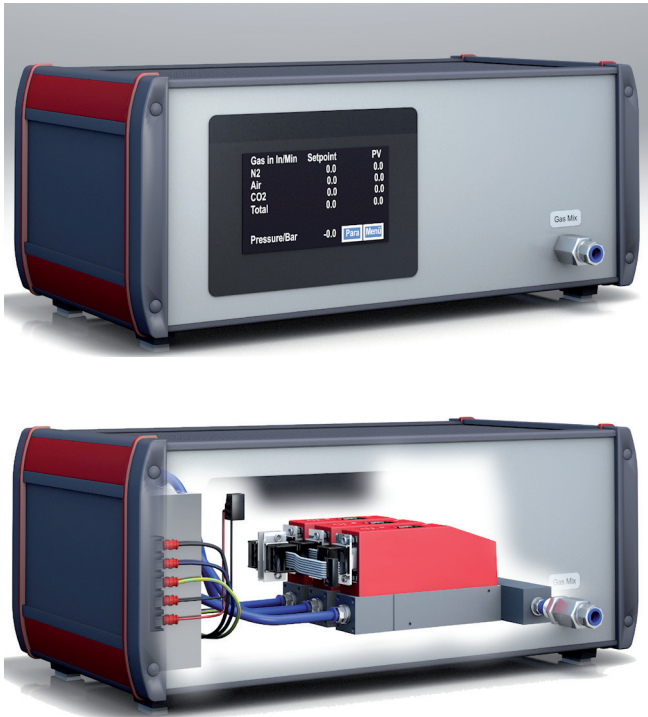


# PCU10 Mix



Our “PCU10 Mix” Gas Mixer is designed to produce high-precision, consistent gas mixtures from up to four component gasses. It is suitable for a large number of technical applications, such as glass processing, burner control, laboratory and medical applications. It is ideal for applications with low gas consumption levels where high mixing precision is required.

The gas mixer PCU10 Mix incorporates fully electronic thermal flow regulators which guarantees high precision, stable control and consistent reproducibility. The system is specifically designed to operate on the lowest gas withdrawal rates whilst maintaining the highest degree of mixing accuracy.

## Advantages

- rapid compensation for disturbance variables and reaction to set value changes through inline measurement directly in the gas flow utilising new CMOS sensor technology
- high mixing accuracy and consistency
- choice of freely programmable recipes /mixes
- optimised gas consumption ensures low operating costs
- handles mixed gas withdrawal rates from a few ml/min to m<sup>3</sup>/h, depending on the model
- reliable reproducibility of the process parameters
- high long-time stability by compensating for disturbance variables such as changes in pressure, temperature and process
- quality and cost control by recording the exact flow rates of the individual gases
- optional MODBUS and/or Profibus interface for easy integration with modern control systems
- no buffer tank necessary
- various premixes no longer necessary
- elaborate installation work is eliminated
- easy operation via touch-screen
- clearly legible display
- low maintenance
- considerably reduced construction costs
- less space is required

## High process reliability

- permanent control of the set nominal values
- electronic gas flow control, error messages or values for levels beyond pre-set limits will operate an alarm and actuate potential-free contact
- password-protected access to all adjustable parameters in order to protect the device settings
- totally unaffected by fluctuations in inlet pressure

# PCU10 Mix

## Options

- RS-232 data interface, USB, Ethernet
- the easyHTK MIX software allows intuitive operated data evaluation and optional control of the PCU10
- MFC control
- gas mixture control
- master/slave control
- different user levels with varying access rights

## Technical Data

Standard	Precision + 1.0% of the final value, dynamic 1:50
Hi-Performance	Highest precision and dynamic Precision $\pm 0.3\%$ of the final value and $\pm 0.5\%$ of the measured value, dynamic 1:100
Media	Air, O <sub>2</sub> , N <sub>2</sub> , He, Ar, CO <sub>2</sub> , H <sub>2</sub> , CH <sub>4</sub> , C <sub>3</sub> H <sub>8</sub> Other gases and gas mixtures on request
Reaction time	50 ms
Reproducibility	$\pm 0.2\%$ of the final value
Long-term stability	< 1% of the measured value p.a.
Working pressure range	0.2 - 11 bar a
Temperature	0 - 50°C
Materials	Anodised aluminium; electropolished stainless steel as option
Seals	KFM, NBR; EPDM as option
Pressure coefficient	< 0.2% / bar of measured value (typical N <sub>2</sub> )
Temperature coefficient	< 0.025% / °C of final value, measured range type
Flow ranges	A 0 ... 25 mln/min to 0 ... 600 mln/min B 0 ... 600 mln/min to 0 ... 6000 mln/min C 0 ... 6 ln/min to 0 ... 60 ln/min D 0 ... 60 ln/min to 0 ... 450 ln/min
Gas connection	Inner thread G 1/4" to 60 ln/min, G 1/2" to 450 ln/Min
Safety	Test pressure 16 bar a
Leakage rate	< 1 x 10 <sup>-6</sup> mbar l/s He
Protection	IP50
Power input voltage	24 V (18 - 30 VDC) or 230 V AC
Company certified to ISO 9001:2000 CE mark as per: EMC 2004/108/EC; EN 61326-1 Low Voltage Directive 2006/95/EC	

Rev. 072013\_PC10 Mix\_engl - subject to technical alterations