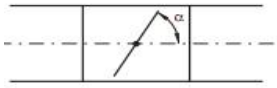
Regulating dampers

SSR/SSP

Description

Rectangular regulating dampers are used to install a ventilation system in buildings along with rectangular ducts. The damper can be used to close or regulate the air flow. The opening angle a of the valve can be adjusted from 0° to 90°.



When closed, the damper always passes about 5% of the nominal air volume. The position of the handle is fixed by a butterfly-type screw. The products can be made of: galvanized steel sheet - corrosion class C3-L / C2-M; sheet with aluminium zinc coating - corrosion class C4-M / C3-H; stainless steel sheet AISI 304 (1.4301) or AISI 316L (1.4404) - corrosion class C5. Tightness class B of standard damper, according to LST EN 1507. Higher tightness class C are available on request. The regulating dampers can be used at temperatures between -45 °C and + 85 °C with appropriate insulation. The maximum permissible absolute humidity inside the air stream and outside is 18 g / kg. Protective films that ensure cleanliness, are placed at the customer's request when ordering. For other dimensions and materials please contact UAB „MKTechnika“ sales offices.

Ordering code

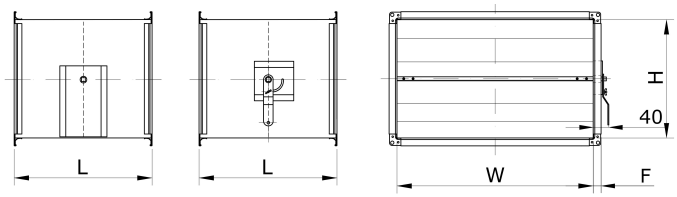
..... SSR500300

- Galvanized steel - AISI 304 – NP
- AISI 316L – 316NP
- Manual – SSR
- With actuator - SSP
- Size

Sample: SSR200 – made of galvanized steel rectangular regulating damper, dimensions WxH – 500x300 mm.

Dimensions

SSP SSR



	W [mm]	H [mm]
Minimum dimension	200	200
Maximum standard dimension	1000	500
Flange F	L20	

- The damper SSP has an axis 8x8 mm.
- The damper has only one blade.
- The dimension W or H can be chosen any. The dimension L is always 50 mm longer than the height H selected.
- The manual damper has a locking screw.
- The damper can be ordered with a bracket for mounting the actuator.
- The damper can only be installed in the duct in a horizontal position.
- Damper blade tightness class 0.

TECHNIKA

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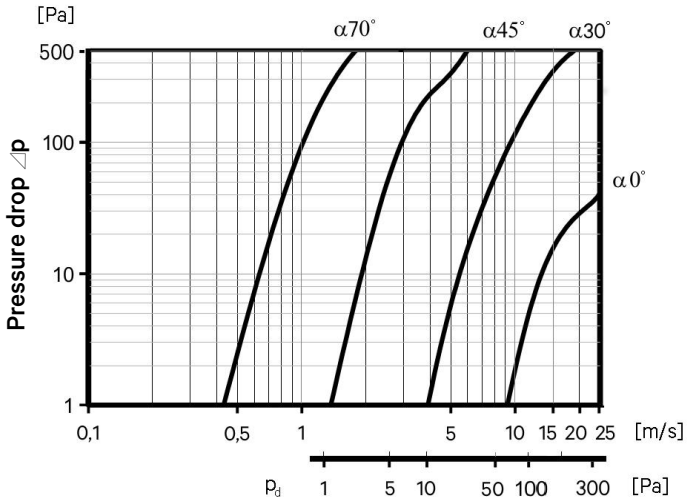
Technical data

The regulating dampers are available in a variety of dimensions. Depending on the selected damper width W and height H the damper length L can be found. The table also shows the standard damper weights (kg) without gears.

H [mm]	W [mm]										
.	.	200	300	400	500	600	700	800	900	1000
200	L, mm	250	250	250	250	250	250	250	250	250
	kg	2,20	2,75	3,25	3,75	4,30	4,82	5,35	5,90	6,50
250	L, mm	300	300	300	300	300	300	300	300	300
	kg	2,70	3,25	3,85	4,45	5,05	5,65	6,20	6,80	7,50
300	L, mm	350	350	350	350	350	350	350	350	350
	kg	3,20	3,82	4,50	5,15	5,80	6,50	7,10	7,85	8,50
350	L, mm	400	400	400	400	400	400	400	400	400
	kg	3,90	4,65	5,40	6,05	6,80	7,50	8,30	9,00	9,7
400	L, mm	450	450	450	450	450	450	450	450	450
	kg	4,40	5,20	6,00	6,80	7,60	8,40	9,15	9,95	10.9
500	L, mm	550	550	550	550	550	550	550	550	550
	kg	5,75	6,65	7,60	8,40	9,40	10,5	11,4	12,5	14,0

Pressure drop

The calculation of the pressure drop shall be specified for the damper installed in the duct on a straight line under normal conditions. To determine the differential pressure across the blade at different opening angles, you need to know what the velocity will be through the damper itself. The design speed of the system shall be multiplied by a factor of 1,04. This will approximate the reduction in area through the damper due to the internal elements of the structure. The graph shows the velocity of the air and the angle of opening as the pressure across the damper. If the dampers are installed in the open space, then due to the change in air velocity additional dynamic pressure must be added p_d.



Air speed in duct v and dynamic pressure p_d