



EXTRACTION GRILLES 25 mm PITCH

GR
SERIES

OVERVIEW

OVERVIEW:

The GR series is a range of inlet and outlet grilles fixed to horizontal elements inclined at 45° used for the extraction of exhaust air from the environment, for the supply of outdoor air and for extracting air outside.

For grilles to be positioned outside, a special rain drop protective blade is included to prevent the entry of rainwater into the duct and a back net protection to prevent small animals from entering the duct.

CHARACTERISTICS :

Frame: Extruded aluminium, 25 mm wide, rounded corners, built in four parts seamlessly interconnected by mechanical assembly.

Blades: Extruded aluminium, 25 mm, assembled and connected to the containment frame by tubular elements.

Finish: grilles finished in anodized aluminium or painted white RAL 9010 and can be painted differently upon request.

Fixing: with patented screws or clips.

OPTIONAL ELEMENTS

Counterframe in galvanized carbon steel for use of a paper filter.

Rain drop protective terminal blade.

Protective back net.

ACCESSORIES:

SC series opposed blade regulation damper, for heights up to 600mm.

Wall fixing frame, UTC series.

POSSIBLE SIZES :

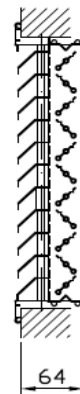
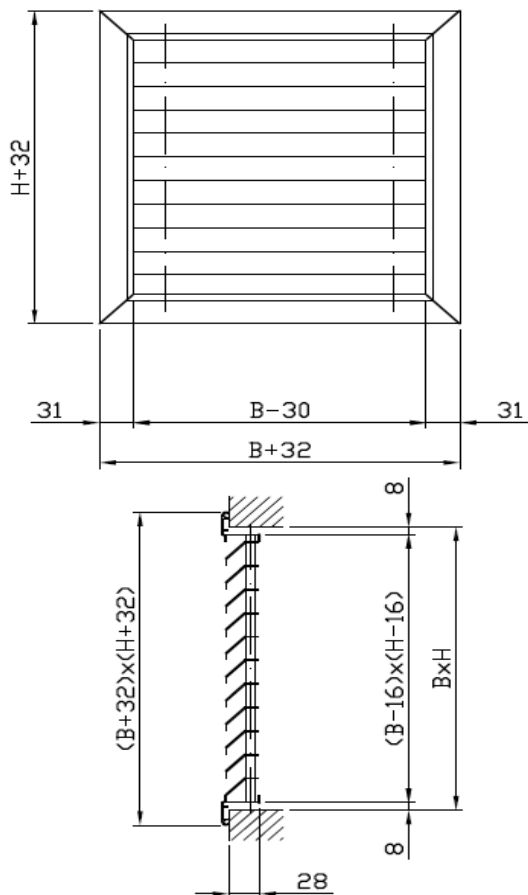
Minimum size: 200 x 100 mm

Maximum size with filter paper 1000x600mm

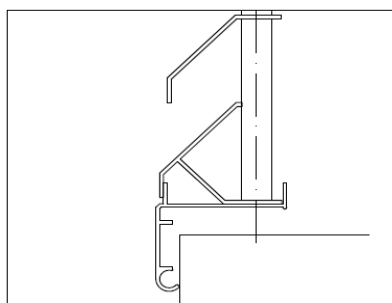
Maximum size: 1500 x 1200 mm.

UNSUITABLE ENVIRONMENTS

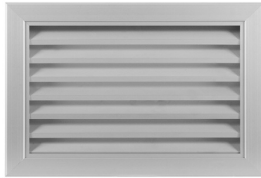
The aluminum products are not suitable for installation in environments with an atmosphere containing corrosive substances for this material and in particular containing chlorine, such as swimming pools, spas and some types of food industries.



With regulation
damper



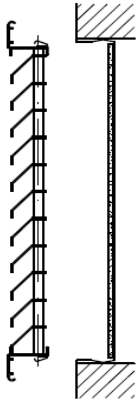
Rain drop protective blade



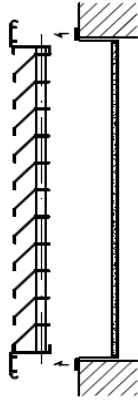
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OVERVIEW

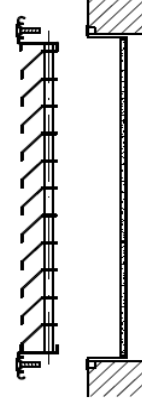
GR SERIES



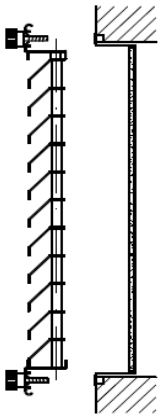
with washable filter
fixing both sides with clips
Installation on wall, not ceiling-mount



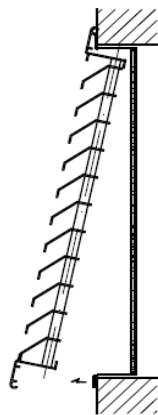
with washable filter
fixing both sides with magnets
Installation on wall, not ceiling-mount



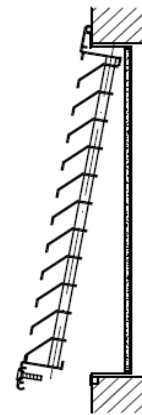
with washable filter
fixing both sides with screws
Installation on wall or ceiling



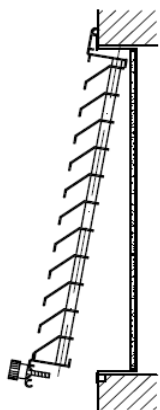
with washable filter
fixing both sides with knobs
Installation on wall or ceiling



with washable filter
fixing hinge and magnets
Installation on wall, not ceiling-mount



with washable filter
fixing hinge and screw
Installation on wall or ceiling



with washable filter
fixing hinge and knob
Installation on wall or ceiling

Filter media:

polyester fibre mat for the reduction of coarse dust particles.

Filtering class : G3

Pressure loss: using V_f as the front air speed

$\Delta P_s = 13 \times V_f^2$ minimum pressure loss with clean filter

$\Delta P_s = 160 \times V_f^2$ minimum pressure loss with dirty filter - suggested replacement

$\Delta P_s = 195 \times V_f^2$ maximum pressure loss with completely dirty filter - necessary replacement



EXTRACTION GRILLES

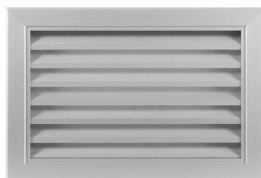
25 mm PITCH

TECHNICAL DATA

WITHOUT RAIN DROP PROTECTIVE BLADE

GR
SERIES

Misura griglia [mm]		Portata d'aria																		
	m³/h	50	80	120	160	200	240	280	320	360	400	440	480	520	560	600	640	680	700	
	A _k [m²]	l/s	(14)	(22)	(33)	(44)	(56)	(67)	(78)	(89)	(100)	(111)	(122)	(133)	(144)	(156)	(167)	(178)	(189)	(194)
200x100 (0,008)	L _{WA} [dB(A)]	<20	24	36	44															
	V _k [m/s]	1,7	2,6	4	5,3															
	Δp _t [Pa]	5	11	26	46															
250x100 (0,011)	L _{WA} [dB(A)]		<20	30	38	45	50													
	V _k [m/s]		2	3,1	4,1	5,2	6,2													
	Δp _t [Pa]		7	15	27	44	63													
300x100 (0,013)	L _{WA} [dB(A)]		<20	25	33	40	45	50												
	V _k [m/s]		1,7	2,5	3,3	4,2	5,1	5,9												
	Δp _t [Pa]		5	10	18	29	42	57												
200x150 (0,014)	L _{WA} [dB(A)]		<20	23	31	38	44	48												
	V _k [m/s]		1,5	2,3	3,1	3,9	4,7	5,5												
	Δp _t [Pa]		4	9	16	25	36	49												
400x100 (0,018)	L _{WA} [dB(A)]			<20	26	33	38	42	46	50										
	V _k [m/s]			1,8	2,4	3,1	3,7	4,3	4,9	5,5										
	Δp _t [Pa]			5	10	16	22	30	40	50										
200x200 (0,02)	L _{WA} [dB(A)]			<20	23	30	35	40	44	47	50									
	V _k [m/s]			1,6	2,2	2,8	3,3	3,9	4,4	4,9	5,5									
	Δp _t [Pa]			4	8	13	18	24	32	40	49									
500x100 (0,023)	L _{WA} [dB(A)]			<20	20	27	32	37	41	44	47	50								
	V _k [m/s]			1,4	1,9	2,4	2,9	3,4	3,9	4,3	4,8	5,3								
	Δp _t [Pa]			3	6	10	14	19	25	31	38	46								
600x100 (0,028)	L _{WA} [dB(A)]				<20	23	28	32	36	39	43	45	48	50						
	V _k [m/s]				1,6	2	2,4	2,8	3,2	3,6	4	4,4	4,8	5,2						
	Δp _t [Pa]				4	7	9	13	17	21	26	31	37	44						
250x200 (0,026)	L _{WA} [dB(A)]				<20	24	29	34	38	41	44	47	49							
	V _k [m/s]				1,7	2,1	2,6	3	3,4	3,8	4,2	4,7	5,1							
	Δp _t [Pa]				5	8	11	15	19	24	29	36	42							
350x150 (0,027)	L _{WA} [dB(A)]				<20	23	29	33	37	40	43	46	49							
	V _k [m/s]				1,6	2,1	2,5	2,9	3,3	3,7	4,1	4,5	4,9							
	Δp _t [Pa]				4	7	10	14	18	23	28	34	40							
400x150 (0,031)	L _{WA} [dB(A)]				<20	20	25	30	34	37	40	43	45	48	50					
	V _k [m/s]				1,4	1,8	2,2	2,5	2,9	3,2	3,6	3,9	4,3	4,6	5					
	Δp _t [Pa]				3	5	8	10	13	17	21	25	30	35	41					
300x200 (0,032)	L _{WA} [dB(A)]				<20	<20	24	29	33	36	39	42	44	47	49					
	V _k [m/s]				1,4	1,7	2,1	2,4	2,8	3,1	3,5	3,8	4,1	4,5	4,9					
	Δp _t [Pa]				3	5	7	10	13	16	20	24	28	33	39					
500x150 (0,039)	L _{WA} [dB(A)]					<20	20	24	28	31	34	37	40	42	44	46	48	50		
	V _k [m/s]					1,4	1,7	2	2,3	2,5	2,8	3,1	3,4	3,6	4	4,2	4,5	4,8		
	Δp _t [Pa]					3	5	6	8	11	13	16	19	22	26	29	33	38		
300x250 (0,042)	L _{WA} [dB(A)]					<20	<20	23	27	30	33	36	38	41	43	45	47	49	49	
	V _k [m/s]					1,3	1,6	1,9	2,1	2,4	2,7	2,9	3,2	3,5	3,8	4	4,3	4,5	4,7	
	Δp _t [Pa]					3	4	6	8	9	12	14	17	20	23	26	30	34	36	
400x200 (0,044)	L _{WA} [dB(A)]					<20	<20	21	25	29	32	34	37	39	42	44	46	47	48	
	V _k [m/s]					1,3	1,5	1,8	2	2,3	2,5	2,8	3	3,3	3,5	3,8	4	4,3	4,4	
	Δp _t [Pa]					3	4	5	7	8	10	13	15	18	21	24	27	30	32	



