

SP50 AA

Gravity light-duty backdraft damper for wall mounting, 50 mm pitch, in anodized aluminium



OVERPRESSURE



Description and application:

Rectangular wall-mounted gravity backdraft damper with single flange, multi-blade type, light-duty version, equipped with noise-reducing seals.

Designed for overpressure relief, allowing automatic air discharge while preventing reverse airflow into the ductwork or conditioned space of the HVAC systems, it is suitable for installation in wall/duct openings or external air openings, whether main, secondary or terminal, in ventilation and air conditioning applications, for both civil and industrial environments.

Construction:

- Execution made of anodized extruded aluminium alloy EN AW-6060;
- Frame extruded, screwed, depth 53mm;
- Flange 40mm drilled $\varnothing 6$ with embossed holes, pitch 300mm, offset with $BM_{internal}=23mm$ / $BM_{external}=17mm$;
- Blades thickness 0,7 mm in natural aluminium alloy EN AW-1050, with adhesive expanded polyethylene noise-reducing seals;
- Blade pitch 50 mm, independently without linkage;
- Internal extruded "C" profile for bushing and blade support;
- Nylon bushings with integrated anti-tilting system;
- Stub shafts $\varnothing 6$ mm in nylon;
- Screw and assembly components in galvanized steel;
- Silicone free.

Available execution:

- Configured for air exhaust (Right version = **D**);
- Configured for air intake (Left version = **S**);
- Anti-bird mesh, square pattern $Q=25 \times 19$ (**R** version);
- Anti-insect mesh, diamond pattern size $3 \times 2,2$ in AISI 304;
- Powder-coated finishing.

Operating limits:

- Dimensions WxH: min 200x150 mm / max 1050x1050mm;
- Temperature range: from -20* to +60 °C;
- Configuration version variants: page 3;
- Dimensional drawing and drilling pattern: page 4;
- V_{max} recommended: 6 m/s (see table page 4);
- Max back pressure: 100 Pa;
- Weights: page 5.

** Negative temperature is achievable only if ice formation is prevented.*

Certifications and Testing:

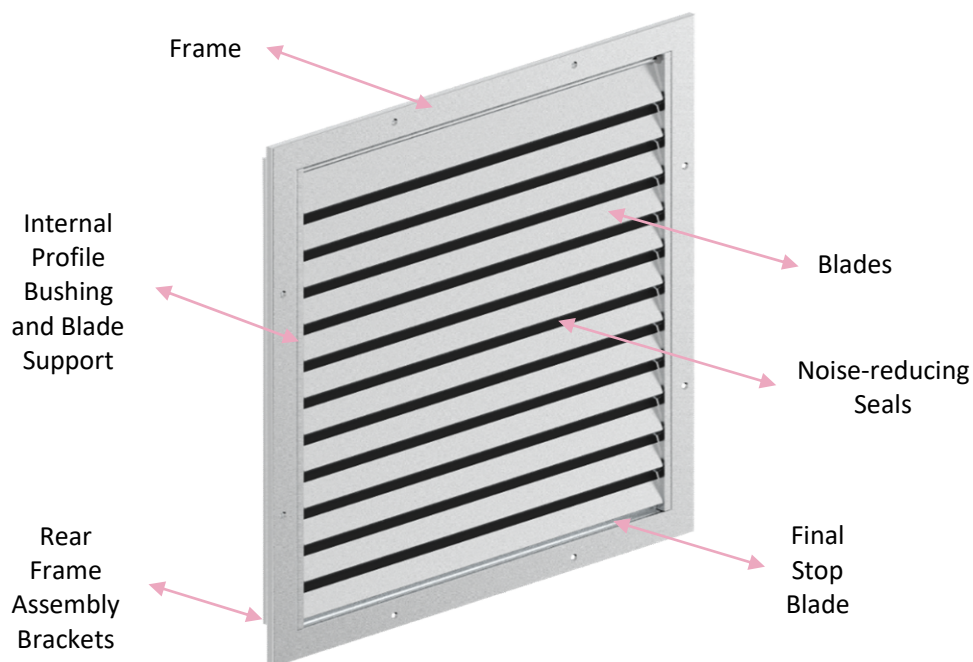
- Pressure drop tests carried out in accordance with UNI CTI 8728 at Istituto Giordano (test report no. 136363).



