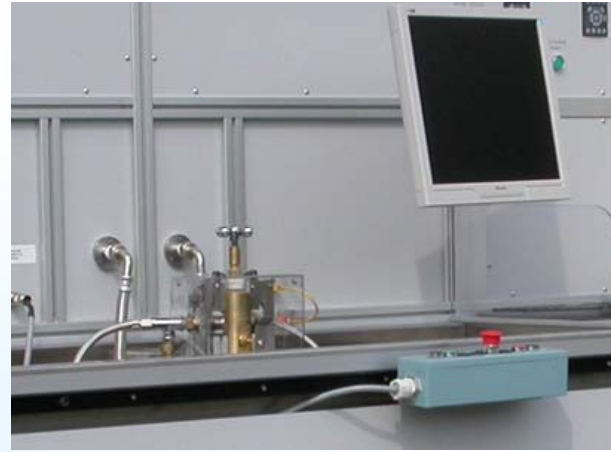


Testing in assembly line executions for thermostatic mixers

BPR-OPZ-TP

Automatic device to test the thermostats at 1 station

The device optimises the test cycle of a thermostat with particular reference to the verification of the range of regulation and the security test for failure of a water and is recommended for inspections of production line. A very intuitive video screen verifies immediately that all test parameters are included in the range.



The modification includes installation of:

- System to clamp the piece with hot or cold air and drain the residual pressure.
- Control push button panel of sequence.
- PLC to realise the sequence of automatic inspection.
- Connection plugs for pneumatic and hydraulic connections.
- Basic tools to automatically block the piece for a basic tap (e.g. external, built in other...) with pneumatic cylinders, safeties, push button panel (other equipment is available on request).
- Specific software depending on the type of standards (NF, EN 1111 or D08) to adopt.

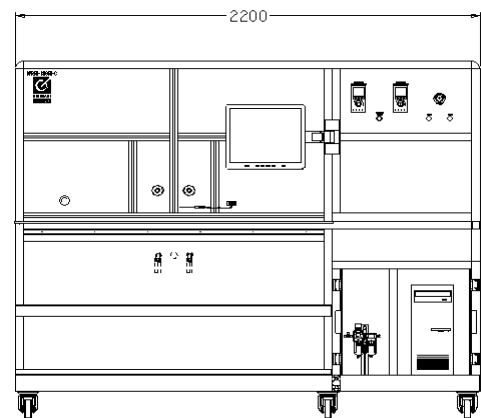
BPR-OPZ-2TP

Automatic device to test thermostats at 2 stations

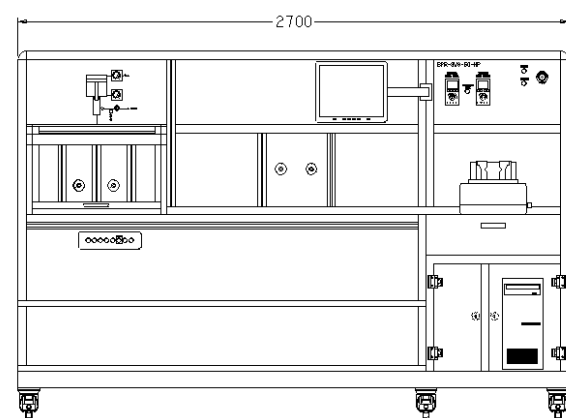
- N° 2 inspection stations
- Productivity: approx. 100 pieces an hour with presence of one operator
- Automatic control of pressure, minimum and maximum temperature, mixed, failure of cold and hot water and final restoration.
- Computerised management of tests and database.
- KAW 510+ external hot and cold water production unit.



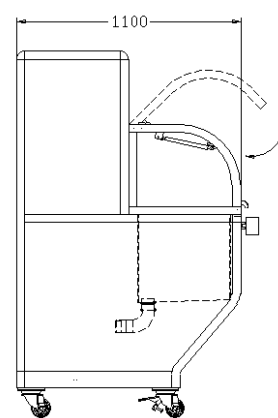
Dimensions



Bpr-Swg



Bpr-Swg+Opz HP



SANITARY TAPS TEST BENCHES BPR-SWG

SPECIAL VERSIONS AND ADDITIONAL TEST DEVICES



The test benches BPR-SWG series can be designed with the rig according to D08 standards or for automatic test of thermostatic mixers. They can be completed with the installation of specific test devices to carry out all the tests required by the international standards.



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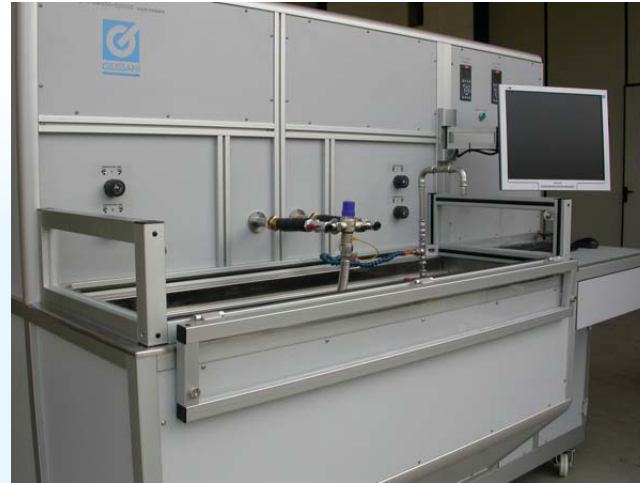
Executions and applications in compliance with D08 standards

BPR-OPZ-D08

Hydraulic system rig according to BS-D08 standards

With this execution the bench test satisfies construction requirements and tests of the D08 standards (TMV3):

- System with valves and dimensions as required by the standards.
- Power supply with 2+2 thermostatic mixers placed on the hot and cold line with servo-piloted interception valves, with this execution it is possible to vary the temperature of feeding to the thermostat setting, in addition to the network temperature, two different values on the hot and cold water (responding to requirement of standards on the change of feeding temperature).
- Specific **AQ2TB-OPZ-D08** software application to pilot jumps in temperature, open drain waters and cooling and differential measurement tests.



