

NOVA-A with ODEN-F

Aluminium Adjustable Grille

Handbook



Table of Contents

Description3

Dimensions & Weights5

Ordering Codes6

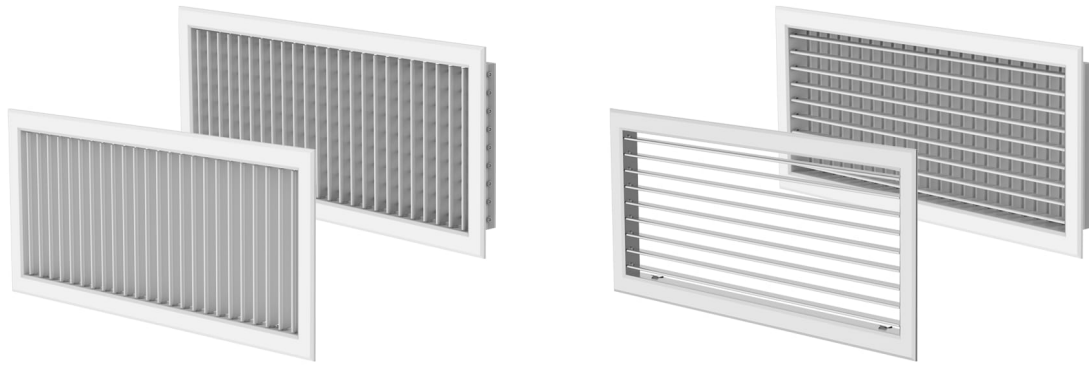
Accessory7

Technical Parameters11

Installation12

Transport, Storage and Operation19

Supplement20



Description

NOVA-A is a rectangular aluminium diffusion grille with one or two rows of adjustable blades. It is adequate for usage in such premises, that require a higher emphasis on appearance. It is intended for wall or ceiling installation in offices, residential premises or hotels. The NOVA-A diffusion grille directs the air using its adjustable blades in a horizontal, as well as vertical direction. It is designed for air supply and air extract. For a balanced distribution of air through the entire diffusion grille it is recommended to use a plenum box.

Highlights

- Individually adjustable blades, single or double layer for well-adjusted air discharge pattern
- Design with emphasized aesthetics
- High ventilation capacity with low sound generation

Accessory

- ODEN-F: Plenum Box

Design

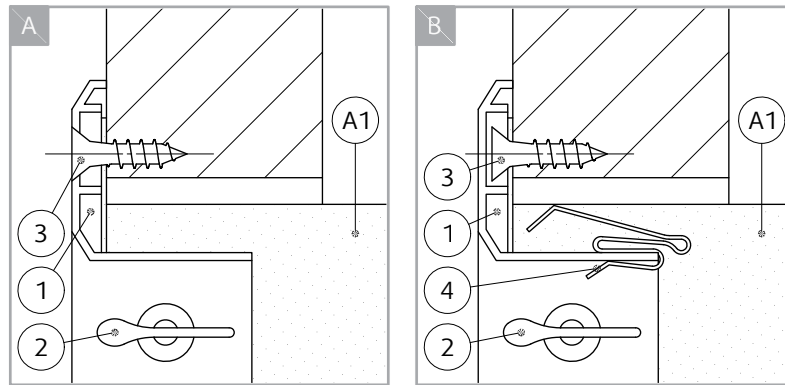
Material Composition

The NOVA-A diffusion grille is manufactured from aluminum profiles with anodized surface or, if appropriate, a powder-painted (RAL 9003 - signal white) surface finish. Other RAL types are available upon request.

Type of Blades

Single-row as well as double-row diffusion grilles can have both horizontal and vertical front blade alignment. The second row of blades is always perpendicular to the first row. The blades' axial pitch is 20 mm.

Product Parts



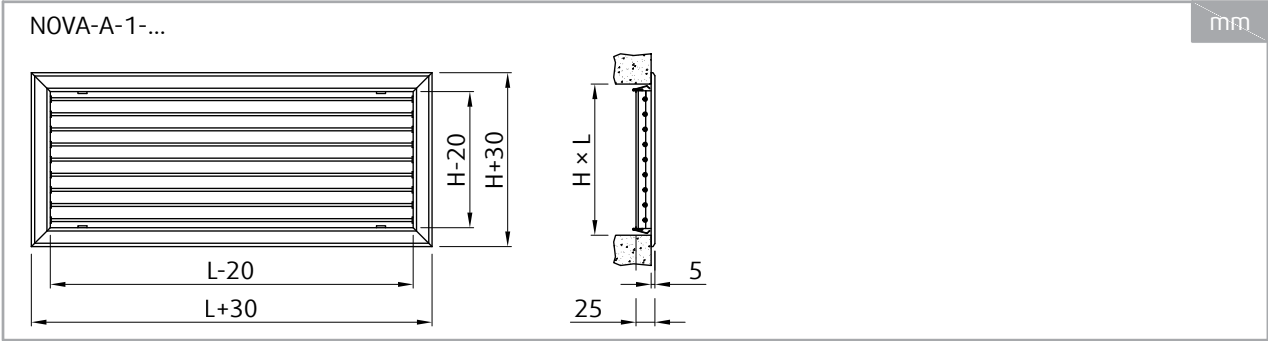
A: Mounting type 1, the grille directly attached with the wall mounting frame and to the building structure by screws.

B: Mounting type 2, the grille attached to the wall mounting frame by spring clips. The wall mounting frame fixed to the building structure by screws.