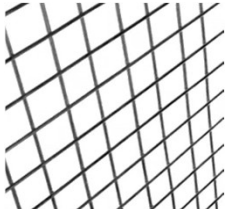
SP50 AA

Gravity light-duty backdraft damper for wall mounting, 50 mm pitch, in anodized aluminium

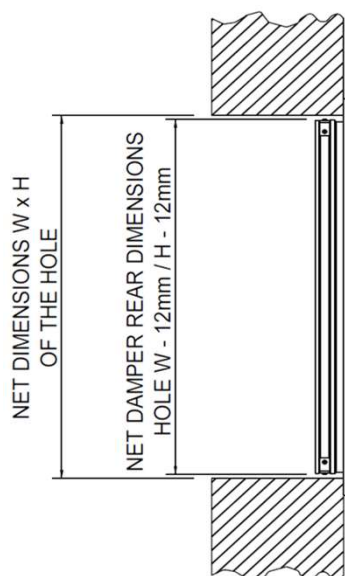
Additional Construction Details SP50 AA



Available Options

Protection Mesh (Rear on D version - Front on S version)	
Anti-bird mesh with square pattern Q = 25x19;	Anti-insect mesh with diamond pattern size R = 3x2,2 (AISI 304)
	

Overpressure Damper SP Installation Type





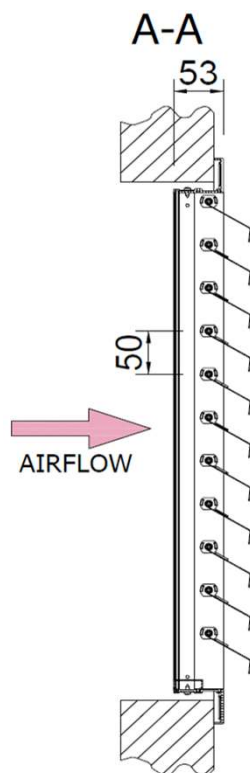
SP50 AA

Gravity light-duty backdraft damper for wall mounting, 50 mm pitch, in anodized aluminium