EXTRACTION GRILLES

25 mm PITCH

TECHNICAL DATA

WITHOUT RAIN DROP PROTECTIVE BLADE

GR
SERIES

Misura griglia [mm]		Portata d'aria																	
	m³/h	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	2000
	A _k [m²]	(56)	(83)	(111)	(139)	(167)	(194)	(222)	(250)	(278)	(306)	(333)	(361)	(389)	(417)	(444)	(472)	(500)	(556)
600x150 (0,048)	L _{WA} [dB(A)]	<20	21	30	36	42	46	50											
	V _k [m/s]	1,2	1,7	2,3	2,9	3,5	4,1	4,6											
	Δp _t [Pa]	2	5	9	14	20	27	35											
350x250 (0,049)	L _{WA} [dB(A)]		21	29	36	41	45	49											
	V _k [m/s]		1,7	2,3	2,8	3,4	3,9	4,5											
	Δp _t [Pa]		5	8	13	19	25	33											
450x200 (0,05)	L _{WA} [dB(A)]		20	29	35	41	45	49											
	V _k [m/s]		1,7	2,2	2,8	3,3	3,9	4,4											
	Δp _t [Pa]		5	8	13	18	25	32											
300x300 (0,051)	L _{WA} [dB(A)]		20	28	35	40	45	48											
	V _k [m/s]		1,6	2,2	2,7	3,3	3,8	4,4											
	Δp _t [Pa]		4	8	12	18	24	31											
800x150 (0,065)	L _{WA} [dB(A)]		<20	23	29	35	39	43	46	49									
	V _k [m/s]		1,3	1,7	2,1	2,6	3	3,4	3,9	4,3									
	Δp _t [Pa]		3	5	8	11	15	19	25	30									
600x200 (0,068)	L _{WA} [dB(A)]		<20	21	28	33	38	42	45	48									
	V _k [m/s]		1,2	1,6	2	2,5	2,9	3,3	3,7	4,1									
	Δp _t [Pa]		2	4	7	10	13	18	22	28									
400x300 (0,07)	L _{WA} [dB(A)]		<20	21	27	33	37	41	44	48	50								
	V _k [m/s]		1,2	1,6	2	2,4	2,8	3,2	3,6	4	4,4								
	Δp _t [Pa]		2	4	6	9	13	17	21	26	31								
500x250 (0,072)	L _{WA} [dB(A)]		<20	20	26	32	36	40	44	47	50								
	V _k [m/s]		1,1	1,5	1,9	2,3	2,7	3,1	3,5	3,8	4,2								
	Δp _t [Pa]		2	4	6	9	12	15	20	24	29								
600x250 (0,088)	L _{WA} [dB(A)]			<20	22	27	32	36	39	42	45	47	50						
	V _k [m/s]			1,3	1,6	1,9	2,2	2,5	2,8	3,2	3,5	3,8	4,1						
	Δp _t [Pa]			3	4	6	8	10	13	16	20	24	28						
500x300 (0,089)	L _{WA} [dB(A)]			<20	22	27	31	35	39	42	45	47	50						
	V _k [m/s]			1,2	1,6	1,9	2,2	2,5	2,8	3,1	3,4	3,7	4,1						
	Δp _t [Pa]			3	4	6	8	10	13	16	19	23	27						
800x200 (0,092)	L _{WA} [dB(A)]			<20	21	26	31	35	38	41	44	46	49						
	V _k [m/s]			1,2	1,5	1,8	2,1	2,4	2,7	3	3,3	3,6	3,9						
	Δp _t [Pa]			2	4	5	7	10	12	15	18	22	25						
600x300 (0,108)	L _{WA} [dB(A)]			<20	<20	22	27	31	34	37	40	43	45	47	49				
	V _k [m/s]			1	1,3	1,6	1,8	2,1	2,3	2,6	2,8	3,1	3,4	3,6	3,9				
	Δp _t [Pa]			2	3	4	5	7	9	11	13	16	18	21	25				
1000x200 (0,115)	L _{WA} [dB(A)]				<20	21	25	29	33	36	38	41	43	46	48	49			
	V _k [m/s]				1,2	1,4	1,7	1,9	2,2	2,4	2,7	2,9	3,1	3,4	3,6	3,8			
	Δp _t [Pa]				2	3	5	6	8	10	12	14	16	19	21	24			
800x250 (0,119)	L _{WA} [dB(A)]				<20	20	25	28	32	35	38	40	43	45	47	49			
	V _k [m/s]				1,2	1,4	1,6	1,9	2,1	2,3	2,6	2,8	3	3,3	3,5	3,7			
	Δp _t [Pa]				2	3	4	6	7	9	11	13	15	18	20	23			
1000x300 (0,183)	L _{WA} [dB(A)]					<20	<20	<20	22	25	28	30	32	35	37	38	40	42	45
	V _k [m/s]					0,9	1,1	1,2	1,4	1,5	1,7	1,8	2	2,1	2,3	2,4	2,6	2,7	3
	Δp _t [Pa]					1	2	2	3	4	5	5	6	7	8	10	11	12	15



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25 mm PITCH
TECHNICAL DATA
WITHOUT RAIN DROP PROTECTIVE BLADE

GR
SERIES

Misura griglia [mm]		Portata d'aria																		
	m³/h	700	880	1060	1240	1420	1600	1780	1960	2140	2320	2500	2680	2860	3040	3220	3400	3580	4000	
	A _k [m²]	l/s	(194)	(244)	(294)	(344)	(394)	(444)	(494)	(544)	(594)	(644)	(694)	(744)	(794)	(844)	(894)	(944)	(994)	(1111)
750x400 (0,186)	L _{WA} [dB(A)]	<20	20	26	31	35	38	41	44	47	49									
	V _k [m/s]	1	1,3	1,6	1,8	2,1	2,4	2,6	2,9	3,2	3,5									
	Δp _t [Pa]	2	3	4	6	7	9	12	14	17	20									
700x500 (0,22)	L _{WA} [dB(A)]	<20	<20	22	27	31	34	37	40	43	45	47	49							
	V _k [m/s]	0,9	1,1	1,3	1,6	1,8	2	2,2	2,5	2,7	2,9	3,1	3,4							
	Δp _t [Pa]	1	2	3	4	5	7	8	10	12	14	16	19							
900x400 (0,225)	L _{WA} [dB(A)]		<20	21	26	30	34	37	39	42	44	47	49							
	V _k [m/s]		1,1	1,3	1,5	1,7	2	2,2	2,4	2,6	2,9	3,1	3,3							
	Δp _t [Pa]		2	3	4	5	6	8	10	11	13	16	18							
600x600 (0,227)	L _{WA} [dB(A)]		<20	21	26	30	33	36	39	42	44	46	48	50						
	V _k [m/s]		1,1	1,3	1,5	1,7	2	2,2	2,4	2,6	2,8	3,1	3,3	3,5						
	Δp _t [Pa]		2	3	4	5	6	8	9	11	13	15	18	20						
1000x600 (0,387)	L _{WA} [dB(A)]				<20	<20	21	24	27	29	32	34	36	38	39	41	43	44	47	
	V _k [m/s]				0,9	1	1,1	1,3	1,4	1,5	1,7	1,8	1,9	2,1	2,2	2,3	2,4	2,6	2,9	
	Δp _t [Pa]				1	2	2	3	3	4	5	5	6	7	8	9	10	11	14	

EXAMPLE 1

data

BASE: 700mm

HEIGHT 500mm

Q = 1360 m³/h

From the intersection between the row of
 And the column of the air flow is derived

L_{WA} 29 [dB(A)]

V_k 1,7 [m/s]

ΔP_t 5 [Pa]

EXAMPLE 2

data

Q = 1760 m³/h

ΔP_s < 10 Pa

Scrolling through the flow column finds the first size
 with ΔP_s less then the maximum admissible

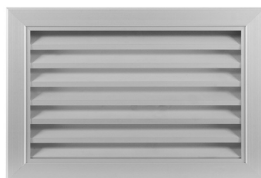
BASE: 700mm

HEIGHT 500mm

L_{WA} 37 [dB(A)]

V_k 2,2 [m/s]

ΔP_t 8 [Pa]



