

ERV-R-N Rectangular variable air flow regulators with servomotor

LMV-D3MP



Description

These regulators are used to control and maintain the amount of air in VAV systems.

Characteristics

- Galvanised steel sheet casing;
- Double case version with rockwool with density 50 kg/m³ and Bs2 fire reaction class according to regulation UNI EN 13510-1;
- Connection flange with 9x22 buttonholes;
- Dynamic dp probe to measure and maintain the air flow rate according to the room demand;
- Galvanised steel damper with sealing gaskets;
- Nylon pressure gauges;
- Operating range between 20 and 1500 Pa;
- Working temperature between 0°C and +50°C;
- Flow rate adjustment and control by means of a linearised motor controller;
- Self-generated and radiated noise tests according to the EN ISO 3741 Standard;
- Damper tightness test performed according to the EN 1751 Standard;
- VAV-COMPACT, AC/DC 24 V, MP-Bus, IP54 LMV-D3-M (5nm) (Standard);
- Configurable via NFC and Assistant App2 application;

Use

The regulator of the series ERV-R-N represent an ideal solution for modern environment 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

- ERVR single casing.
- ERVR-I double casing.

On request

- VAV-Compact, AC/DC 24 V, Bacnet MS/TP, Modbus RTU, MP-Bus, IP54 LMV-D3-MOD (5Nm);
- VAV-Compact, AC/DC 24 V, KNX (S-Mode), IP54 LMV-D3-KNX (5Nm);

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.

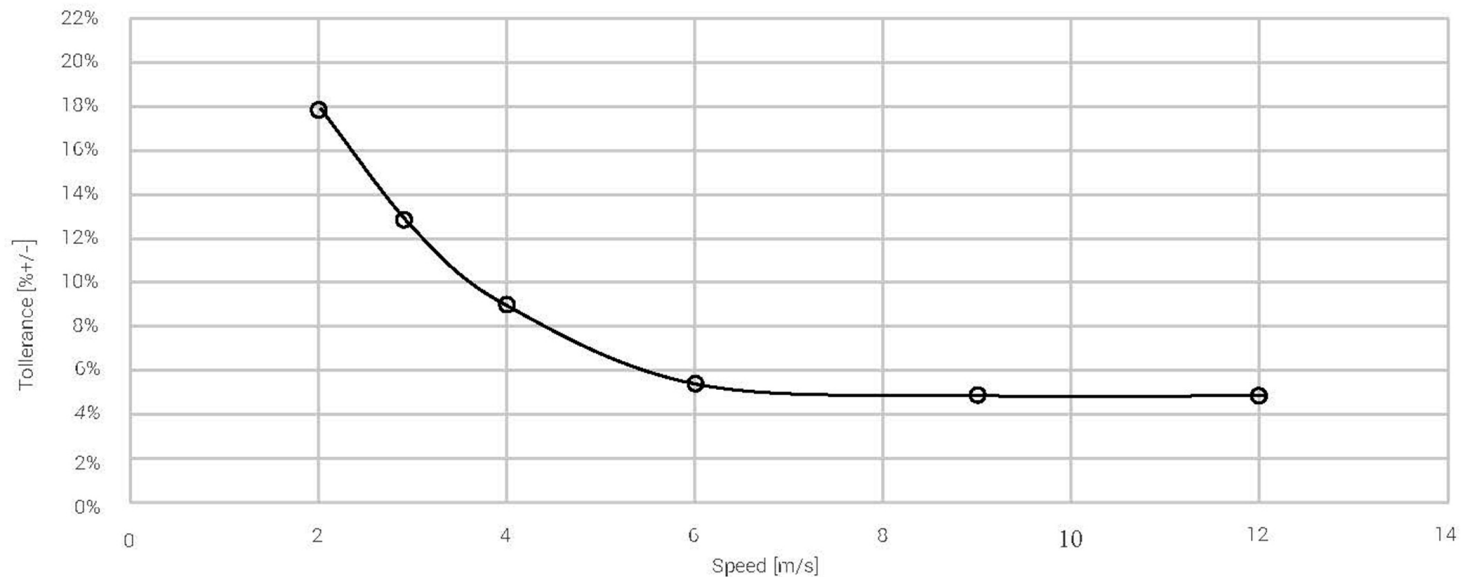
Operating data

When placing the order, specify the minimum and maximum airflow rates to be set.

