

## PRESSURE RELIEF DAMPER



**Pressure Relief Damper**

**DESCRIPTION:**

Pressure-relief dampers open and close automatically.

If the differential pressure exceeds the set maximum value, the magnetic force is overcome, and the blades open. The airflow by which the excess pressure has been caused can now flow through the damper. The pressure peak is immediately and reliably controlled. The blade opening angle depends on the differential pressure and the volume flow rate.

When the differential pressure drops below approx. 30 Pa, the blades close again..

**MATERIAL:**

Sheet metal Frame, Aluminum Blade

**FUNCTION:**

Pressure relief dampers for gas fire extinguishing systems and transformer substations

- Air leakage with back pressure to EN 1751, class 4
- Maximum differential pressure: 5000 Pa
- Differential pressure can be adjusted from 50 – 1000 Pa (B > 600 mm: 600 Pa max.)
- Blades made of aluminum, casing made of galvanized steel
- Blades open when the maximum differential pressure is exceeded and close automatically when the pressure drops
- Robust, maintenance-free construction
- Available in standard sizes and many intermediate sizes
- Operating temperature 0 to 80 °C

## PRESSURE RELIEF DAMPER

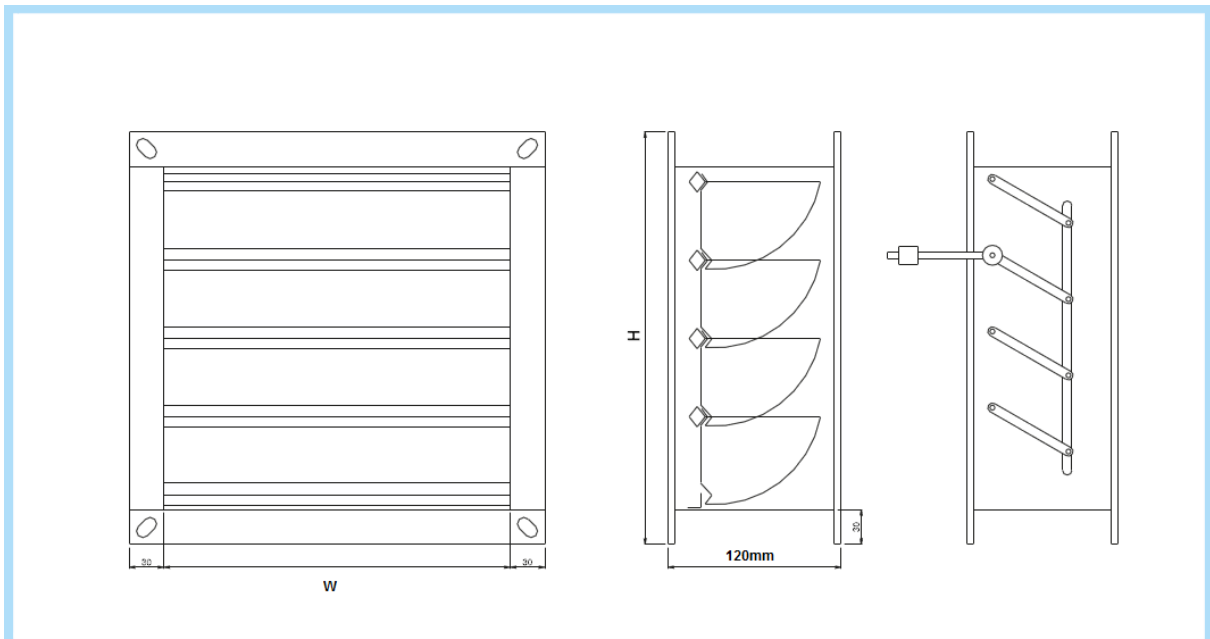
### INSTALLATION:

- Screw

### STANDARD SIZES (mm):

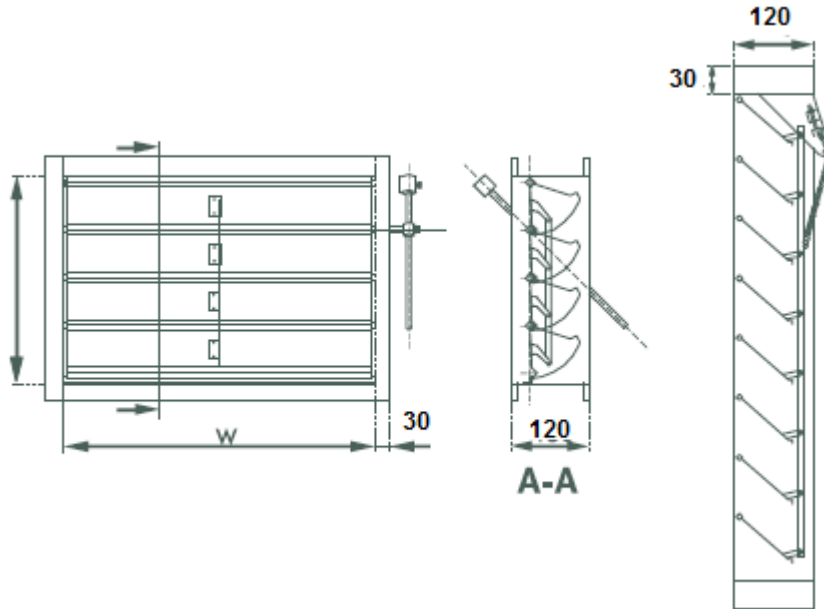
AVAILABLE SIZES (mm) - Always width x height											
	WIDHT										
HEIGHT	200	250	280	315	355	400	450	500	560	630	710
200	X	X	X	X	X	X	X	X	X	X	X
224	X	X	X	X	X	X	X	X	X	X	X
250	X	X	X	X	X	X	X	X	X	X	X
280	X	X	X	X	X	X	X	X	X	X	X
315	X	X	X	X	X	X	X	X	X	X	X
400	X	X	X	X	X	X	X	X	X	X	X
450	X	X	X	X	X	X	X	X	X	X	X
500	X	X	X	X	X	X	X	X	X	X	X
560	X	X	X	X	X	X	X	X	X	X	X
630	X	X	X	X	X	X	X	X	X	X	X
750	X	X	X	X	X	X	X	X	X	X	X
1000	X	X	X	X	X	X	X	X	X	X	X

