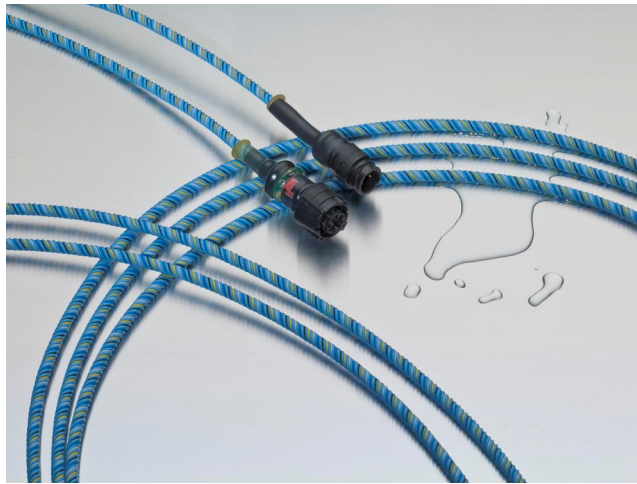


FG-EC SENSING CABLE TROUBLESHOOTING PROCEDURES



How to analyze if a FG-EC sensing cable is working or defective? Please follow below procedures to test it.

PREPARATION OF THE TEST BENCH

1. Provide a working FG-SYS panel with the first circuit connected only. DO NOT power it on at this stage.
2. Install 2 working sensing cables FG-EC3 (or FG-EC7, or 15) on first circuit.
3. Terminate the circuit with FG-TMC.
4. Test this small installation: The panel shall read and display cables 001 and 002, then switch to surveillance mode. The Green LED's on each sensing cable shall blink.

TESTING THE SENSING CABLES

1. Power off FG-SYS panel.
2. Disconnect the first circuit between cables 001 and 002.
3. Exam visually the cable you want to test, make sure it is dry and clean, the external wires, the connectors and thermo shrinkable tube are not broken. Then connect this cable between cable 001 and cable 002.
4. Power on FG-SYS panel.

5. FG-SYS panel shall display cables 001, 002 and 003. Wait 1 minute after it goes to surveillance mode, if no alarm is active, it means the cable under test is not broken.
6. If FG-SYS panel display doesn't show all the sensing cables, and give alarm after goes to surveillance mode, the cable under test has problem. You may encounter one of below situations:
 - FG-SYS panel displays "cable 002 cablebreak at 0 m", it means any internal wires of the cable under test is broken.
 - FG-SYS panel displays "cable 002 cablebreak at 1 m", it means any external wires of the cable under test are broken.
 - FG-SYS panel displays "cable 002 leak at xx m", please check if the cable under test is exempt of any contaminations, especially near the thermo shrinkable tube. Clean carefully the cable and re-start the steps 1 to 6 in this part.

LEAK STIMULATION ON THE SENSING CABLES

1. Following above steps, if the testing shows the cable under test functions well, you may follow below steps to simulate a leak.
2. Pour 10 ml water at the beginning of the sensing cable under test (cable 002). After 30 seconds the red LED on the cable will begin to blink (instead of the green one) and the FG-SYS LCD will display "cable 002 leak at 1 m".
3. Remove the sensing cable from water and carefully clean it. After 5 seconds the green LED on cable will blink again and the FG-SYS panel will display "End of fault on cable 002".
4. Power off the FG-SYS panel and remove the sensing cable under test. The stimulation is now over; it shows the cable under test functions well.
5. In the contrary case, the cable is defective and shall be replaced if it's under guarantee period.