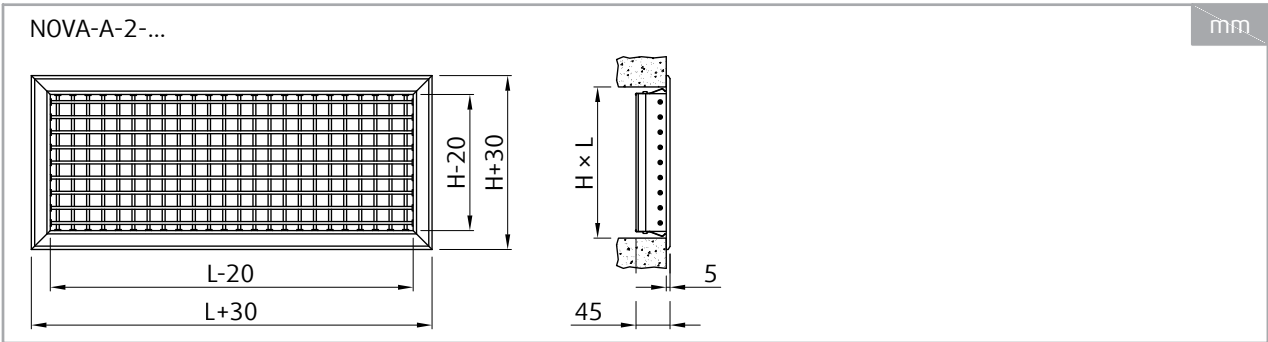
Legend

- 1** Grille frame
- 2** Grille blade, individually adjustable
- 3** Screw
- 4** Spring clip
- A1** Wall mounting and adjustment frame, part of plenum box ODEN-F

Dimensions & Weights



NOVA-A-1-...									
m (kg)			L						
			mm						
			200	300	400	500	600	700	800
H	mm	100	0,20	0,27	0,34	0,41	-	-	-
		150	-	0,34	0,43	0,52	-	-	-
		200	-	-	-	0,67	0,79	0,91	1,03



NOVA-A-2-...									
m (kg)			L						
			mm						
			200	300	400	500	600	700	800
H	mm	100	0,30	0,42	0,54	0,67	-	-	-
		150	-	0,57	0,73	0,89	-	-	-
		200	-	-	-	1,16	1,38	1,60	1,81

Ordering Codes

Rows of blades

- 1 Single-row
- 2 Double-row

Mounting with

- 1 Screws
- 2 Spring clips

Dimensions ¹

L × H

Blades ²

- H** Horizontal
- V** Vertical

Surface finish ³

- AN** Anodized
- SW** Signal white (RAL9003, gloss 30%)
- RALXXXX** Other RAL colour

NOTES:

1. The plenum box ODEN-F for the grille of the size 200 mm × 100 mm is available only with rear duct connection orientation, type 1. The lateral connection orientation type 2 is not possible.
2. In case the front row blade alignment – horizontal (H) or vertical (V) – is not specified in the ordering code, the product with a horizontal blade alignment (H) will be delivered as default.
3. In case the RAL surface finish is not specified in the ordering code, the product will be delivered with a natural anodized surface finish as default.

Example of Ordering Code

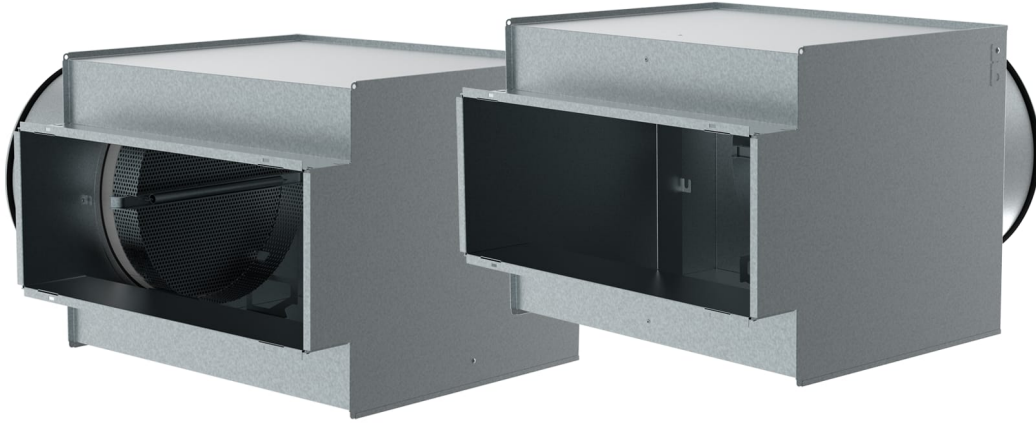
NOVA-A-2-2-400×200-H-SW

Aluminum grille with two rows of blades. Mounting with spring clips, intended for a structural opening with dimensions 400 mm × 200 mm, the front row of blades horizontally oriented. Signal white powder paint RAL9003 surface finish.