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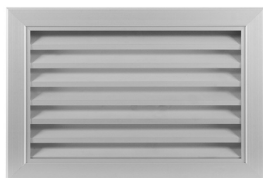
Misura griglia [mm]	A _k [m ²]		Portata d'aria																	
		m ³ /h	50	80	120	160	200	240	280	320	360	400	440	480	520	560	600	640	680	700
		l/s	(14)	(22)	(33)	(44)	(56)	(67)	(78)	(89)	(100)	(111)	(122)	(133)	(144)	(156)	(167)	(178)	(189)	(194)
200x100 (0,006)	L _{WA} [dB(A)]	<20	32	44																
	V _k [m/s]	2,4	3,7	5,5																
	Δp _t [Pa]	9	22	50																
250x100 (0,008)	L _{WA} [dB(A)]	<20	26	38	46															
	V _k [m/s]	1,8	2,9	4,3	5,7															
	Δp _t [Pa]	5	13	30	54															
300x100 (0,009)	L _{WA} [dB(A)]		21	33	41	48														
	V _k [m/s]		2,3	3,5	4,7	5,9														
	Δp _t [Pa]		9	20	36	58														
200x150 (0,012)	L _{WA} [dB(A)]		<20	27	36	43	48													
	V _k [m/s]		1,8	2,8	3,7	4,7	5,6													
	Δp _t [Pa]		6	13	22	36	52													
400x100 (0,013)	L _{WA} [dB(A)]		<20	25	34	41	46	50												
	V _k [m/s]		1,7	2,5	3,4	4,3	5,2	6												
	Δp _t [Pa]		5	11	19	31	44	60												
200x200 (0,018)	L _{WA} [dB(A)]			<20	26	33	38	43	47	50										
	V _k [m/s]			1,8	2,5	3,1	3,8	4,4	5	5,6										
	Δp _t [Pa]			6	10	16	23	31	41	52										
500x100 (0,016)	L _{WA} [dB(A)]			20	28	35	40	45	49											
	V _k [m/s]			2	2,7	3,4	4,1	4,7	5,4											
	Δp _t [Pa]			7	12	19	27	37	48											
600x100 (0,02)	L _{WA} [dB(A)]			<20	23	30	36	40	44	47	50									
	V _k [m/s]			1,7	2,2	2,8	3,4	3,9	4,5	5	5,6									
	Δp _t [Pa]			4	8	13	19	25	33	41	51									
250x200 (0,023)	L _{WA} [dB(A)]			<20	20	27	32	37	41	44	47	50								
	V _k [m/s]			1,4	1,9	2,4	2,9	3,4	3,9	4,3	4,8	5,3								
	Δp _t [Pa]			3	6	10	14	19	24	31	38	46								
350x150 (0,022)	L _{WA} [dB(A)]			<20	21	28	33	37	41	45	48	50								
	V _k [m/s]			1,5	2	2,5	3	3,5	4	4,5	5	5,4								
	Δp _t [Pa]			4	6	10	15	20	26	33	40	49								
400x150 (0,026)	L _{WA} [dB(A)]				<20	24	30	34	38	41	44	47	50							
	V _k [m/s]				1,7	2,2	2,6	3	3,4	3,9	4,3	4,7	5,1							
	Δp _t [Pa]				5	8	11	15	19	24	30	36	43							
300x200 (0,028)	L _{WA} [dB(A)]				<20	22	27	32	36	39	42	45	47	50						
	V _k [m/s]				1,6	2	2,4	2,8	3,1	3,5	3,9	4,3	4,7	5,1						
	Δp _t [Pa]				4	6	9	12	16	20	25	30	36	42						
500x150 (0,033)	L _{WA} [dB(A)]				<20	20	24	28	32	36	39	41	44	46	49					
	V _k [m/s]				1,3	1,7	2	2,4	2,7	3	3,4	3,7	4	4,4	4,7					
	Δp _t [Pa]				3	5	7	9	12	15	19	23	27	31	37					
300x250 (0,038)	L _{WA} [dB(A)]					<20	21	25	29	32	35	38	41	43	45	47	49			
	V _k [m/s]					1,5	1,8	2,1	2,4	2,6	2,9	3,2	3,5	3,8	4,1	4,4	4,7			
	Δp _t [Pa]					4	5	7	9	11	14	17	20	24	28	32	36			
400x200 (0,039)	L _{WA} [dB(A)]					<20	20	24	28	32	35	37	40	42	45	47	48	50		
	V _k [m/s]					1,4	1,7	2	2,3	2,6	2,9	3,1	3,4	3,7	4	4,3	4,6	4,9		
	Δp _t [Pa]					3	5	7	9	11	13	16	19	23	26	30	34	39		



EXTRACTION GRILLES
25 mm PITCH
TECHNICAL DATA
WITH RAIN DROP PROTECTIVE BLADE

GR
SERIES

Misura griglia [mm]		Portata d'aria																		
	m³/h	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	2000	
	A _k [m²]	l/s	(56)	(83)	(111)	(139)	(167)	(194)	(222)	(250)	(278)	(306)	(333)	(361)	(389)	(417)	(444)	(472)	(500)	(556)
600x150 (0,04)	L _{WA} [dB(A)]	<20	26	34	41	46	50													
	V _k [m/s]	1,4	2,1	2,8	3,5	4,2	4,9													
	Δp _t [Pa]	3	7	13	20	29	39													
350x250 (0,045)	L _{WA} [dB(A)]	<20	23	31	38	43	48													
	V _k [m/s]	1,3	1,9	2,5	3,1	3,7	4,3													
	Δp _t [Pa]	3	6	10	16	23	31													
450x200 (0,044)	L _{WA} [dB(A)]	<20	23	32	38	44	48													
	V _k [m/s]	1,3	1,9	2,5	3,2	3,8	4,4													
	Δp _t [Pa]	3	6	10	16	24	32													
300x300 (0,047)	L _{WA} [dB(A)]	<20	22	30	37	42	46	50												
	V _k [m/s]	1,2	1,8	2,3	2,9	3,5	4,1	4,7												
	Δp _t [Pa]	2	5	9	14	20	28	36												
800x150 (0,054)	L _{WA} [dB(A)]		<20	27	33	39	43	47												
	V _k [m/s]		1,5	2,1	2,6	3,1	3,6	4,1												
	Δp _t [Pa]		4	7	11	16	21	28												
600x200 (0,06)	L _{WA} [dB(A)]		<20	24	31	36	41	45	48											
	V _k [m/s]		1,4	1,9	2,3	2,8	3,2	3,7	4,2											
	Δp _t [Pa]		3	6	9	13	17	23	29											
400x300 (0,065)	L _{WA} [dB(A)]		<20	23	29	35	39	43	46	49										
	V _k [m/s]		1,3	1,7	2,1	2,6	3	3,4	3,9	4,3										
	Δp _t [Pa]		3	5	8	11	15	19	24	30										
500x250 (0,066)	L _{WA} [dB(A)]		<20	22	29	34	39	42	46	49										
	V _k [m/s]		1,3	1,7	2,1	2,5	2,9	3,4	3,8	4,2										
	Δp _t [Pa]		3	5	7	11	14	19	24	29										
600x250 (0,08)	L _{WA} [dB(A)]			<20	24	30	34	38	41	44	47	50								
	V _k [m/s]			1,4	1,7	2,1	2,4	2,8	3,1	3,5	3,8	4,2								
	Δp _t [Pa]			3	5	7	10	13	16	20	24	29								
500x300 (0,082)	L _{WA} [dB(A)]			<20	23	29	33	37	41	44	47	49								
	V _k [m/s]			1,3	1,7	2	2,4	2,7	3	3,4	3,7	4								
	Δp _t [Pa]			3	5	7	9	12	15	19	23	27								
800x200 (0,081)	L _{WA} [dB(A)]			<20	24	29	34	38	41	44	47	49								
	V _k [m/s]			1,4	1,7	2,1	2,4	2,7	3,1	3,4	3,8	4,1								
	Δp _t [Pa]			3	5	7	9	12	16	19	24	28								
600x300 (0,1)	L _{WA} [dB(A)]			<20	<20	24	29	33	36	39	42	44	47	49						
	V _k [m/s]			1,1	1,4	1,7	1,9	2,2	2,5	2,8	3,1	3,3	3,6	3,9						
	Δp _t [Pa]			2	3	5	6	8	10	13	15	18	21	25						
1000x200 (0,102)	L _{WA} [dB(A)]			<20	<20	24	28	32	36	39	41	44	46	48						
	V _k [m/s]			1,1	1,4	1,6	1,9	2,2	2,5	2,7	3	3,3	3,5	3,8						
	Δp _t [Pa]			2	3	4	6	8	10	12	15	18	21	24						
800x250 (0,108)	L _{WA} [dB(A)]			<20	<20	22	27	31	34	37	40	43	45	47	49					
	V _k [m/s]			1	1,3	1,5	1,8	2,1	2,3	2,6	2,8	3,1	3,3	3,6	3,9					
	Δp _t [Pa]			2	3	4	5	7	9	11	13	16	18	21	25					
1000x300 (0,17)	L _{WA} [dB(A)]					<20	<20	20	23	27	29	32	34	36	38	40	42	44	47	47
	V _k [m/s]					1	1,1	1,3	1,5	1,6	1,8	2	2,1	2,3	2,5	2,6	2,8	2,9	3,3	3,3
	Δp _t [Pa]					2	2	3	4	4	5	6	7	9	10	11	13	14	18	18



EXTRACTION GRILLES

25 mm PITCH

TECHNICAL DATA

WITH RAIN DROP PROTECTIVE BLADE

GR
SERIES

Misura griglia [mm]		Portata d'aria																		
	m³/h	700	880	1060	1240	1420	1600	1780	1960	2140	2320	2500	2680	2860	3040	3220	3400	3580	4000	
	A _k [m²]	l/s	(194)	(244)	(294)	(344)	(394)	(444)	(494)	(544)	(594)	(644)	(694)	(744)	(794)	(844)	(894)	(944)	(994)	(1111)
750x400 (0,176)	L _{WA} [dB(A)]	<20	22	27	32	36	39	42	45	48	50									
	V _k [m/s]	1,1	1,4	1,7	2	2,2	2,5	2,8	3,1	3,4	3,7									
	Δp _t [Pa]	2	3	5	6	8	10	13	16	19	22									
700x500 (0,211)	L _{WA} [dB(A)]	<20	<20	23	28	32	35	38	41	44	46	48	50							
	V _k [m/s]	0,9	1,2	1,4	1,6	1,9	2,1	2,3	2,6	2,8	3,1	3,3	3,5							
	Δp _t [Pa]	1	2	3	4	6	7	9	11	13	15	18	20							
900x400 (0,213)	L _{WA} [dB(A)]	<20	<20	23	27	31	35	38	41	43	46	48	50							
	V _k [m/s]	0,9	1,1	1,4	1,6	1,8	2,1	2,3	2,6	2,8	3	3,3	3,5							
	Δp _t [Pa]	1	2	3	4	6	7	9	11	13	15	17	20							
600x600 (0,219)	L _{WA} [dB(A)]	<20	<20	22	27	31	34	37	40	43	45	47	49							
	V _k [m/s]	0,9	1,1	1,3	1,6	1,8	2	2,3	2,5	2,7	2,9	3,2	3,4							
	Δp _t [Pa]	1	2	3	4	5	7	8	10	12	14	16	19							
1000x600 (0,373)	L _{WA} [dB(A)]				<20	<20	22	25	27	30	32	35	37	39	40	42	44	45	48	
	V _k [m/s]				0,9	1,1	1,2	1,3	1,5	1,6	1,7	1,9	2	2,1	2,3	2,4	2,5	2,7	3	
	Δp _t [Pa]				1	2	2	3	3	4	5	6	7	7	8	9	10	12	15	

ESEMPIO 1

dati

BASE: 700mm

ALTEZZA 500mm

Q = 1360 m³/h

Dall'incrocio tra lariga delle dimensioni
e la colonna della portata si ricava

L_{WA} 30 [dB(A)]

V_k 1,8 [m/s]

ΔP_t 5 [Pa]

ESEMPIO 2

dati

Q = 1760 m³/h

ΔP_s < 10 Pa

Scorrendo la colonna della portata si individua il primo formato
con ΔP_s inferiore al massimo ammissibile

BASE: 700mm

ALTEZZA 500mm

L_{WA} 38 [dB(A)]

V_k 2,3 [m/s]

ΔP_t 9 [Pa]



