

ERV-N Circular variable air flow regulators with servomotor LMV-D3MP



Description

The ERVC-N regulators are designed for the control and maintenance of indoor air quality in VAV (Variable Air Volume) systems.

Characteristics

- Galvanized steel casing Z200;
- Casing thickness 0,8 mm from d.125 mm to d.250 mm and 1 mm for d.315 mm to 400 mm;
- Galvanized steel damper with thickness 0,8 mm from d.125 mm to d.200, 1 mm from d.200 mm to d.250 mm and 1,5 mm from d.315 mm to 400 mm;
- Bronze bushing d.8 mm from 125 mm to 250 mm and 12 mm nylon bushing from 315 mm to 400 mm;
- Male connections with external silicon seals;
- Dynamic dp probe to measure and maintain the air flow rate according to the room demand;
- Nylon pression gauges;
- Version with external insulation made of polyester fiber with a density of 15 kg/m3, a thickness of 30 mm and complete with an second case with a thickness of 0,8 mm; - Insulation with fire reaction class accordind to regulations UNI EN 13510-1 Bs2;
- Pressure range from 20 to 1000 Pa; - Working range temperature from 0°C to +50 °C;
- Flow rate adjustment and control by means of a linearised motor controller;
- Test on self-generated and radiated noise according to regulation EN ISO 3741;
- Damper leakage test according to regulation EN 1751;
- Air flow regulator VAV-Compact, AC/DC 24V, Mp-bus, IP54 LMV-D3-MP (5 Nm) (STANDARD);
- Configurable via NFC and Assistant App2 application;

Use

The regulator of the series ERVC-N represent an ideal solution for modern enviroment in residential, commercial, and industrial. optimized regulation of system branches ensures stable comfort and reduced energy consumption compared to traditional systems. Double casing versions are available for both summer cooling and winter heating applications

Models

ERVc single case
ERVc-I double case.

On request

- Air flow regulator VAV-Compact, AC/DC 24V, BACnet MS/TP, Modbus RTU, MP-Bus, IP54 LMV-D3-MOD (5Nm);
- Air flow regulator VAV -Compact, AC/DC 24 V, KNX (S-Mode) IP54 LMV-D3-KNX (5Nm);
- ZTH EU service tool for LMV-D3-MP actuator and ZK1-GEN connection cable;
- Available with high speed servomotors for hospital applications;

Notes

For correct pressure readings and for a flow rate tolerance of 5%, a straight duct with a length equal to 2/3 times the regulator diameter must be provided upstream. Otherwise, the air flow rate may vary between 10% and 20% from the calibrated value.

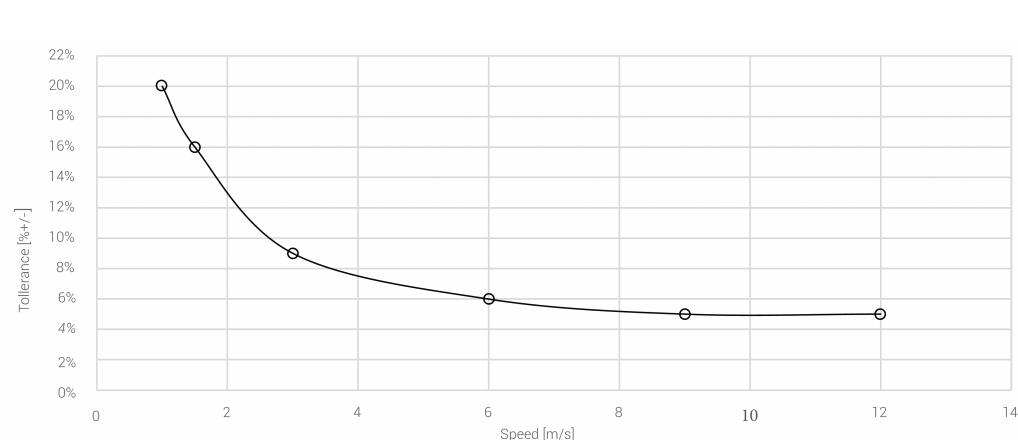
Operating Data

When ordering, indicate the minimum and maximum air flow rates to be programmed.

To prevent noise propagation that could reduce the comfort inside the building, it is advisable to consider maximum flow rate with an VAV internal air speed of 10 m/s.

Model	Minimum Air Flow (v=1,2 m/s)		Nominal Air Flow (v=10 m/s)	
mm	m³/h		m³/h	
125	53		445	
160	87		725	
200	138		1130	
250	212		1770	
315	337		2810	
355	428		3570	
400	543		4525	

The uncertainty of the probe reading at various flow rates is shown below. We recommend use in the range 6-8 m/s:

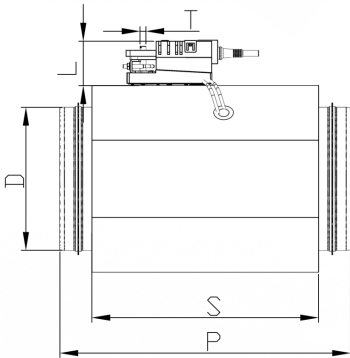
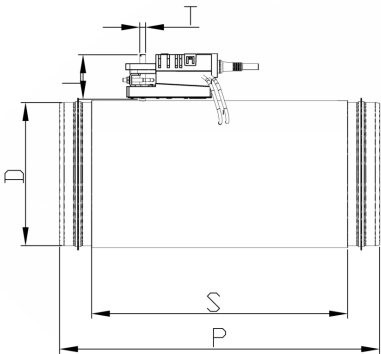


The generated and radiated noise are available in the technical data sheet in the "Documentation" section of the website.

Dimensions

All dimensions are expressed in mm, intermediate sizes on demand.

Model	H	L	P	S	T
mm	mm	mm	mm	mm	mm
125	185	60	310	220	8
160	220	60	400	220	8
200	260	60	400	220	8
250	310	60	400	310	8
315	375	100	500	310	12
355	415	100	500	410	12
400	460	100	500	410	12



Installation specifications and further construction details, are available in the technical data sheet in the "Documentation" section of the website.

Price List

Model	ERVC-N - Control signal 2...10V	ERVC-N Control signal 0...10V	ERVC-N-I - Control signal 2...10V	ERVC-N-I Control signal 0...10V
mm	€	€	€	€
125	541,33	541,33	572,89	572,89
160	554,86	554,86	587,93	587,93
200	568,38	568,38	605,97	605,97
250	586,42	586,42	633,03	633,03
315	610,48	610,48	663,09	663,09
355	631,52	631,52	688,65	688,65
400	655,57	655,57	718,71	718,71