

Dansensor® MAP Mix Provectus®

A SMARTER WAY TO MIX GAS!



*Dansensor MAP Mix Provectus -
Advanced accuracy and ease
of operation*

Benefits

- Reliable outlet gas flow supply for high-capacity packaging operations
- Stable and accurate mixing, regardless of inlet pressures
- Simple and intuitive setup and operation
- Reliable traceability with data logging of vital parameters
- Integrates with Dansensor MAP Check 3 gas analyzer for optimal quality control and gas savings
- For use with all types of MAP packaging machines for food applications and more

Features

- Models for 2 or 3 gas mixing
- 10 customizable mixture presets
- Real time display of actual gas mix, inlet and outlet pressures and flow rate
- Data logging of gas consumption, gas mix, date, and time
- Very low internal pressure loss from gas inlet to outlet
- Wide inlet pressure range (2-10 bar)
- Dynamic mass flow controllers regulate the flow of gases for accurate automatic mixing

Innovative gas mixer for mixing 2 or 3 gases

The revolutionary Dansensor® MAP Mix Provectus® uses an innovative electronic mixing principle to improve the reliability, accuracy, and operation of a gas mixer. Simple to use, highly reliable, and rich in data, this mixer presents and stores vital information such as current gas flow, total gas consumption, and actual gas mix in real time.

Compatible with all types of gas sources and mixes, even variable or fluctuating inlet and outlet pressures do not cause an issue. Your only decision is whether you need to mix two or three gases – everything else is easily configured on the intuitive touch screen when you power up the unit for the first time.

Despite its compact size, the Dansensor MAP Mix Provectus delivers an outstanding flow of up to 1500 liters per minute. If you require a higher flow rate, you can bridge up to three mixers and triple the capacity.

HOW DOES IT WORK?

DATA SHEET

1: After unpacking, use the intuitive touch screen to easily program the mixer according to the gases connected and the desired gas mixture. The Dansensor MAP Mix Provectus can be programmed with up to 10 preset gas mixtures for easy change of gas mix by the operator.

2: During operation, the Dansensor MAP Mix Provectus ensures the correct gas mixture for the application and keeps the operator informed about inlet pressure, outlet pressure and gas flow. In case of any irregularities, the mixer alerts the operator.

3: The Dansensor MAP Mix Provectus provides operators and quality personnel with vital information about actual gas consumption, inlet and outlet pressure and gas mixture. Best of all, everything can be logged and transferred to a PC or an external data warehouse.

TOP: Shown with IP45 accessory kit for improved water protection



Technical Specifications

General standard features	
Mixer configurations	2-gas or 3-gas models available with 5" touch screen display or as "Black-Box" without display
Connections	2 x RS232C, LAN 10/100 Mbit (Modbus TCP), USB, 24 VDC I/O logic for start/stop and alarm
Power supply	103-132 / 207-264 VAC (autoranging), 47-63 Hz
Dimensions & Weight	192 x 230 x 375 mm (HxWxD); 12 kg (2-gas) / 14 kg (3-gas)
Compliances	CE
Mixer parameters	
Gas media	Any mix of dry gases O ₂ , CO ₂ , N ₂ , AR and clean air (0°C to +50°C gas temperature)
Gas inlet pressure	2 to 10 bar
Pressure drop	Example: 1 bar at 10 bar input pressure
Gas flow per gas string	6-500 L/min
Output gas flow	Maximum 1000 L/min (2-gas) and 1500 L/min (3-gas) depending on mixture setting
Mixer settings	Range 0% (off), 0.5% - 100%
Mixer accuracy	± 2% absolute in flow ranges above 50 L/min total output flow
Operating modes	Buffer or flow configuration, selectable in software and by installation
Flow measuring	Total and daily consumption
Accessories (optional)	
Protection kit	IP45 protection (NEMA 3S) frames and covers for front and back
Bracket, assembly	Can be combined with MAP Check 3 Vacuum and MAP Check 3: 2 brackets, 8 screws
Buffer tank	15 liter, stainless steel, approved up to 12 bar
Mix	
Typical mix (2-gas mixer)	N ₂ 60% + CO ₂ 40%, flow range: 15-830 L/min
Typical mix (3-gas mixer)	N ₂ 70% + CO ₂ 20% + O ₂ 10%, flow range: 60-710 L/min
Typical mix (2 gases on 3-gas mixer)	N ₂ 70% + CO ₂ 30%, flow range: 20-1420 L/min

Specifications subject to change without notice.