GRYFIT

DEP DELTA

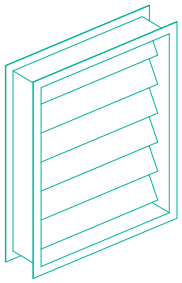
PRESSURE RELIEF DAMPER

ADVANTAGES

- For mounting in ventilation ducts and partition walls
- Self-regulation in the range of pressure from 20 to 50 Pa
- Complies with the standard PN-EN 12101-6
- Vertical and horizontal installation

In the libraries

Fluid Desk
Building Engineering Solutions



parametric libraries

GRYFIT CAD

AIR DIFFUSION

FUNCTION

DEP DELTA is designed for both functions, as a non-return and relief damper in overpressure systems of staircases, in smoke ventilation as well as in HVAC systems. It allows to block air flow from one side and controls the overpressure from it's other side

APPLICATION

In its basic application DEP DELTA is designed for installation in vertical partition walls. It is designed to maintain a proper difference of pressure on both sides of the wall in smoke-extraction systems from escape routes using a pressure differentiation method in compliance with the standard PN-EN 12101-6.
It is also possible to install DEP DELTA in horizontal ventilation ducts where it can play a double role to protect from air and to control overpressure in a vented staircases. A particular overpressure is maintained on the inlet side of the damper and its value depends on the velocity of air flow according to the characteristic attached.

DESCRIPTION

Swing blades of DEP DELTA are made of galvanized steel metal sheet and they mounted in a rectangular frame equipped with collar fittings 30 mm wide and made of galvanized steel.. Move of the blades is possible only towards one direction which is the outlet side of air flow. The opposite flow direction is blocked. The blades are factory balanced for particular pressure difference opening set value. damper. The damper is set in standard version for the overpressure of 50 Pa. With maximum opening position the blades remain within the casing

INSTALLATION

DEP DELTA may be installed directly in the partition wall . The damper can be fitted to ventilation ducts is possible with 4 screws. The dimensions of the wall opening for the installation should be: L+100mm, H+100mm dimensions for one single damper DEP.

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ACCESSORIES

Pressure relief damper can be equipped:

- blades position remote indicator WKK – electromagnet of current impulse type EI 24V/48V DC, EI 230V AC, maintenance of the normal blades position,
- electromagnet of current break type EP 24V/48V DC, EP 230V AC, maintenance of the normal blades position,
- ventilation damper with adjustable, thermally insulated grilles ISOLA., The system DEP-DELTA +ISOLAR reduces the influence of external conditions, protecting rooms against the flow of cold air into the room. ISOLAR is equipped with properly shaped, thermally isolated blades k=2.44W/m²K, and fully controllable close-open mechanism 24V or 230V protecting the correct operation of DEP DELTA
- blades DEP DELTA can be isolated at using in material overall heat transfer coefficient k=2,44W/m²K, for selection DEP DELTA with isolated blades version, please consult us.

SELECTION

EFFECTIVE AREAS

Number of blades DEP DELTA	H [mm]	L [mm]																
		200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
2	200	3,28	3,92	4,92	5,56	6,56	7,20	8,20	8,84	9,84	10,48	11,48	12,12	13,12	13,76	14,76	15,40	16, 40
3	250	4,10	4,90	6,15	6,95	8,20	9,00	10,25	11,05	12,30	13,10	14,35	15,15	16,40	17,20	18,45	19,25	20,50
3	300	4,92	5,88	7,38	8,34	9,84	10,80	12,30	13,26	14,76	15,72	17,22	18,18	19,68	20,64	22,14	23,10	24,60
4	350	5,74	6,86	8,61	9,73	11,48	12,60	14,35	15,47	17,22	18,34	20,09	21,21	22,96	24,08	25,83	26,95	28,70
4	400	6,56	7,84	9,84	11,12	13,12	14,40	16,40	17,68	19,68	20,96	22,96	24,24	26,24	27,52	29,52	30,80	32,80
5	450	7,38	8,82	11,07	12,51	14,76	16,20	18,45	19,89	22,14	23,58	25,83	27,27	29,52	30,96	33,21	34,65	36,90
5	500	8,20	9,80	12,30	13,90	16,40	18,00	20,50	22,10	24,60	26,20	28,70	30,30	32,80	34,40	36,90	38,50	41,00
6	550	9,02	10,78	13,53	15,29	18,04	19,80	22,55	24,31	27,06	28,82	31,57	33,33	36,08	37,84	40,59	42,35	45,10
6	600	9,84	11,76	14,76	16,68	19,68	21,60	24,60	26,52	29,52	31,14	34,44	36,36	39,36	41,28	44,28	46,20	49,20
7	650	10,66	12,74	15,99	18,07	21,32	23,40	26,65	28,73	31,98	34,06	37,31	39,39	42,64	44,72	47,97	50,05	53,30
7	700	11,48	13,72	17,22	19,46	22,96	25,20	28,70	30,94	34,44	36,68	40,18	42,42	45,92	48,16	51,66	53,90	57,40
8	750	12,30	14,70	18,45	20,85	24,60	27,00	30,75	33,15	36,90	39,30	43,05	45,45	49,20	51,60	55,35	57,75	61,50
8	800	13,12	15,68	19,68	22,24	26,24	28,80	32,80	35,36	39,36	41,92	45,92	48,48	52,48	55,04	59,04	61,60	65,60
9	850	13,94	16,66	20,91	23,63	27,88	30,60	34,85	37,57	41,82	44,54	48,79	51,51	55,76	58,48	62,73	65,45	69,70
9	900	14,76	17,64	22,14	25,02	29,52	32,40	36,90	39,78	44,28	47,16	51,66	54,54	59,04	61,92	66,42	69,30	73,80
10	950	15,58	18,62	23,37	26,41	31,16	34,20	38,95	41,99	46,74	49,78	54,53	57,57	62,32	65,36	70,11	73,15	77,90
10	1000	16,40	19,60	24,60	27,80	32,80	36,00	41,00	44,20	49,20	52,40	57,40	60,60	65,60	68,80	73,80	77,00	82,00