### DRAWING

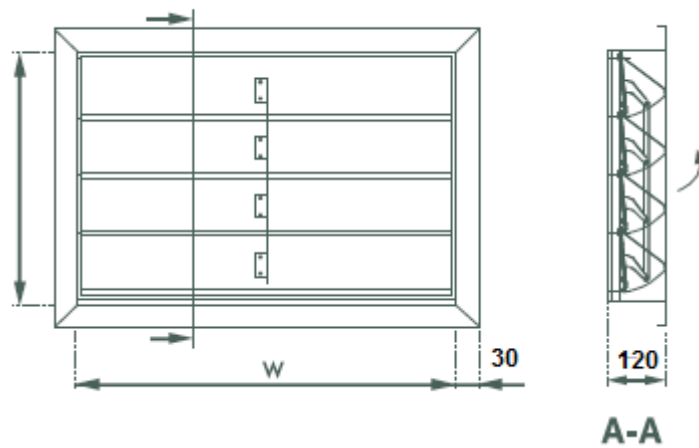


## PRESSURE RELIEF DAMPER

### Type-1

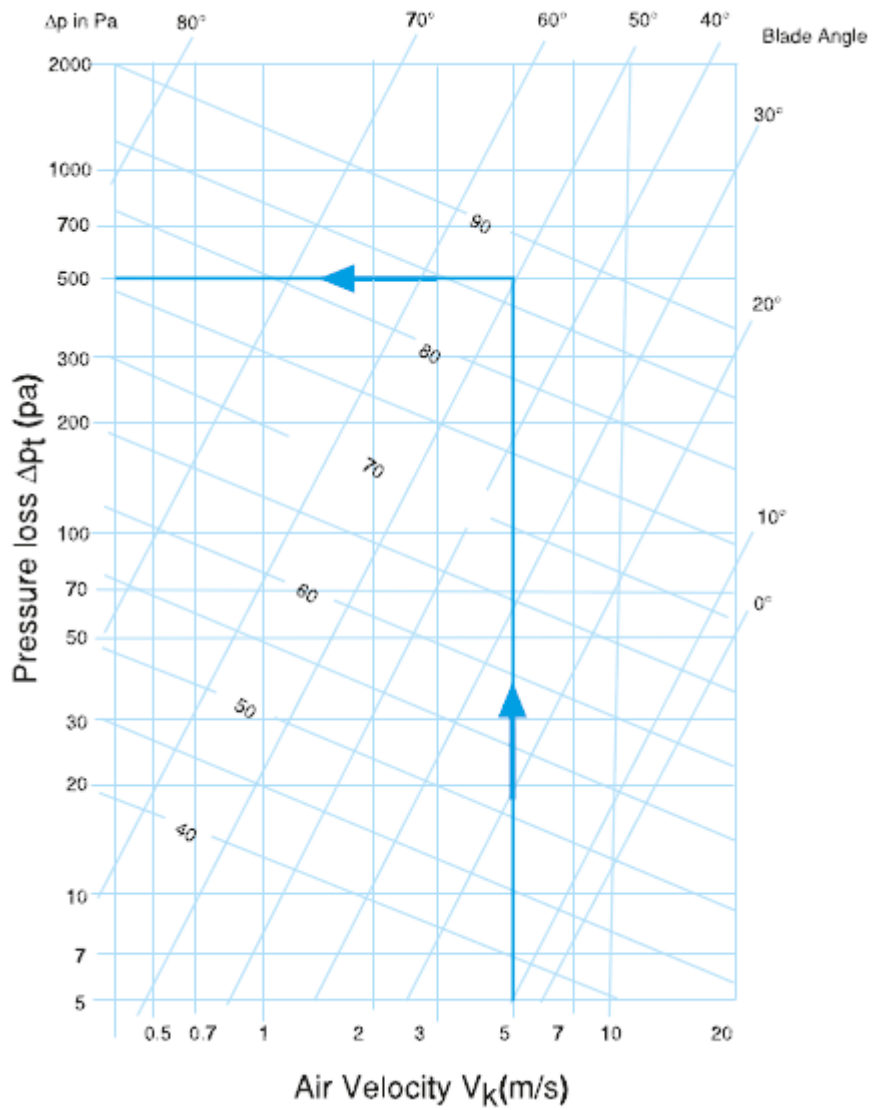


### Type-2



### SELECTION TABLE

#### 1 m<sup>2</sup> DAMPER FOR Ak(m<sup>2</sup>) VALUE FOR PRESSURE DROP DIAGRAM



### EXAMPLE

## PRESSURE RELIEF DAMPER

**GIVEN:**

Air flow  $v = 18.000 \text{ m}^3/\text{h}$   
 when Damper %50 is closed  
 Air velocity  $V_k = 5 \text{ m/s}$

**RESULTS:**

in Diagram 1  
 $A_k = 1 \text{ m}^2$   
 $\Delta p_t = 500 \text{ pa}$

in Table 2 BxH 1200 x 1005

### ORDER CODES

PRD-1	S	00	SM	F 600x600
PRD PRD-1				N: Neck Size F: Frame Size
				00: No Mounting SM: Screw Mounting
A: Aluminum Blade (Standard) S: Metal Sheet Blade (Ops.)				00: No coating EX: Eloxal Coating RAL----: Oven Drying Coating