



SÄÄTÖOPAS
INJUSTERINGSGUIDE
COMMISSIONING GUIDE
01.06.2018

$$q_v = k \times \sqrt{\Delta P_m}$$

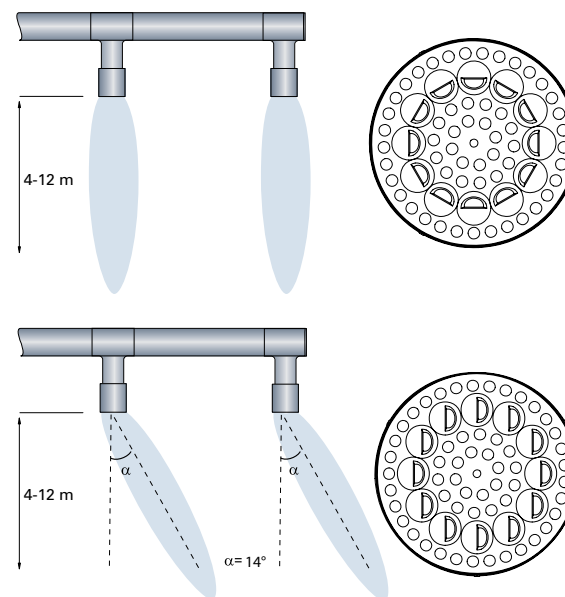
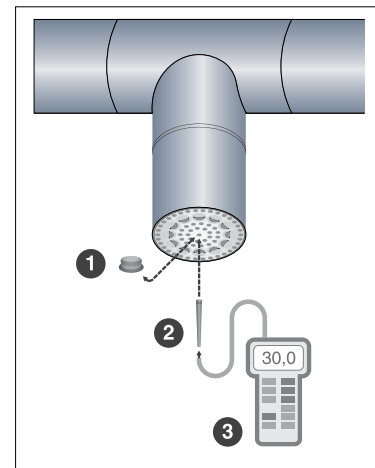
BVHR, BVKR	49	RAM	39
CLIK	14	RAN	36
DINO-A	40	RAS	48
DINO-K	42	RATT	33
DINO-R	44	RITT	33
DINO-T	46	REK+ PAK	32
ECO 1	59	REK+TAK	30
ECO 2	60	REL	13
ECO 3	61	RETRO	56
ECO 4	62	RIL	7
ELO	58	RINO	21
FINO	17	RINOI	21
LEK+ PAK	32	RINO-S	21
LEK+TAK	30	ROK+ PAK	32
LINO	15	ROK+TAK	30
LOK+ PAK	32	RIX	3
LOK+TAK	30	ROL	10
MAK+TAK	30	ROL-S	12
MAP+TAK	30	RON	36
MIS	36	RONDO	22
MIK	36	ROX	11
MOT+TAK	30	ROX-S	12
NOP	5	RUL	8
NOT	5	RUX	4
NOP-S	5	RXA	50
NOT-S	5	SAM	38
NOX/NOX-S	6	SAM-P	57
OKA	23	SAP	58
OKA-P	25	SAS	34
OKA-S	24	SAT	55
OKE	26	SET	55
OKE-P	29	SES	35
OKE SPECIAL	28	SET-P	53
OKI	52	TOF+TAK	30
PINOC	18	TINO	16
PINOD	19	TINOI	54
RAL	9	TINO-P	27
RALP	51	VIP	20

RIX

$$q_v = k \times \sqrt{\Delta P_m}$$

RIX	k
250	15,0
315	26,0
400	44,5

Säätö - suuttimen tulppaus: k=-0,2
 Injustering - pluggning av 1 dysa: k=-0,2
 Adjustment - plugging 1 nozzle: k=-0,2

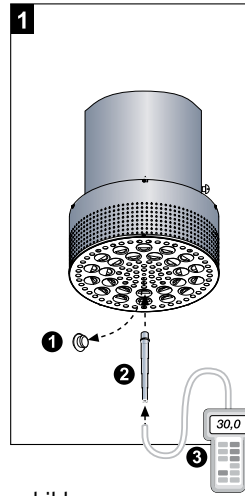


RUX

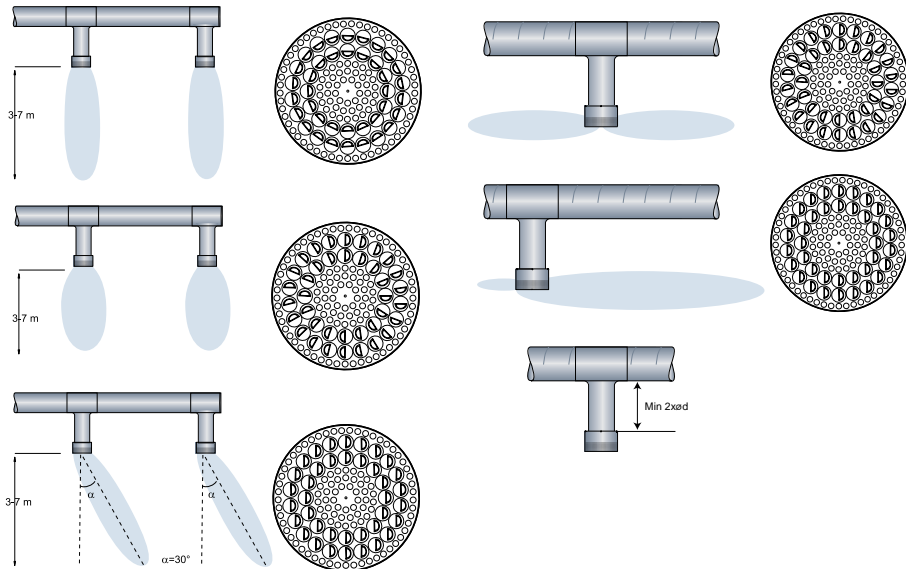
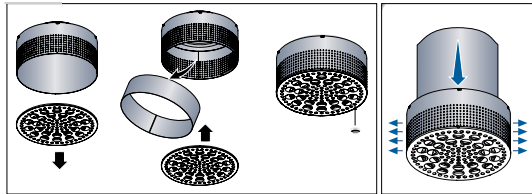
$$q_v = k \times \sqrt{\Delta P_m}$$

RUX	k
160	8,1
200	12,2
250	20,4
315	28,7
400	46,8

Säätö - suuttimen tulppaus: $k=-0,2$
 Injustering - pluggning av 1 dysa: $k=-0,2$
 Adjustment - plugging 1 nozzle: $k=-0,2$



Puhalluskuvion säätö • Inställning av spridningsbilden
 Adjusting the air flow pattern



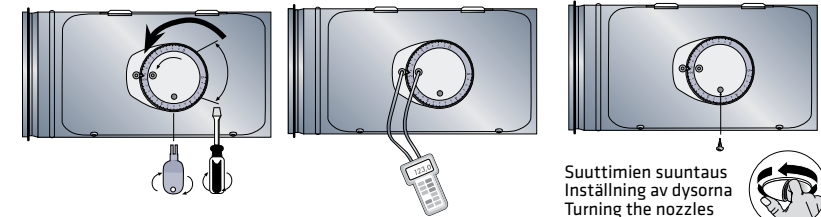
NOP/NOT/NOP-S/NOT-S

$$q_v = k \times \sqrt{\Delta P_m}$$

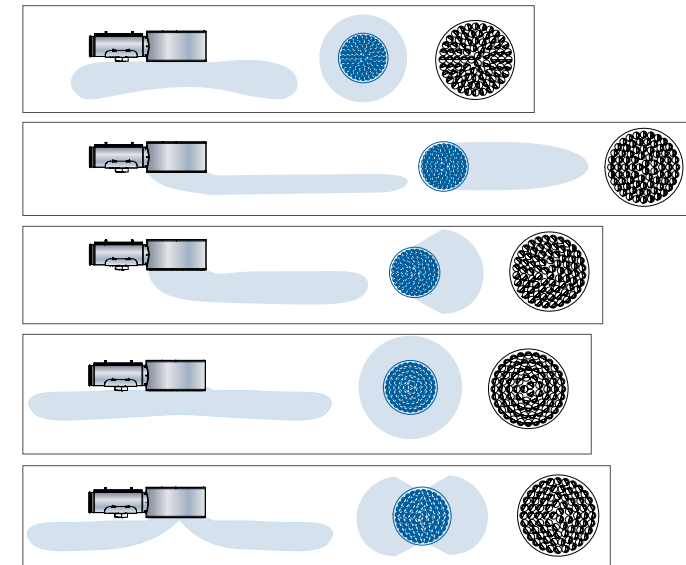
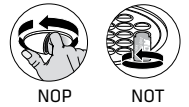
NOP/NOT/NOP-S/NOT-S	k				
	125	160	200	250	315
4,5-5	20	33	49	90	167
4	18	29	42	76,5	137
3,5	15	24	33	59,5	110
3	13	20	27	47,3	88
2,5	10,5	16	21	38	71
2	9	13,2	17,2	31,4	55
1,5	7,5	10,4	13,9	26	44
1	6	8,4	10,6	21,3	35
0,5	5	6,5	8,2	16,8	27
0	4	4,9	5,6	14	21

Säätöasento
 Injusteringsläge
 Adjustment settings

Säätösuunta • Adjustment direction • Rotationsriktningen



Suuttimien suuntaus
 Inställning av dysorna
 Turning the nozzles

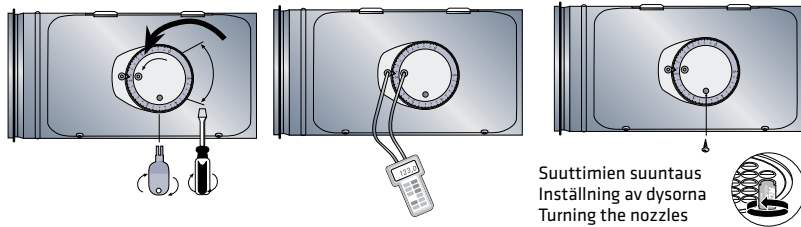


NOX/NOX-S

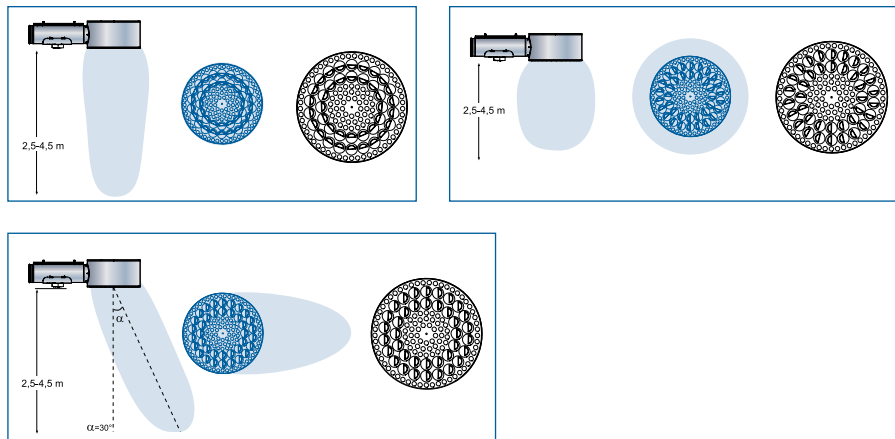
$$q_v = k \times \sqrt{\Delta P_m}$$

NOX/NOX-S		k				
		125	160	200	250	315
Säätöasento Injusteringsläge Adjustment settings	4,5-5	20	33	49	90	167
	4	18	29	42	76,5	137
	3,5	15	24	33	59,5	110
	3	13	20	27	47,3	88
	2,5	10,5	16	21	38	71
	2	9	13,2	17,2	31,4	55
	1,5	7,5	10,4	13,9	26	44
	1	6	8,4	10,6	21,3	35
	0,5	5	6,5	8,2	16,8	27
	0	4	4,9	5,6	14	21

Säätösuunta • Adjustment direction • Rotationsriktningen



Suuttimien suuntaus
Inställning av dysorna
Turning the nozzles

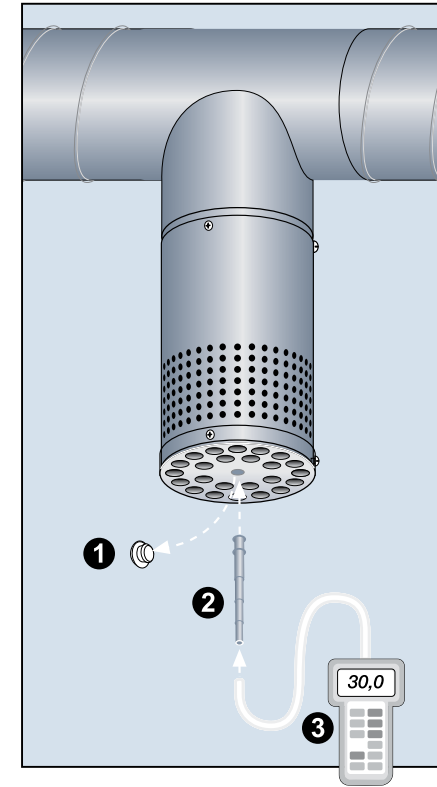


RIL

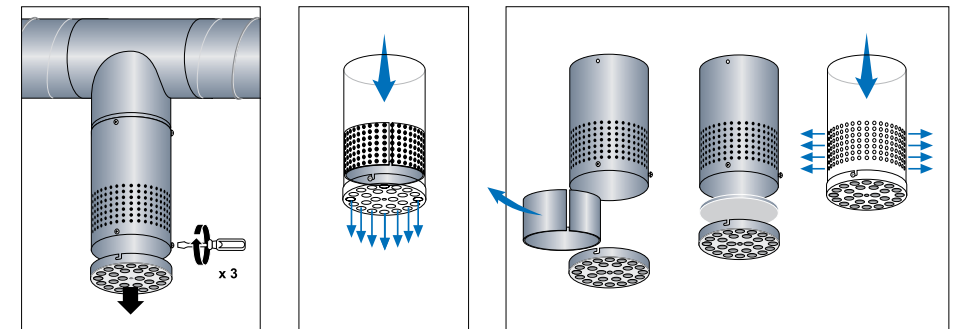
$$q_v = k \times \sqrt{\Delta P_m}$$

11/2005 alkaen

RIL	k
160	7,4
200	12,4
250	17,7
315	29,0
400	48,8



Puhalluskuvion säätö
Inställning av spridningsbilden
Adjusting the air flow pattern

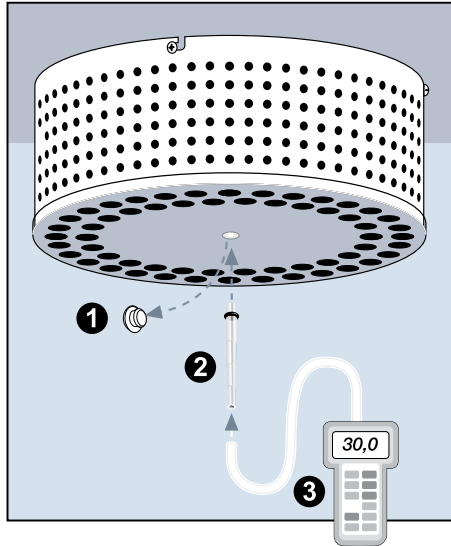


RUL

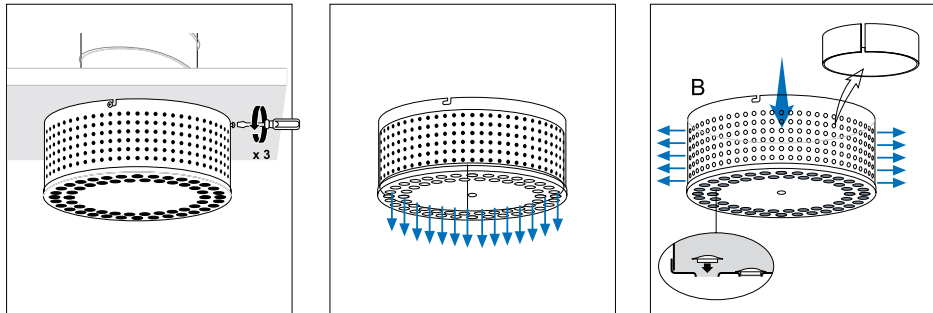
$$q_v = k \times \sqrt{\Delta P_m}$$

11/2005 alkaen

RUL	k
160	9,2
200	13,8
250	23,2
315	34,6
400	49,1



Puhalluskuvion säätö
 Inställning av spridningsbilden
 Adjusting the air flow pattern