Accessory

ODEN-F

Plenum Box



Description

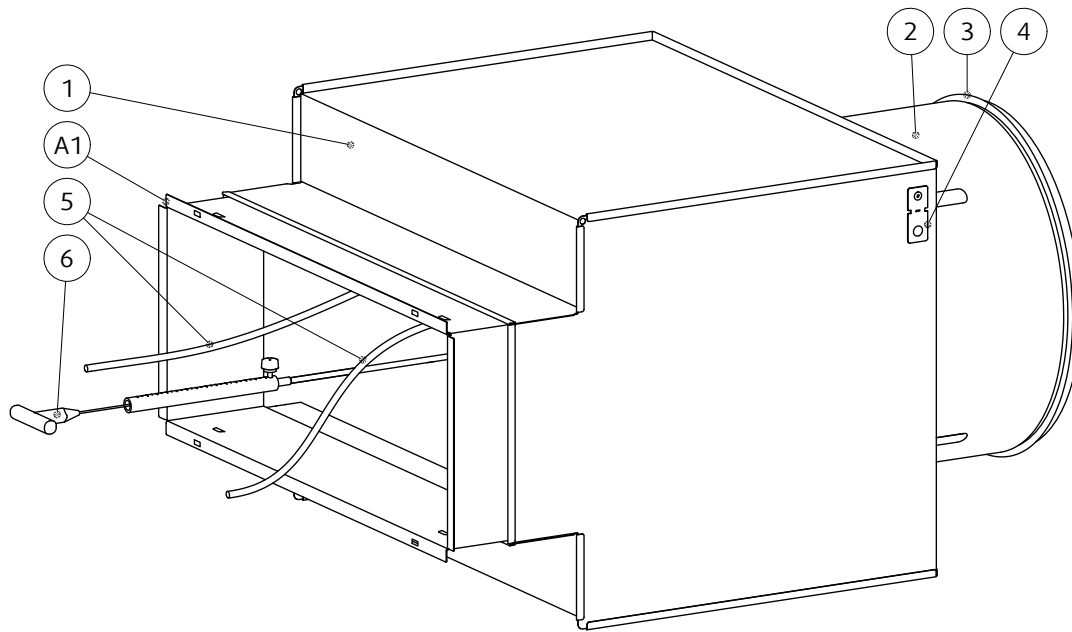
ODEN-F is a plenum box intended for both air supply and air extract. It can be used along with the NOVA-A grilles for the supply air flow velocity reduction and a better distribution (optimizing) of the air flow through the grille with possibility to adjust and measure the air flow volume.

Design

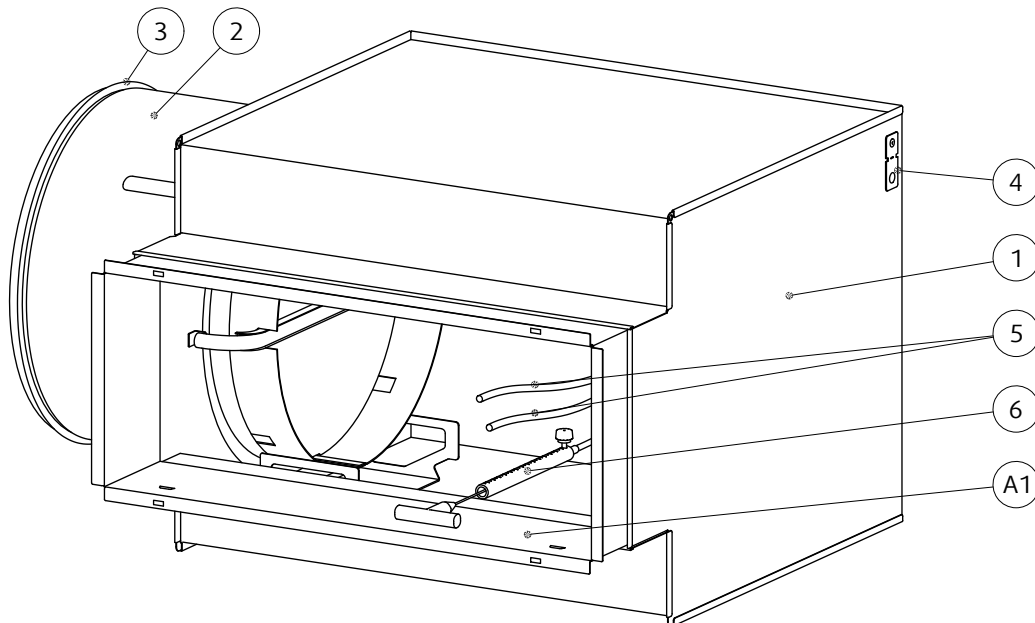
The ODEN-F plenum box is manufactured from galvanized steel sheet with a rear or lateral side mounted circular duct connection with a rubber gasket. The plenum box is equipped by a cylinder-shaped perforated adjustment damper in the connection spigot. A measurement probe on the damper enables supply or extract air flow measurements readable outside the box by pressure impulse tubes. The damper can be adjusted from outside the box by a pulling cable mechanism. The measurement and adjustment requires no additional mounting tools.

Product Parts

ODEN-F-1-...