Effective areas in [dm²].

Within the L dimension [mm] it is possible to have 5 mm intervals

Within the H dimension [mm] it is possible to have 50 mm intervals

In the case of dimensions over LxH=1000 x 1000 [mm] – pressure relief dampers DEP DELTAin batteries

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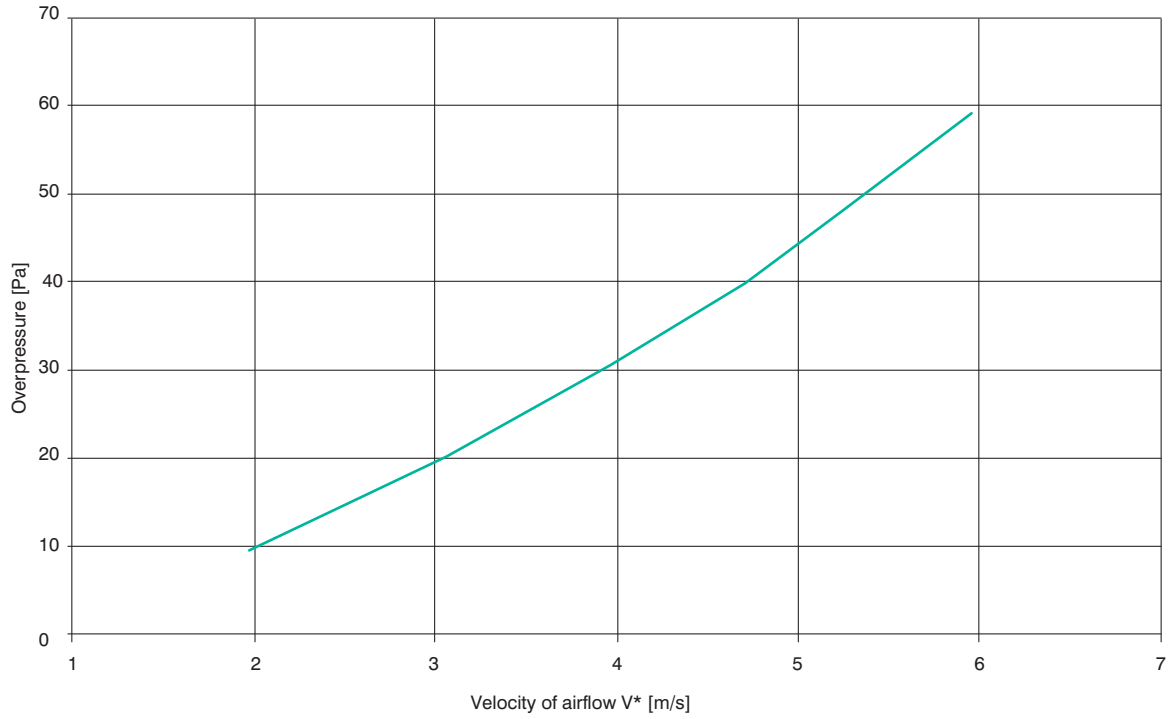
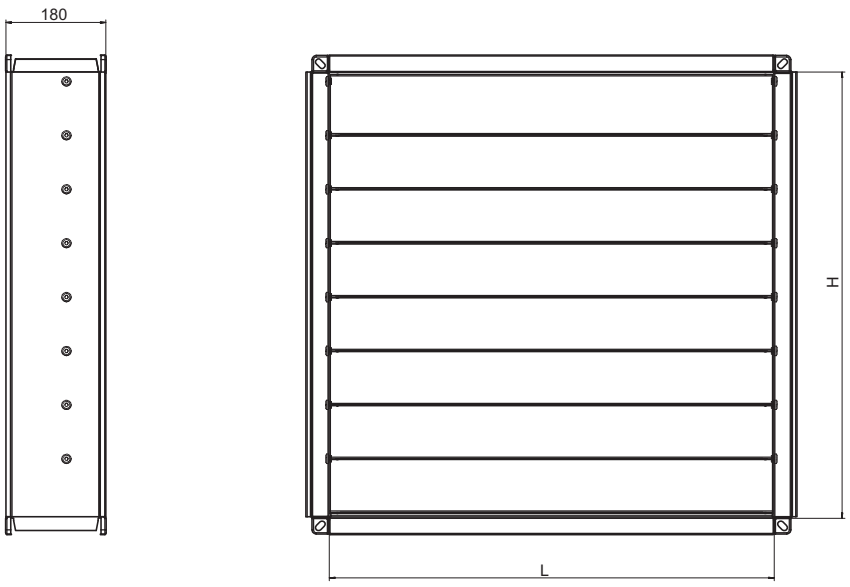
PRESSURE CHARACTERISTIC