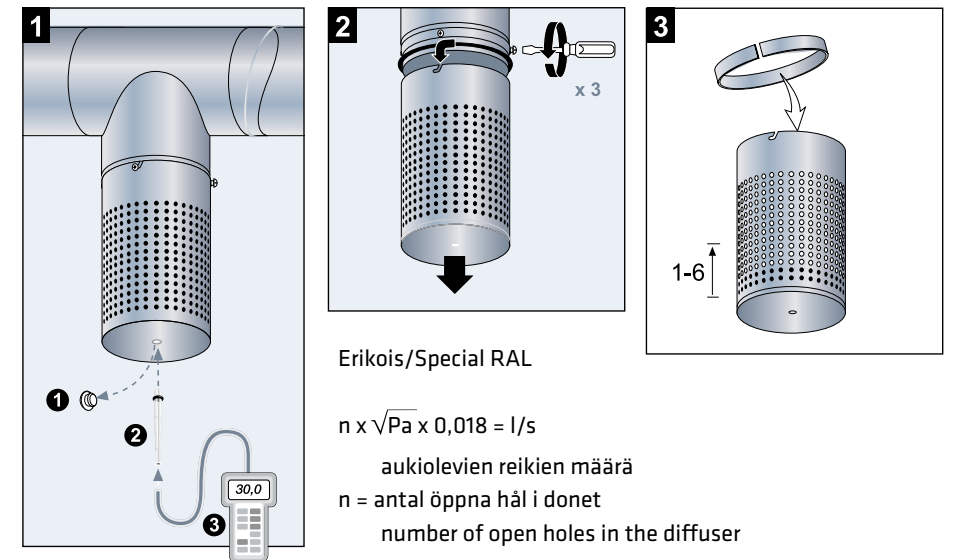


RAL

$$q_v = k \times \sqrt{\Delta P_m}$$

		k						
RAL - Ød - 360		100	125	160	200	250	315	400
A		4,1	5,6	9,2	15,1	23,2	33,0	47,4
Suljettu Stängda Closed	1	3,7	5,0	8,5	14,2	22,1	31,6	45,6
	2	3,2	4,5	7,8	13,4	21,0	30,2	43,8
	3	2,8	3,9	7,1	12,5	19,9	28,9	42,1
	4	2,3	3,4	6,4	11,6	18,8	27,5	40,3
	5		2,8	5,7	10,8	17,7	26,1	38,6
	6		2,2	4,9	9,9	16,6	24,7	36,8

		k						
RAL - Ød - 180		100	125	160	200	250	315	400
A		3,5	6,1	8,7	14,3	22,8	35,2	52,1
Suljettu Stängda Closed	1	3,3	5,8	8,3	13,9	22,3	34,5	51,3
	2	3,1	5,5	8,0	13,5	21,7	33,9	50,4
	3	2,8	5,2	7,6	13,0	21,2	33,2	49,5
	4	2,6	4,9	7,2	12,6	20,6	32,6	48,7
	5	2,4	4,6	6,9	12,2	20,1	31,9	47,8
	6	2,1	4,3	6,5	11,7	19,6	31,3	46,9



Erikois/Special RAL

$$n \times \sqrt{Pa} \times 0,018 = l/s$$

aukiolevien reikien määrä

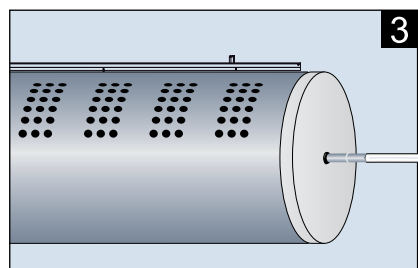
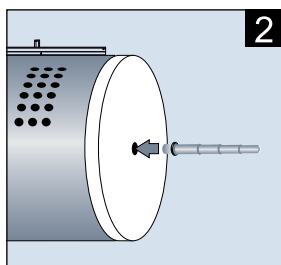
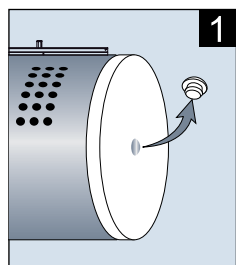
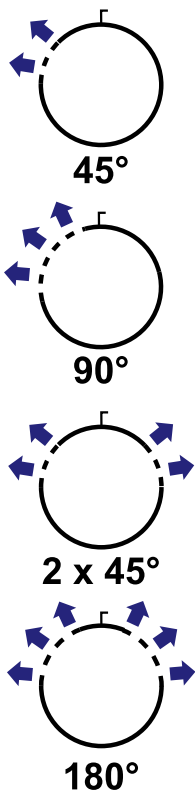
n = antal öppna hål i donet

number of open holes in the diffuser

ROL

$$q_v = k \times \sqrt{\Delta P_m}$$

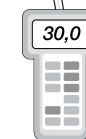
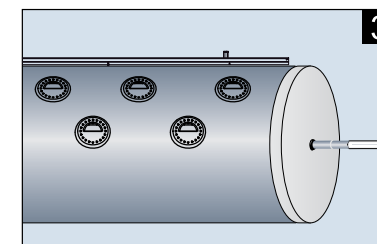
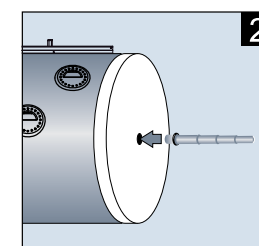
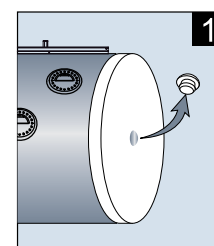
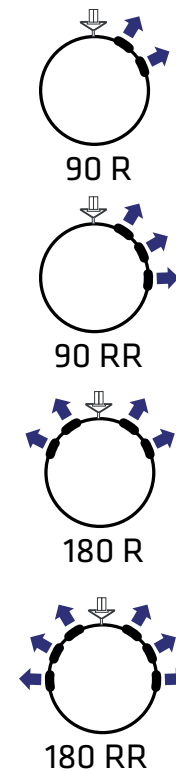
ROL	Tuloilmasektori Tillufts sektor Supply sektor	k			
		Pituus/Längd/Length			
		1500	3000	4500	6000
160	45	6,3	12,6	15,1	15,1
	90 (2x45)	12,6	15,1	15,1	15,1
	180	15,1	15,1	15,1	15,1
200	45	7,9	15,8	23,6	25,2
	90 (2x45)	15,8	25,2	25,2	25,2
	180	25,2	25,2	25,2	25,2
250	45	9,8	19,5	29,3	31,3
	90 (2x45)	19,5	31,3	31,3	31,3
	180	31,3	31,3	31,3	31,3
315	45	13,0	26,0	39,0	41,7
	90 (2x45)	26,0	41,7	41,7	41,7
	180	41,7	41,7	41,7	41,7
400	45	17,9	35,8	53,8	71,7
	90 (2x45)	35,8	71,7	71,7	71,7
	180	71,7	71,7	71,7	71,7



ROX

$$q_v = k \times \sqrt{\Delta P_m}$$

ROX	k		
	Ø160	Ø200	Ø250
90-R-1500	7,4	8,6	16
90-R-3000	9,6	14,7	26,9
90-R-4500	8,7	14,4	28,8
90-R-6000	9	14,1	28,2
90-RR-1500	9,3	13,1	23,4
90-RR-3000	13,4	20,5	37,1
90-RR-4500	12,5	19,2	36,5
90-RR-6000	14	21,8	35,8
180-R-1500	14,7	17,3	32
180-R-3000	17,4	26,7	48,7
180-R-4500	15,7	26,1	52,2
180-R-6000	16,2	25,5	51
180-RR-1500	16,8	23,8	42,3
180-RR-3000	21,8	33,3	55,7
180-RR-4500	20,3	31,2	54,7
180-RR-6000	22,9	35,4	53,8

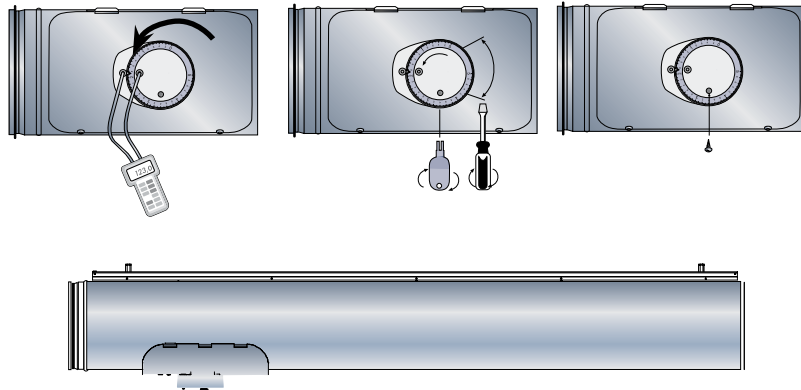


ROL-S / ROX-S

$$q_v = k \times \sqrt{\Delta P_m}$$

ROL-S/ROX-S		k				
		125	160	200	250	315
Säätöasento Injusteringsläge Adjustment settings	4,5-5	20	33	49	90	167
	4	18	29	42	76,5	137
	3,5	15	24	33	59,5	110
	3	13	20	27	47,3	88
	2,5	10,5	16	21	38	71
	2	9	13,2	17,2	31,4	55
	1,5	7,5	10,4	13,9	26	44
	1	6	8,4	10,6	21,3	35
	0,5	5	6,5	8,2	16,8	27
	0	4	4,9	5,6	14	21

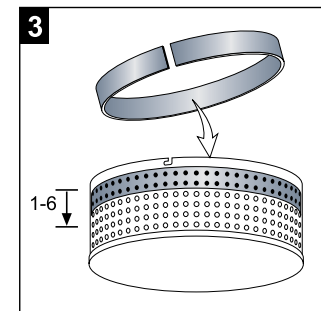
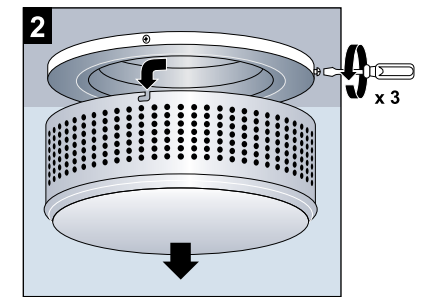
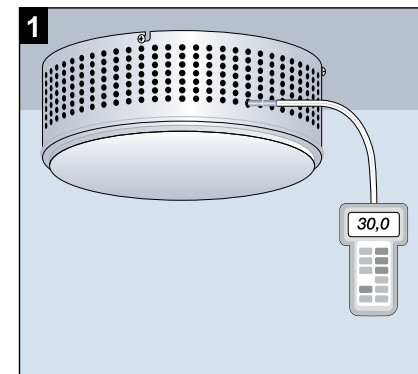
Säätösuunta • Adjustment direction • Rotationsriktningen



REL

$$q_v = k \times \sqrt{\Delta P_m}$$

REL		k					
		100	125	160	200	250	315
Sujettu Stängda Closed	0	5,6	6,5	8,1	10,1	16,6	20,7
	1	4,7	5,6	7,0	8,7	14,7	18,4
	2	3,7	4,7	5,8	7,2	12,9	16,1
	3	2,8	3,7	4,6	5,8	11,0	13,8
	4	1,9	2,8	3,5	4,3	9,2	11,5
	5			2,3	2,9	7,4	9,2
	6					5,5	6,9



Erikois/Special REL

$$n \times \sqrt{Pa} \times 0,019 = l/s$$

aukiolevien reikien määrä

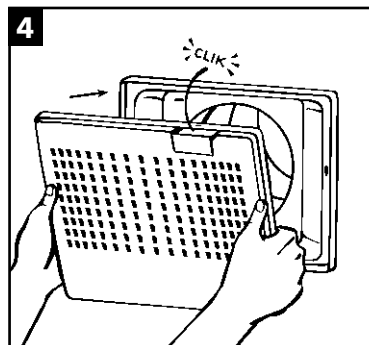
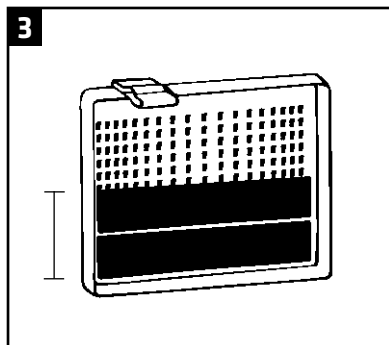
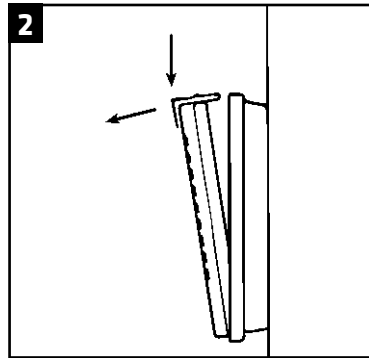
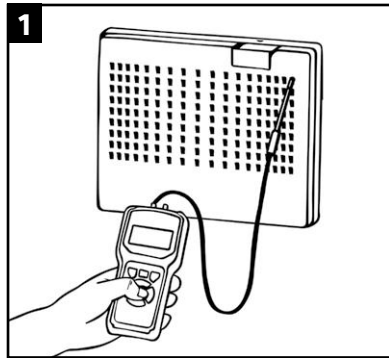
n = antal öppna hål i donet

number of open holes in the diffuser

CLIK

$$q_v = k \times \sqrt{\Delta P_m}$$

CLIK		k	
		100	125
Vaakariviä sujetettu Stängda rad Horizontal rows closed	0	3,6	3,6
	1	3,4	3,4
	2	3,1	3,1
	3	2,9	2,9
	4	2,6	2,6
	5	2,4	2,4
	6	2,2	2,2
	7	1,9	1,9
	8	1,7	1,7
	9	1,4	1,4
	10	1,2	1,2
	11	1,0	1,0
	12	0,7	0,7
13	0,5	0,5	

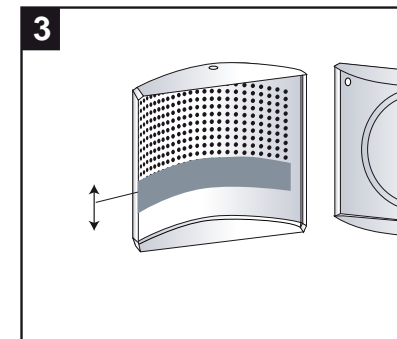
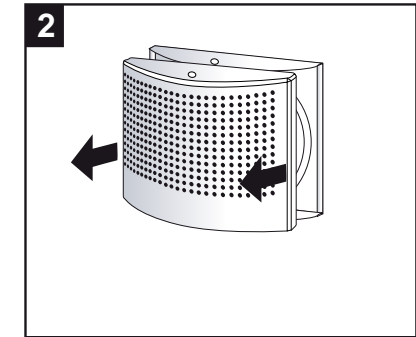
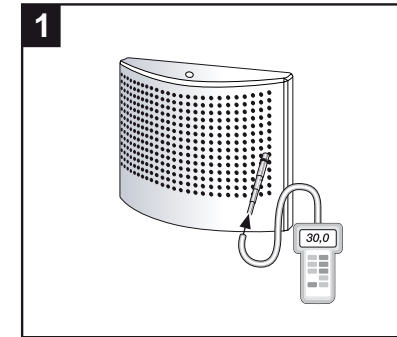


LINO

$$q_v = k \times \sqrt{\Delta P_m}$$

LINO		k	
		100	125
Sujettu riviä Stängda rad Closed rows		14x31	14x31
	0	4,2	4,2
	2	3,6	3,6
	4	3,0	3,0
	6	2,2	2,2
	8	1,6	1,6
	10	1,1	1,1
	12	0,5	0,5

LINO-W		k	
		100	125
Sujettu riviä Stängda rad Closed rows		14x31	14x31
	0	4,0	4,0
	2	3,4	3,4
	4	2,9	2,9
	6	2,2	2,2
	8	1,6	1,6
	10	1,1	1,1
	12	0,5	0,5

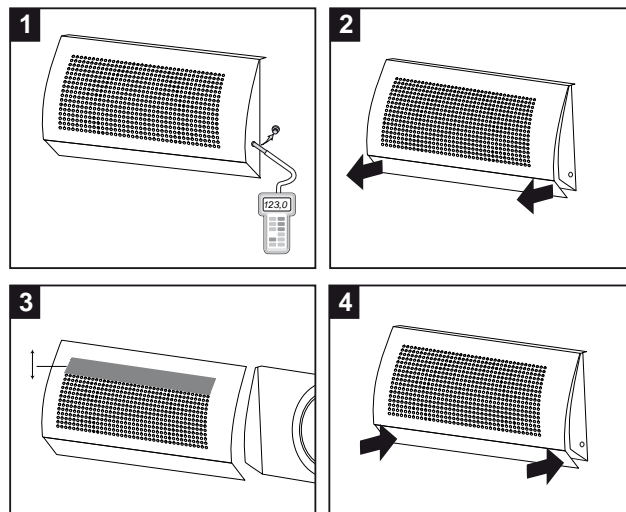


TINO

$$q_v = k \times \sqrt{\Delta P_m}$$

TINO		k				
		100P	125P	125	160	200
		12x37=444	12x37=444	17x38=646	23x47=1081	29x55=1595
Sujettu riviä Stängda rad Closed rows	0	3,8	3,8	5,6	9,2	14,2
	2	3,2	3,2	4,9	8,4	13,2
	4	2,5	2,5	4,3	7,6	12,2
	6	1,9	1,9	3,6	6,8	11,3
	8	1,2	1,3	2,9	6,0	10,3
	10	0,6	0,6	2,3	5,2	9,3
	12			1,6	4,4	8,3