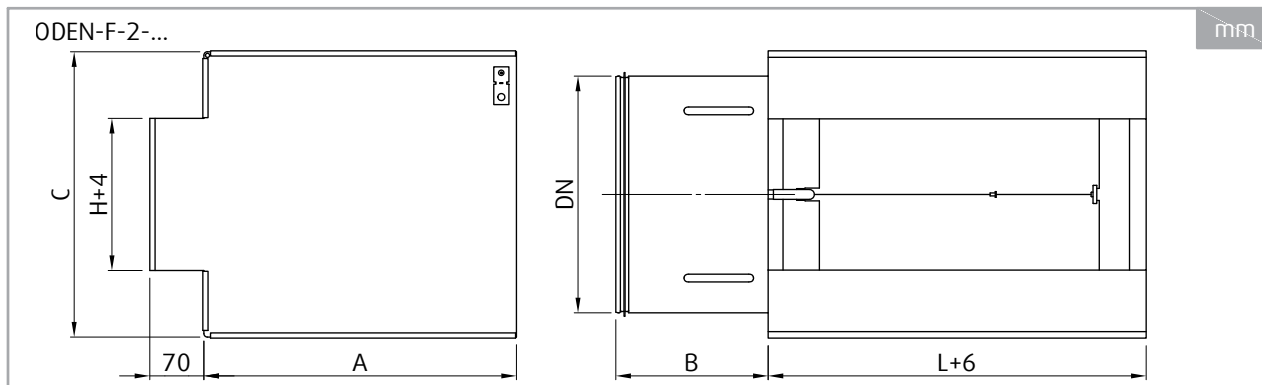
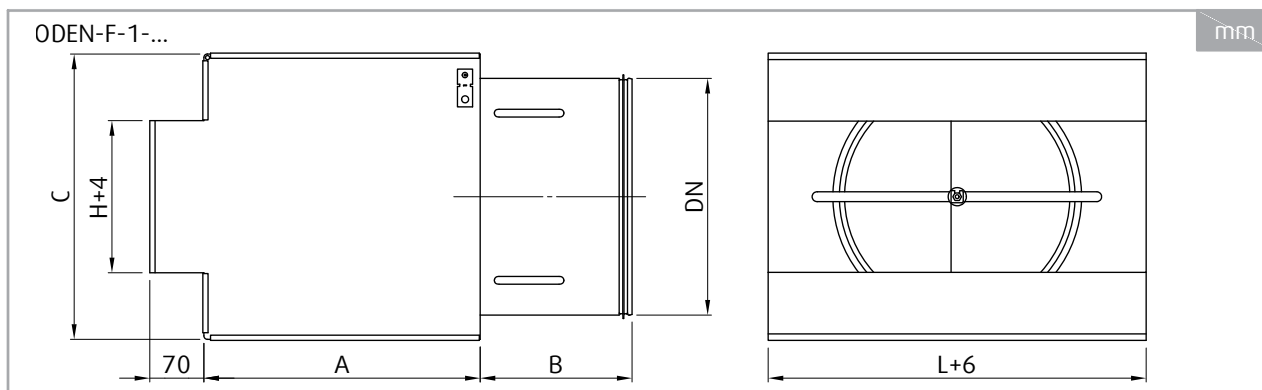
ODEN-F-2-...



Legend

- 1** Plenum box casing
- 2** Duct connection
- 3** Duct connection gasket
- 4** Bendable hangers
- 5** Commissioning tubes
- 6** Bowden
- A1** Wall mounting and adjustment frame, part of plenum box ODEN-F

Dimensions



ODEN-F	L × H	DN	A	B	C	m
	mm					kg
ODEN-F-1	200 × 100	125	302	145	190	3,6
ODEN-F-1	300 × 100	160	317	160	225	5,1
ODEN-F-2			260			4,8
ODEN-F-1	300 × 150	200	337	170	265	6,2
ODEN-F-2			295			6,0
ODEN-F-1	400 × 100	160	317	160	225	5,9
ODEN-F-2			260			5,4
ODEN-F-1	400 × 150	250	352	185	315	8,4
ODEN-F-2			350			8,4
ODEN-F-1	500 × 100	200	337	170	265	7,5
ODEN-F-2			295			7,2
ODEN-F-1	500 × 150	250	352	185	315	9,1
ODEN-F-2			350			9,0
ODEN-F-1	500 × 200	315	367	200	380	11,4
ODEN-F-2			415			11,8
ODEN-F-1	600 × 200		367			11,6
ODEN-F-2			415			12,5
ODEN-F-1	700 × 200		367			12,3
ODEN-F-2			415			13,3
ODEN-F-1	800 × 200		367			13,0
ODEN-F-2			415			14,1

Ordering Codes

Duct connection location

1 Rear

2 Lateral

Dimensions (equal to grille nominal dimensions)

