

# Aluminum multi-layer dampers



# ALM



## Application

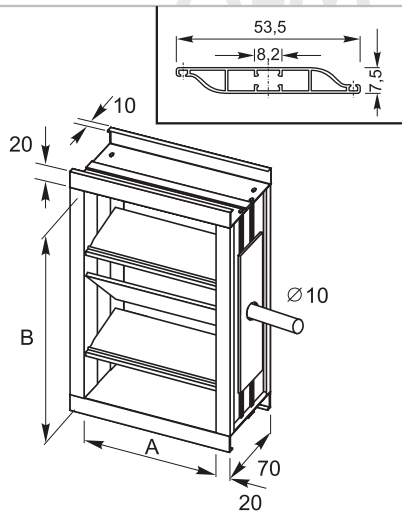
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ALM multi-blade air dampers are a miniature version of SMAY multi-blade louvered air dampers. They are designed for fitting in ventilation and air conditioning systems, especially in air handling units and automation systems for precision control of airflow.

ALM dampers are excellent closing devices. They can be used in systems that have special requirements such as heat recovery systems (multi-section dampers), or to protect air heaters from the effects of frost, and to release smoke during a fire. Working temperature (-40°C to +90°C).

**Hygienic Certificate no. HK/B/1121/01/2007.**

## Dimensions



## Typical dimensions

B wysokość [mm]	A szerokość [mm]					
	100	200	300	400	500	600
	Orientacyjna masa [kg]					
105	0,70	0,80	1,00	1,10	1,30	1,40
155	0,90	1,10	1,30	1,50	1,70	1,90
205	1,20	1,40	1,60	1,90	2,10	2,30
255	1,40	1,70	1,90	2,20	2,50	2,80
305	1,60	1,90	2,30	2,60	2,90	3,20
355	1,90	2,20	2,60	2,90	3,30	3,70
405	2,10	2,50	2,90	3,30	3,70	4,10
455	2,40	2,80	3,30	3,70	4,10	4,60
505	2,60	3,10	3,60	4,10	4,50	5,00
555	2,90	3,40	3,90	4,40	4,90	5,50
605	3,10	3,70	4,20	4,80	5,30	5,90

Due to the convergence of design solutions, to determine the technical parameters of the damper according to ALM V / Ap uses nomograms and graphs resulting from research carried out for PS dampers.

## Material

The louvered damper is made with 4 types of hardened aluminum extrusions: vertical frame, horizontal frame, blades and an actuator bracket. The blades of the damper are joined with bearings and gears made of PP polypropylene with glass fibre content. The drive mechanism is built into the frame section (vertical frame). The plasticized PVC seals provide an airtight joint between the blades. All the damper parts meet environmental class requirements. The material from which the damper is constructed can be separated for recycling.

## Finishing

The construction of the dampers using aluminum extrusions makes it possible to achieve a high level of precision workmanship and assembly, thus ensuring a good air tightness in the fully closed position and a small resistance to flow in the open position. The built-in drive system enables the damper to be completely isolated. In addition, a dedicated aluminum bracket facilitates the mounting of an actuator or a manual control quadrant.

## Product symbolic description - how to order

### ALM-200x205-W0-T2

**ALM - A x B - W W - T N**

- A** damper light width [mm]
- B** damper light height [mm]
- W** number of partitions in damper per width (0-none)\*
- N** type of drive\*
  - 1 with actuator
  - 2 **manual mechanism**
  - 3 for use with an actuator
- \* optional values – lack of them will cause application of default values

### Drive

- 1 – damper with an actuator
- 2 – damper with manual control mechanism
- 3 – throttling valve with an extended axis.

### Note:

The design of the aluminum blades was registered as a property of SMAY at the Polish Patent Office in 1995.

We can make each dimension **A** in the range **100 - 1200 [mm]**.

Due to the width of the blade 50 [mm] recommended height is:

**B = n × 50 + 5 [mm]**.