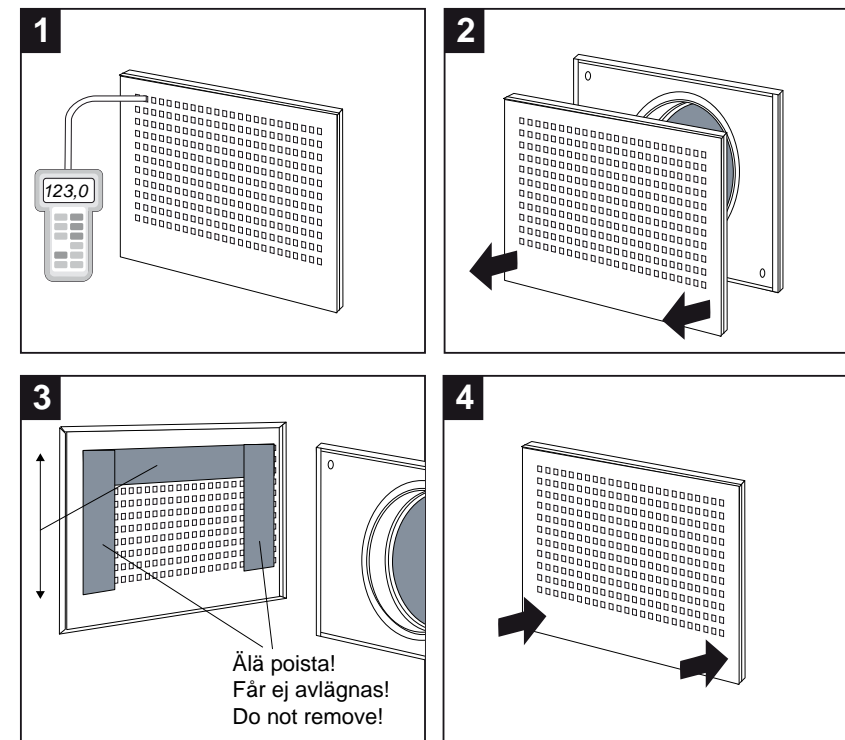
TINOq		k		
		100	125	160
		13x30=390	16x39=624	21x50=1050
Sujettu riviä Stängda rad Closed rows	0	3,7	5,9	9,5
	2	3,2	5,2	8,6
	4	2,6	4,4	7,7
	6	2,0	3,7	6,8
	8	1,4	3,0	5,9
	10	0,9	2,2	5,0
	12		1,5	4,1



FINO

$$q_v = k \times \sqrt{\Delta P_m}$$

FINO		k	
		0	160
Sujettu Stängda Closed	0	5,9	
	2	5,4	
	4	4,8	
	8	3,8	
	12	2,6	
	16	1,5	
	18	1,0	
	20	0,5	

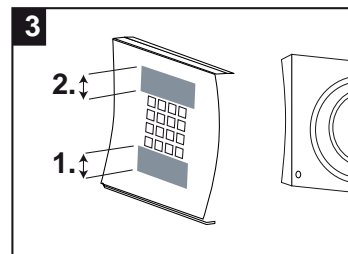
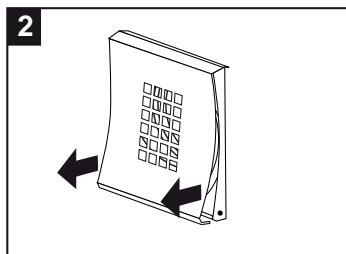
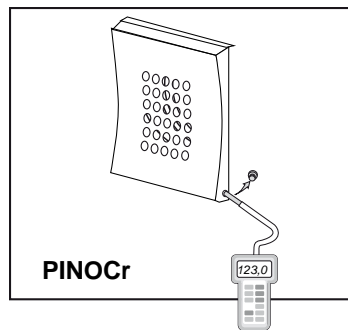
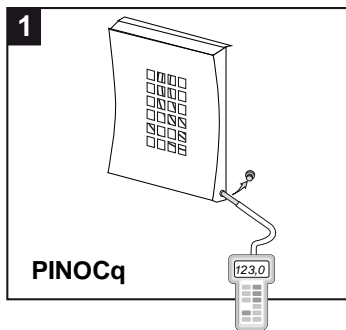


PINOC

$$q_v = k \times \sqrt{\Delta P_m}$$

		k		
PINOCq		100	125	140
		5x4=20	6x4=24	8x6=48
Sujeettu riviä Stängda rad Closed rows	0	2,6	3,1	6,4
	1	2,1	2,6	5,6
	2	1,6	2,1	4,8
	3	1,0	1,5	4,0
	4	0,5	1,0	3,2
	5		0,5	2,4

		k		
PINOCr		100	125	140
		6x4=24	6x5=30	8x7=56
Sujeettu riviä Stängda rad Closed rows	0	2,3	3,1	5,8
	1	1,9	2,6	5,5
	2	1,6	2,0	4,3
	3	1,2	1,5	3,6
	4	0,8	1,0	2,9
	5		0,5	2,2

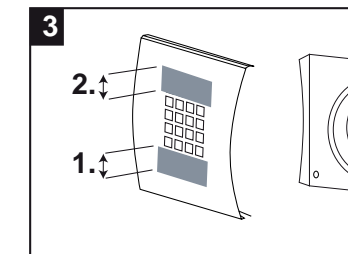
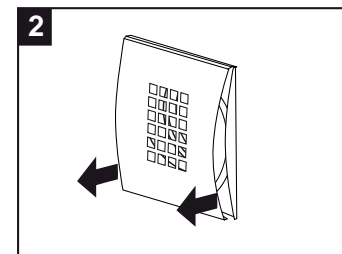
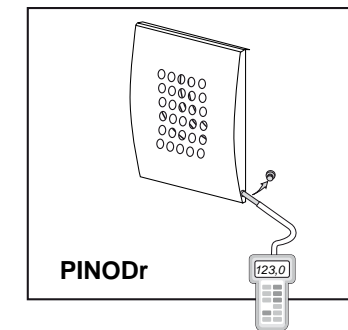
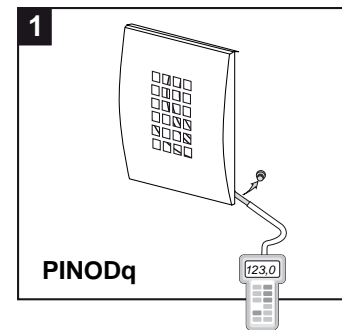


PINOD

$$q_v = k \times \sqrt{\Delta P_m}$$

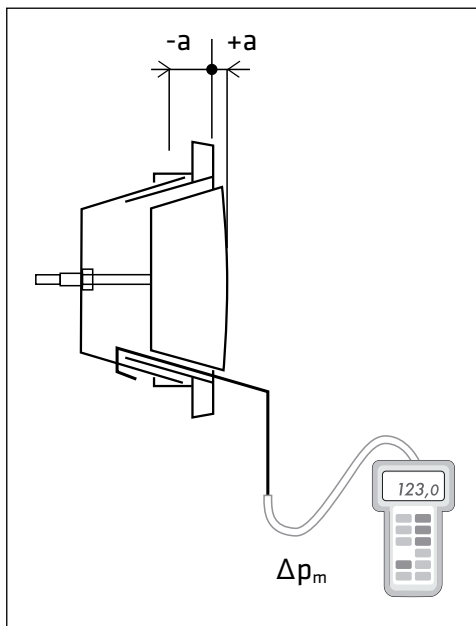
		k		
PINODq		100	125	140
		5x4=20	6x4=24	8x6=48
Sujeettu riviä Stängda rad Closed rows	0	2,5	3,1	6,2
	1	2,0	2,6	5,4
	2	1,5	2,1	4,7
	3	1,0	1,5	3,8
	4	0,5	1,0	3,1
	5		0,5	2,3

		k		
PINODr		100	125	140
		6x4=24	6x5=30	8x7=56
Sujeettu riviä Stängda rad Closed rows	0	2,5	3,0	5,0
	1	2,1	2,5	5,0
	2	1,7	2,0	4,3
	3	1,2	1,5	3,5
	4	0,8	1,0	2,8
	5		0,5	2,1



$$q_v = k \times \sqrt{\Delta P_m}$$

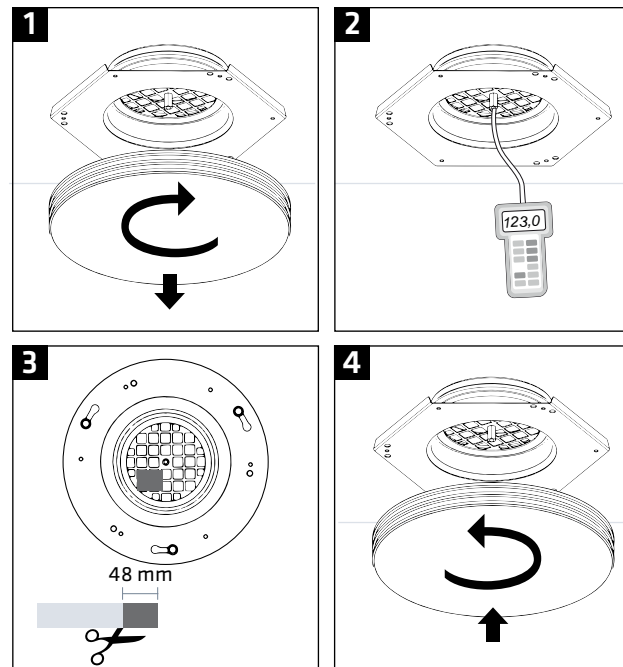
VIP	k			
	100	125	160	200
-12	0,7	0,5	1,3	
-10	0,8	0,7	1,5	
-8	0,9	0,9	1,7	
-5	1,2	1,2	2,3	
-2	1,4	1,6	2,8	
0	1,6	1,8	3,3	
3	1,8	2,1	3,7	
5	2,0	2,3	4,0	1,5
8	2,2	2,7	4,5	2,3
10	2,4	2,9	4,8	2,7
12	2,5	3,1	5,0	3,2
15	2,6	3,4	5,5	3,9
20	3,2	4,0	6,3	5,1
25		4,5	6,9	6,3
28				7,1
30				7,1



$$q_v = k \times \sqrt{\Delta P_m}$$

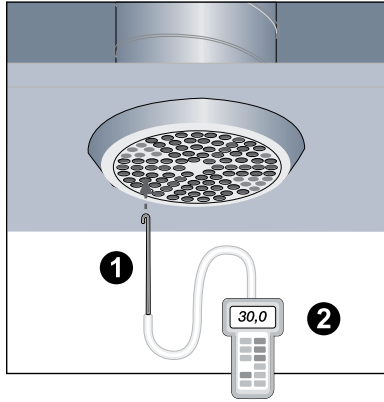
RINO/RINO-S/RINOi	k						
	100	125	160	100-S	100i	125i	
0	3,14	4,48	7,60	1,77	3,40	4,90	
1	2,73	4,05	7,10	1,43	2,89	4,55	
2	2,31	3,70	6,70	1,05	2,52	4,10	
3	1,96	3,41	6,30		2,14	3,80	
4	1,59	3,04	5,84		1,78	3,40	
5	1,24	2,72	5,50		1,44	3,04	
6		2,44	5,13			2,68	
7		2,05	4,80			2,38	
8		1,73	4,40			1,96	
9			4,30				
10			3,80				
11			3,40				
12			3,10				
13			2,70				
14			2,40				
15			2,10				

Säätönauhaa kpl /
Injusteringsband st /
Adjustment tape pcs
(1 = 4 reikää /hål /holes = 48mm)



RONDO

$$q_v = k \times \sqrt{\Delta P_m}$$

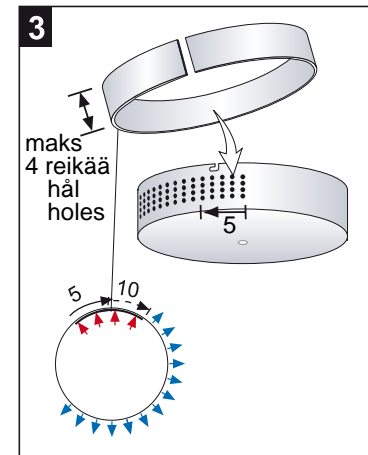
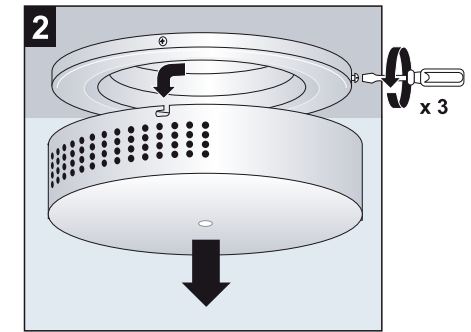
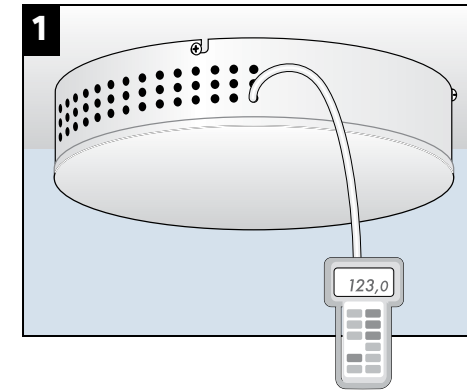


RONDO		k
Suljettu / Stängda / Closed		125
0	4,2	
1	4,05	
2	3,9	
3	3,75	
4	3,6	
5	3,45	
6	3,3	

OKA

$$q_v = k \times \sqrt{\Delta P_m}$$

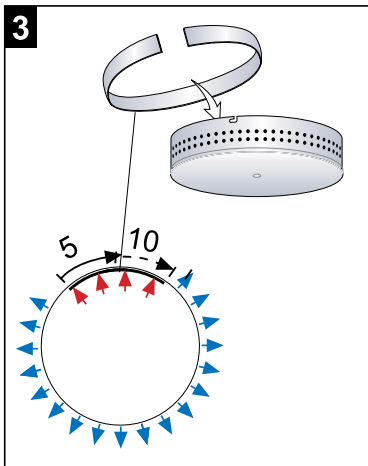
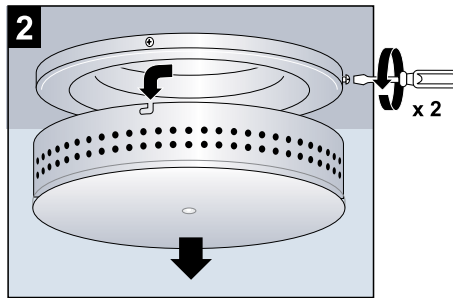
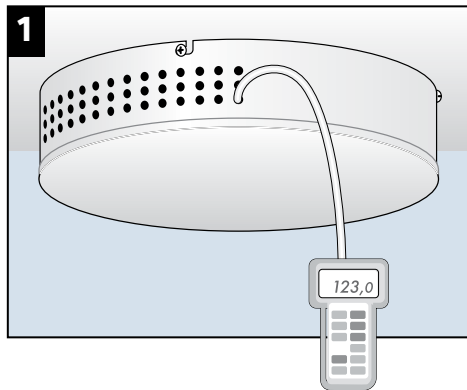
OKA		k			
OKA		100	125	160	200
Suljettu / Stängda / Closed	0	2,7	3,6	5,0	7,6
	5	2,4	3,3	4,6	7,3
	10	2,2	2,9	4,2	6,9
	15	1,9	2,5	3,9	6,6
	20	1,6	2,1	3,5	6,3
	30			2,7	5,5
	40				4,8



OKA-S

$$q_v = k \times \sqrt{\Delta P_m}$$

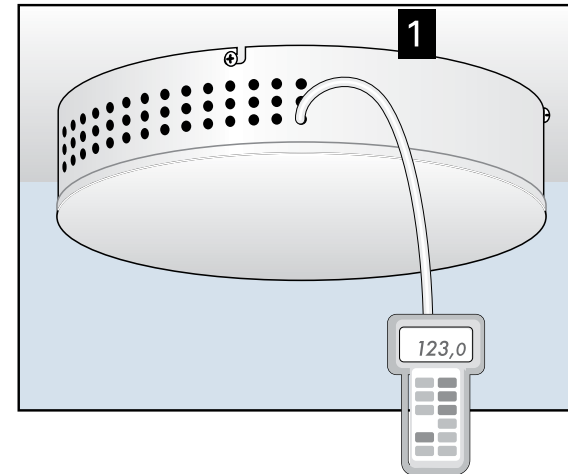
		k	
OKA-S		100	125
		2x44	2x56
	0	1,8	2,1
	10	1,6	1,9
	20	1,4	1,7
	30	1,2	1,5
	40	1,0	1,3
	50	0,8	1,2
	60		1,0
	70		0,8



OKA-P

$$q_v = k \times \sqrt{\Delta P_m}$$

		k	
OKA		100	125
Sujettu Stängda Closed	0	2,8	3,7
	5	2,4	3,3
	10	2,0	3,0
	15	1,7	2,6



OKE

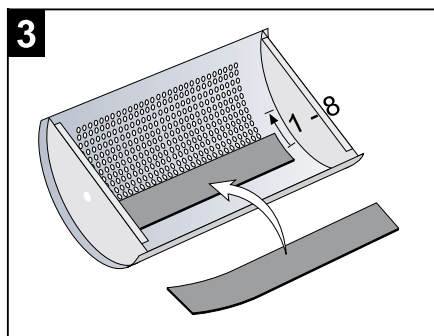
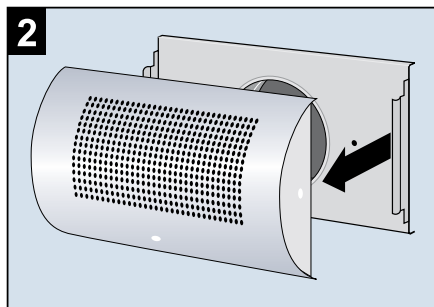
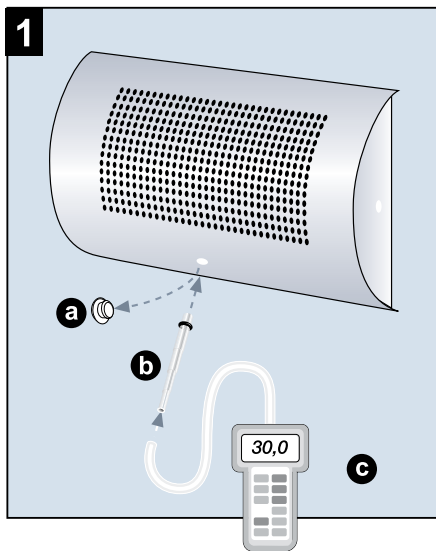
$$q_v = k \times \sqrt{\Delta P_m}$$