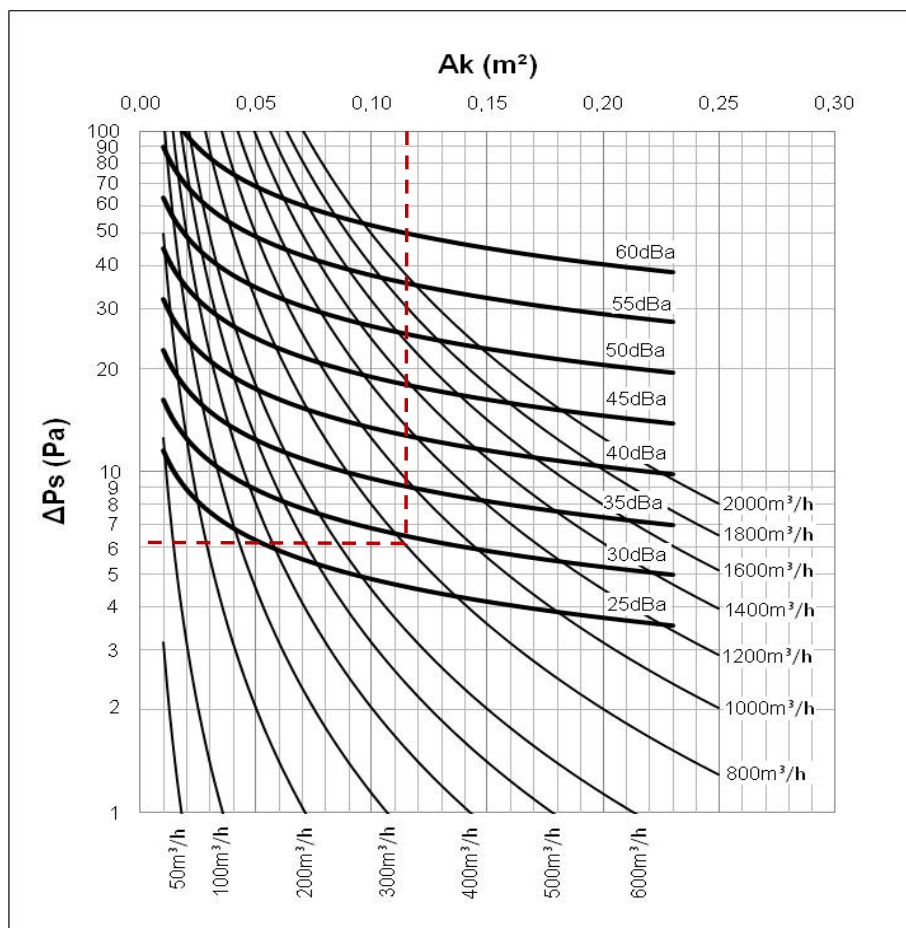
EXTRACTION GRILLES 25 mm PITCH

GR
SERIES

TECHNICAL DATA
WITH RAIN DROP PROTECTIVE BLADE

HEIGHT	EFFECTIVE SECTION A_k (m ²)									
	BASE									
	200	250	300	350	400	450	500	550	563	600
100	0,0059	0,0077	0,0094	0,0112	0,0129	0,0147	0,0164	0,0182	0,0187	0,0199
150	0,0119	0,0154	0,0189	0,0224	0,0259	0,0294	0,0329	0,0364	0,0373	0,0399
200	0,0178	0,0231	0,0283	0,0336	0,0388	0,0441	0,0493	0,0546	0,0560	0,0598
250	0,0238	0,0308	0,0378	0,0448	0,0518	0,0588	0,0658	0,0728	0,0746	0,0798
300	0,0297	0,0385	0,0472	0,0560	0,0647	0,0735	0,0822	0,0910	0,0933	0,0997
350	0,0357	0,0462	0,0567	0,0672	0,0777	0,0882	0,0987	0,1092	0,1119	0,1197
400	0,0416	0,0539	0,0661	0,0784	0,0906	0,1029	0,1151	0,1274	0,1306	0,1396
450	0,0476	0,0616	0,0756	0,0896	0,1036	0,1176	0,1316	0,1456	0,1492	0,1596
500	0,0535	0,0693	0,0850	0,1008	0,1165	0,1323	0,1480	0,1638	0,1679	0,1795
550	0,0595	0,0770	0,0945	0,1120	0,1295	0,1470	0,1645	0,1820	0,1865	0,1995
563	0,0610	0,0790	0,0969	0,1149	0,1328	0,1508	0,1687	0,1867	0,1914	0,2047
600	0,0654	0,0847	0,1039	0,1232	0,1424	0,1617	0,1809	0,2002	0,2052	0,2194

the nominal dimension 563 is for 595 external frame



ESEMPIO 1

dati

BASE: 500mm
ALTEZZA 400mm
 $Q = 800 \text{ m}^3/\text{h}$

ricavare da tabella
 $A_k = 0,1151 \text{ m}^2$

da diagramma si ricava
 $\Delta P_s = 6,1 \text{ Pa}$
 $L_w = 29 \text{ dBa}$

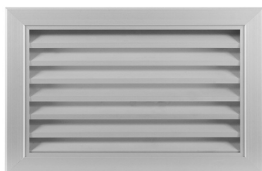
ESEMPIO 2

dati

$Q = 800 \text{ m}^3/\text{h}$
 $\Delta P_s < 10 \text{ Pa}$
 $L_w < 30 \text{ dBa}$

da diagramma si ricava
 $L_w = 29 \text{ dBa}$
 $\Delta P_s = 6,1 \text{ Pa}$
 $A_k \approx 0,11 \text{ m}^2$

da tabella si ricava
BASE: 500mm
ALTEZZA 400mm



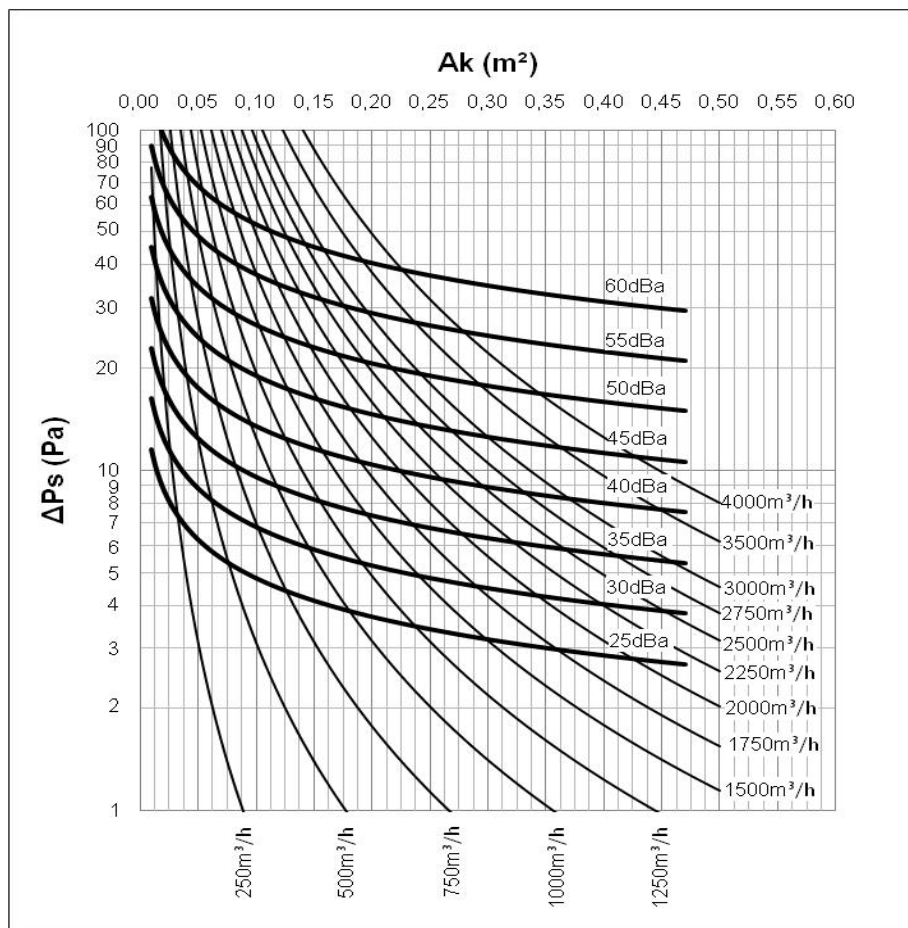
EXTRACTION GRILLES 25 mm PITCH

TECHNICAL DATA

GR
SERIES

HEIGHT	EFFECTIVE SECTION A_k (m ²)									
	BASE									
	200	250	300	350	400	450	500	550	563	600
600	0,0654	0,0847	0,1039	0,1232	0,1424	0,1617	0,1809	0,2002	0,2052	0,2194
650	0,0714	0,0924	0,1134	0,1344	0,1554	0,1764	0,1974	0,2184	0,2238	0,2394
700	0,0773	0,1001	0,1228	0,1456	0,1683	0,1911	0,2138	0,2366	0,2425	0,2593
750	0,0833	0,1078	0,1323	0,1568	0,1813	0,2058	0,2303	0,2548	0,2611	0,2793
800	0,0892	0,1155	0,1417	0,1680	0,1942	0,2205	0,2467	0,2730	0,2798	0,2992
850	0,0952	0,1232	0,1512	0,1792	0,2072	0,2352	0,2632	0,2912	0,2984	0,3191
900	0,1011	0,1309	0,1606	0,1904	0,2201	0,2499	0,2796	0,3093	0,3171	0,3391
950	0,1071	0,1386	0,1701	0,2016	0,2331	0,2646	0,2961	0,3275	0,3357	0,3590
1000	0,1130	0,1463	0,1795	0,2128	0,2460	0,2793	0,3125	0,3457	0,3544	0,3790
1050	0,1190	0,1540	0,1890	0,2240	0,2590	0,2940	0,3289	0,3639	0,3730	0,3989
1100	0,1249	0,1617	0,1984	0,2352	0,2719	0,3086	0,3454	0,3821	0,3917	0,4189
1150	0,1309	0,1694	0,2079	0,2464	0,2849	0,3233	0,3618	0,4003	0,4103	0,4388
1200	0,1368	0,1771	0,2173	0,2576	0,2978	0,3380	0,3783	0,4185	0,4290	0,4588

