HORIBA

Sample gas

measuring and controlling volume flow rates

Gas Sampling System

GPS5-8D

JQA-E-90039 (Head Office/Factory) ISO 14001 Award of Certification
Horiba received these standards for excellence from the International Organization for Standardization.
ISO 9001 JQA-0298

CE marking compliant

HORIBA gas samplers are suitable for volume-correct taking of gaseous samples during Imission and emission measurements. This device can be used wherever gases and gaseous components must be inspected.

Since this device is an innovation, its concept is based on the use of state-of-the-art technology. Thermal mass flow meters are used for the volume measurements, which refer to direct volume-correct measurements related to standard or operating liters. The control function is taken over by a microcomputer and the operation of the devise is carried out via the touch display on the front side. All important information, e.g. flow rate, collecting time, remain time, start time, etc. are indicated by means of an TFT display. This display also serves the purpose of programming the computer in plain text. A rotary slide valve pump is used as a suction pump, whereby the flow rate is regulated by the digital mass flow regulator. The devise can be equipped with up to 8 input channels. These channels can be activated by the timer control system up to 365 days in advance. The possibility of activating a measurement by means of an externally connected mA signal is also available (Option).

Operation:

- Flow sensors of the HI-TEC series F-200 operate according to the principle of heat transport, whereby the differential temperature T is measured in front of and after the sensor, a heated partial piece of a capillary tube. A part of the gas flows through the Sensor and is warmed up by the heater, while the rest runs though a bypass. Consequently the measured two temperatures drift apart. The temperature difference is directly proportional to the mass flow. Electrically, temperatures T1 and T2 are in fact two temperature dependent resistors. The signals measured in the sensor are amplified to electric signals. All common output signals are available and one can be selected. In the case of mass flow control, the output signal is continuously compared with a setpoint signal from a voltage source. Any deviations between setpoint signal and measured signal are translated into a control valve adjustment until the two signals are identical.

Technical data:

Type:	HORIBA GPS5-8D
Function:	measuring and controlling volume flow rates
Data indication:	display, integrated report printer and history memory
Ambient temperature:	5 - 40 °C
Power Input:	230V / 50 Hz max. 60 VA
Weight electronic unit:	8,5 kg
Dimensions:	500 x 420 x 135 mm
Display:	5,7" TFT 640 x 480 Pixel with Touch
Gas inlet:	up to 8 inlets
Flow range:	typically 100 ml/min to 5 l/min
Report print:	option

http://www.horiba.com

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Example for adating absorbtion tubes and water traps / filters:

⚠ Please read the manual before using this product to assure safe and proper handling of the product.

- The contents of this data sheet are subject to change without prior notice, and without any subsequent liability to this company.
- It is strictly forbidden to copy the content of this data sheet in part or in full.

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