OKE		k			
		100	125	160	200
		9x20=180	12x24=288	15x32=480	19x38=722
Sujettu Stängda Closed	0	3,5	6,0	9,8	15,0
	1	3,1	5,5	9,2	14,2
	2	2,7	5,0	8,5	13,4
	3	2,4	4,5	7,9	12,6
	4	2,0	4,0	7,2	11,8
	5	1,6	3,5	6,6	11,0
	6		3,0	5,9	10,2
	7			5,3	9,4
	8				8,7

Huom! Ei koske OKE-P:tä
Obs! Gäller ej OKE-P
Attention! Does not concern OKE-P

Poistoilma
Frånluft
Exhaust air

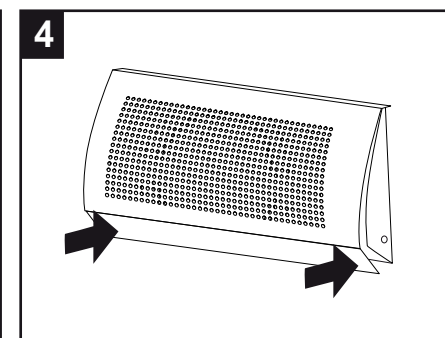
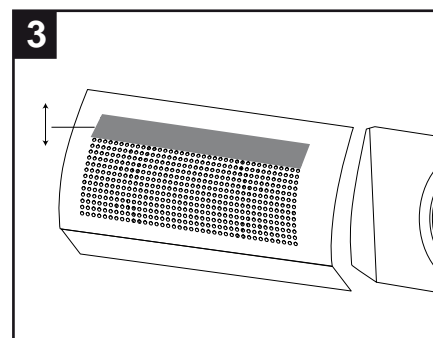
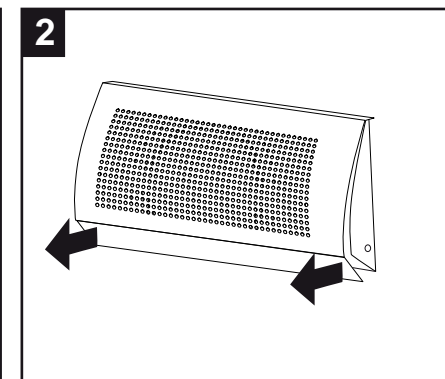
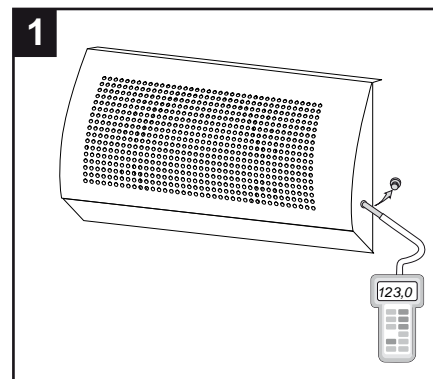
OKE	100	125	160	200
A	3,5	5,6	9,4	14,1



TINO-P

$$q_v = k \times \sqrt{\Delta P_m}$$

TINO		k	
		100P	125P
Sujettu rivä Stängda rad Closed rows	0	3,8	3,8
	2	3,2	3,2
	4	2,5	2,5
	6	1,9	1,9
	8	1,2	1,3
	10	0,6	0,6
	12		



OKE SPECIAL

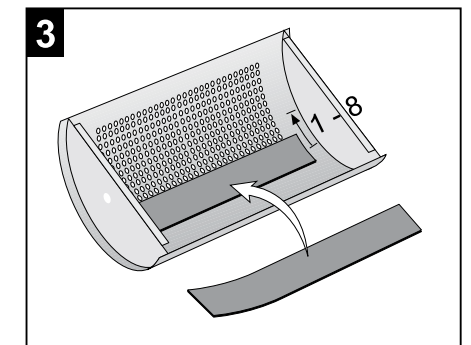
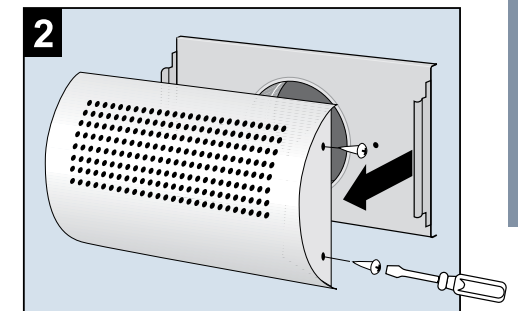
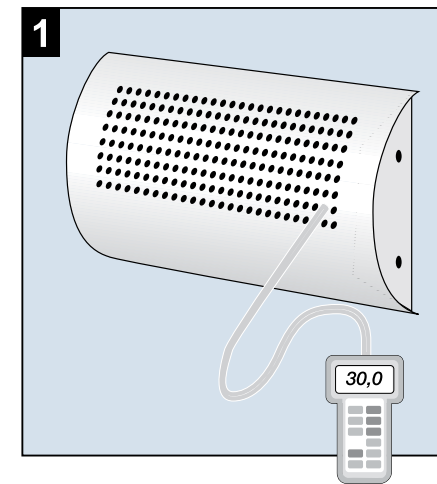
$$q_v = k \times \sqrt{\Delta P_m}$$

OKE SPECIAL		k										Korkeus Höjd Height mm
		Etuosan pituus/Frontdelens längd/Lenght of the face mm										
		300	400	500	600	700	800	900	1000	1100	1200	
Suljettujen reikärivien määrä Antal stängda hålrad Number of closed perforated rows	A	5,5	7,6	9,6	11,6	13,5	15,9	17,9	19,9	22,0	24,0	140
	1	4,9	6,7	8,5	10,3	12,0	14,1	15,9	17,7	19,5	21,3	
	2	4,3	5,9	7,5	9,0	10,5	12,3	13,9	15,4	17,1	18,7	
	3	3,7	5,0	6,4	7,7	9,0	10,6	11,9	13,3	14,6	16,0	
	4	3,1	4,2	5,3	6,5	7,5	8,8	9,9	11,1	12,2	13,3	
	5	2,5	3,4	4,3	5,2	6,0	7,1	8,0	8,9	9,8	10,7	
	A	7,4	10,1	12,8	15,5	18,0	21,2	23,9	26,6	29,3	32,0	177
	1	6,8	9,2	11,7	14,2	16,5	19,4	21,9	24,4	26,8	29,3	
	2	6,2	8,4	10,7	12,9	15,0	17,6	19,9	22,1	24,4	26,7	
	3	5,6	7,6	9,6	11,6	13,5	15,9	17,9	19,9	22,0	24,0	
	4	4,9	6,7	8,5	10,3	12,0	14,1	15,9	17,7	19,5	21,3	
	5	4,3	5,9	7,5	9,0	10,5	12,3	13,9	15,5	17,1	18,7	
	A		12,6	16,0	19,4	22,4	26,4	29,8	33,2	36,6	40,0	226
	1		11,8	14,9	18,1	21,0	24,7	27,8	31,0	34,2	37,3	
	2		10,9	13,9	16,8	19,5	22,9	25,9	28,8	31,7	34,6	
3		10,1	12,8	15,5	18,0	21,2	23,9	26,6	29,3	32,0		
4		9,2	11,7	14,2	16,5	19,4	21,9	24,4	26,8	29,3		
5		8,4	10,7	12,9	15,0	17,6	19,9	22,1	24,4	26,7		
A			20,3	24,5	28,4	33,5	37,8	42,1	46,4	50,6	282	
1			19,2	23,2	26,9	31,7	35,8	39,9	43,9	48,0		
2			18,1	22,0	25,4	30,0	33,8	37,6	41,5	45,3		
3			17,1	20,7	23,9	28,2	31,8	35,4	39,0	42,6		
4			16,0	19,4	22,4	26,4	29,8	33,2	36,6	40,0		
5			14,9	18,1	21,0	24,7	27,8	31,0	34,2	37,3		

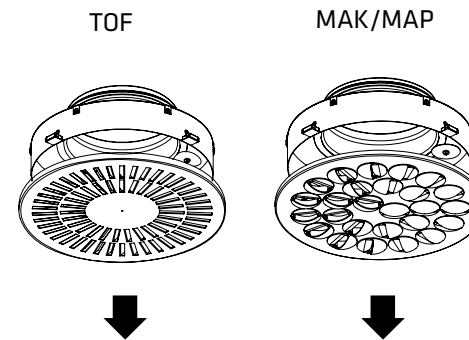
OKE-P

$$q_v = k \times \sqrt{\Delta P_m}$$

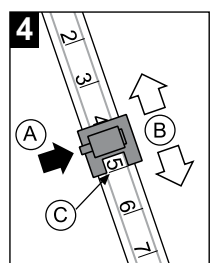
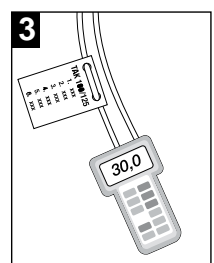
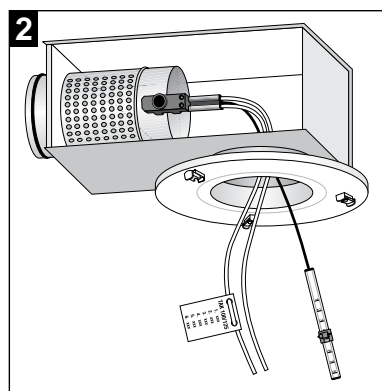
OKE-P		k	
		100	125
		7x19=133	8x24=192
Suljettu Stängda Closed	0	2,5	3,6
	1	2,2	3,2
	2	1,8	2,7
	3	1,4	2,3
	4	1,2	1,9



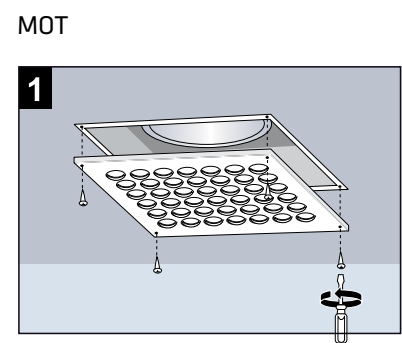
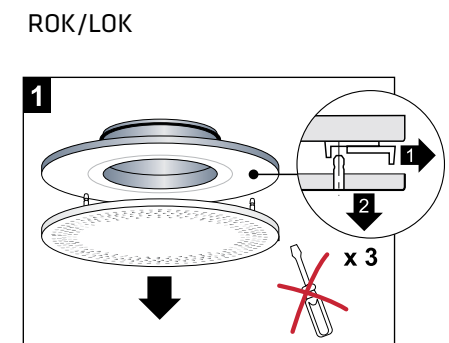
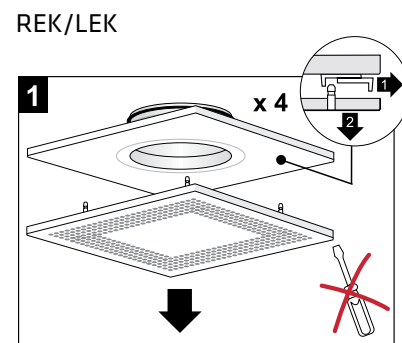
TAK		k				
		100/125	125/160	160/200	200/250	250/315
Säätöasento Injusteringsläge Adjustment settings	1	1,9	3,0	4,5	9,0	18,0
	2	2,4	3,7	5,3	10,0	19,1
	3	2,9	4,3	6,1	11,0	20,1
	4	3,3	4,8	6,8	12,0	21,0
	5	3,7	5,4	7,6	13,0	22,0
	6	4,0	5,9	8,4	14,0	23,0
	7			9,2	14,7	24,0
	8			10,0	15,4	25,0



Suuttimien suuntaus
Inställning av dysorna
Turning the nozzles



- Mittaa paine-ero/Mät injusteringstrycket/
Measure the pressure drop
- A) Avaa lukitus/Öppna Låset/Open the lock
B) Sääda ilmavirta/Injustera luftflödet/Regulate the airflow
C) Kohdista merkkiviivaan/Anpassa till sträcket/Adjust to the line
D) Lukitse/Lås/Lock

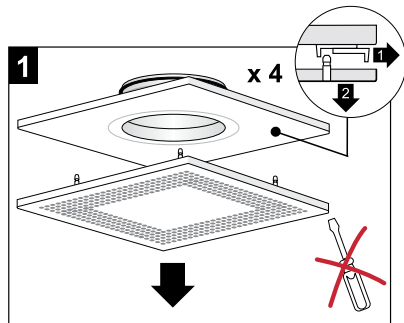


Suuttimien suuntaus
Inställning av dysorna
Turning the nozzles

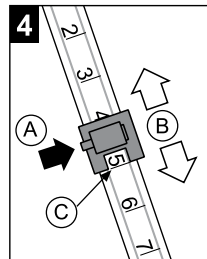
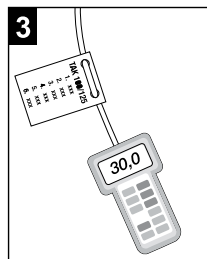
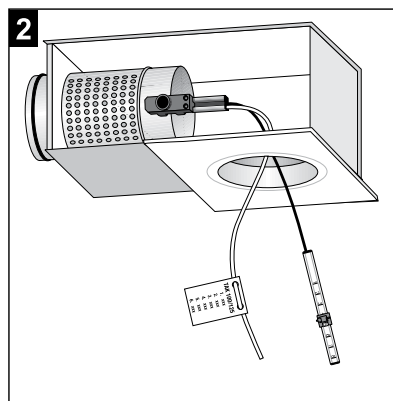
PAK + REK/ROK/LEK/LOK

$$q_v = k \times \sqrt{\Delta P_m}$$

		k				
PAK + REK/ROK		100/125	125/160	160/200	200/250	250/315
Säätöasento Injusteringsläge Adjustment settings	1	1,9	3,1	4,7	8,5	18,9
	2	2,5	3,7	5,4	9,8	19,7
	3	3,0	4,3	6,2	11,0	20,5
	4	3,4	4,9	7,0	11,9	21,2
	5	3,9	5,5	7,8	12,6	21,9
	6	4,3	6,0	8,6	13,4	22,6
	7			9,3	14,2	23,3
	8			10,0	15,0	24,0



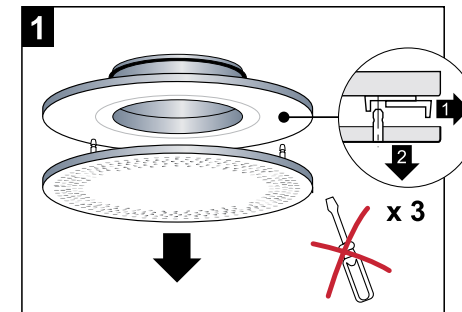
- Mittaa paine-ero/Mät injusteringstrycket/
Measure the pressure drop
- A) Avaa lukitus/Öppna Låset/Open the lock
 - B) Sääda ilmavirta/Injustera luftflödet/Regulate the airflow
 - C) Kohdista merkkiviivaan/Anpassa till sträcket/Adjust to the line
 - D) Lukitse/Lås/Lock



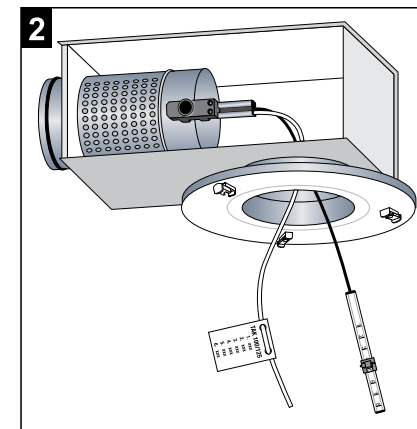
RATT/RITT

$$q_v = k \times \sqrt{\Delta P_m}$$

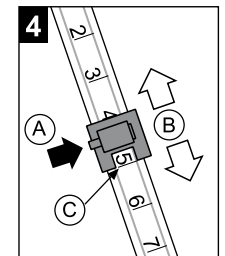
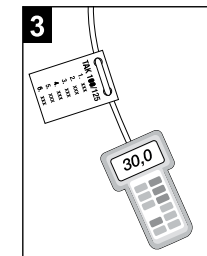
		k				
RATT/RITT		100	125	160	200	250
Säätöasento Injusteringsläge Adjustment settings	1	2,5	4,0	5,0	9,8	21,0
	2	3,0	4,8	6,0	10,9	22,0
	3	3,5	5,5	7,0	12,0	23,0
	4	4,0	6,2	8,0	13,0	24,0
	5	4,5	6,8	9,0	14,0	27,0
	6	4,9	7,4	10,0	15,0	30,0
	7			10,9	17,0	30,5
	8			11,8	19,0	31,0



- Mittaa paine-ero/Mät injusteringstrycket/
Measure the pressure drop
- A) Avaa lukitus/Öppna Låset/Open the lock
 - B) Sääda ilmavirta/Injustera luftflödet/Regulate the airflow
 - C) Kohdista merkkiviivaan/Anpassa till sträcket/Adjust to the line
 - D) Lukitse/Lås/Lock



