

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 O₂-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



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