



The gas mixer of the future

Tailored to your requirements

The PCU10 Mix is suitable for almost all technical gases and applications. Electronic control technology which has been tried and tested over decades, MFC technology, and standardised interfaces permit high-precision gas mixtures and process safety as well as straightforward integration into existing applications.

Advantages

- Suitable for 2, 3 or more gases
- Ex version also available
- High dynamism for different flow rate ranges
- Can be combined with a buffer tank
- Integrated intake pressure monitoring using flow rate monitoring
- Integrated monitoring of set and actual values of all parameters
- Gas mixtures which are stable over the long term, independent of input and output pressure
- Reliable and fail-safe
- Constantly high mixing precision +/- 0.5%
- Freely adjustable gas mixture from 0-100%
- Minimum withdrawal volumes possible in millilitres
- External control and monitoring of all relevant parameters
- Simple and intuitive operation via 7" colour touch-screen display (option)
- Standard analogue and digital interfaces
- Metal housing for laboratory applications
- Stainless steel housing for industrial applications
- Low maintenance
- 3-year warranty

Mode of operation

The integrated PCU10 controller permits selection of pre-set parameters, evaluation of alerts and flow rates of individual gases, thus providing quality control and cost control. The ease of integrating the PCU10 into existing processes using standardised digital and analogue interfaces makes it possible to use this device in all automated processes.

The gas mixing system works independently of all external influences, such as changes in pressure or temperature and always delivers an evenly high-precision gas mixture during the entire process! Thanks to the modular design, multiple MFC's can be fitted quickly and easily, forming compact units, and can be combined with all the components needed for ready-to-use mixer units.



optional



optional



optional

Areas of application

- Metalwork
- Food technology
- Drinks industry
- Medical technology
- Laboratory applications
- Leak testing facilities
- Glass processing
- Laser technology
- Coating systems
- Burner control
- Flame control
- Gas analysers (dilution units)
- Gas dosing
- Calibration facilities
- Calibration of analysers
- Production of test gases
- Surface coatings
- Oven construction

Rev.II_042019_PCU10 Mix_engl • Subject to alterations

HTK gas mixers

This is what makes our gas mixing systems stand out

Gas mixers produced by HTK Hamburg are robust and built for a long working life. By selecting high-quality materials during manufacture, our in-house production of components, and straight-forward assembly using a modular system, our gas mixers offer added value in production and increase the quality of your processes.

- Extremely precise & rapid control
- All components are modular
- High reproducibility
- Calibration with real gas
- Multiple gases per device
- Great potential savings for mixed gases
- Independent of temperature and pressure
- Easy to maintain and service
- 3-year warranty



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Technical data	
Model	PCU10 Mix
Gases	Air, O ₂ , N ₂ , He, Ar, CO ₂ , H ₂ , CH ₄ , C ₃ H ₈ (other gases and gas mixtures upon request)
Mixing range	0-100% per gas type
Precision	better +/- 0,5%
Reproducibility	better +/- 0,3%
Reaction speed	+/- 500 ms
Pressure range	0.1-10 bar gauge
Flow rate ranges	Type A 0 ... 25 mln/min to 0 ... 600 mln/min Type B 0 ... 600 mln/min to 0 ... 6000 mln/min Type C 0 ... 6 ln/min to 0 ... 60 ln/min Type D 0 ... 60 ln/min to 0 ... 450 ln/min
Ambient temperature	0-50°C
Connections	G ¼" or G ½" internal thread
Analogue interface	0..20 mA, 4..20 mA, 0..5 V, 1..5 V, 0..10 V, 2..10 V
Digital interface	RS-485; Modbus RTU (Slave); Lab View-VIs available Option: ProfiBus DP-V0, DP-V1 / Profinet RT / EtherCAT
Dimensions	approx. B = 350mm, H = 160mm, T = 300mm
Weight	approx. 7 kg
Buffer tank	When using the gas mixer with provisions for synchronised withdrawal, we recommend using a buffer tank. The volume of the buffer tank needs to be adjusted to the flow rate range. Feel free to get in touch with us to discuss this.
Power supply	24 V DC or 230 V AC
Protection type	IP 54
Certifications	CE conformity UL certification (optional) ISO 9001:2015

Overview of our models



PCU10 Mix VP

Fully electronic gas mixer for 2 or 3 gases, especially for operation on vacuum, deep drawing, flow wrapping or chamber packaging machines from all manufacturers.



PCU10 Mix FP

Fully electronic gas mixer for 2 or 3 gases especially for operation on flow wrapping machines from all manufacturers.