L×H

Example of Ordering Code

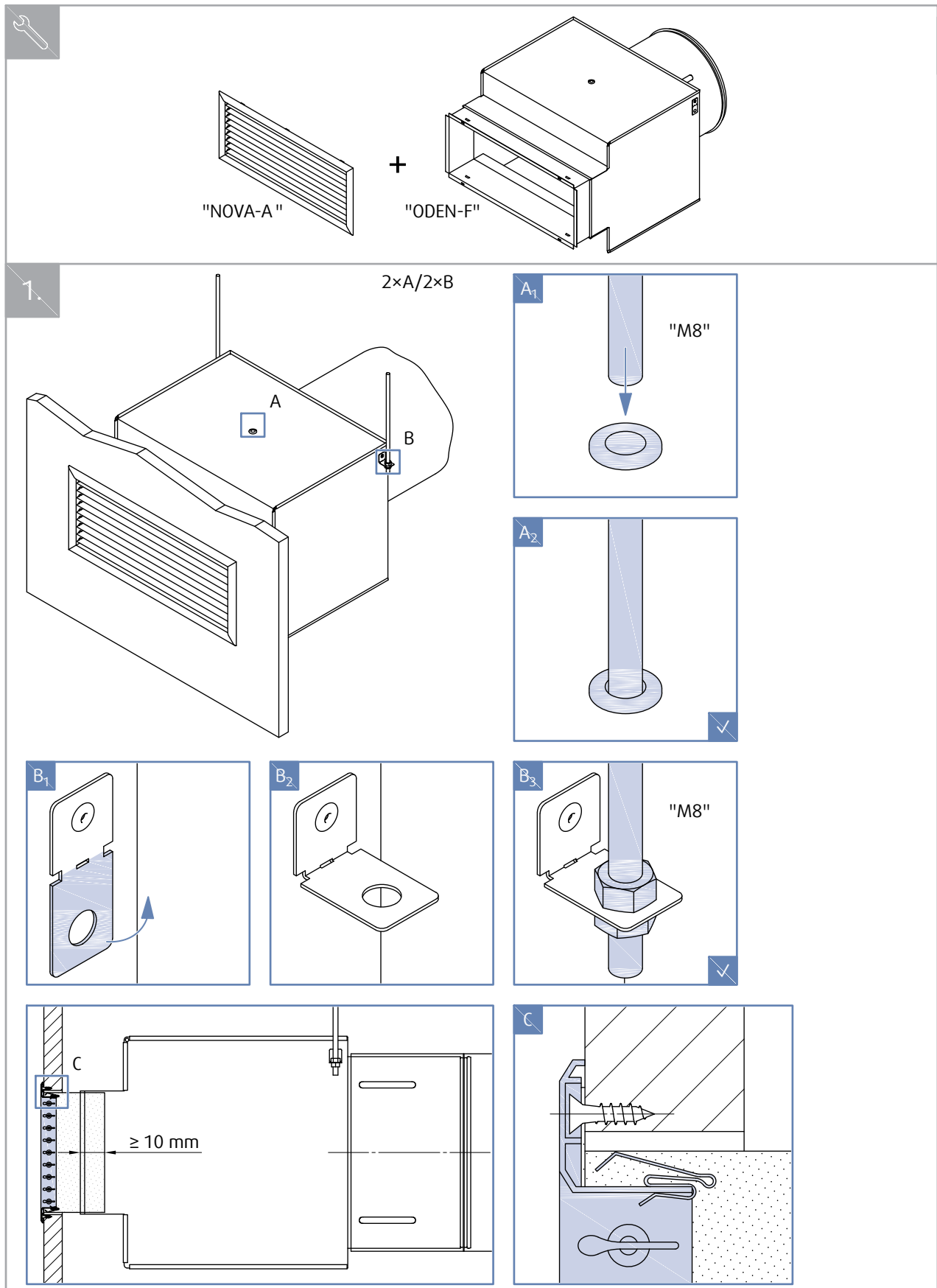
ODEN-F-2-800x200

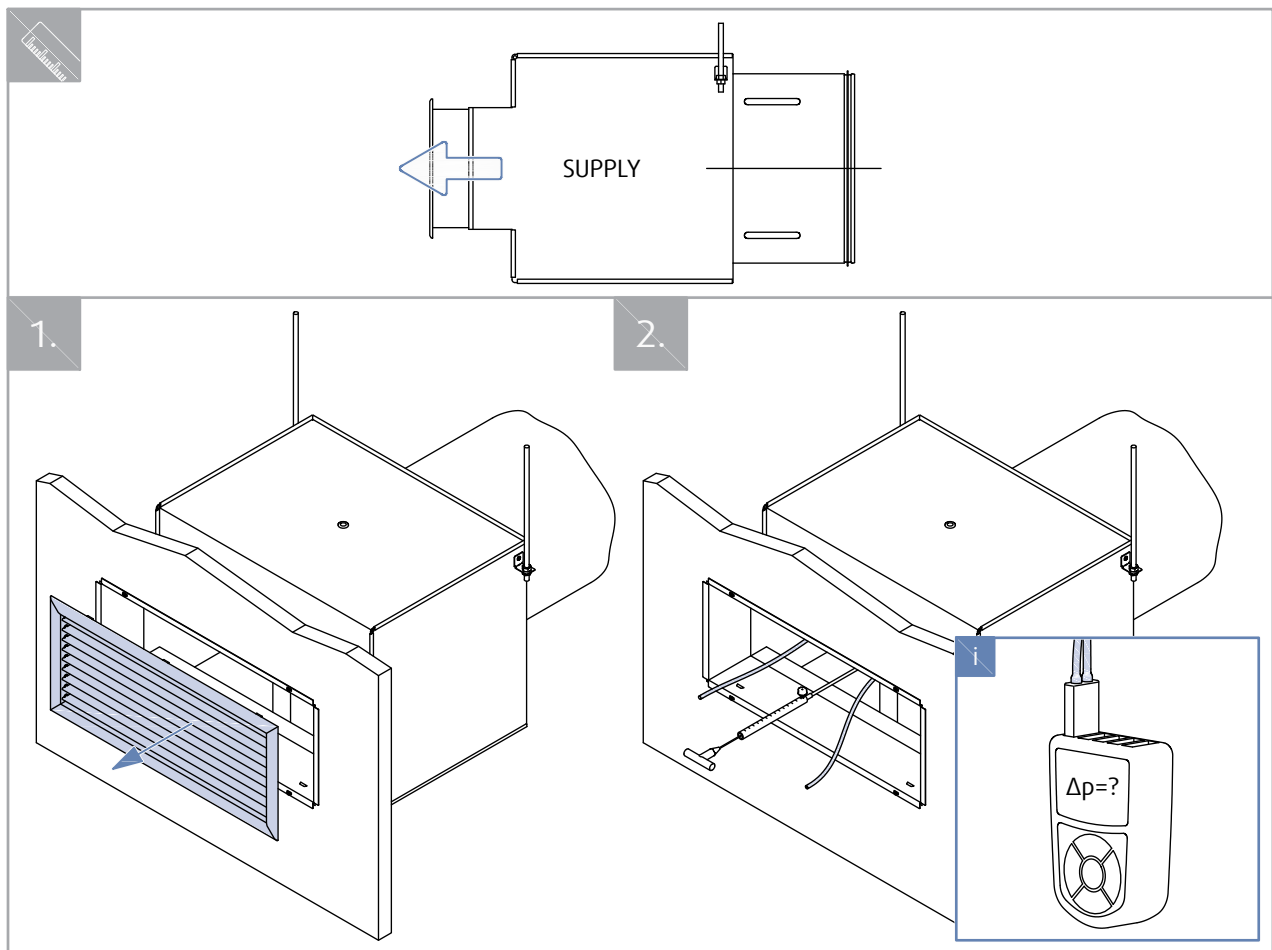
Plenum box with lateral duct connection for NOVA-A grille with nominal dimensions 800 mm x 200 mm.