V* velocity [m/s] refferd to the netto surface of the damper

DIMENSIONS



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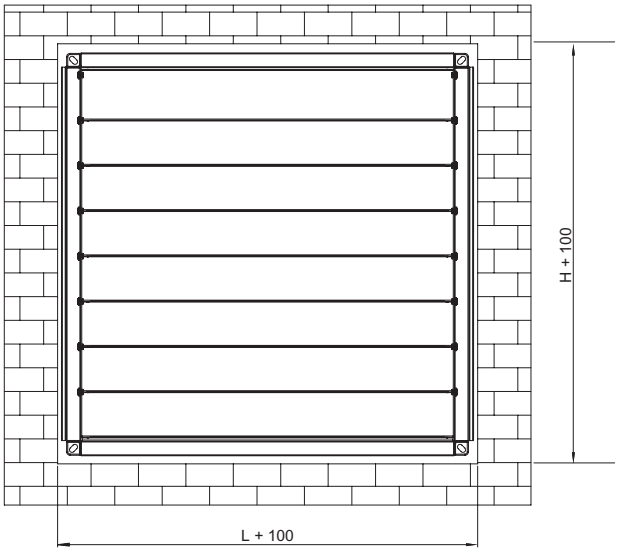
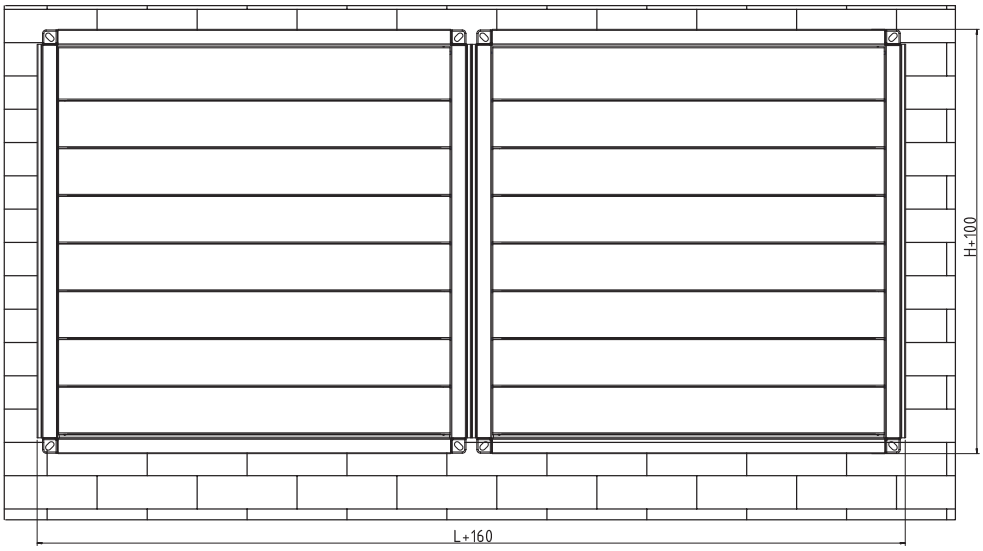
INSTALLATION DIMENSIONS



Vertical installation DEP DELTA in partition walls



Vertical installation set DEP DELTA in partition walls

ORDER KEY

DEP DELTA	L x H = 300 x 600	Galvanised steel
Type	Damper dimensions	finishing

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