

# GAS FLOW CONTROLLER KD 500-1A MAPY



**Electronic flow control system for modified atmospheres for flowwrap machines in the food industry and for room atmospheres e.g. for the storage of fruit and vegetables.**

## Cost Reduction

- saves up to 30% of gas consumption by automatic controlling the required residual oxygen level to a pre determined set point
- the non-destructive gas analysis guarantees quality of the packages and economy of the production

## Easy Operation

- simple calibration
- low maintenance
- easy to read display
- integrated data logger
- USB connection for file transfer
- administration of product names
- simple to operate via touch-screen
- ethernet connection for network integration
- measured data storage
- user level with different access authorisation
- user definable settings for each different product i.e. set point, alarm limits etc.

## High Process Reliability

- data log
- permanent control of the O<sub>2</sub>-concentration
- electronic control of the sample gas to the sensor
- lockable transparent door for protection of settings
- 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
- independent of pressure fluctuations in the gas supply
- independent of packing speeds (MAP)
- independent of package sizes (MAP)



## Maximum Hygiene

- splash-proof, robust stainless steel housing
- smooth and easy to clean surface

## Documentation

- Interfaces for the documentation and remote transfer of the settings and measured values

## Options

- software GASCONTROL CENTER for recording of results (see separate data sheet)
- fully automatic calibration
- bar code scanner for product names or user selection
- additional memory
- sample measurement via needle - also with additional sensor

**Please identify the individual gases and control ranges of flow at the time of enquiring!**

# GAS FLOW CONTROLLER KD 500-1A MAPY



<b>Type</b>	KD 500-1A MAPY
<b>Gases</b>	N <sub>2</sub> , CO <sub>2</sub> , Ar or others as well as their mixtures; not for flammable gases!
<b>Measuring system</b>	zirconia measuring cell for O <sub>2</sub>
<b>Measuring range</b>	0 – 100%
<b>Life time</b>	long lifetime
<b>Repeatability</b>	±0.1%
<b>Accuracy</b>	±0.3% of the required O <sub>2</sub> value
<b>Gas inlet pressures</b>	see table
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<b>Output (air)</b>	see table
<b>connection with     central gas supply     upstreamed mixer</b>	min. mixture output = 3% of the max. mixture output (see table) min. mixture output = 1/5 of the max. mixture output of mixer
<b>Temperatures (gas/environment)</b>	5 – 40 °C (+41 °F to +104 °F)
<b>Gas connections</b>	
<b>inert gas</b>	G 1/2 with cone seat, hose nipple 11 mm
<b>analysis gas (lance)</b>	PK 6/4
<b>analysis gas (needle)</b>	PK 6/4
<b>purge air</b>	PK 6/4
<b>calibration gas</b>	PK 6/4 (fully automatic calibration)
<b>Inlet pressure analysis</b>	max. 0.3 barg
<b>Alarm contacts</b>	2 potential free contacts for min. and max. settings O <sub>2</sub>
<b>Interfaces</b>	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
<b>Data log</b>	620 measurements, 120 products, 60 users additional max. 2 GB SD-memory card
<b>Housing</b>	stainless steel, splash proof
<b>Weight</b>	approx. 16 kg
<b>Dimensions (HxWxD)</b>	approx. 230 x 380 x 550 mm (9.05 x 14.96 x 21.65 inch) (with connections)
<b>Voltage</b>	230 V AC, 110 V AC, 24 V DC
<b>Power consumption</b>	230 V AC / 0.4 A
<b>Approvals</b>	Company certified according to ISO 9001 and DIN EN 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

Flow (in NI/min) in relation to air		outlet pressure in barg								
		1	2	3	4	5	6	7	8	9
min. inlet pressure in barg (max. 10 bar)	2	230	-	-	-	-	-	-	-	-
	3	337	277	-	-	-	-	-	-	-
	4	445	403	320	-	-	-	-	-	-
	5	567	530	455	358	-	-	-	-	-
	6	668	653	603	528	392	-	-	-	-
	7	783	763	717	638	550	422	-	-	-
	8	900	880	855	805	727	617	453	-	-
	9	1017	1003	977	925	853	782	662	482	-
	10	1115	1108	1087	1060	1013	928	808	673	502