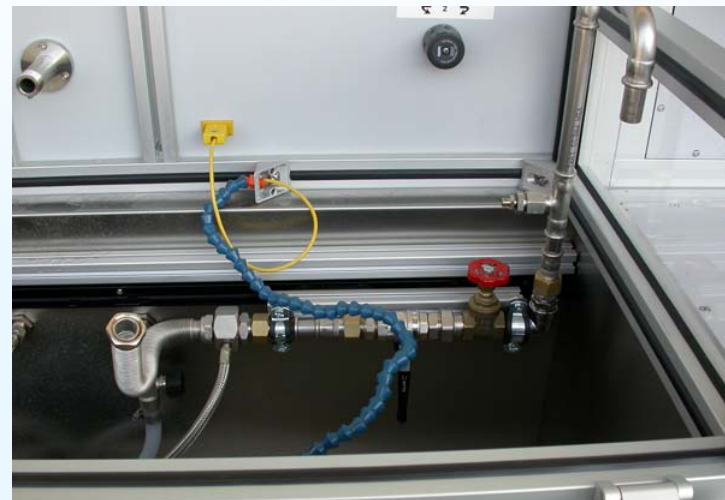
BPR-OPZ-DP

Device to test delta pressure downstream of the thermostat

This test device is used to inspect the built-in mixers using a hydraulic system located downstream of the mixer and provided with a pressure plug to standard with relevant pressure transducer, temperature measuring device, flow rate adjuster downstream. The system is manufactured in accordance with standard D08.

The device can be moved on a guide inside the testing tank.

The application of the device is in accessory at the D08 system and to the software for differential measurements.



BPR-OPZ-CA

Water column manometer

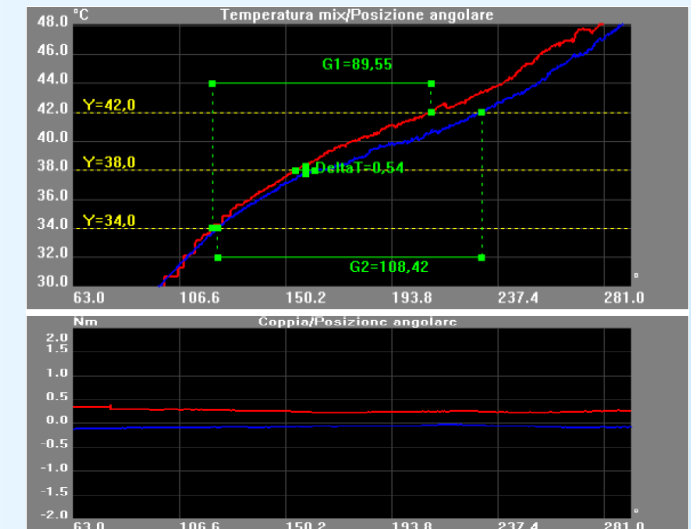
- Device to measure low pressure that can be installed on the bench and consisting of a water column manometer with calibrated glass tube field 0÷1000mm water column prec. $\pm 0,2\%$.
- Support in anodized aluminium profile with two pressure plugs located parallel to the test plugs of the bench, with fixing bracket and translation device upwards with handle to block.
- The device takes a very precise measurements of the dynamic delivery pressure in the field up to 150 mbar.

Sensibility and hysteresis test device for thermostatic mixers



BPR-OPZ-C

- Device to detect the curves of sensitivity and hysteresis of single lever and thermostatic mixers in agreement with the EN 1111 and EN 817 standards.
- The device performs the automatic movement of the tap with support for the transmission motor of the motion adjustable on three axes.
- Motor with C.C. drive, with gear motor, torsion meter and transmission with telescopic cardan shaft.
- Control and regulation of the speed, angle position, sense of rotation, torque provided and resistant torque directly through computer.
- The device activated the lever or the knob to regulate the temperature detecting the graphic of the temperature of the mixed water in relation to the angle position and graphics of the resistant torque.
- **AQ2TB-S+F-DRIVE** control application software of the motor acquisition and assessment final of the test with the automatic calculation of the hysteresis and optimal lever radius.



Test device for static pressure and water hammer



BPR-OPZ-HP

Operating field: 0/100 bar in static pressure

0/100 bar with pulsing pressure frequency maximum 3Hz.

Pneumatic-hydraulic device to generate static pressure and water hammer with possibility to feed the tap being tested through the hydraulic section on the bench, with hot or cold water and perform the test with static or pulsating pressure.

The pressure booster is piloted directly by the computer with an electro pneumatic valve, the application involves the addition of two dedicated pressure plugs and a protection hood that can be opened upwards, to install this application the length of the test bench BPR-SWG must be increase to 2700mm.

Dedicated **AQ2TB-PULSE-AUT** software application



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