR TUBE INSTALLATION RECOMMENDATIONS



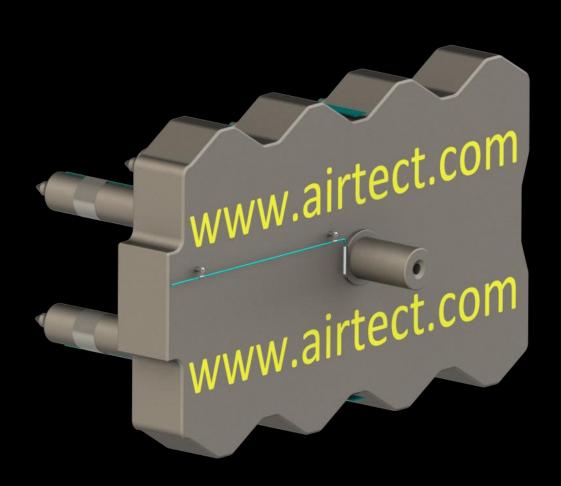


SILICONE TUBE INSTALLATION RECOMMENDATIONS





SENSOR TUBE INSTALLATION RECOMMENDATIONS



MULTI-ZONE LEAK DETECTION SYSTEMS ARE AVAILABLE WITH OR WITHOUT PROGRAMMABLE CONTROL

PROGRAMMABLE CONTROL ADVANTAGES (USING LA500 or LM2050)

- PROGRAMMABLE FUNCTIONS INCLUDE LEAK REPORTING AND INTERLOCK RELAY DELAY TIMERS, MANIFOLD TEMPERATURE ETC
- MULTIPLE MANIFOLD CONNECTION SYSTEMS (DAISY CHAIN).
- PROVIDE LEAK DETECTION AT MAIN INJECTION NOZZLE

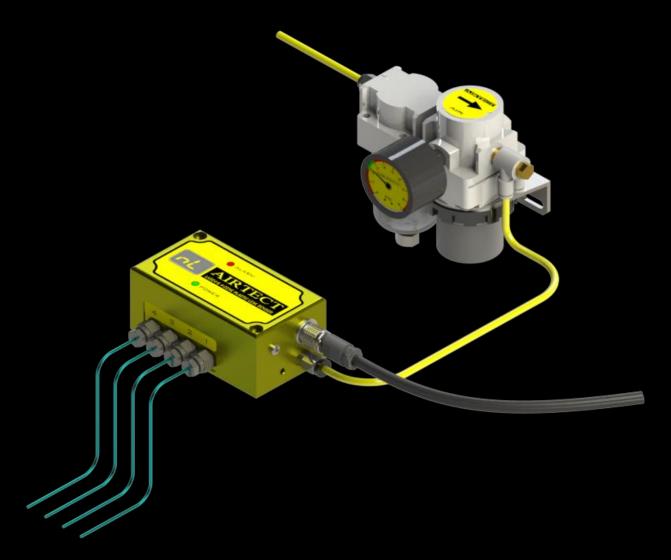
NON-PROGRAMMABLE CONTROL ADVANTAGES (STAND-ALONE MANIFOLDS)

- LOW COST ALTERMATIVE
- LEAK LOCATION DISPLAYED ON MANIFOLD
- FIXED 10 SECOND INTERLOCK RELAY DELAY TIMER
- AVAILABLE IN FIXED OR MODULAR UNITS, SAME AS ABOVE.
- AUTO-RESET OF ALARMS
- SAME ELECTRICAL CONNECTIONS AS LA500/LM2050
- NO PCC CABLES

NOTE: THESE UNITS CANNOT BE EXPANDED (DAISY CHAINED)

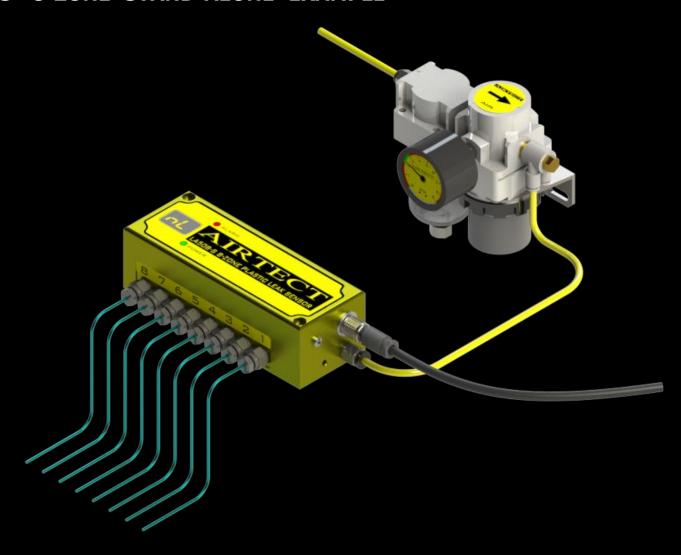


LA504S 4-ZONE 'STAND-ALONE' EXAMPLE



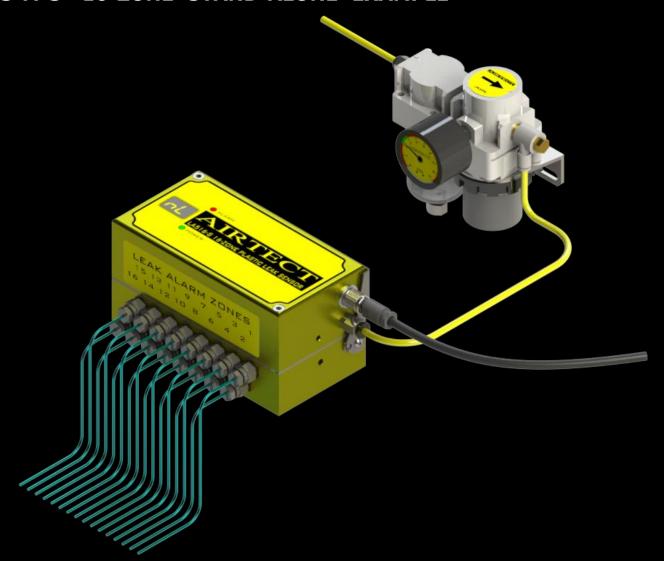


LA508S 8-ZONE 'STAND-ALONE' EXAMPLE





LA516S-M-S 16-ZONE 'STAND-ALONE' EXAMPLE



FREQUENTLY ASKED QUESTIONS

- Q: How much compressed air is used?
 A: 0.05 Litres per minute per sensor of compressed air at 2PSI.
- Q: What is the difference between the LA500 and LM2050.
 A: There is no functional difference. Only the Clear Text LCD display with multiple language options.
- Q: How much DC power is required?
 A: 24Vdc @ 150mA average for LM2050 + LA508. Please note the DC power Source must be free from Electromagnetic Interference (EMI), caused by many devices such a solenoid valves, servo motors etc working on the sale DC power line. Good electrical practice will eliminate all potential problems.
- Q: How long can the stainless steel sensor tubes be?
 A: The design is for a maximum of about 5 meters.
- Q: What is the minimum bend radius for the stainless steel tubes without affecting air flow?
 - A: R1.6mm for the 1.6mm diameter tube and R2 for the 2mm diameter tube.
- Q: Where is the Silicone Rubber tube used?
 A: At the end of the stainless steel sensor tube at the main injection nozzle. It is also used within a Hot Runner mould where the temperature is less than 270°C.



DESIGNED AND MANUFACTURED BY:

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