To prevent noise propagation that could reduce comfort inside the building, it is advisable to consider a maximum airflow with an internal velocity in the VAV of 10 m/s.

Model		Minimum Air flow(v=2 m/s)	Nominal Air Flow (v=10 m/s)	Maximum Air flow (v=12 m/s)
mm	mm	m³/h	m³/h	m³/h
200	110	160	790	950
400	110	315	1580	1900
600	110	475	2375	250
400	210	605	3040	3650
600	210	905	4540	5450
800	210	1210	6040	7250
600	310	1340	6710	8050
800	310	1785	8915	10700
1000	310	2230	11150	13400
600	410	1770	8875	10650
800	410	2360	11790	14150
1000	410	2950	14750	17700

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

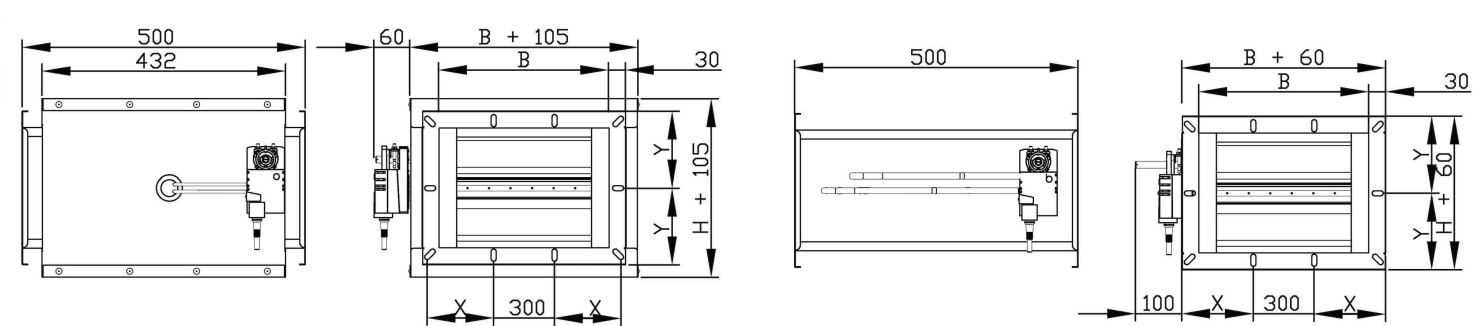


The generated and radiated noise are available in the technical data sheet in the "Documentation" section of the website

Dimensions

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

Model		Base holes		Height Holes	
mm	mm	N° buttonholes	X	N° buttonholes	Y
200	110	1	116,1	0	0
400	110	1	216,1	0	0
600	110	1	316,1	0	0
400	210	1	216,1	1	116,6
600	210	1	316,1	1	116,6
800	210	2	266,1	1	116,6
600	310	1	316,1	1	166,6
800	310	2	266,1	1	166,6
1000	310	3	216,1	1	166,6
600	410	1	316,1	1	216,6
800	410	2	266,1	1	216,6
1000	410	3	216,1	1	216,6



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

Price list:

Model	ERVR-N - Control signal 2...10V	ERVR-N - Control signal 0...10V	ERVR-N-I - Control signal 2...10V	ERVR-N-I Control signal 0...10V
mm	€	€	€	€
200x110	-	-	-	-
400x110	-	-	-	-
600x110	-	-	-	-
400x210	-	-	-	-
600x210	-	-	-	-
800x210	-	-	-	-
600x310	-	-	-	-
800x310	-	-	-	-
1000x310	-	-	-	-
600x410	-	-	-	-
800x410	-	-	-	-
1000x410	-	-	-	-