Technical Parameters

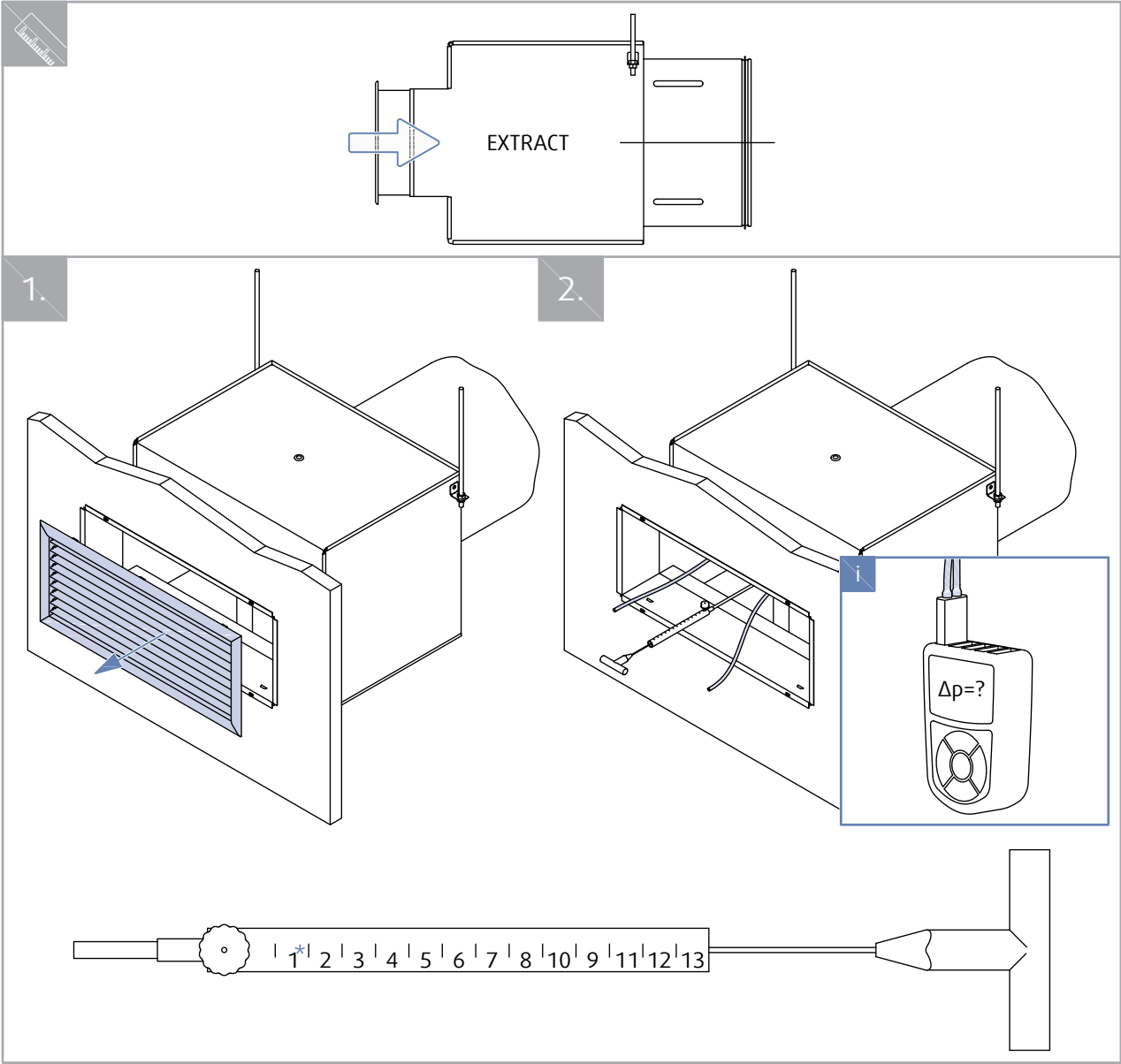
Diagrams and technical parameters are available at design.systemair.com