the nominal dimension 563 is for 595 external frame





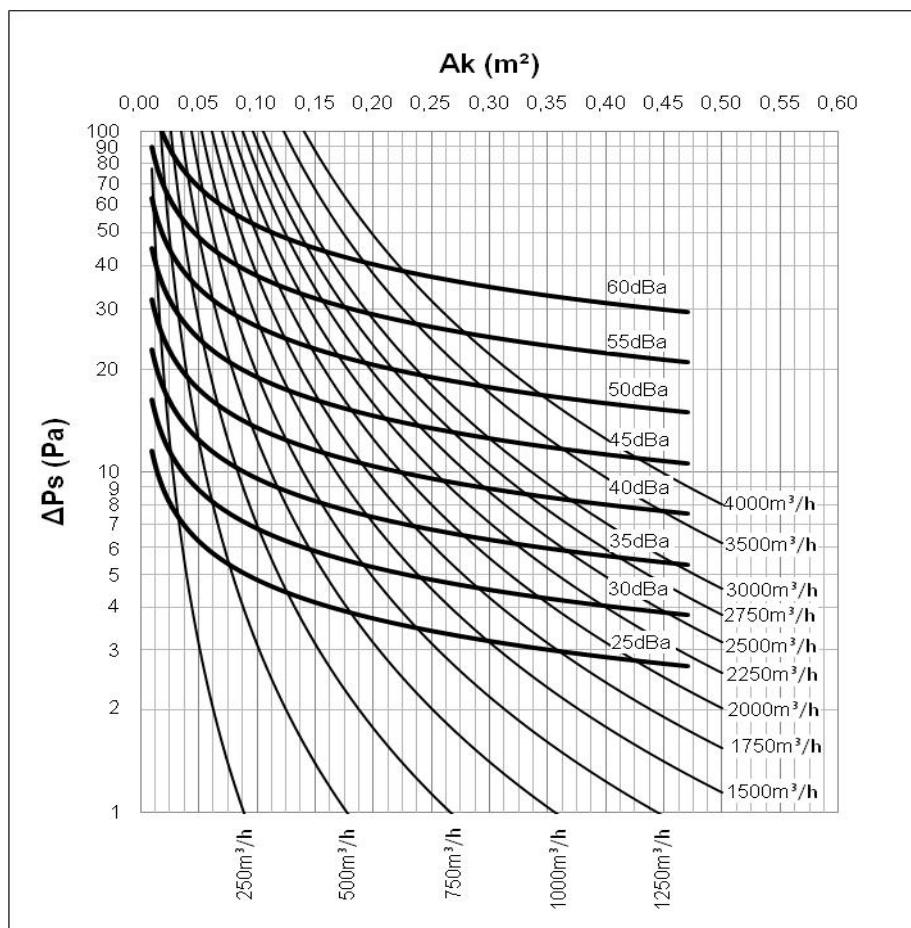
EXTRACTION GRILLES 25 mm PITCH

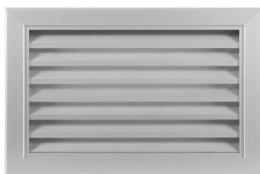
TECHNICAL DATA

GR SERIES

HEIGHT	EFFECTIVE SECTION A_k (m ²)												
	BASE												
	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
100	0,0199	0,0217	0,0234	0,0252	0,0269	0,0287	0,0304	0,0322	0,0339	0,0357	0,0374	0,0392	0,0409
150	0,0399	0,0434	0,0469	0,0504	0,0539	0,0574	0,0609	0,0644	0,0679	0,0714	0,0749	0,0784	0,0819
200	0,0598	0,0651	0,0703	0,0756	0,0808	0,0861	0,0913	0,0966	0,1018	0,1071	0,1123	0,1176	0,1228
250	0,0798	0,0868	0,0938	0,1008	0,1078	0,1148	0,1218	0,1288	0,1358	0,1428	0,1498	0,1568	0,1638
300	0,0997	0,1085	0,1172	0,1260	0,1347	0,1435	0,1522	0,1610	0,1697	0,1785	0,1872	0,1960	0,2047
350	0,1197	0,1302	0,1407	0,1512	0,1617	0,1722	0,1827	0,1932	0,2037	0,2142	0,2247	0,2352	0,2457
400	0,1396	0,1519	0,1641	0,1764	0,1886	0,2009	0,2131	0,2254	0,2376	0,2499	0,2621	0,2744	0,2866
450	0,1596	0,1736	0,1876	0,2016	0,2156	0,2296	0,2436	0,2576	0,2716	0,2856	0,2996	0,3135	0,3275
500	0,1795	0,1953	0,2110	0,2268	0,2425	0,2583	0,2740	0,2898	0,3055	0,3212	0,3370	0,3527	0,3685
550	0,1995	0,2170	0,2345	0,2520	0,2695	0,2870	0,3044	0,3219	0,3394	0,3569	0,3744	0,3919	0,4094
563	0,2047	0,2226	0,2406	0,2585	0,2765	0,2944	0,3124	0,3303	0,3483	0,3662	0,3842	0,4021	0,4201
600	0,2194	0,2387	0,2579	0,2772	0,2964	0,3156	0,3349	0,3541	0,3734	0,3926	0,4119	0,4311	0,4504

the nominal dimation 563 is for 595 external frame



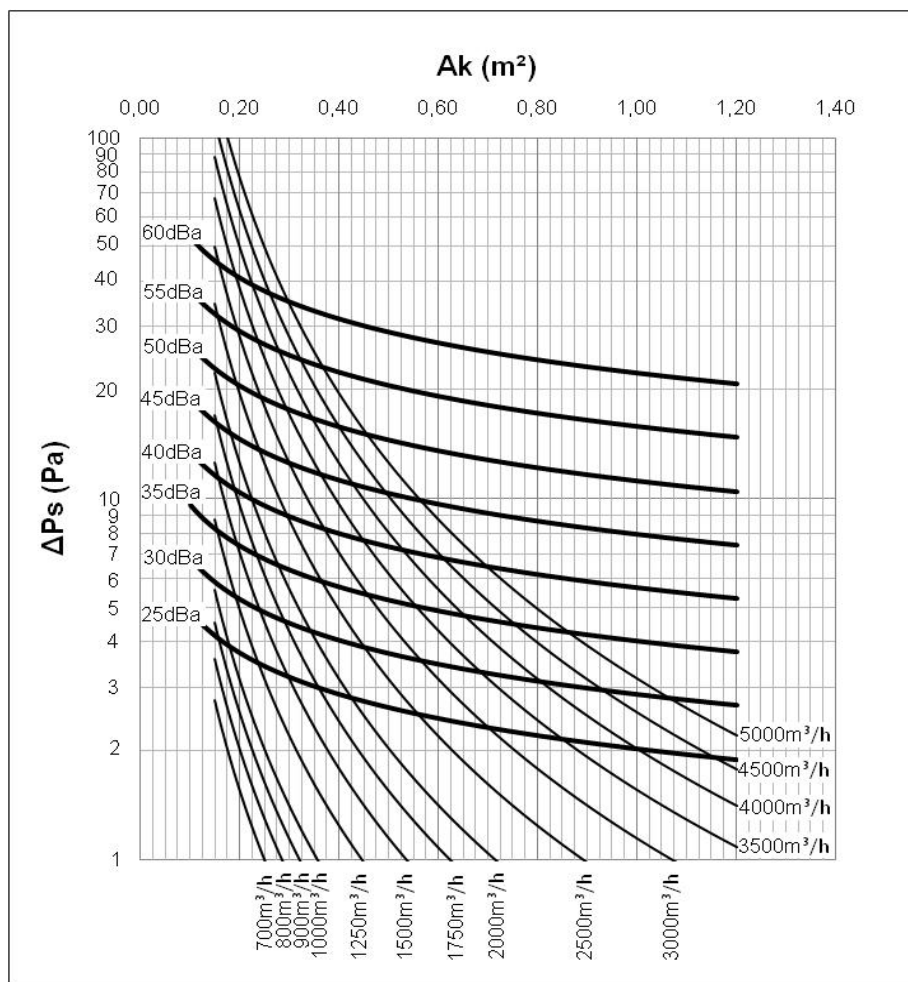


EXTRACTION GRILLES 25 mm PITCH

GR
SERIES

TECHNICAL DATA

HEIGHT	EFFECTIVE SECTION A_k (m ²)												
	BASE												
	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
600	0,2194	0,2387	0,2579	0,2772	0,2964	0,3156	0,3349	0,3541	0,3734	0,3926	0,4119	0,4311	0,4504
650	0,2394	0,2604	0,2814	0,3023	0,3233	0,3443	0,3653	0,3863	0,4073	0,4283	0,4493	0,4703	0,4913
700	0,2593	0,2821	0,3048	0,3275	0,3503	0,3730	0,3958	0,4185	0,4413	0,4640	0,4868	0,5095	0,5323
750	0,2793	0,3037	0,3282	0,3527	0,3772	0,4017	0,4262	0,4507	0,4752	0,4997	0,5242	0,5487	0,5732
800	0,2992	0,3254	0,3517	0,3779	0,4042	0,4304	0,4567	0,4829	0,5092	0,5354	0,5617	0,5879	0,6141
850	0,3191	0,3471	0,3751	0,4031	0,4311	0,4591	0,4871	0,5151	0,5431	0,5711	0,5991	0,6271	0,6551
900	0,3391	0,3688	0,3986	0,4283	0,4581	0,4878	0,5176	0,5473	0,5771	0,6068	0,6365	0,6663	0,6960
950	0,3590	0,3905	0,4220	0,4535	0,4850	0,5165	0,5480	0,5795	0,6110	0,6425	0,6740	0,7055	0,7370
1000	0,3790	0,4122	0,4455	0,4787	0,5120	0,5452	0,5785	0,6117	0,6449	0,6782	0,7114	0,7447	0,7779
1050	0,3989	0,4339	0,4689	0,5039	0,5389	0,5739	0,6089	0,6439	0,6789	0,7139	0,7489	0,7839	0,8189
1100	0,4189	0,4556	0,4924	0,5291	0,5659	0,6026	0,6393	0,6761	0,7128	0,7496	0,7863	0,8231	0,8598
1150	0,4388	0,4773	0,5158	0,5543	0,5928	0,6313	0,6698	0,7083	0,7468	0,7853	0,8238	0,8623	0,9007
1200	0,4588	0,4990	0,5393	0,5795	0,6197	0,6600	0,7002	0,7405	0,7807	0,8210	0,8612	0,9014	0,9417