SP50 AA Overpressure Damper Configuration Variants

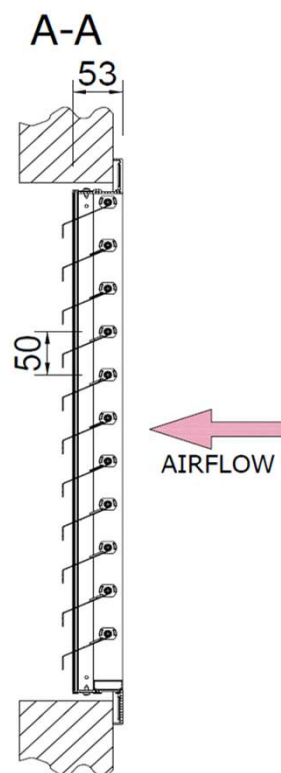
Air Exhaust

Right Version SP50 D

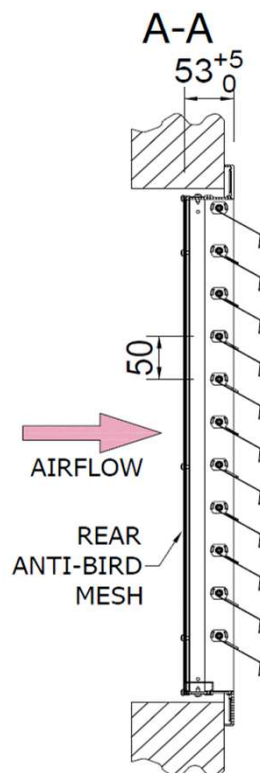


Air Intake

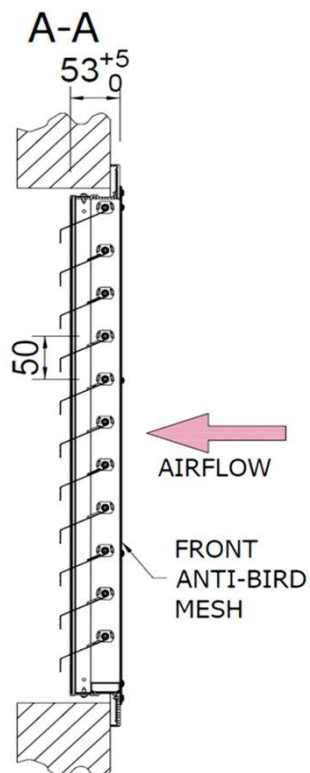
Left Version SP50 S



Right Version with Mesh SP50 RD



Left Version with Mesh SP50 RS

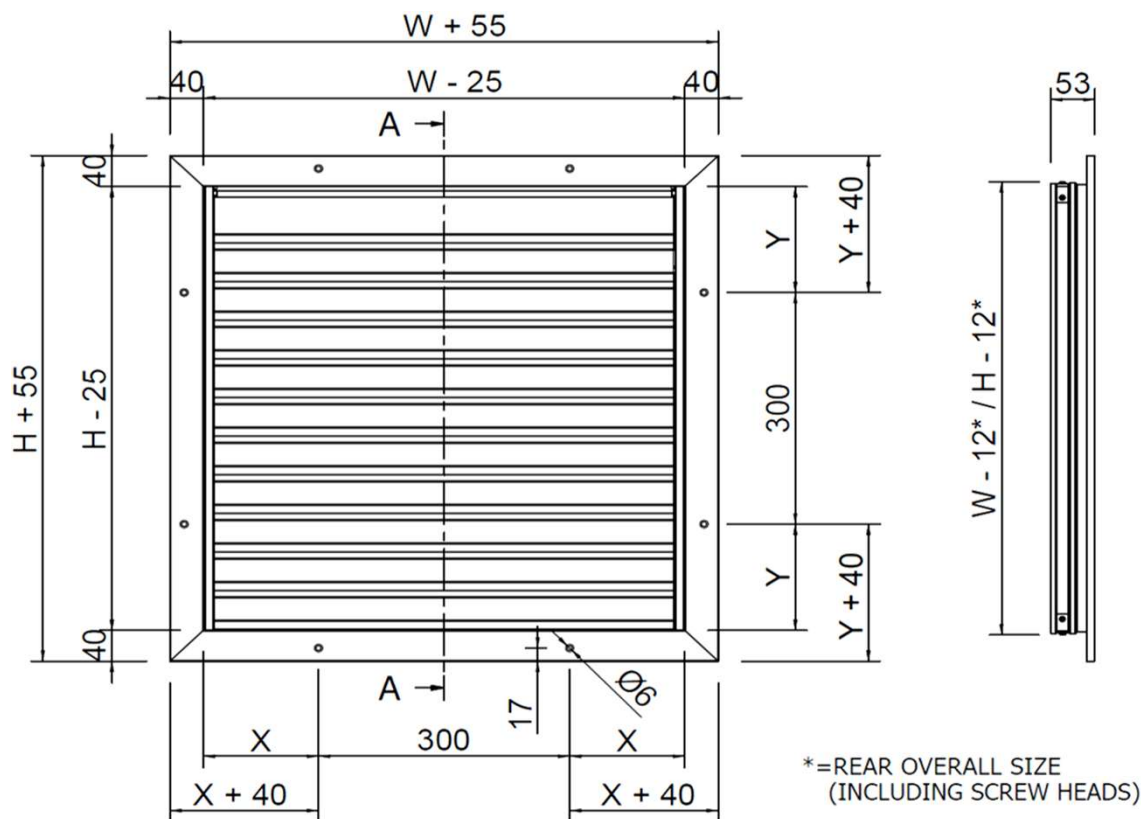




SP50 AA

Gravity light-duty backdraft damper for wall mounting, 50 mm pitch, in anodized aluminium

Dimensional Drawing and Standard Drilling Pattern (size in mm, always referred to the wall hole)



WIDTH AND HEIGHT DRILLING (STD LIMITS)					
W \ H	N°HOLES	X \ Y	W \ H	N°HOLES	X \ Y
150	1	62,5	650	2	162,5
200	1	87,5	700	2	187,5
250	1	112,5	750	3	62,5
300	1	137,5	800	3	87,5
350	1	162,5	850	3	112,5
400	1	187,5	900	3	137,5
450	2	62,5	950	3	162,5
500	2	87,5	1000	3	187,5
550	2	112,5	1050	4	62,5
600	2	137,5			

Note : For sizes not listed in the table, the number of holes and the starting position X or Y (Width or Height) are determined by referring to the next lower standard dimension.

Pressure Drop SP50	
V [m/s]	Δp_t [Pa]
0,5	5
1	10
1,5	13
2	15
2,5	18
3	20
3,5	23
4	25
4,5	28
5	30
5,5	39
6	45

V = face velocity referred to the section $(W-45) \times (H-35)$;
 Δp_t = total pressure drop;



SP50 AA

Gravity light-duty backdraft damper for wall mounting, 50 mm pitch, in anodized aluminium