Installation



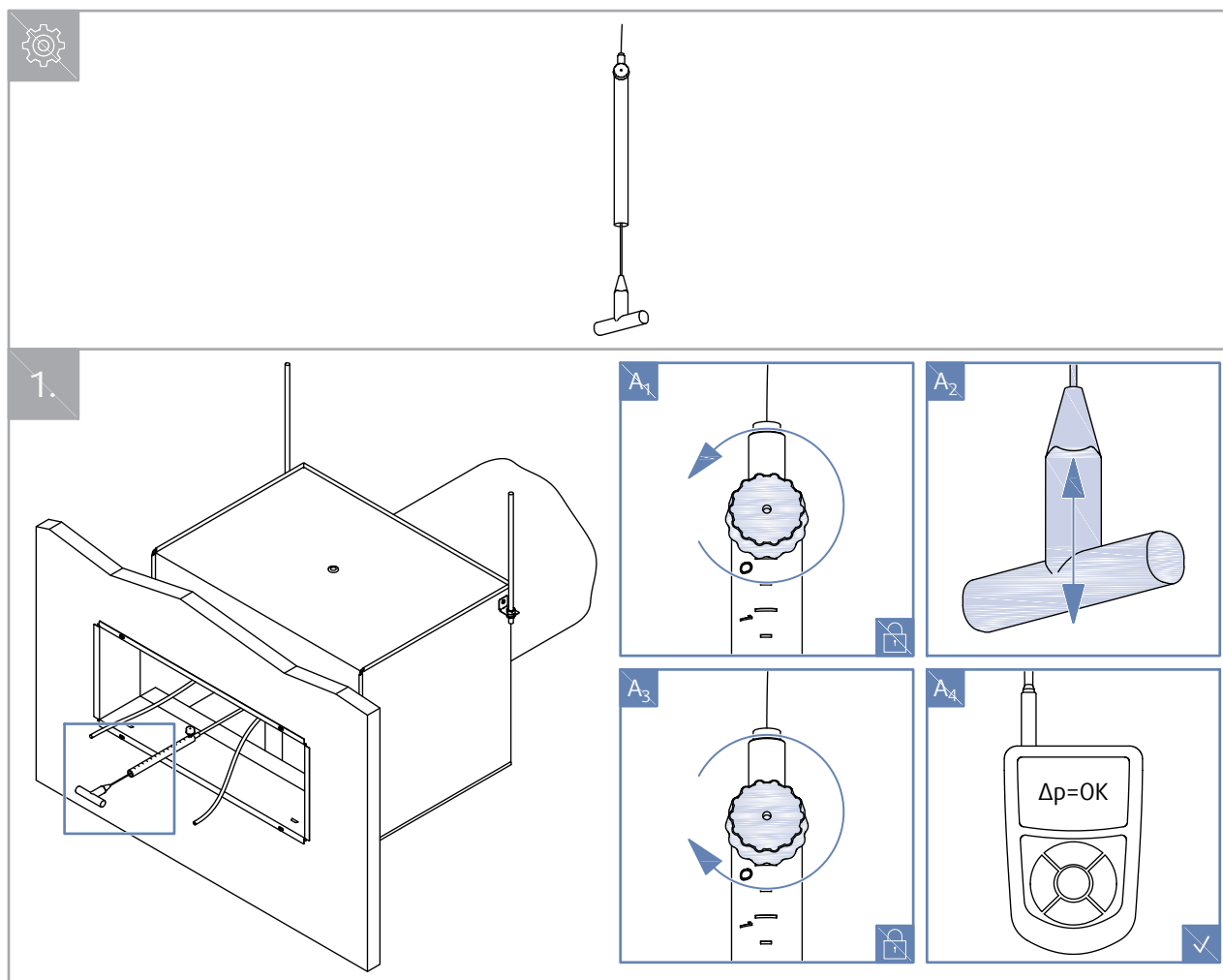


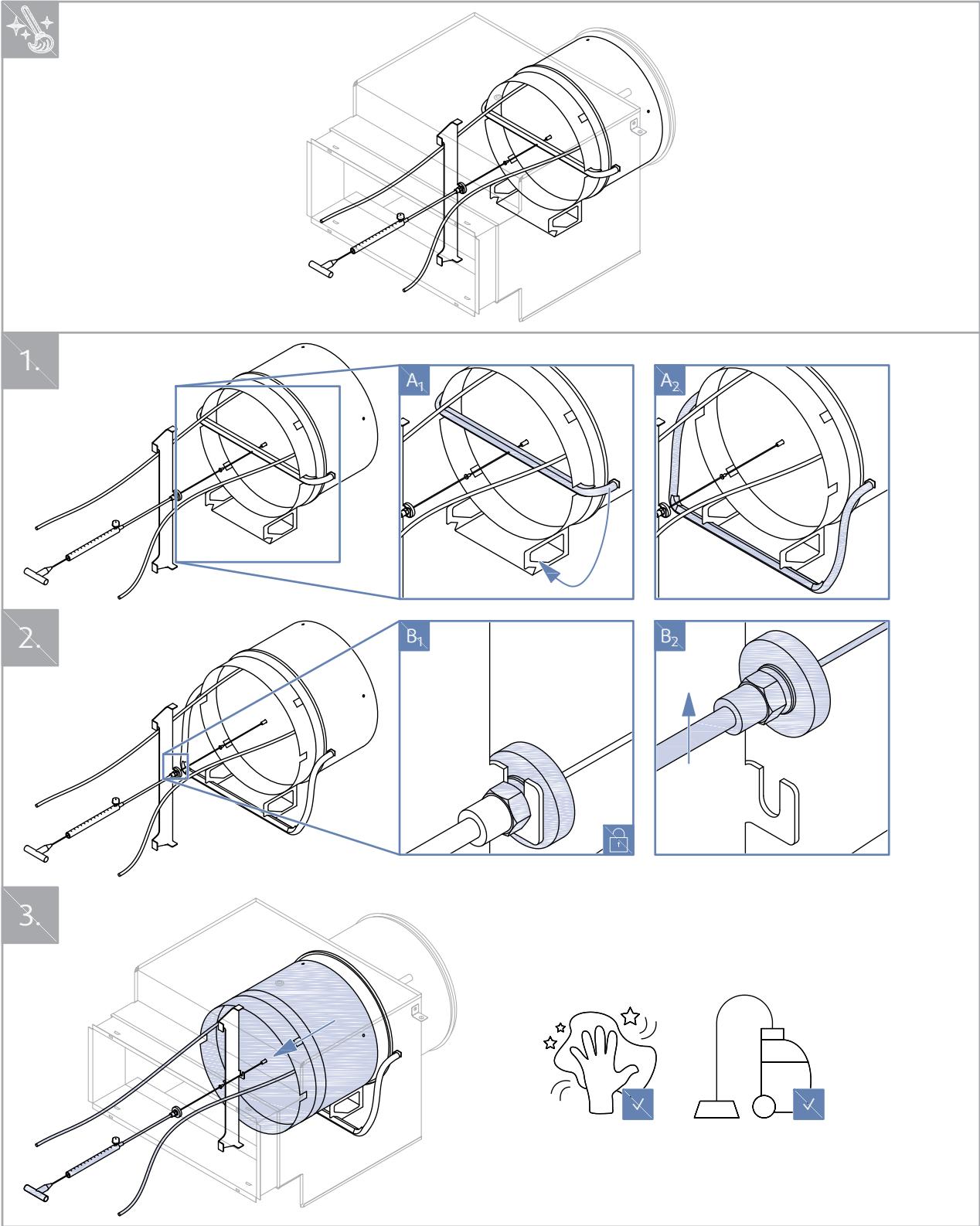
SUPPLY 	DN	k	
ODEN-F-	mm	→ q (m³/h)	→ q (l/s)
200×100-1	125	33,13	9,20
300×100-1	160	57,71	16,03
300×100-2			
400×100-1			
400×100-2			
300×150-1	200	91,15	25,32
300×150-2			
500×100-1			
500×100-2			
500×150-1	250	143,57	39,88
500×150-2			
400×150-1			
400×150-2			
500×200-1	315	247,55	68,76
500×200-2			
600×200-1			
600×200-2			
700×200-1			
700×200-2			
800×200-1			
800×200-2			