Huom! Ei koske RIT:iä
Obs! Gäller ej RIT
Attention! Does not concern RIT

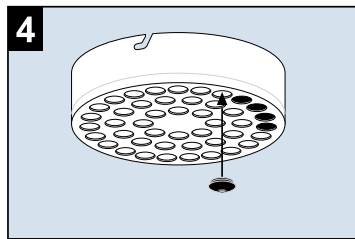
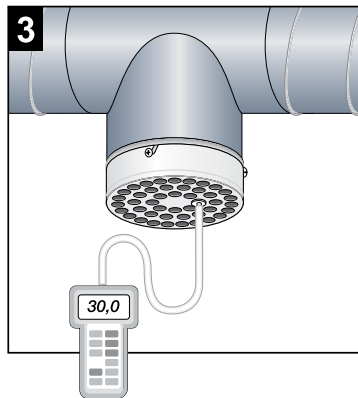
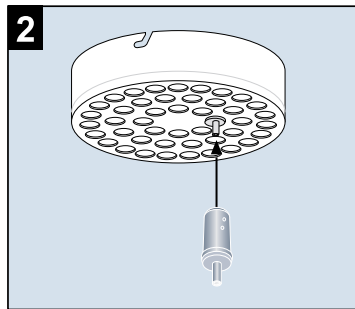
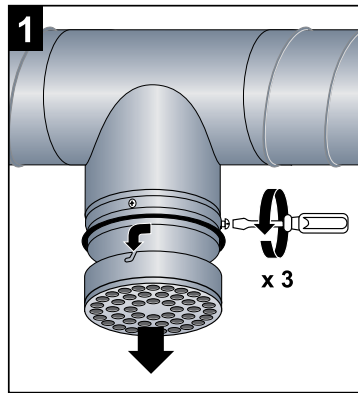


SAS

$$q_v = k \times \sqrt{\Delta P_m}$$

SAS	k
100	2,8
125	4,2
160	7,4
200	12,0
250	17,6
315	28,6
400	47,6

Säätö - suuttimen tulppaus: k=-0,2
 Injustering - pluggning av 1 dysa: k=-0,2
 Adjustment - plugging 1 nozzle: k=-0,2

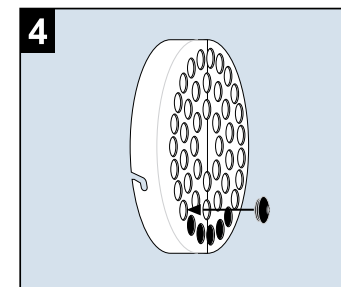
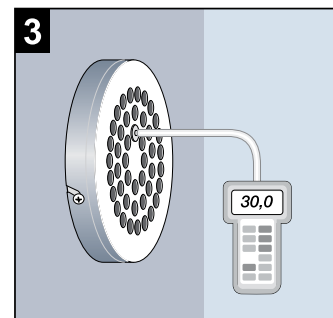
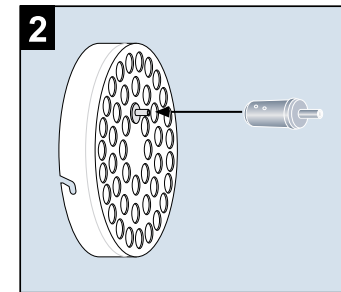
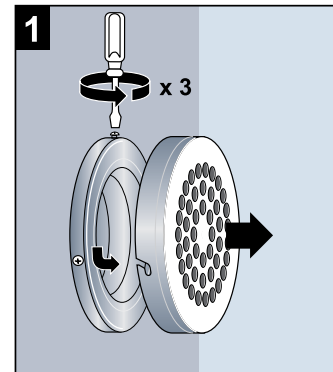


SES

$$q_v = k \times \sqrt{\Delta P_m}$$

SES	k
100	2,8
125	4,2
160	7,4
200	12,0
250	17,6
315	28,6
400	47,6

Säätö - suuttimen tulppaus: k=-0,2
 Injustering - pluggning av 1 dysa: k=-0,2
 Adjustment - plugging 1 nozzle: k=-0,2

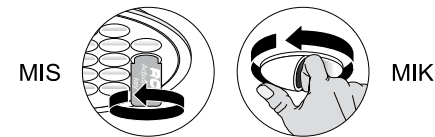


$$q_v = k \times \sqrt{\Delta P_m}$$

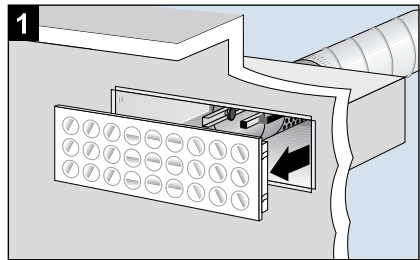
$$q_v = k \times \sqrt{\Delta P_m}$$

		k			
MIS/MIK/RAN/RON		100	125	160	200
Säätöasento Injusteringsläge Adjustment settings	1	2,0	3,1	4,8	9,5
	2	2,5	3,8	5,8	10,7
	3	3,0	4,5	6,7	11,9
	4	3,6	5,2	7,6	13,0
	5	4,0	5,9	8,5	14,0
	6	4,6	6,5	9,4	15,0
	7			10,3	16,0
	8			11,2	17,0

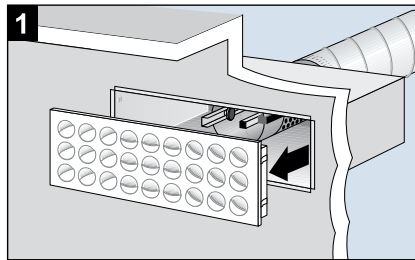
Suuttimien suuntaus
Inställning av dysorna
Turning the nozzles



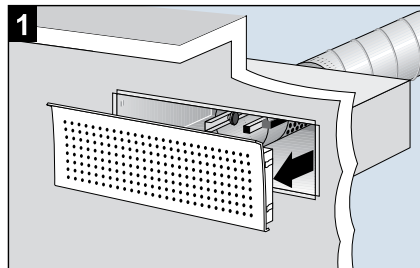
MIS



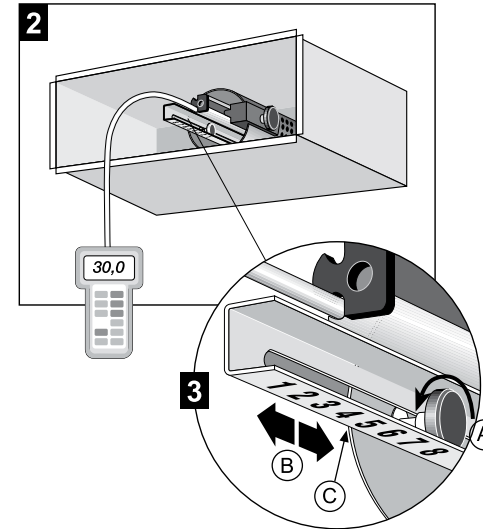
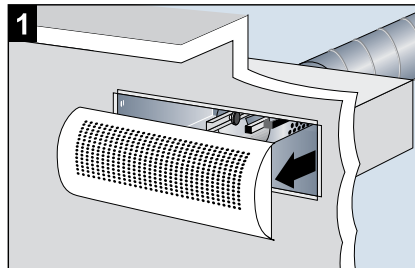
MIK



RAN



RON



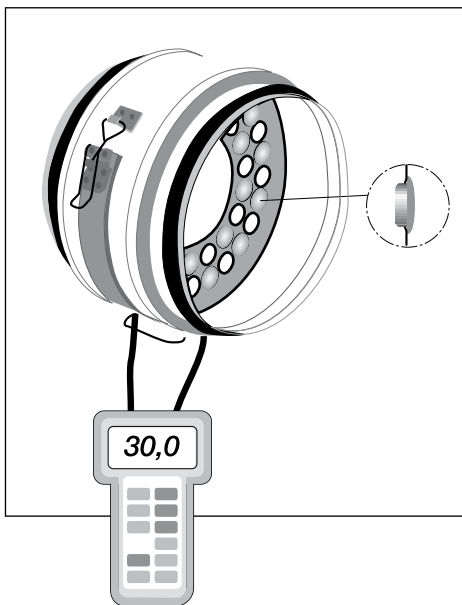
- Mittaa paine-ero/Mät injusteringstrycket/
Measure the pressure drop
- A) Avaa lukitus/Öppna Låset/Open the lock
 - B) Sääda ilmavirta/Injustera luftflödet/Regulate the airflow
 - C) Kohdista merkkiviivaan/Anpassa till sträcket/Adjust to the line
 - D) Lukitse/Lås/Lock

SAM

$$q_v = k \times \sqrt{\Delta P_m}$$

Ød	k	
	SAM-A	SAM-B
100	4,1	
125	4,9	
160	8,7	8,9
200	15,5	16,3
250	23,5	28,0
315	38,7	44,0
400	56,9	78,0
500	125,0	

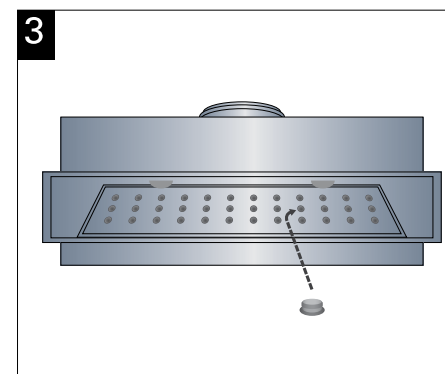
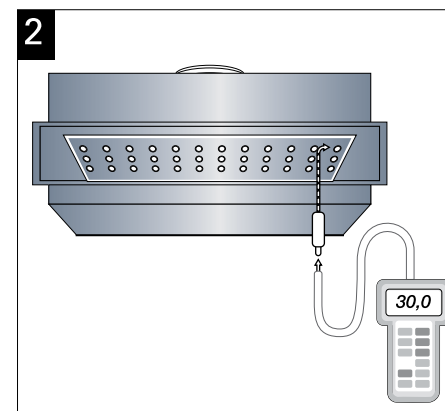
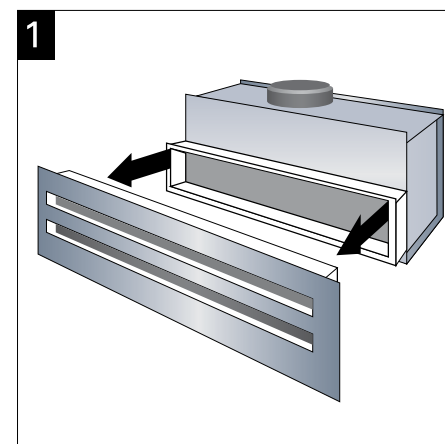
Säätö - suuttimen tulppaus: k=-0,2
 Injustering - pluggning av 1 dysa: k=-0,2
 Adjustment - plugging 1 nozzle: k=-0,2



RAM

$$q_v = k \times \sqrt{\Delta P_m}$$

11/1999 alkaen

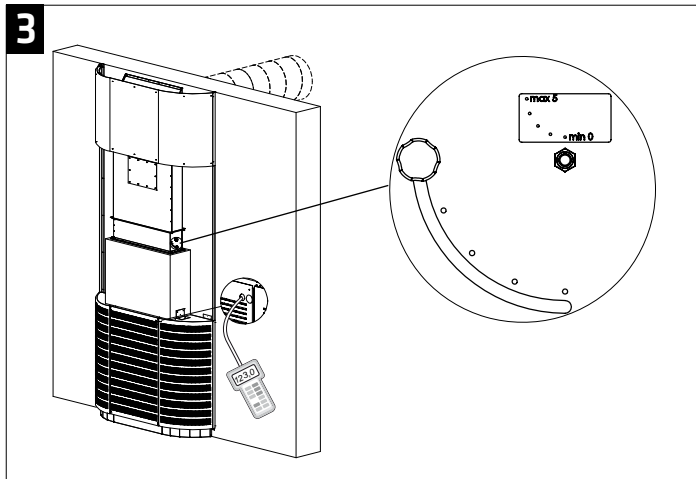
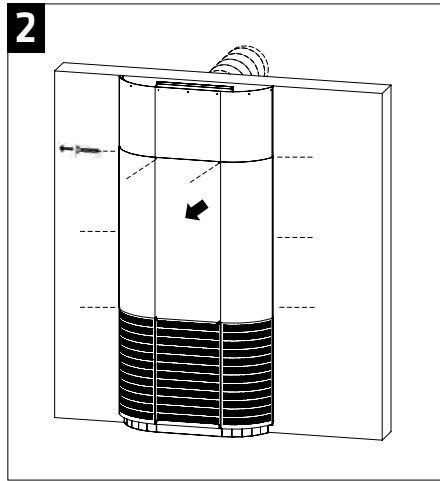
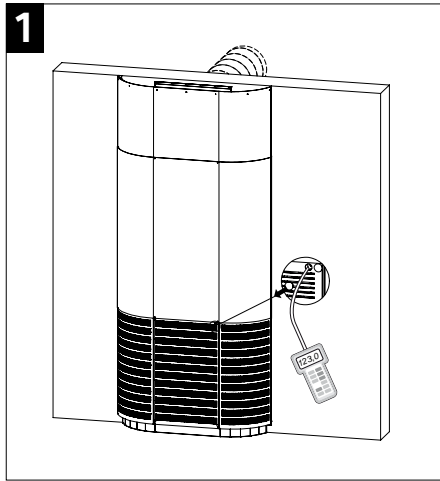


	RAM	k
Rakojen lukumäärä - pituus mm Antal spalter - längd mm Number of slots - length mm	2-600	6,3
	3-600	8,9
	4-600	11,3
	6-600	17,7
	8-600	30,3
	2-900	10,4
	3-900	14,6
	4-900	16,5
	6-900	29,2
	8-900	32,9
	2-1200	13,1
	3-1200	17,4
	4-1200	21,9
	6-1200	32,4
	8-1200	43,2
	2-1500	17,2
	3-1500	22,3
	4-1500	27,0
	6-1500	40,7
	8-1500	54,8
	2-1800	20,9
	3-1800	29,2
	4-1800	32,2
	6-1800	58,5
8-1800	65,8	

Säätö - suuttimen tulppaus: k=-0,2
 Injustering - pluggning av 1 dysa: k=-0,2
 Adjustment - plugging 1 nozzle: k=-0,2

DINO-A

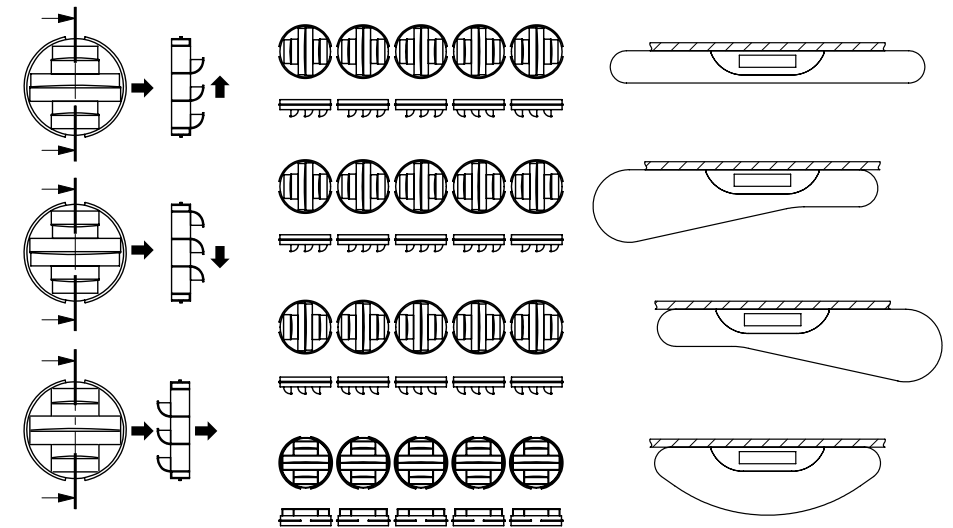
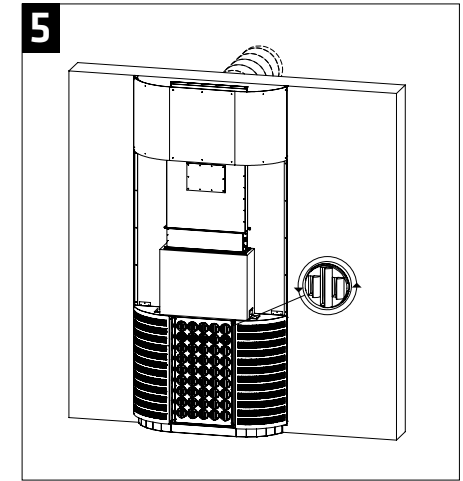
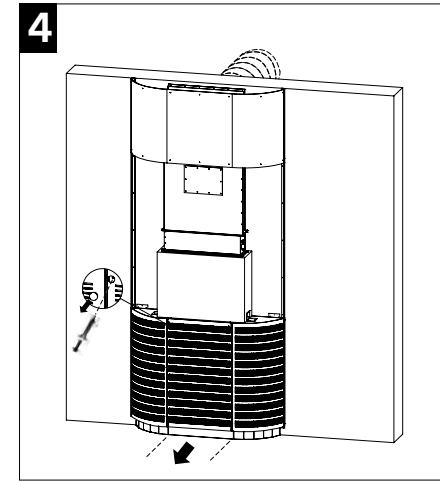
$$q_v = k \times \sqrt{\Delta P_m}$$



	k
DINO-A	
300x60 (Ø160)	18
400x100 (Ø250)	36
700x150 (Ø400)	116
1000x200 (Ø500)	205

