# MFA4 - L01/1A subject to change

# GAS ANALYSER MAPY 4.0

# for $O_2$ , $CO_2$ or $O_2/CO_2$







Analysing System for the monitoring of protective atmospheres in food packaging (MAP). For continuous analysis (inline) and also intermittent sampling via a needle e.g. from food packs. A flexible analyser to guarantee quality and productivity of production processes. Available as a single or double analyser for carbon dioxide and oxygen.

### **Benefits**

- minimum sample gas required for analysis of smallest volumes (e.g. food packaging) fast response time
- · fast measuring results of sampling
- simple to operate via touch-screen
- reliable steady measuring results and high accuracy through pressure compensation
- · simple calibration of sensor
- permanent monitoring of set limit values
- alarm signals are given if the set limits are exceeded and a potential free contact operates to e.g. auto-stop your machine to avoid quality problems
- easy to clean stainless steel housing for maximum hygiene, splash-proof
- USB connection for file transfer by USB memory stick
- Ethernet connection for network integration
- internal audible alarm
- · measured data storage
- administration of product names
- user management for measurement personalisation

### **Options**

- fully automatic calibration
- software GASCONTROL CENTER for recording of results (see separate data sheet)
- plug set for external connection of signals
- model for higher inlet pressures
- bar code scanner for product names or user selection

### **Equipment selection**

Applications	Analysis		Gases			
Food	Sampling	Continuous Analysis	O <sub>2</sub>	CO <sub>2</sub>	O <sub>2</sub> /CO <sub>2</sub>	Type of equipment
•	•		•	•	•	MAPY 4.0 S <sup>3)</sup>
•		•	•	•	•	MAPY 4.0 L 3)
•	•	•	•	•	•	MAPY 4.0 S+L 2)3)
•		•	•	•	•	MAPY 4.0 P 1) 3)

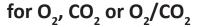
<sup>1)</sup> without pump, with inlet pressure regulation

All versions also available with zirconia measuring cell for  ${\rm O_2}$ . Please add  ${\bf Zr}$  to the model type.

 $<sup>^{2)}</sup>$  with 2 chemical sensors for oxygen

 $<sup>^{3)}</sup>$  gases to be specified

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### Measuring systems

	Gases	Measuring system	Measuring range	Repeatability	Response time	Service life
ontional	O <sub>2</sub> for sampling	chemical measuring cell	0-100%	± 0.2%	6 sec.	approx. 2 years in air
	O <sub>2</sub> for continuous analysis	chemical measuring cell	0-100%	± 0.2%	10 sec.	approx. 3 years in air
	O <sub>2</sub> for sampling and for continuous analysis	zirconia measuring cell	0-100%	± 0.1%	4 sec.	long lifetime
	O <sub>2</sub> for sampling and for continuous analysis	paramagnetic measuring cell	adaptable please indicate	dependent on measuring range	5 sec.	long lifetime
	CO <sub>2</sub>	infrared measuring cell	0-30% 0-100% please indicate	± 0.5%	6 sec.	long lifetime

Type MAPY 4.0

**Gases** O<sub>2</sub>, CO<sub>2</sub> or O<sub>2</sub>/CO<sub>2</sub> not for flammable, corrosive or toxic gases!

Temperature range

(gas/environment)  $0 \,^{\circ}\text{C}$  to +40  $^{\circ}\text{C}$  (+32  $^{\circ}\text{F}$  to +104  $^{\circ}\text{F}$ )

Gas connections

**Permanent measuring** lance, hose connection for PK 6/4 (exhaust)

integrated measuring gas pump

Sample measuring needle (exhaust) integrated measuring gas pump

Calibration (full automatic) hose connection for PK 6/4

Inlet pressure

 S-version
 max. 0.3 barg

 P-version
 1.5 barg – 10 barg

Calibration

**Gas consumption** approx. 1 l/min

 Calibration time
 the real gas consumption for calibration

is depending on installation. optimal: 240 sec/calibration

Alarm signals 2 potential free contacts for min. and max. settings

(adjustable for each gas)

Interfaces RS 232 with ASCII-output of date, time, measured value

USB by memory stick for profiles, product and user data

RJ45 Ethernet FTP-Server for profiles, product and user data, software Update

analog output 4-20 mA or 0-10 V

**Housing** stainless steel, splash-proof

Weight approx. 7.2 kg

**Dimensions (HxWxD)** approx. 110 x 300 x 260 mm

(approx. 4.33 x 11.81 x 10.24 inches)

**Voltage** 230 V AC 50 / 60 Hz

110 V AC 50 / 60 Hz

Power consumption 230 V AC / 0.12 A

Approvals Company certified according to ISO 9001 and ISO 22000

CE-marked according to: - EMC 2014/30/EU

- Low Voltage Directive 2014/35/EU

for food-grade gases according to:
- Regulation (EC) No 1935/2004

Designed for Oxygen Service in accordance with

EIGA 13/20 and CGA G-4.4: Oxygen Pipeline and Piping Systems

Cleaned for Oxygen Service in accordance with

EIGA 33/18 and CGA G-4.1: Cleaning of Equipment for Oxygen Servicestems