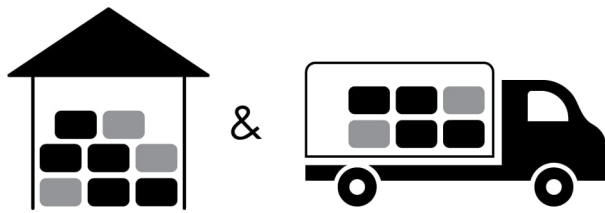
EXTRACT 	DN	*2	*3	*4	*5	*6	*7	*8	*9	*10	*11	*12	*13
		 → q (m³/h)											
ODEN-F-	mm												
200×100-1	125	39,85	35,36	30,86	26,37	22,72						-	-
300×100-1	160	65,44	54,93	44,43	33,93	23,43	37,60			43,05			-
300×100-2		52,08	46,27	40,45	35,56						40,24		-
400×100-1		67,11	58,41	49,70	41,00	32,30	34,52			38,46			-
400×100-2		70,59	61,10	51,61	42,11	33,59			38,04				-
300×150-1		200	124,51	104,31	84,10	63,89	43,68	57,15					-
300×150-2	125,55		105,27	84,99	64,70	44,42	60,90					-	
500×100-1	127,62		111,03	94,44	77,85	61,29					67,95	-	
500×100-2	125,28		108,51	91,73	74,96	59,03						-	
500×150-1	250	198,00	191,52	185,05	168,80					139,33			
500×150-2		198,26	176,47	154,69	132,90	115,01							
400×150-1		188,56	181,89	175,22	168,55	161,88	143,29	124,70	108,03				
400×150-2		212,96	190,87	168,78	146,69	124,60	116,81	106,03					
500×200-1	315	370,33	326,78	283,22	239,67	196,11	187,48	173,85					
500×200-2		409,75	354,65	299,55	244,45	189,34	174,24						
600×200-1		274,39	246,02	217,64	189,27	161,88							
600×200-2		285,17	260,57	235,96	211,36	183,63		170,80					
700×200-1		301,42	271,09	240,75	210,42	170,34							
700×200-2		67,11	58,41	49,70	41,00	33,41			37,75				
800×200-1		281,85	256,63	231,40	206,18	180,96	166,97						
800×200-2		294,80	271,96	249,13	226,29	203,46	189,41	175,36	164,09				

EXTRACT 	DN	*2	*3	*4	*5	*6	*7	*8	*9	*10	*11	*12	*13
		 → q (l/s)											
ODEN-F-	mm												
200×100-1	125	11,07	9,82	8,57	7,32	6,31						-	-
300×100-1	160	18,18	15,26	12,34	9,42	6,51	10,44			11,96			-
300×100-2		14,47	12,85	11,24	10,44						11,18		-
400×100-1		18,64	16,22	13,81	11,39	8,97	9,59			10,57			-
400×100-2		19,61	16,97	14,34	42,11	9,33			10,57				-
300×150-1		200	34,59	28,97	23,36	63,89	43,68	15,87					
300×150-2	34,88		29,24	23,61	64,70	44,42	16,92						-
500×100-1	35,45		30,84	26,23	77,85	17,03					18,88		-
500×100-2	34,80		30,14	25,48	74,96	16,40						-	
500×150-1	250		55,00	53,20	51,40	46,89						38,70	
500×150-2		55,07	49,02	42,97	36,92	31,95							
400×150-1		52,38	50,53	48,67	46,82	44,97	39,80	34,64	30,01				
400×150-2		59,15	53,02	46,88	40,75	34,61	32,45	29,45					
500×200-1		315	102,87	90,77	78,67	66,57	54,47	52,08	48,29				
500×200-2	113,82		98,51	83,21	67,90	52,60	48,40						
600×200-1	76,22		68,34	60,46	52,57	44,97							
600×200-2	79,21		72,38	65,54	58,71	51,01		47,45					
700×200-1	83,73		75,30	66,88	58,45	47,32							
700×200-2	18,64		16,22	13,81	11,39	9,28			10,49				
800×200-1	78,29		71,28	64,28	57,27	50,27	46,38						
800×200-2	81,89		75,55	69,20	62,86	56,52	52,61	48,71	45,58				





Transport, Storage and Operation



 °C -40°C ... +50°C

 % ≤ 95%



 °C -20°C ... +70°C

 % ≤ 95%

Supplement

Any deviations from the technical specifications contained herein and the terms should be discussed with the manufacturer. We reserve the right to make any changes to the product without prior notice, provided that these changes do not affect the quality of the product and the required parameters.

Current information on all products is available on design.systemair.com.