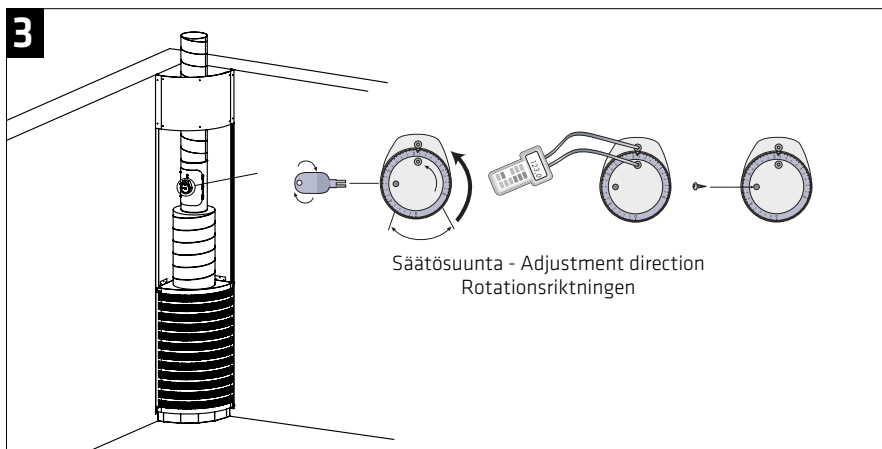
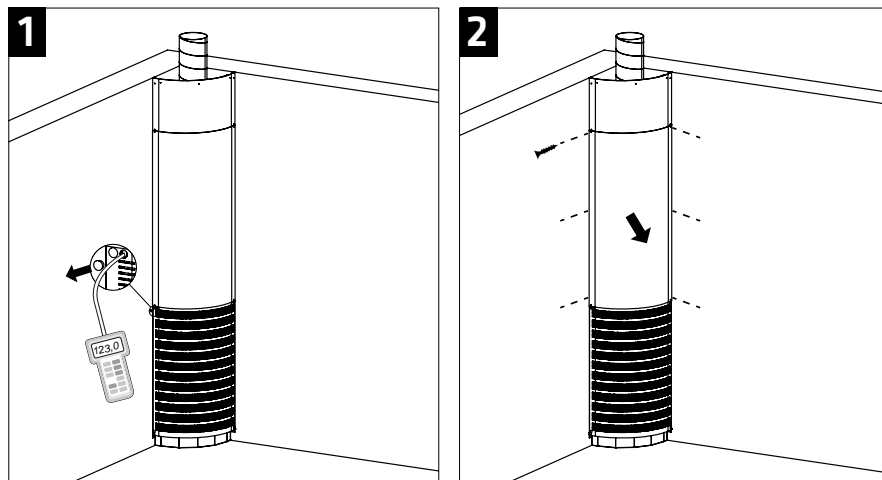
DINO-A

$$q_v = k \times \sqrt{\Delta P_m}$$



DINO-K

$$q_v = k \times \sqrt{\Delta P_m}$$



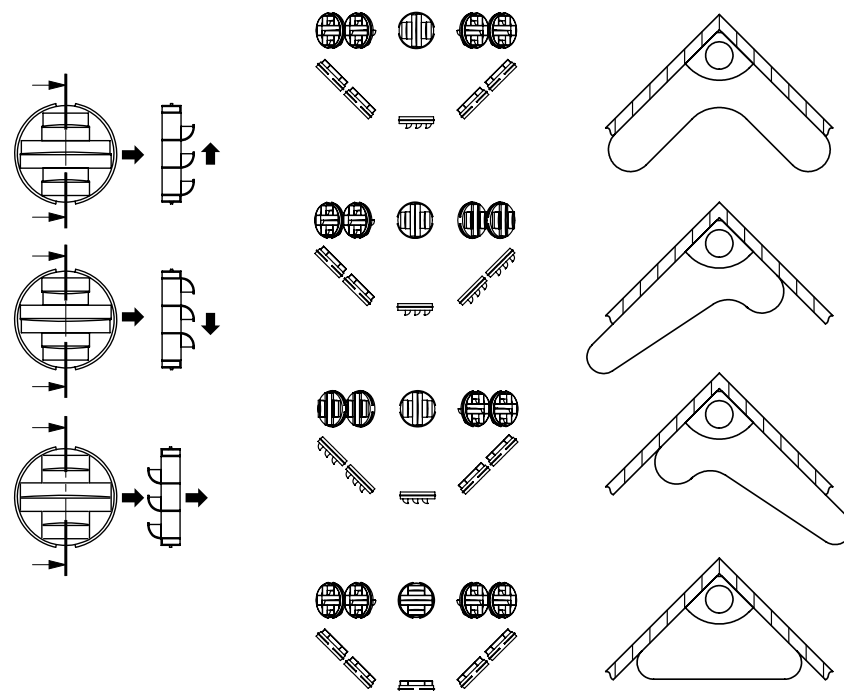
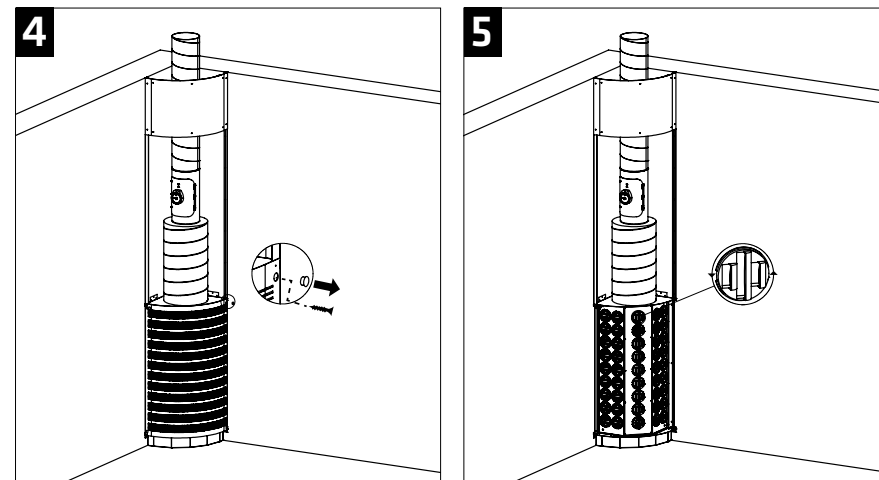
DINO-K	k
125	12
160	18
200	32
250	45
315	80
400	136

Säätöasento Injusteringsläge Adjustment settings	k					
	DINO-K	125	160	200	250	315
	4,5	20	33	49	87	167
	4	18	29	42	70	137
	3,5	15	24	33	56	110
	3	13	20	27	44	88
	2,5	11	16	21	35	71
	2	9	13,2	17,2	28	55
	1,5	8	10,4	13,9	23	44
	1	6	8,4	10,6	18	35
	0,5	5	6,5	8,2	13,4	27
	0	4	4,9	5,6	9,9	21

Säätöasento Injusteringsläge Adjustment settings	k	
	DINO-K	400
	1	131
	2	102
	3	88,3
	4	67,3
	5	52,7
	6	38,5
	7	28,4
	8	15,5

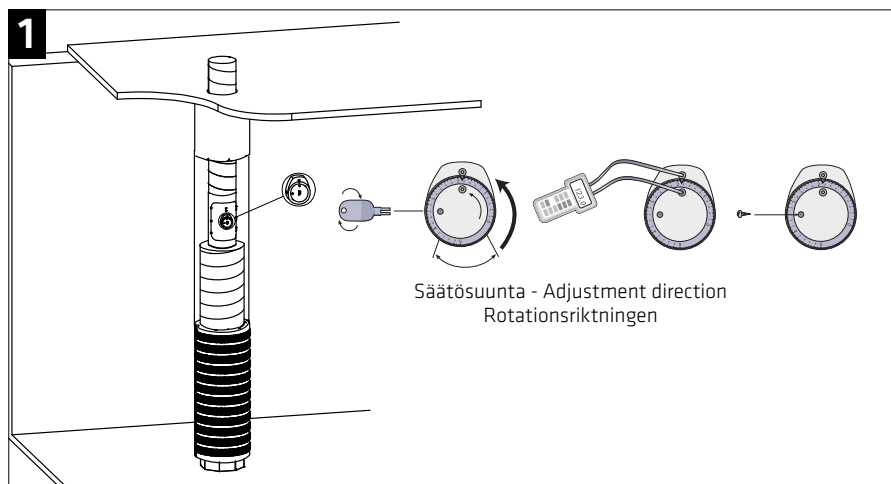
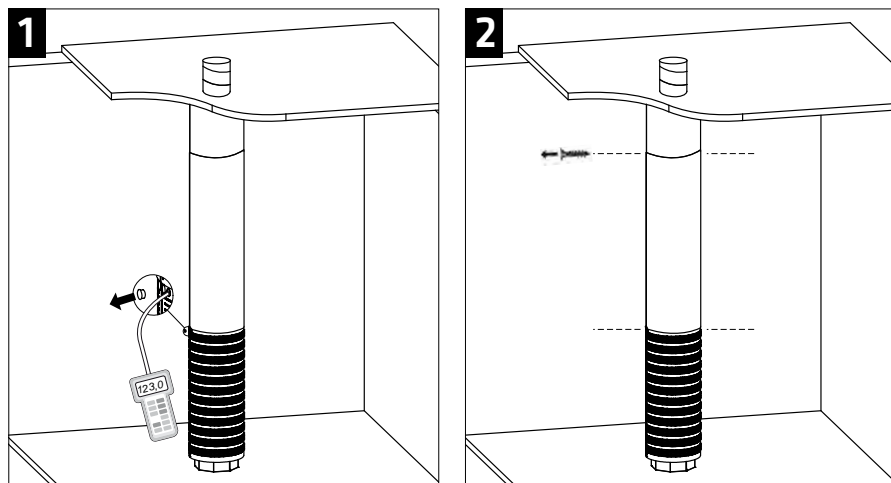
DINO-K

$$q_v = k \times \sqrt{\Delta P_m}$$



DINO-R

$$q_v = k \times \sqrt{\Delta P_m}$$



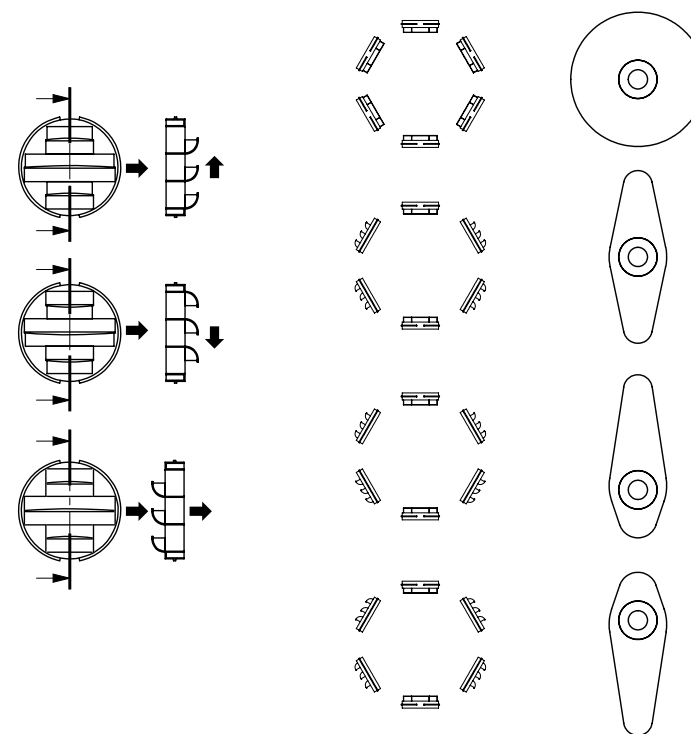
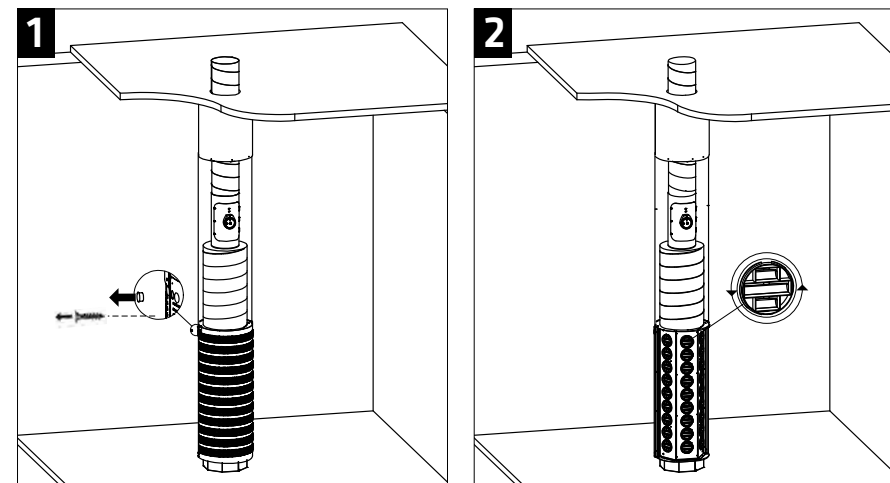
DINO-R	k
125	12
160	22
200	34
250	54
315	92
400	147

		k					
DINO-R		125	160	200	250	315	
Säätöasento Injusteringsläge Adjustment settings	4,5	20	33	49	87	167	
	4	18	29	42	70	137	
	3,5	15	24	33	56	110	
	3	13	20	27	44	88	
	2,5	11	16	21	35	71	
	2	9	13,2	17,2	28	55	
	1,5	8	10,4	13,9	23	44	
	1	6	8,4	10,6	18	35	
	0,5	5	6,5	8,2	13,4	27	
	0	4	4,9	5,6	9,9	21	

		k
DINO-R		400
Säätöasento Injusteringsläge Adjustment settings	1	131
	2	102
	3	88,3
	4	67,3
	5	52,7
	6	38,5
	7	28,4
	8	15,5

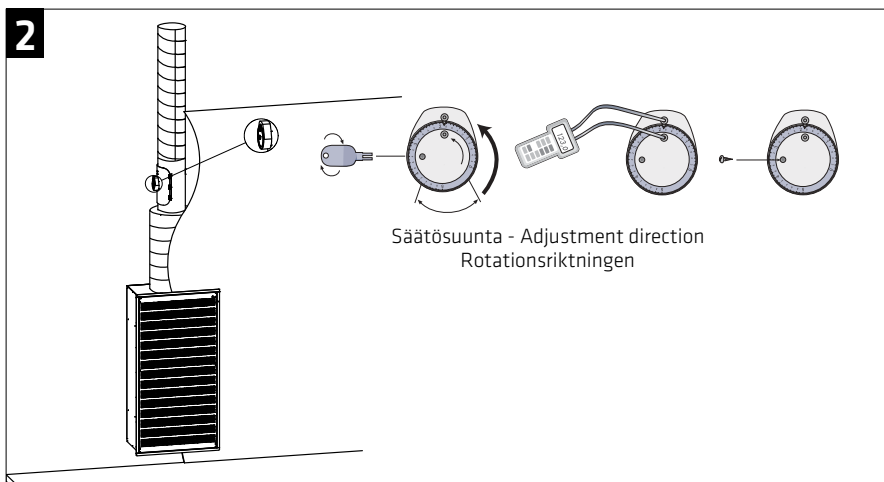
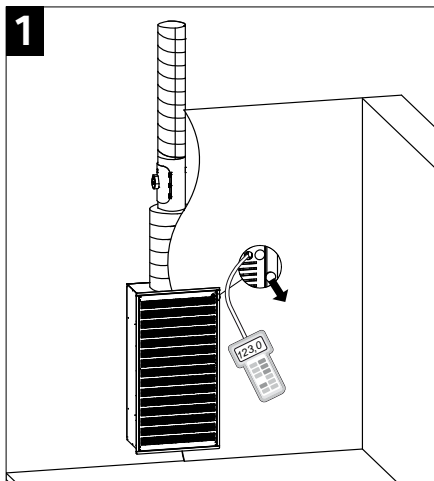
DINO-R

$$q_v = k \times \sqrt{\Delta P_m}$$



DINO-T

$$q_v = k \times \sqrt{\Delta P_m}$$



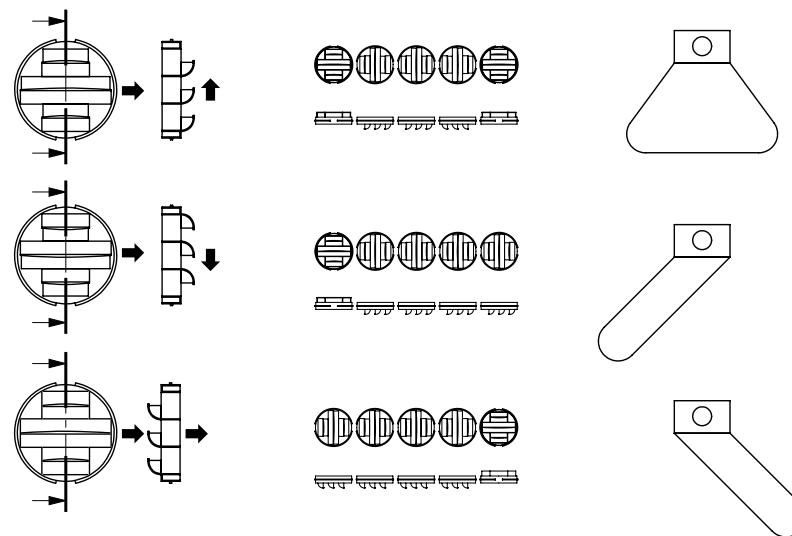
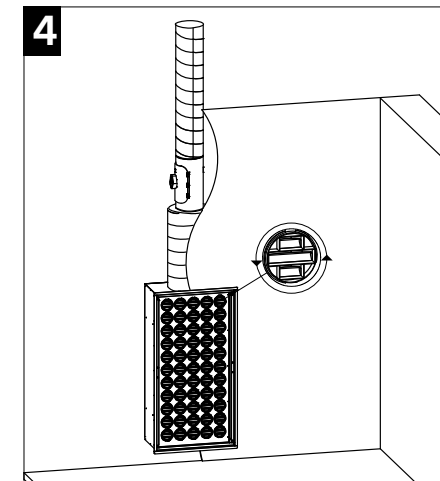
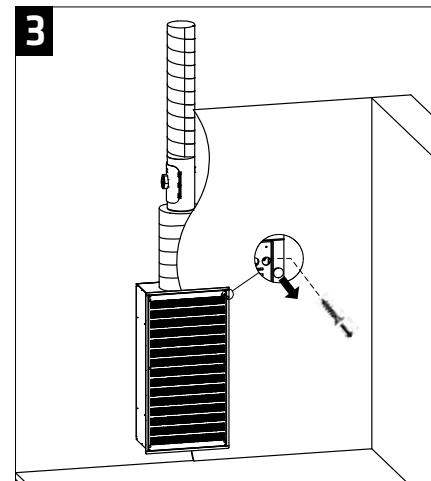
DINO-T	k
125	12
160	20
200	33
250	52
315	87
400	125