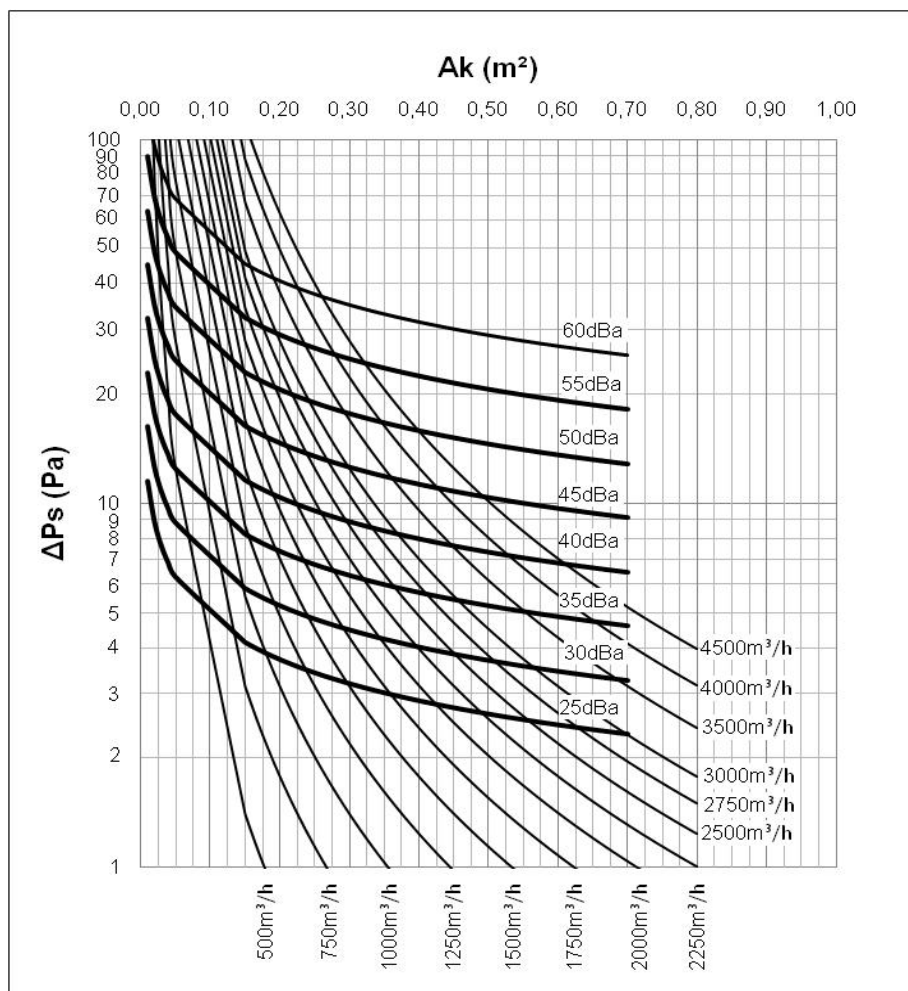


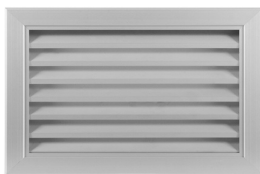
EXTRACTION GRILLES 25 mm PITCH

TECHNICAL DATA

GR
SERIES

HEIGHT	EFFECTIVE SECTION A_k (m ²)						
	BASE						
	1200	1250	1300	1350	1400	1450	1500
100	0,0409	0,0427	0,0444	0,0462	0,0479	0,0497	0,0514
150	0,0819	0,0854	0,0889	0,0924	0,0959	0,0994	0,1029
200	0,1228	0,1281	0,1333	0,1386	0,1438	0,1491	0,1543
250	0,1638	0,1708	0,1778	0,1848	0,1918	0,1988	0,2058
300	0,2047	0,2135	0,2222	0,2310	0,2397	0,2485	0,2572
350	0,2457	0,2562	0,2667	0,2772	0,2877	0,2982	0,3086
400	0,2866	0,2989	0,3111	0,3233	0,3356	0,3478	0,3601
450	0,3275	0,3415	0,3555	0,3695	0,3835	0,3975	0,4115
500	0,3685	0,3842	0,4000	0,4157	0,4315	0,4472	0,4630
600	0,4504	0,4696	0,4889	0,5081	0,5274	0,5466	0,5659



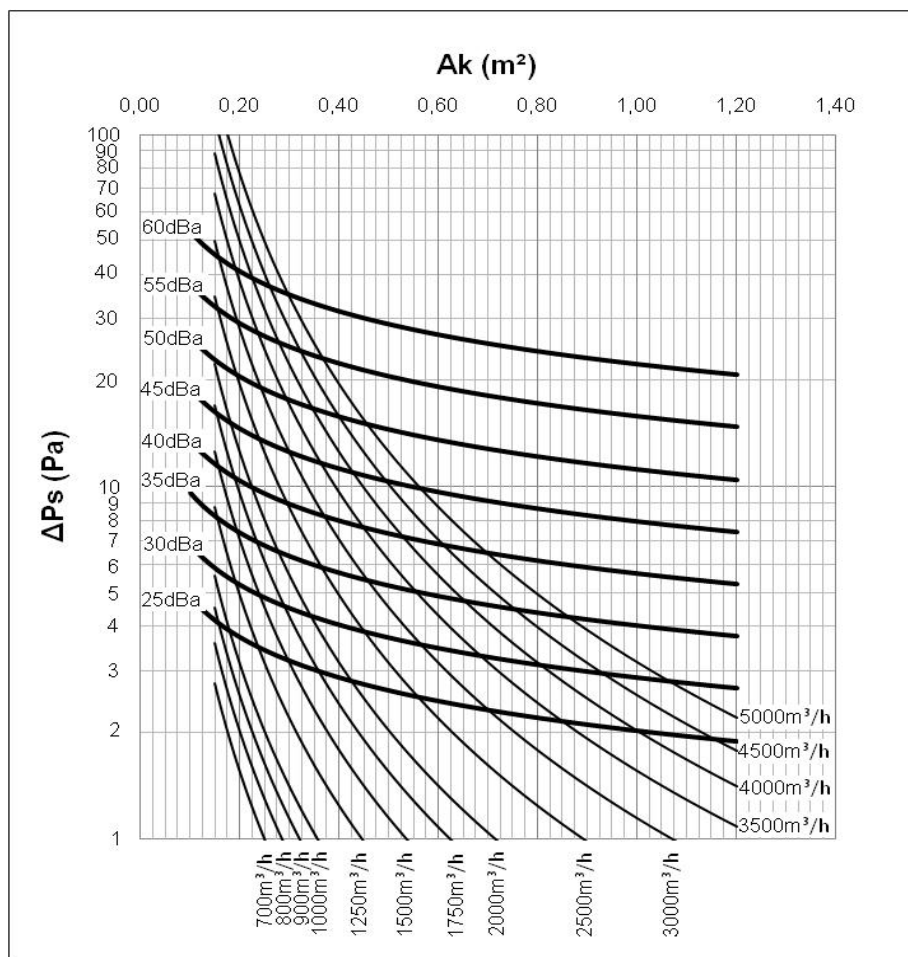


EXTRACTION GRILLES 25 mm PITCH

TECHNICAL DATA

GR
SERIES

HEIGHT	EFFECTIVE SECTION A_k (m ²)						
	BASE						
	1200	1250	1300	1350	1400	1450	1500
600	0,4504	0,4696	0,4889	0,5081	0,5274	0,5466	0,5659
650	0,4913	0,5123	0,5333	0,5543	0,5753	0,5963	0,6173
700	0,5323	0,5550	0,5778	0,6005	0,6232	0,6460	0,6687
750	0,5732	0,5977	0,6222	0,6467	0,6712	0,6957	0,7202
800	0,6141	0,6404	0,6666	0,6929	0,7191	0,7454	0,7716
850	0,6551	0,6831	0,7111	0,7391	0,7671	0,7951	0,8231
900	0,6960	0,7258	0,7555	0,7853	0,8150	0,8448	0,8745
950	0,7370	0,7685	0,8000	0,8315	0,8630	0,8945	0,9259
1000	0,7779	0,8112	0,8444	0,8777	0,9109	0,9441	0,9774
1050	0,8189	0,8539	0,8889	0,9238	0,9588	0,9938	1,0288
1100	0,8598	0,8966	0,9333	0,9700	1,0068	1,0435	1,0803
1150	0,9007	0,9392	0,9777	1,0162	1,0547	1,0932	1,1317
1200	0,9417	0,9819	1,0222	1,0624	1,1027	1,1429	1,1832

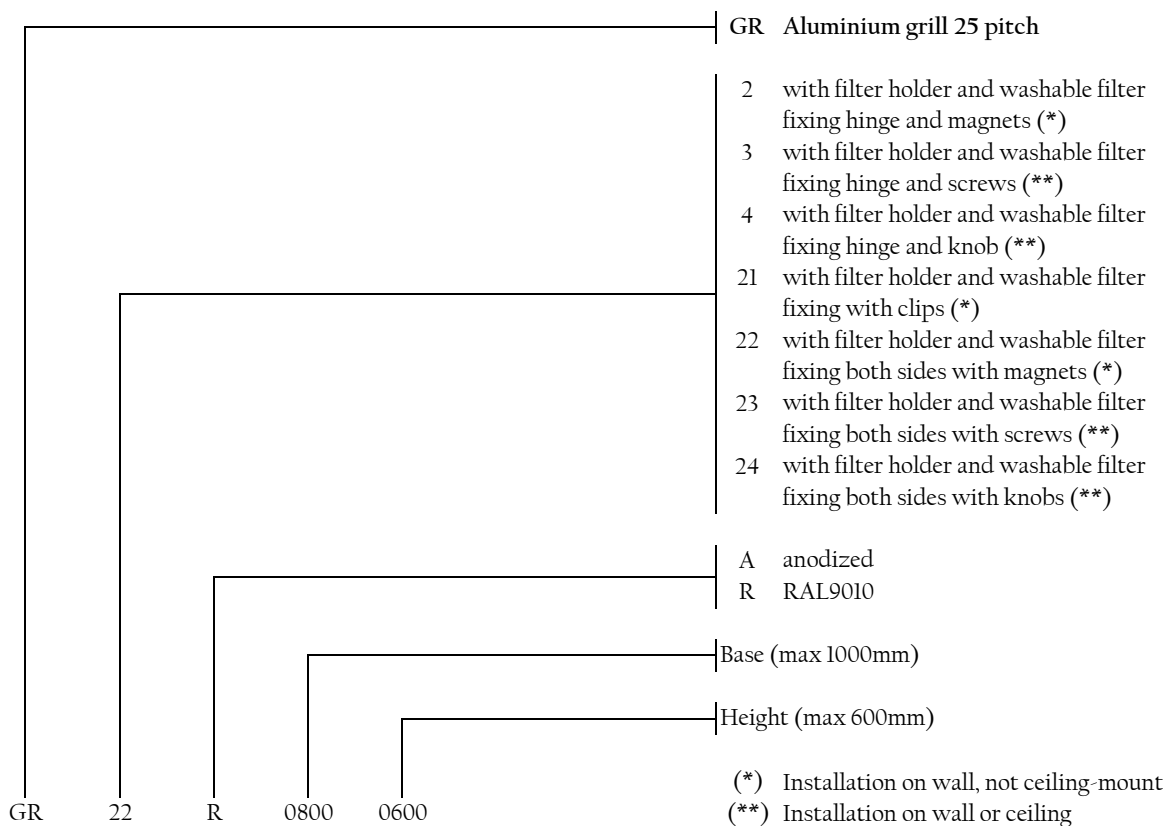
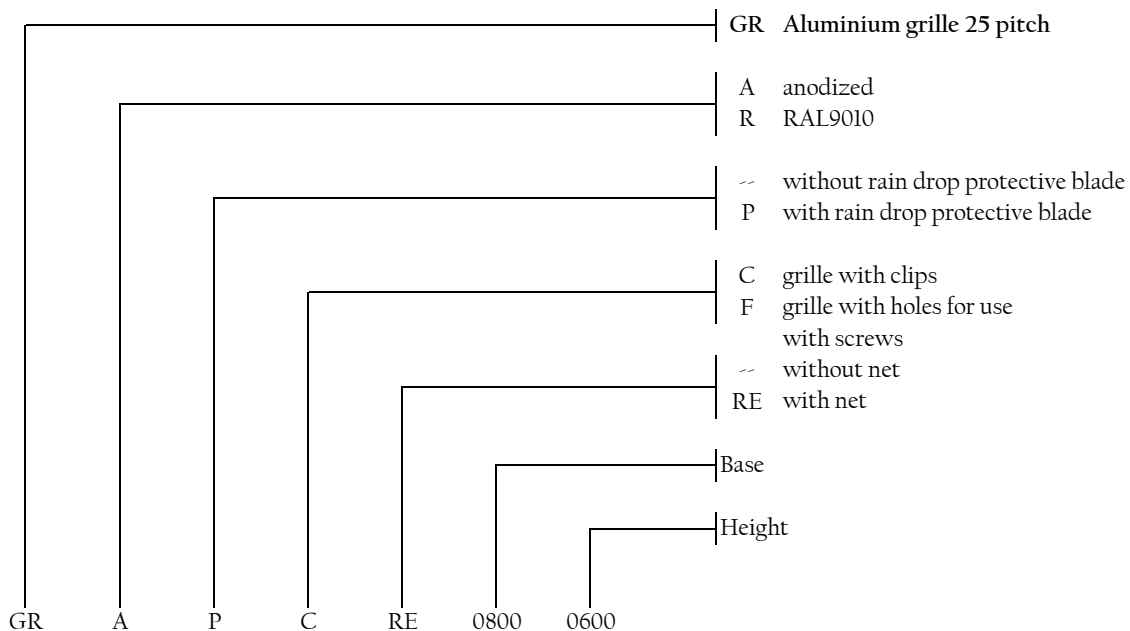




