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MGA 11

Product Information

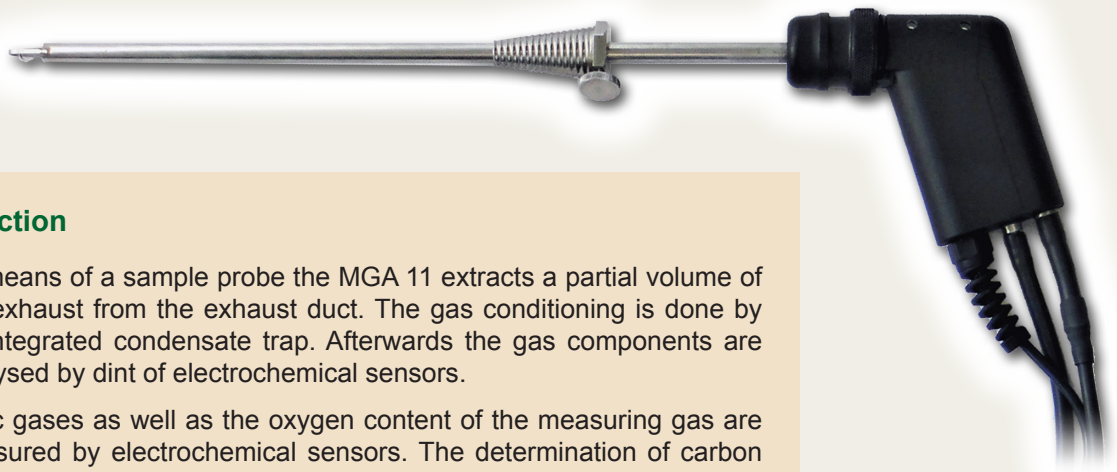
The multi gas analyser MGA 11 serves the temporary emission measurement of pollutants in flue gas (e.g. CO, NO, NO_2, SO_2, O_2, H_2S, CO_2). Thereby the device can be used mobile and up to seven gas components can be detected simultaneously.

Application

The MGA 11 is applicable all-purpose for measurement of emissions, raw gases or processes and, amongst others, it serves the exhaust concentration control in combustion plants with different types of fuel, the combustion optimisation, the process and safety management control and the control of atmosphere during heat treatment of steel.

Application examples:

- power plants
- refineries
- cement industry
- industrial exhaust air
- coal bunkers



Function

By means of a sample probe the MGA 11 extracts a partial volume of the exhaust from the exhaust duct. The gas conditioning is done by an integrated condensate trap. Afterwards the gas components are analysed by dint of electrochemical sensors.

Toxic gases as well as the oxygen content of the measuring gas are measured by electrochemical sensors. The determination of carbon dioxide is based on the absorption of non-dispersive infrared radiation.

Through the construction of the sample probe the pressure, draft and temperature are measured directly at the end of the probe tube.

Highlights of the device

- mobile use with easy and safe handling
- simultaneous measurement of up to seven gas components
- robust, slender housing
- robust metal connections
- standardised connection sockets for every kind of standard temperature sensors
- easy, menu-driven operating
- first-class price-performance ratio

Measuring ranges

Component	*Meas. range 1*	*Meas. range 2*
CO *:	0...625 mg/m³ (0...500 ppm)	0...12500 mg/m³ (0...10000 ppm)
NO:	0...400 mg/m³ (0...300 ppm)	0...6700 mg/m³ (0...5000 ppm)
NO_2:	0...205 mg/m³ (0...100 ppm)	0...2050 mg/m³ (0...1000 ppm)
SO_2:	0... 14290 mg/m³ (0...5000 ppm)	-
H_2S:	0...3040 mg/m³ (0...2000 ppm)	-
O_2:	0...25 vol. %	-
CO_2:	0...40 vol. %	-

** Measuring range 3 of CO: 25000 mg/m³ (20000 ppm)*

Technical Data

Housing:	housing with holding magnets and skid-proof device feet, 110 mm x 225 mm x 52 mm (w x h x d); weight: approx. 0.8 kg; illuminated condensate trap
Accessories:	- sample probe, fixed or changeable - condensate separator
Ambient temperature:	0...40 °C
Measuring methods:	- electrochemical cell (O_2, CO, SO_2, H_2S, NO, NO_2) - infrared photometer (CO_2)
Display/operating:	TFT colour display, 3.5“, background-lighted; menu-driven operating; languages: German, English; membrane keyboard
Accuracy:	< 2% of the respective measuring range
Zero point correction:	automatic
Sensitivity correction:	with test gas
Air pressure correction:	internal
Response time:	T_{90} < 180 s (depending on plant and chosen component)
Connections:	- probe connection at condensate separator - pressure connection respectively for draft and differential pressure - temperature connection respectively for air and gas
Interfaces:	USB, IRDA printer interface, SD card reader, Bluetooth
Power supply:	lithium ion battery or NiMH battery; charging via USB interface
Optional:	- temperature sensor (measuring range: 0...650 °C respectively 0...1100 °C) - differential pressure sensor (measuring range: -100...+100 hPa)

Special models are possible on request.