



SPARK TEST APPARATUS



The spark test apparatus serves for testing intrinsically safe circuits. The test is based on whether the tested equipment is capable of producing sparks, arcs in normal operation, capable of igniting the gas mixture specified by the standard, in the given chamber, under given conditions.

The apparatus includes a built-in gas mixer producing the gas mixture for testing and calibration with a high accuracy. The actual measuring process is completed with the purging of the chamber after the measuring process, aiming at the removal of the needless combustions products. All the elements required for the operation of the apparatus are assembled in only one compact unit. As soon as the gas mixture required for the test is in- and outlet and the electrical connection is made, the apparatus is ready for operation.

The spark test apparatus is completed with a test gas mixture producing unit, which can be placed in and removed from the apparatus like a module.

The measuring process starts with the pressing of one button only; the apparatus runs down the test in automatic operation mode then evaluates the obtained results and proceeds accordingly, e.g. performs calibration check. The calibration unit

produces the calibration currents according to the safety factor 1.0 and 1.5.

Technical parameters:

Computer controlled automatic apparatus

Controlling: keyboard, mouse

Gas connections: FESTO Ø 8mm és Ø 10 mm

Inlet pressures: gas – 1 bar
air – 1 bar

Accuracy of mixture: 1 – 99 tf. %-ig, $\pm 0,1$ tf. %

Electrical connection: 230 VAC 50 Hz

Inlet electrical parameters:

- input resistance
- input inductance
- input capacitance
- electrical strength

according to standard IEC 60079-11