EXTRACTION GRILLES 25 mm PITCH

GR
SERIES

ORDERING CODES





EXTRACTION GRILLES 25 mm PITCH

ACCESSORIES

GR SERIES



PP30 Plenum with rear connection
insulated and non insulated version



PP40 Plenum with lateral connection
insulated and non insulated version



SC Control damper



UTC Counterframe



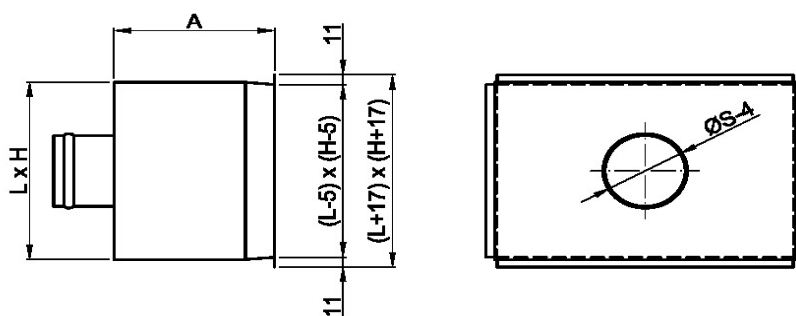
PLENUM FOR VENTILATION GRILLES

PP 30
SERIES

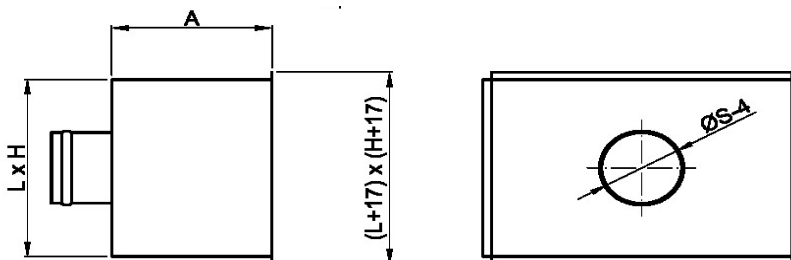
TECHNICAL CHARACTERISTICS

L	H	A	N°	S
200	100	140	1	80
300	100	140	1	80
400	100	140	1	80
500	100	140	2	80
600	100	140	2	80
700	100	140	2	80
800	100	140	2	80
200	150	180	1	127
300	150	180	1	127
400	150	180	1	127
500	150	180	2	127
600	150	180	2	127
700	150	180	2	127
800	150	180	2	127
900	150	180	2	127
1000	150	180	2	127
200	200	220	1	150
300	200	220	1	150
400	200	220	1	180
500	200	220	1	180
600	200	220	2	150
700	200	220	2	150
800	200	220	2	150
900	200	220	2	180
1000	200	220	2	180
200	250	220	1	200
300	250	220	1	200
400	250	220	1	200
500	250	220	1	200
600	250	220	2	150
700	250	220	2	150
800	250	220	2	150
900	250	220	2	180
1000	300	220	2	180
300	300	260	1	250
400	300	260	1	250
500	300	260	1	250
600	300	260	2	160
700	300	260	2	160
800	300	260	2	160
900	300	260	2	200
1000	300	260	2	200
400	400	260	1	350
500	400	260	1	350
600	400	260	2	160
700	400	260	2	160
800	400	260	2	160
900	400	260	2	200
1000	400	260	2	200
515	515	150	1	250
563	563	270	1	350

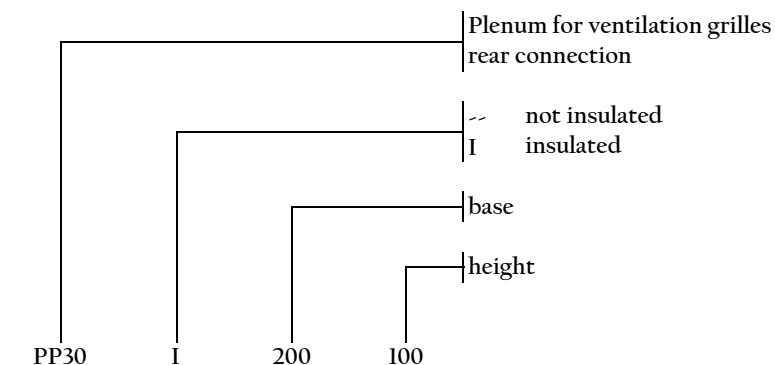
PP 30



STANDARD GRILLE



GRILLE WITH FILTERHOLDER FRAME



For S = 125 - 160 - 200 - 250 connection in ABS - steel on request
For other diameters connection in steel

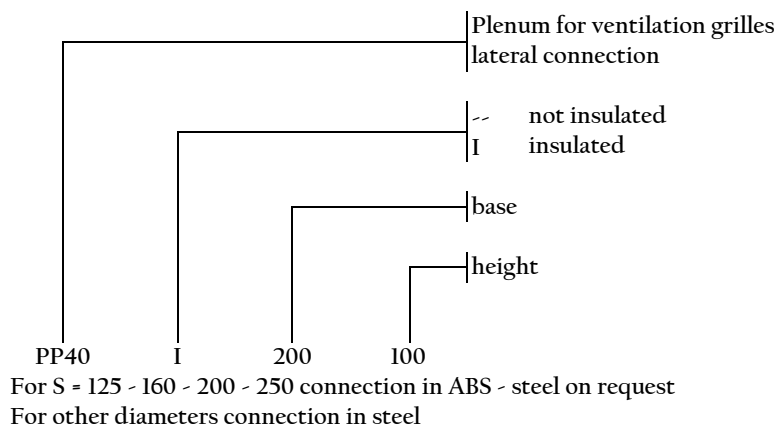
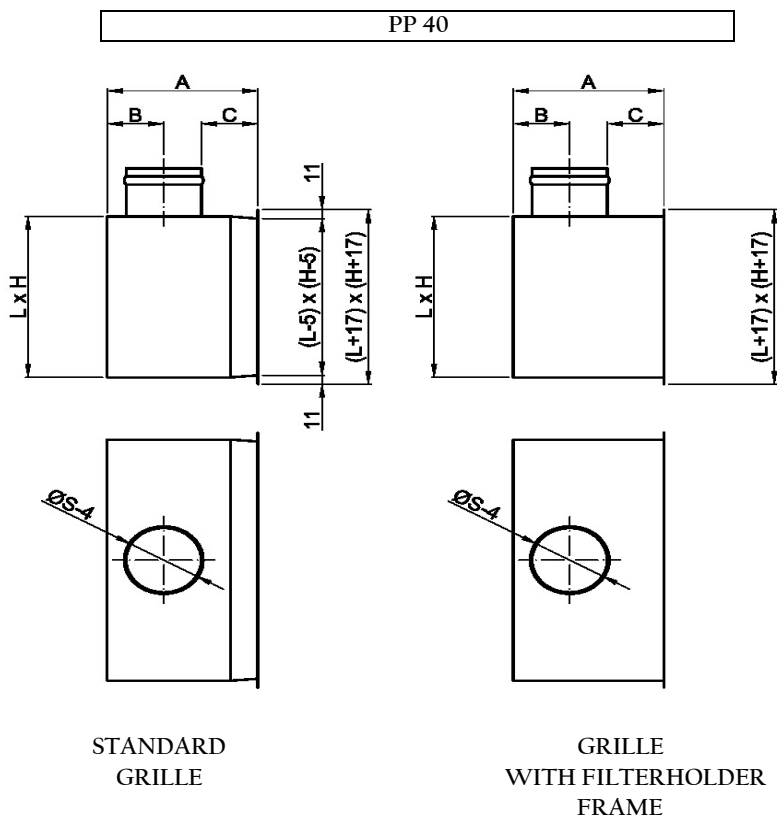


