

# Dansensor® MAP Mix ProVectus

## A SMARTER WAY TO MIX GAS!



MAP Mix ProVectus - Advanced accuracy and ease of operation

### Benefits

- Uses an intuitive touch screen for easy set-up and operation
- Meets traceability requirements by storing accurate information about current gas flow, consumption over time and gas mix
- Avoids operator errors with programming of up to 10 standard gas mixes
- Integrates fully with the Dansensor MAP Check 3 gas analyzer for ultimate effectiveness
- Helps reduce gas cost on flow packaging machines when used in combination with Dansensor MAP Check 3

## Innovative gas mixer for mixing 2 or 3 gasses

The revolutionary Dansensor® MAP Mix ProVectus uses an entirely new operating principle to advance the accuracy, operation and appearance of a gas mixer. Simple to use, highly reliable and rich in data, this mixer gives vital feedback on information such as current gas flow, total gas consumption and actual gas mix, at any time.

It is also simple when it comes to product selection – no longer do you need to worry about inlet and outlet pressure, whether it will work with your nitrogen or oxygen generators or which gasses you need to mix. Your only decision is whether you need to mix two or three gasses – everything else gets set up 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.

### Features

- Data logging of consumption, date, time and gas mix
- Very low pressure drop over the mixer, making it suitable for working with nitrogen and oxygen generators
- USB, Ethernet (LAN), RS232, Modbus TCP connections for data logging and control
- Mixes oxygen, nitrogen, carbon dioxide, air and argon (optional)

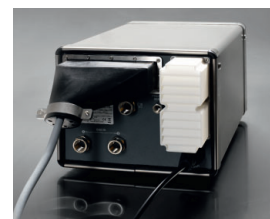
# HOW DOES IT WORK?

**1:** After unpacking, use the intuitive touch screen to easily program the mixer according to the gasses 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 LCD display or as "Black-Box" without display	
Connections	2 x RS232C, LAN 10/100 Mbit (Modbus TCP), USB, 24 VDC logic for start/stop and alarm	
Power supply	103-132 / 207-264 VAC (autoranging), 47-63 Hz. 24 VDC models available (excl. MAP Mix Provectus Argon)	
Dimensions	192 x 230 x 375 mm (HxWxD)	
Weight	12.0 - 14.0 kg	
Compliances	CE	
Mixer parameters		
Gas media	Any mix of dry O <sub>2</sub> , CO <sub>2</sub> , N <sub>2</sub> , air or Ar (optional) (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 to 500 L/min	
Output gas flow	Total output flow up to: 1000 L/min (2-gas) and 1500 L/min (3-gas) depending on mixture setting	
Mixer settings	Range 0%, 2% - 100%	
Mixer accuracy	± 2% absolute in flow ranges above 50 L/min total output flow. Argon: ± 2% absolute at argon flow > 50 l	
Flow measuring	Total and daily consumption	
Operating modes	Buffer or flow configuration, selectable in software and by installation	
Accessories (optional)		
Protection kit	IP45 protection (NEMA 3S)	
Bracket, assembly	Can be combined with MAP Check 3 Vacuum and MAP Check 3: 2 brackets, 8 screws	
Mix	2-gas	3-gas
Typical mix 1:	N <sub>2</sub> 80% + CO <sub>2</sub> 20%, flow range: 30 to 625 L/min	N <sub>2</sub> 70% + CO <sub>2</sub> 20% + O <sub>2</sub> 10%, flow range: 60 to 714 L/min
Typical mix 2:	N <sub>2</sub> 60% + CO <sub>2</sub> 40%, flow range: 15 to 833 L/min	N <sub>2</sub> 70% + CO <sub>2</sub> 28% + O <sub>2</sub> 2%, flow range: 300 to 714 L/min
Worst case mix:	N <sub>2</sub> 98% + CO <sub>2</sub> 2%, flow range: 300 to 509 L/min	N <sub>2</sub> 88% + CO <sub>2</sub> 10% + O <sub>2</sub> 2%, flow range: 300 to 568 L/min
Best case mix:	N <sub>2</sub> 50% + CO <sub>2</sub> 50%, flow range: 12 to 1000 L/min	N <sub>2</sub> 34% + CO <sub>2</sub> 33% + O <sub>2</sub> 33%, flow range: 18 to 1470 L/min

Specifications subject to change without notice.