Säätöasento Injusteringsläge Adjustment settings	DINO-T	k				
		125	160	200	250	315
	4,5	20	33	49	87	167
	4	18	29	42	70	137
	3,5	15	24	33	56	110
	3	13	20	27	44	88
	2,5	11	16	21	35	71
	2	9	13,2	17,2	28	55
	1,5	8	10,4	13,9	23	44
	1	6	8,4	10,6	18	35
	0,5	5	6,5	8,2	13,4	27
	0	4	4,9	5,6	9,9	21

Säätöasento Injusteringsläge Adjustment settings	DINO-T	k
		400
	1	131
	2	102
	3	88,3
	4	67,3
	5	52,7
	6	38,5
	7	28,4
	8	15,5

DINO-T

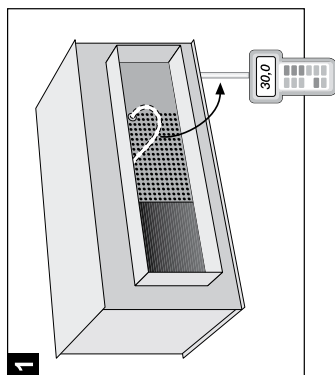
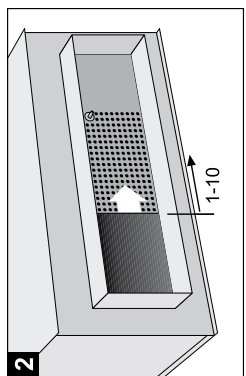
$$q_v = k \times \sqrt{\Delta P_m}$$



RAS

$$q_v = k \times \sqrt{\Delta P_m}$$

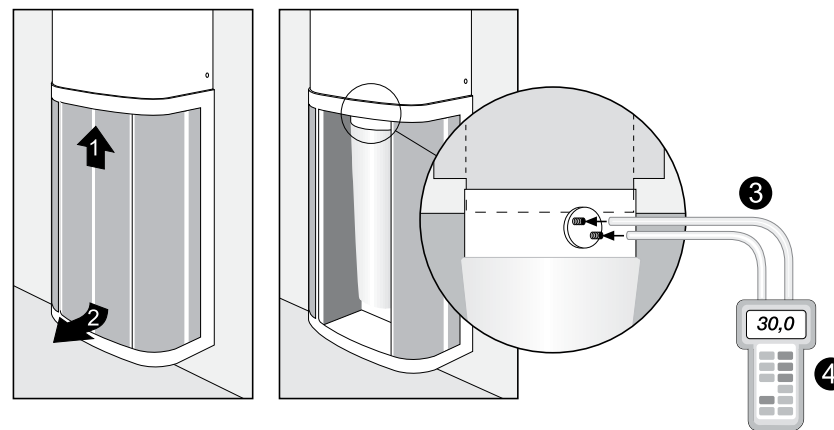
Säleikön koko Galler storlek Galler size	200-100	300-100	400-100	500-100	200-150	300-150	400-150	500-150	600-150	300-200	400-200	200-200	500-200	600-200	800-200	000-300	000-500	000-800
A	3,7	5,5	7,4	10,4	5,2	8,9	12,6	15,8	18,6	13,6	16,2	21,8	25,6	34,1	34,1	29,3	29,3	34,1
1	3,4	5,2	7,1	10,0	4,9	8,5	12,1	15,4	18,2	13,1	15,6	21,2	24,9	33,5	33,5	28,5	28,5	33,5
2	3,1	4,9	6,7	9,6	4,6	8,1	11,6	14,9	17,7	12,6	15,1	20,5	24,3	32,8	32,8	27,7	27,7	32,8
3	2,9	4,5	6,4	9,3	4,2	7,7	11,1	14,4	17,2	12,1	14,6	19,9	23,7	32,2	32,2	26,8	26,8	32,2
4	2,6	4,2	6,1	8,9	3,9	7,3	10,7	14,0	16,8	11,6	14,1	19,3	23,1	31,5	31,5	26,0	26,0	31,5
5	2,3	3,9	5,8	8,5	3,6	6,9	10,2	13,5	16,3	11,1	13,6	18,7	22,4	30,9	30,9	25,1	25,1	30,9
6	-	3,6	5,5	8,1	3,3	6,5	9,7	13,0	15,8	10,5	13,1	18,0	21,8	30,2	30,2	24,3	24,3	30,2
7	-	3,3	5,2	7,7	-	6,1	9,3	12,5	15,4	10,0	12,6	17,4	21,2	29,6	29,6	23,4	23,4	29,6
8	-	-	4,9	7,3	-	-	8,8	12,1	14,9	-	12,1	16,8	20,5	29,0	29,0	22,3	22,3	29,0
9	-	-	-	-	-	-	8,3	11,6	14,4	-	11,6	16,2	19,9	28,3	28,3	21,8	21,8	28,3
10	-	-	-	-	-	-	-	11,1	14,0	-	-	15,5	19,3	27,7	27,7	20,9	20,9	27,7



BVHR, BVKR

$$q_v = k \times \sqrt{\Delta P_m}$$

BVHR/BVKR	k
100	5,8
125	9,1
160	15,5
200	23,3
250	36,4
315	59,7
400	97,6
500	148,5

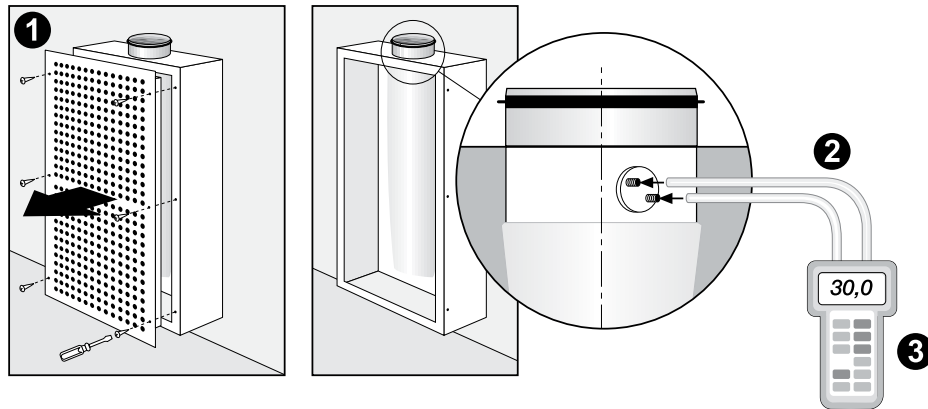


RXA

$$q_v = k \times \sqrt{\Delta P_m}$$

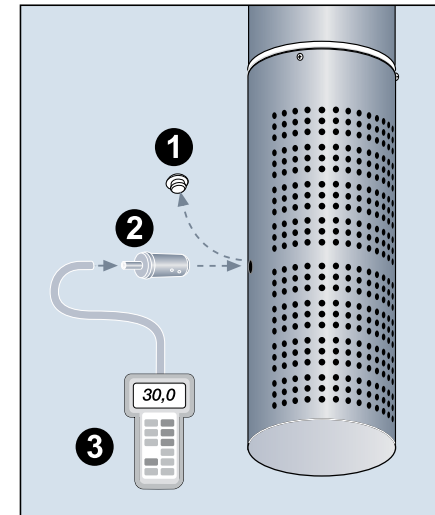
5/2001 alkaen

RXA	k
160	15,5
200	23,3
250	36,4
315	59,7
400	97,6



RALP

$$q_v = k \times \sqrt{\Delta P_m}$$

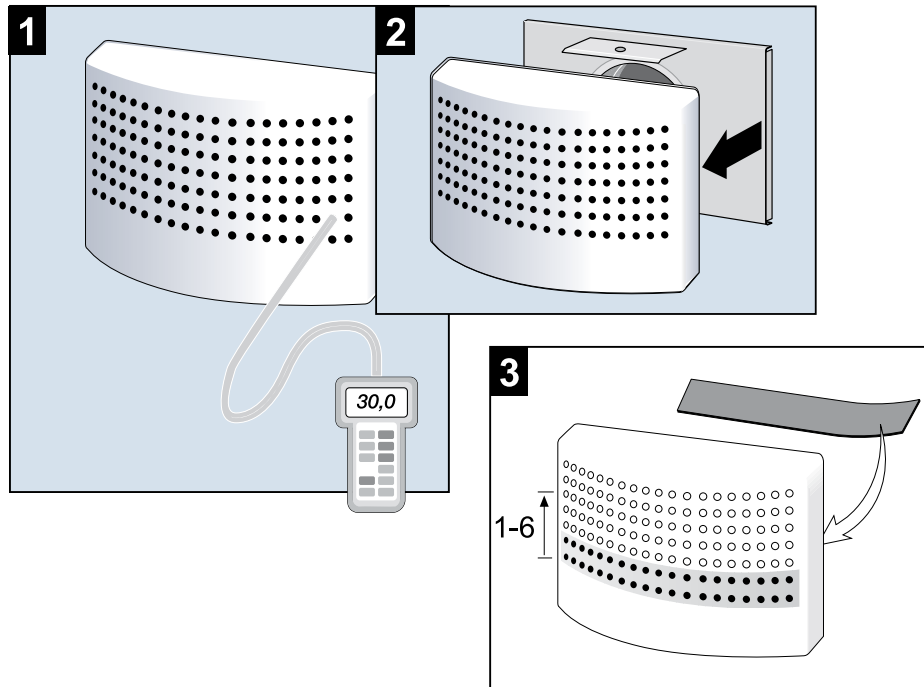


RALP	k
200	18,2
250	29,3
315	44,5
400	65,0
500	106,0

OKI

$$q_v = k \times \sqrt{\Delta P_m}$$

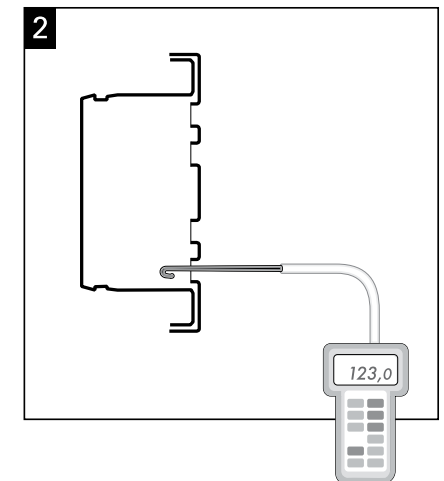
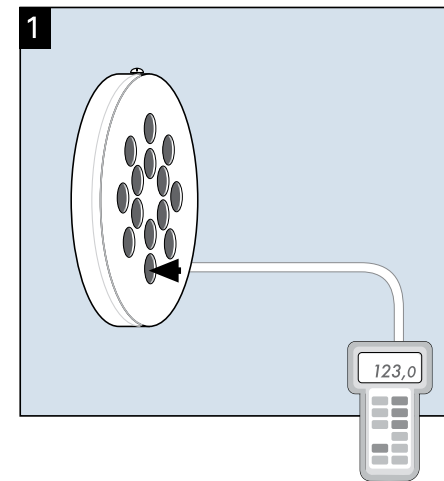
		k		
		Tuloilma Tilluft Supply air		Poistoilma Frånluft Exhaust air
OKI		100	125	100 ja 125
		8x23=184	8x23=184	
Sujettu Stängda Closed	0	3,5	3,5	3,8
	1	3,1	3,1	3,3
	2	2,6	2,6	2,8
	3	2,2	2,2	2,4
	4	1,7	1,7	1,9
	5	1,3	1,3	1,5
	6	0,9	0,9	1,1



SET-P

$$q_v = k \times \sqrt{\Delta P_m}$$

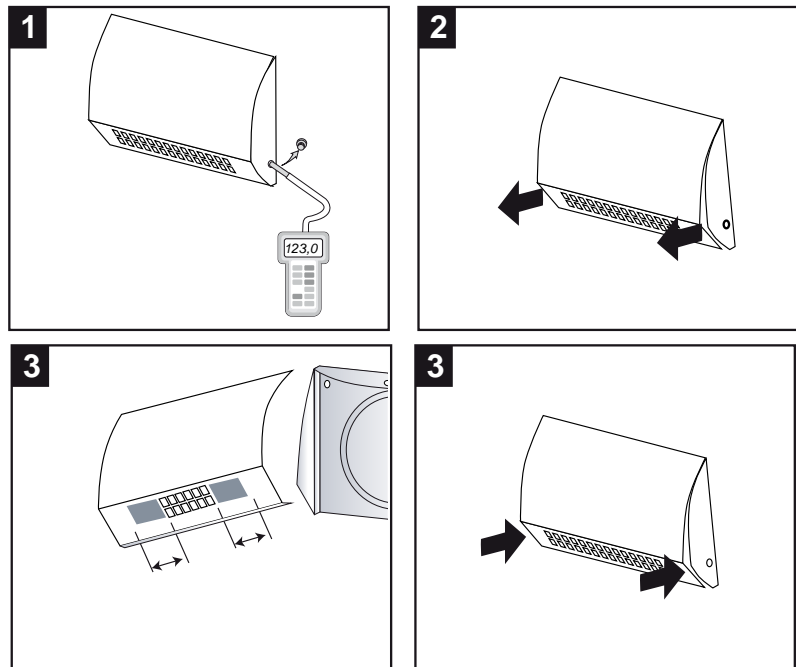
		k	
		100	125
SET-P			
Sujettu Stängda Closed	0	2,60	3,32
	1	2,42	3,14
	2	2,23	2,95
	3	2,05	2,77
	4	1,86	2,59
	5	1,68	2,41
	6	1,49	2,22
	7		2,04
	8		1,86



TINOi

$$q_v = k \times \sqrt{\Delta P_m}$$

TINOi		k		
		100	125	160
		10x2=20	14x2=28	18x3=48
Sujettu riviä Stängda rad Closed rows	0	2,4	3,4	6,2
	2	1,9	2,9	5,4
	4	1,5	2,4	4,6
	6	1,0	1,9	3,8
	8	0,5	1,3	3,0
	10		0,6	2,3

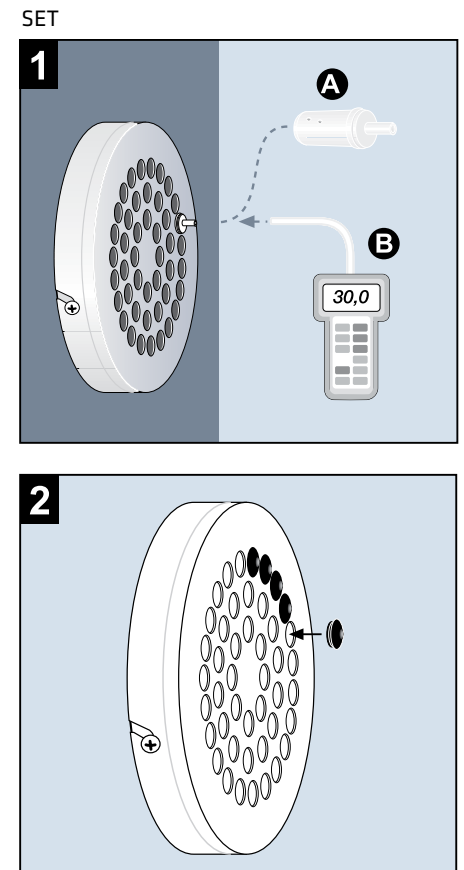
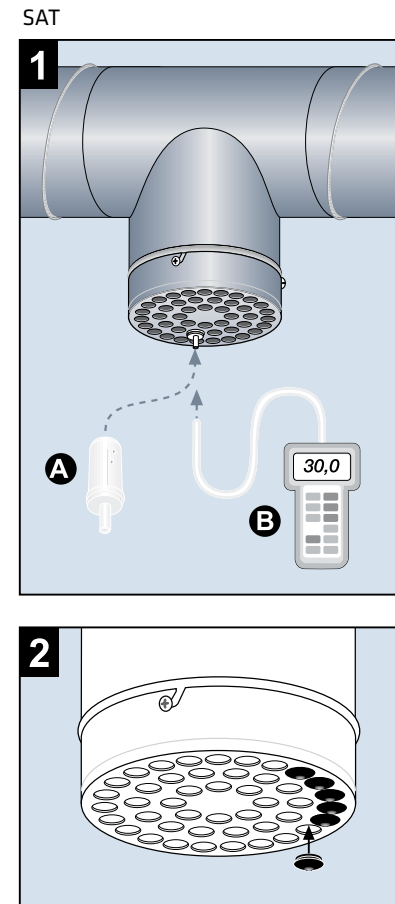