PLENUM FOR VENTILATION GRILLES

PP 40
SERIES

TECHNICAL CHARACTERISTICS

L	H	A	B	C	N°	S
200	100	200	70	80	1	100
300	100	250	95	80	1	150
400	100	250	95	80	1	150
500	100	300	120	80	1	200
600	100	300	120	80	1	200
700	100	350	145	80	1	250
800	100	350	145	80	1	250
200	150	250	95	80	1	150
300	150	300	120	80	1	200
400	150	300	120	80	1	200
500	150	350	145	80	1	250
600	150	350	145	80	1	250
700	150	350	145	80	1	250
800	150	415	178	80	1	315
900	150	415	178	80	1	315
1000	150	415	178	80	1	315
200	200	250	95	80	1	150
300	200	250	95	80	1	150
400	200	350	145	80	1	250
500	200	350	145	80	1	250
600	200	415	178	80	1	315
700	200	415	178	80	1	315
800	200	415	178	80	1	315
900	200	450	195	80	1	350
1000	200	450	195	80	1	350
200	250	300	120	80	1	200
300	250	300	120	80	1	200
400	250	350	145	80	1	250
500	250	350	145	80	1	250
600	250	415	178	80	1	315
700	250	415	178	80	1	315
800	250	415	178	80	1	315
900	250	450	195	80	1	350
1000	250	450	195	80	1	350
300	300	350	145	80	1	250
400	300	415	178	80	1	315
500	300	450	195	80	1	350
600	300	450	195	80	1	350
700	300	450	195	80	1	350
800	300	450	195	80	1	350
900	300	500	220	80	1	400
1000	300	500	220	80	1	400
400	400	450	195	80	1	350
500	400	450	195	80	1	350
600	400	450	195	80	1	350
700	400	450	195	80	1	350
800	400	450	195	80	1	350
900	400	500	220	80	1	400
1000	400	500	220	80	1	400
515	515	320	145	50	1	250
563	563	450	195	80	1	350





CONTROL DAMPERS

SC SERIES

OVERVIEW TECHNICAL CHARACTERISTICS

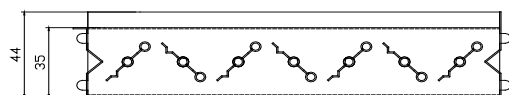
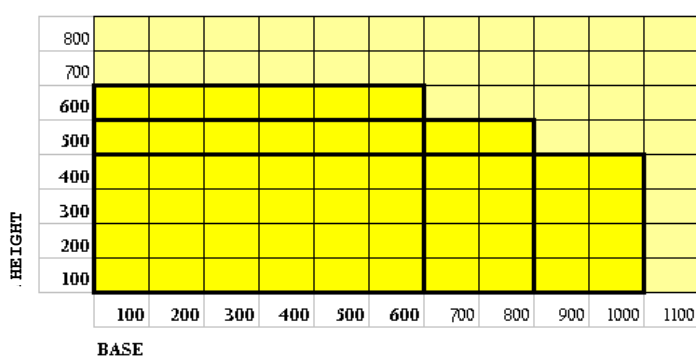
OVERVIEW AND CHARACTERISTICS :

The contrast control dampers of SC series can be fitted to UF KG UM UR GI KN e CR-KN series . They are held in place by special patented clips, designed both for fitting the damper to the grill and for fitting it on a false frame.

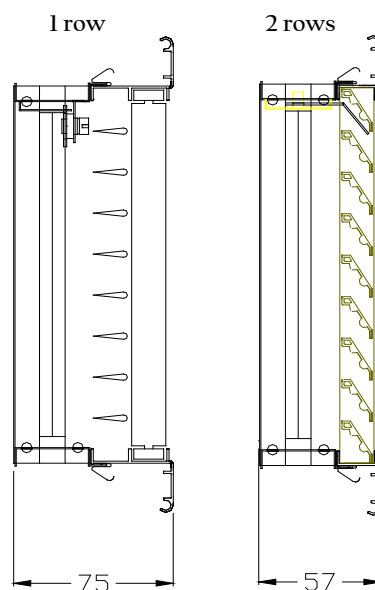
The SC series dampers are made entirely of galvanised steel and have a mechanism for moving and closing all the blades simultaneously.

This mechanism is a simple longitudinal plate that links all the blades, and can be removed by unscrewing a nut using a screwdriver. The careful design, precise assembly, and the quality of the materials used, make this an economical, practical, and efficient component.

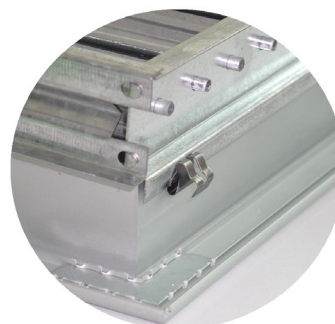
Contrast control damper- dimensions that can be created in a single solution



Contrast control damper - overall dimensions



Contrast control damper -detail of patented fixing clips





COUNTERFRAMES FOR SUPPLY AND RETURN GRILLES

UTC
SERIES

OVERVIEW

OVERVIEW

The UTC series counterframes used for supply and return grilles are a strong frame on which the fixing clips can rest. They are required if the grilles need to be frequently removed for cleaning, inspection, filter changing and other similar jobs.

The UTC counterframes can be installed both next to steel ducts and on masonry walls.

Bendable parts are placed inside the fixing agent of the wall and a frame that will be completely hidden from the frame of the grille itself, for fixing by means of screws or rivets to the duct wall.

The use of the counterframe on the side of the steel duct allows the use of grilles with fixing clips rather than with screws, therefore allowing to undertake jobs that require removing and reinstalling the grille with the up most simplicity without the need of tools.

The use of the counterframe on masonry walls allows for an almost unlimited number of removals and replacements of the grille without ever damaging or wearing-out the border of the hole made in the wall. The position of the grille can therefore be maintained, precise and secure.

TECHNICAL CHARACTERISTICS

The UTC Series counterframes are made of four separate parts, of galvanized carbon steel sheet, fixable to each other without the need of tools. The parts are completely interchangeable as the particular system of connection eliminated the need to distinguish between horizontal and vertical parts and with between left and right parts.

As shown in the illustration, the necessary space for the counterframe needs to be 5mm more than the nominal size of the grille.

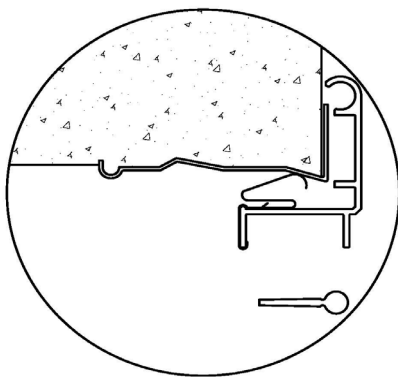
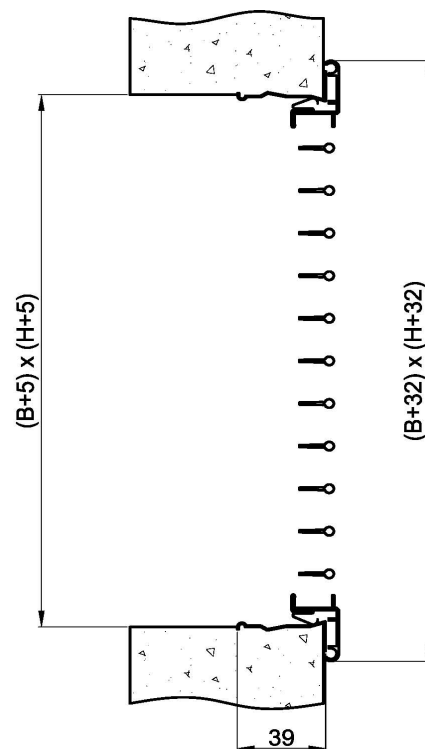
The parts are supplied unassembled, the complete interchangeability helps to easily manage the parts kept in stock.

AVAILABLE SIZES

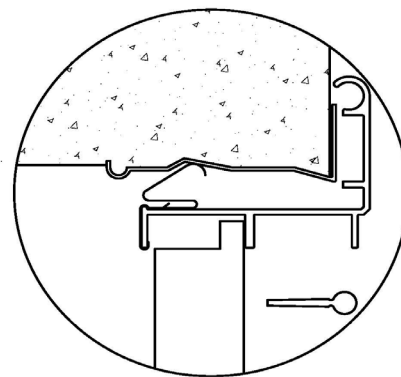
The available sizes for each part range from 100mm up to a maximum of 1400mm, in multiples of 50mm.

Special sizes are also available on request.

By composing the various sizes, all the necessary sizes are achievable.



Mounting with single deflection grille



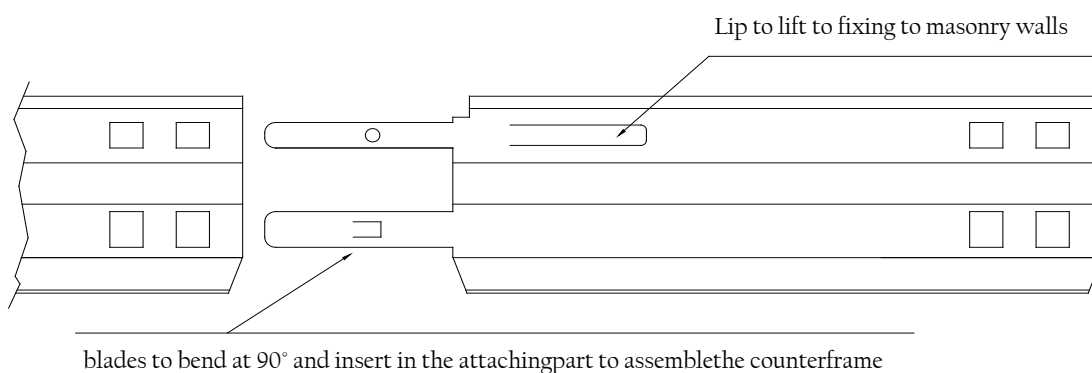
Mounting with double deflection grille



COUNTERFRAMES FOR SUPPLY AND RETURN GRILLES

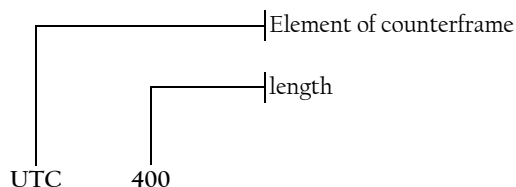
UTC
SERIES

OVERVIEW



Detail of the fixing method between parts

This system allows to quickly assemble the counterframe, even during the construction phase.



Example:

To order a counterframe for a 400x200mm grille, request:

UTC-400 - 2 pieces

UTC-200 - 2 pieces

To order a counterframe for a 300x300 grille, request:

UTC-300 - 4 pieces

COUNTERFRAME SIZES WITH AVAILABLE PARTS KEPT IN STOCK																
HEIGHT H	1000															
	900															
	800															
	700															
	600															
	563															
	500															
	450															
	400															
	350															
	300															
	250															
	200															
	150															
	100															
		100	150	200	250	300	350	400	450	500	563	600	700	800	900	1000
BASE B																

The 563x563 size is for grilles with a 595x595mm outside frame measurement, used for modular counterceilings.