



**Room pressure
under control.**

VAV-Universal – maximum flexibility for increased requirements

Ventilation concepts according to DIN EN 15232 require modern, energy-efficient VAV control concepts and ensure demand-regulated operation from the fan of the air handling unit to the room. Not as much as possible, but as much as necessary. The modular design of the VAV-Universal controller product range with integrated Δp sensor enables the ideal combination of controller and damper motorisation for each VAV, duct pressure and room pressure application.

- Two types of sensor are available. In addition to the well-established dynamic D3 sensor the new M1 membrane sensor is now available.
- The damper actuator product range with plug-and-play function includes rotary actuators, very fast running actuators as well as rotary actuators with fail-safe.
- Integrated NFC interface for simple commissioning and parametrisation using the Belimo Assistant App.

Reliable. Safe. Universal.

Applications

- Room pressure
- Duct pressure
- Volumetric flow VAV / CAV
- Volumetric flow summation

Actuator solutions

- Rotary actuator
- Safety rotary actuator
- Very fast running rotary actuator
- Very fast running safety rotary actuator

Control

- Conventional control 0...10 V / 2...10 V
- BACnet and Modbus incl. Hybrid Mode
- MP-Bus®
- Can be switched using the Belimo Assistant App

Tools

- Belimo Assistant App (iOS, Android)
- Wireless tool connection via NFC (Bluetooth)
- A PC-based parametrisation tool is available for VAV manufacturers



Positive pressure control for clean room



Negative pressure control for isolation room/ laboratory

Controller units with integrated Δp sensor

VRU-D3-BAC	VAV-CAV / duct pressure in the comfort zone
VRU-M1-BAC	VAV-CAV / duct pressure, polluted air
VRU-M1R-BAC	Room pressure control

Sensors

Sensor: D3 – flow, dynamic 0...500 Pa
Sensor: M1 – diaphragm, static 0...600 Pa
Sensor: M1R – diaphragm, static -75...75 Pa

Actuators

LM/NM/SM24A-VST	Rotary actuator
LF/NF/SF24A-VST	Mechanical fail-safe
LMQ24A-VST	Very fast running actuators
NMQ24A-VST	Very fast running actuators
NKQ24A-VST	Very fast running actuator, electrical fail-safe

Features

5/10/20 Nm, 120 s
4/10/20 Nm, 120 s, spring <20 s
4 Nm, 2.5 s
8 Nm, 4 s
6 Nm, 4 s