mm W \ H	General Weight Table SP50 AA [Kg]																		
	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
200	0,8	0,9	1,0	1,1	1,2	1,4	1,5	1,6	1,7	1,8	1,9	2,0	2,2	2,3	2,4	2,5	2,6	2,7	2,9
250	0,9	1,0	1,1	1,3	1,4	1,5	1,6	1,8	1,9	2,0	2,1	2,3	2,4	2,5	2,6	2,8	2,9	3,0	3,1
300	1,0	1,1	1,2	1,4	1,5	1,6	1,8	1,9	2,1	2,2	2,3	2,5	2,6	2,7	2,9	3,0	3,1	3,3	3,4
350	1,1	1,2	1,4	1,5	1,6	1,8	1,9	2,1	2,2	2,4	2,5	2,7	2,8	3,0	3,1	3,2	3,4	3,5	3,7
400	1,2	1,3	1,5	1,6	1,8	1,9	2,1	2,2	2,4	2,6	2,7	2,9	3,0	3,2	3,3	3,5	3,6	3,8	4,0
450	1,3	1,4	1,6	1,8	1,9	2,1	2,2	2,4	2,6	2,7	2,9	3,1	3,2	3,4	3,6	3,7	3,9	4,1	4,2
500	1,4	1,5	1,7	1,9	2,1	2,2	2,4	2,6	2,8	2,9	3,1	3,3	3,5	3,6	3,8	4,0	4,2	4,3	4,5
550	1,4	1,6	1,8	2,0	2,2	2,4	2,6	2,7	2,9	3,1	3,3	3,5	3,7	3,9	4,0	4,2	4,4	4,6	4,8
600	1,5	1,7	1,9	2,1	2,3	2,5	2,7	2,9	3,1	3,3	3,5	3,7	3,9	4,1	4,3	4,5	4,7	4,9	5,1
650	1,6	1,8	2,0	2,3	2,5	2,7	2,9	3,1	3,3	3,5	3,7	3,9	4,1	4,3	4,5	4,7	4,9	5,1	5,3
700	1,7	1,9	2,2	2,4	2,6	2,8	3,0	3,2	3,5	3,7	3,9	4,1	4,3	4,5	4,7	5,0	5,2	5,4	5,6
750	1,8	2,1	2,3	2,5	2,7	3,0	3,2	3,4	3,6	3,9	4,1	4,3	4,5	4,8	5,0	5,2	5,4	5,7	5,9
800	1,9	2,2	2,4	2,6	2,9	3,1	3,3	3,6	3,8	4,0	4,3	4,5	4,7	5,0	5,2	5,4	5,7	5,9	6,2
850	2,0	2,3	2,5	2,8	3,0	3,2	3,5	3,7	4,0	4,2	4,5	4,7	5,0	5,2	5,4	5,7	5,9	6,2	6,4
900	2,1	2,4	2,6	2,9	3,1	3,4	3,6	3,9	4,2	4,4	4,7	4,9	5,2	5,4	5,7	5,9	6,2	6,4	6,7
950	2,2	2,5	2,7	3,0	3,3	3,5	3,8	4,1	4,3	4,6	4,9	5,1	5,4	5,7	5,9	6,2	6,4	6,7	7,0
1000	2,3	2,6	2,9	3,1	3,4	3,7	4,0	4,2	4,5	4,8	5,1	5,3	5,6	5,9	6,2	6,4	6,7	7,0	7,3
1050	2,4	2,7	3,0	3,3	3,5	3,8	4,1	4,4	4,7	5,0	5,2	5,5	5,8	6,1	6,4	6,7	7,0	7,2	7,5

Note : If the damper is equipped with the optional rear anti-volatile mesh quare pattern 25x19, 75% open area ratio), increase the table values by 10%.

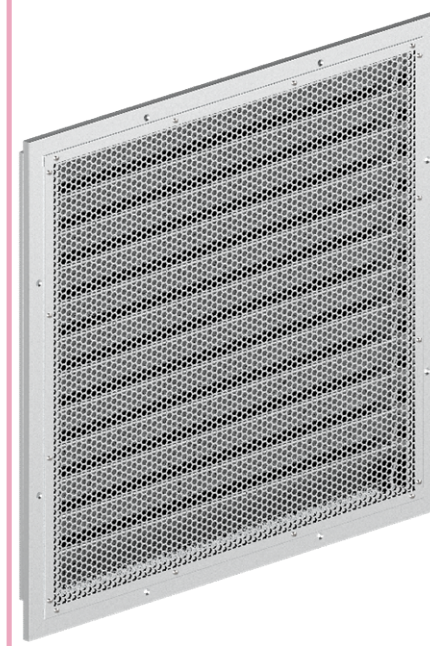
If the damper is equipped with rear anti-insect mesh (diamond pattern 3x2.2, 60% open area ratio), increase the table values by 30%.

Additional Product Images

Left Version (SP50 S)



Left Version with Mesh (SP50 RS)



Note : mesh pattern shown for illustrative purposes only.

AZIENDA CON SISTEMA
DI GESTIONE QUALITÀ
CERTIFICATO DA DNV GL
ISO 9001

AZIENDA CON
SISTEMA DI GESTIONE
AMBIENTALE CERTIFICATO
DA DNV
ISO 14001



CLA & UTEK reserves the right to make any necessary changes at any time to improve the products, without prior notice.