SAT, SET

$$q_v = k \times \sqrt{\Delta P_m}$$

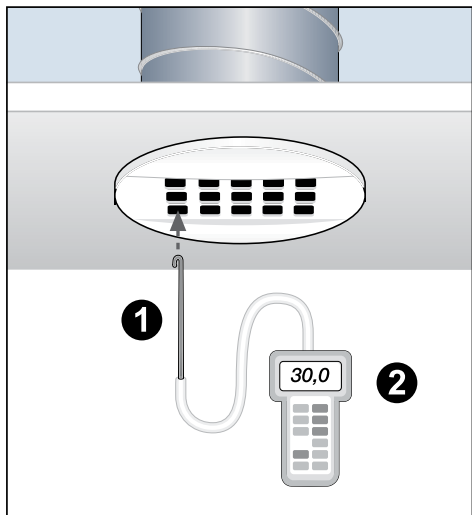
SAT/SET	k
100	2,4
125	3,6
160	6,7
200	11,1
250	16,6
315	27,2
400	45,2

Säätö - suuttimen tulppaus: k=-0,2
 Injustering - pluggning av 1 dysa: k=-0,2
 Adjustment - plugging 1 nozzle: k=-0,2

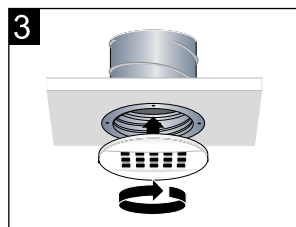
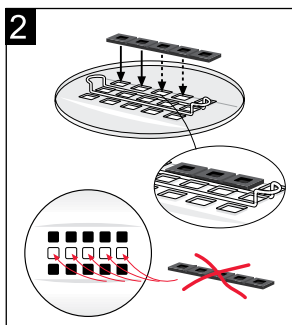
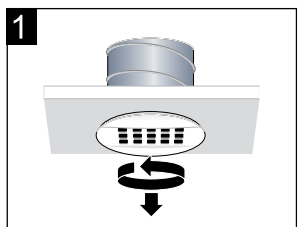


RETRO

$$q_v = k \times \sqrt{\Delta P_m}$$



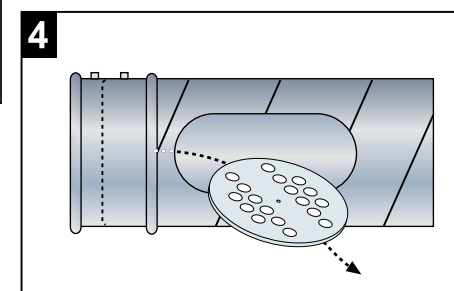
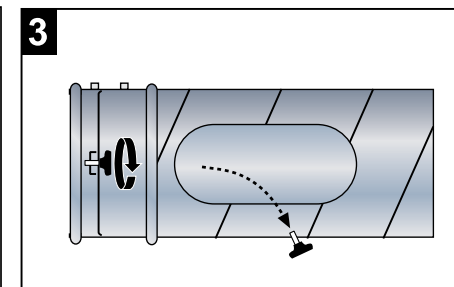
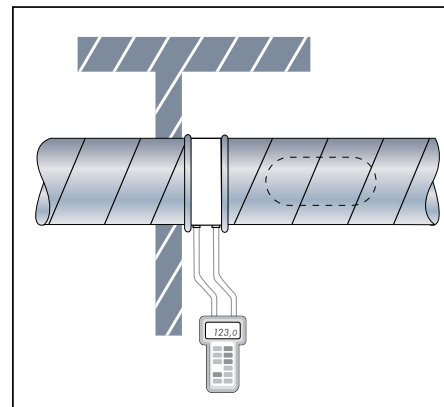
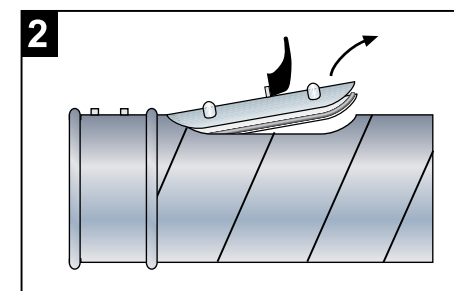
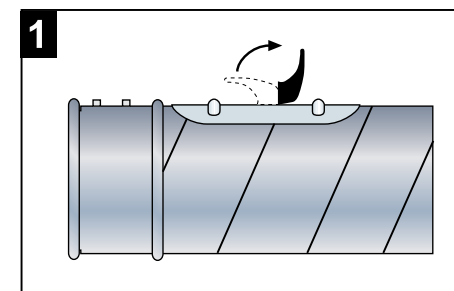
RETRO-125	k	
Avoimia reikiä Antal öppna hål Number of open holes	15	2,8
	14	2,6
	13	2,4
	12	2,2
	11	2,1
	10	1,9
	9	1,7
	8	1,5
	7	1,3
	6	1,1
	5	0,9



SAM-P

$$q_v = k \times \sqrt{\Delta P_m}$$

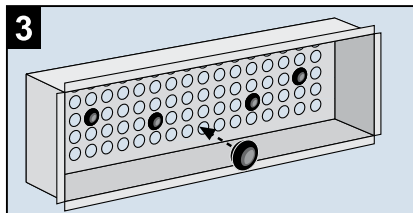
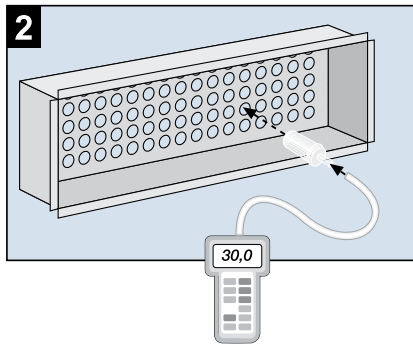
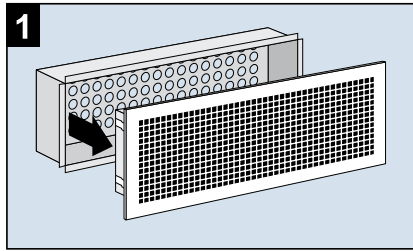
SAM-P	k		
	125	160	
Sujettu Stängda Closed	0	3,2	3,5
	1	3,0	3,3
	2	2,8	3,1
	3	2,5	2,9
	4	2,3	2,7
	5	2,1	2,5
	6	1,9	2,25
	7	1,7	2,05
	8	1,6	1,85
	9	1,4	1,70
	10	1,2	1,50



ELO, SAP, SAS

$$q_v = k \times \sqrt{\Delta P_m}$$

Koko Storlek Size	k	
	ELO/SAP Poistoilma Frånluft Exhaust air	SAS Tuloilma Tilluft Supply air
200 x 100	3,9	4,2
300 x 100	6,1	6,6
400 x 100	8,9	9,6
500 x 100	11,1	12,0
600 x 100	13,9	15,0
800 x 100	18,9	20,4
200 x 150	6,5	7,0
300 x 150	10,2	11,0
400 x 150	14,8	16,0
500 x 150	18,5	20,0
600 x 150	23,1	25,0
800 x 150	31,5	34,0
200 x 200	9,1	9,8
300 x 200	14,2	15,4
400 x 200	20,7	22,4
500 x 200	25,9	28,0
600 x 200	32,4	35,0
800 x 200	44,0	47,6
300 x 300	22,4	24,2
400 x 300	32,6	35,2
500 x 300	40,7	44,0
600 x 300	50,9	55,0
800 x 300	70,5	74,8
400 x 400	47,4	51,2
500 X 400	59,2	64,0
600 X 400	74,0	80,0
800 X 400	102,0	108,8
500 X 500	77,9	84,2
600 X 600	111,0	120,0

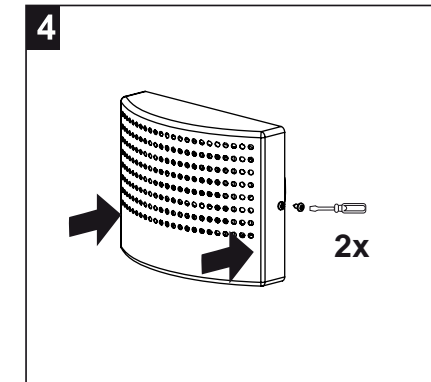
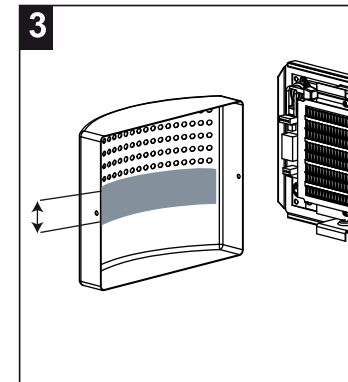
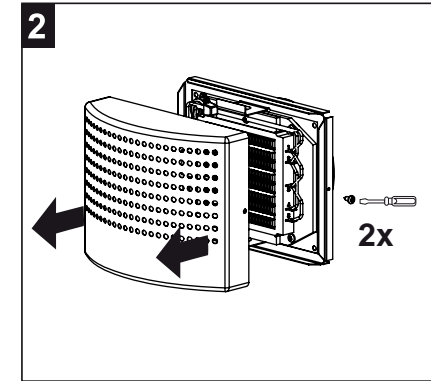
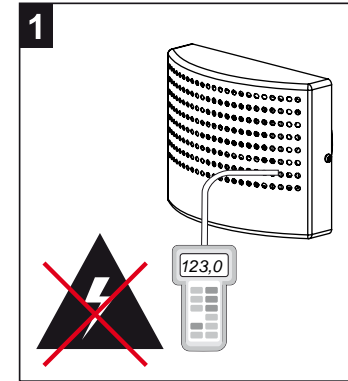


Säätö - 1 suuttimen tulppaus: k = -0,185
 Injustering - pluggning av 1 dysa: k = -0,185
 Adjustment - plugging nozzle: k = -0,185

PTE-laatikko ei vaikuta mittauspaineeseen
 Anslutningslådan PTE påverkar ej mättrycket
 The connection box PTE does not affect the measuring pressure

ECO 1

$$q_v = k \times \sqrt{\Delta P_m}$$



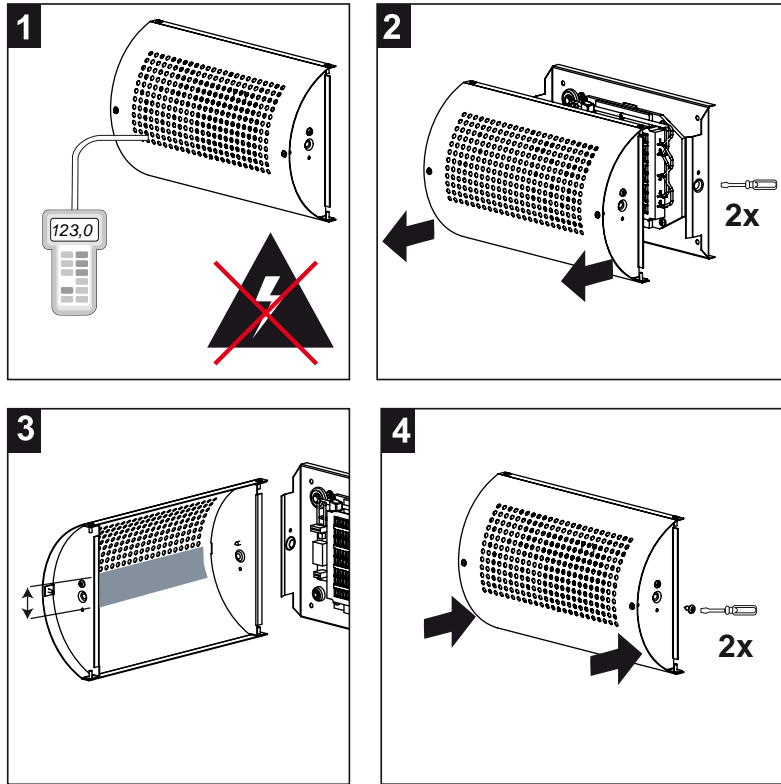
		k
ECO 1		125
Suljettua riviä Stängda rad Closed rows	0	3,7
	1	3,2
	2	2,8
	3	2,3
	4	1,9

SÄLEIKÖT

ILMALÄMMITTIMET

ECO 2

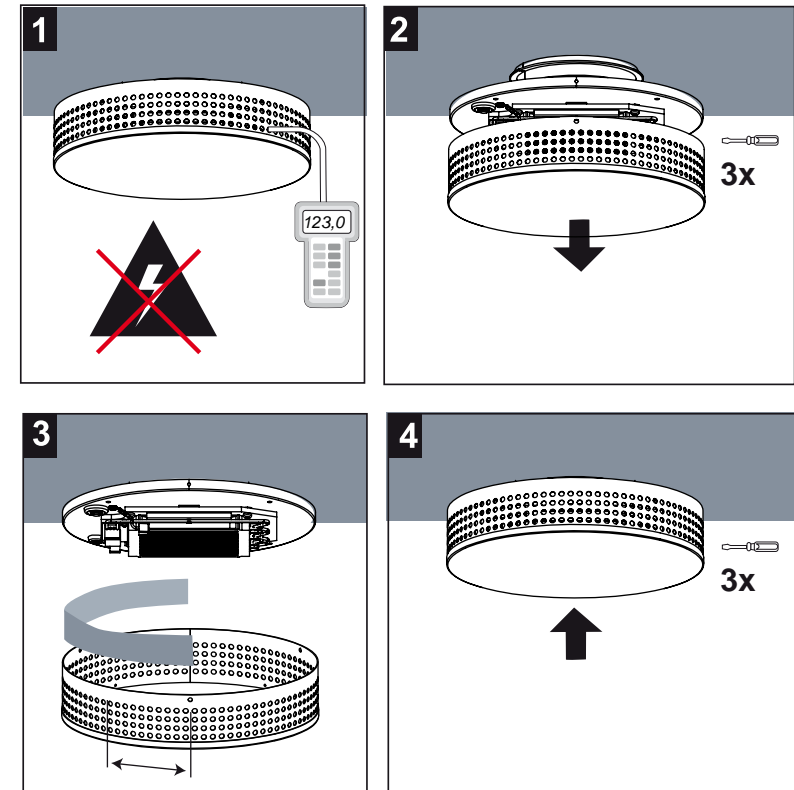
$$q_v = k \times \sqrt{\Delta P_m}$$



ECO 2		k
		125
Suljettua riviä Stängda rad Closed rows	0	6,3
	1	5,8
	2	5,3
	3	4,7
	4	4,2
	5	3,7
	6	3,2

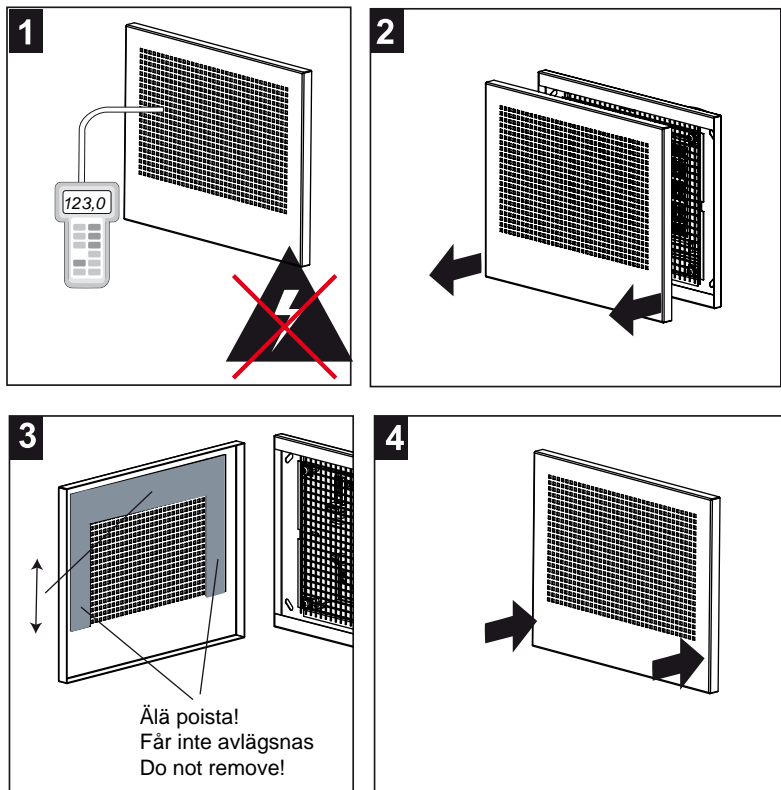
ECO 3

$$q_v = k \times \sqrt{\Delta P_m}$$



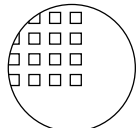
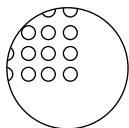
ECO 3		k
		125
Suljettu Stängda Closed	0	7,2
	20	5,6
	30	4,7
	40	3,9
	50	3,1
	60	2,3
	70	1,5

$$q_v = k \cdot x \cdot \sqrt{\Delta P_m}$$



ECO 4		k
Suljettua riviä Stängda rad Closed rows	0	4,2
	1	3,8
	2	3,4
	4	2,7
	6	1,9
	8	1,1

ECO 4		k
Suljettua riviä Stängda rad Closed rows	0	6,1
	2	5,5
	4	5,0
	8	3,9
	12	2,8
	16	1,6
	18	1,1
	20	0,6



3/2011 →

Lämmittäjänkatu 4 A
FI-00880 HELSINKI
Finland
Telephone +358 20198 6600
www.climecon.fi