

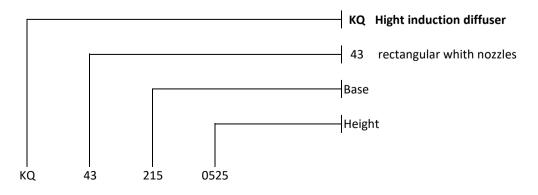
KQ - 43 SERIES

#### **OVERVIEW**

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These are high induction diffusers built similarly to the KQ42 models but rectangular in shape. Made in carbon steel with a an opoxy powder fihish in RAL 9010, with nozzles in policarbonate+ white ABS RAL 9010. The installation is done using fixing screws on the sides.

Model	A mm	B mm	n° of nozzels	Ak m²	
KQ43-1150425	150	450	14	0,0036	
KQ43-1150525	150	550	18	0,0047	B -
KQ43-1150625	150	650	22	0,0057	00000000
KQ43-1150825	150	850	30	0,0078	00000000
KQ43-1151025	150	1050	38	0,0098	
KQ43-2150425	250	450	21	0,0055	<u>B</u> →
KQ43-2150525	250	550	27	0,007	
KQ43-2150625	250	650	33	0,0086	
KQ43-2150825	250	850	45	0,0116	00000000
KQ43-2151025	250	1050	57	0,0147	
KQ43-3150425	350	450	35	0,0091	В
KQ43-3150525	350	550	45	0,0116	00000000
KQ43-3150625	350	650	55	0,0142	<pre></pre>
KQ43-3150825	350	850	75	0,0194	00000000
KQ43-3151025	350	1050	95	0,0245	





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#### **QUICK SELECTION**

		Air flow rate																		
Mode	m³/h	25	50	75	100	125	150	175	200	225	250	275	300	325	350	400	450	500	550	
A <sub>k</sub> [m²		I/s	(7)	(14)	(21)	(28)	(35)	(42)	(49)	(56)	(63)	(69)	(76)	(83)	(90)	(97)	(111)	(125)		(153)
KQ43		[dB(A)]	20	33	41	47														
425 x 115		[m/s]	1,9	3,9	5,8	7,8														
(0,004)		[Pa]	2	9	20	35														
	L 0,2	[m]	1	2,1	3,1	4,2														
KQ43	L <sub>WA</sub>	[dB(A)]	<20	25	33	39	44	48												
425 x 215	$V_k$	[m/s]	1,3	2,5	3,8	5,1	6,4	7,6												
(0,006)		[Pa]	1	4	9	16	25	36												
	L 0,2	[m]	0,8	1,7	2,6	3,4	4,3	5,2												
KQ43		[dB(A)]		<20	22	29	34	38	42	45	48	50								
425 x 315	$V_k$	[m/s]		1,5	2,3	3,1	3,8	4,6	5,4	6,2	6,9	7,6								
(0,009)		[Pa]		1	3	6	9	13	18	23	29	35								
	L 0,2	[m]		1,4	2,1	2,8	3,4	4,1	4,8	5,5	6,2	6,7								
KQ43	L <sub>WA</sub>	[dB(A)]	<20	28	36	42	46	50												
525 x 115	$V_k$	[m/s]	1,5	3	4,5	6	7,4	8,9												
(0,005)	$\Delta p_t$	[Pa]	1	6	13	24	37	54												
	L 0,2	[m]	1	1,9	2,8	3,7	4,6	5,5												
KQ43		[dB(A)]		<20	28	35	40	44	47	50										
525 x 215	$V_k$	[m/s]		2	3	4	5	6	7	8										
(0,007)	$\Delta p_t$	[Pa]		3	6	11	16	24	32	42										
	L 0,2	[m]		1,5	2,3	3,1	3,8	4,6	5,4	6,2										
KQ43	L <sub>WA</sub>	[dB(A)]			<20	23	29	33	37	40	43	45	48	50						
525 x 315	$V_k$	[m/s]			1,8	2,4	3	3,6	4,2	4,8	5,4	5,9	6,6	7,2						
(0,012)	$\Delta p_{t}$	[Pa]			2	4	6	9	12	15	20	23	28	34						
	L 0,2	[m]			1,8	2,5	3,1	3,7	4,3	4,9	5,5	6,1	6,7	7,3						
KQ43	$L_{WA}$	[dB(A)]	<20	24	33	39	44	47												
625 x 115	$V_k$	[m/s]	1,2	2,5	3,7	4,9	6,1	7,4												
(0,006)	$\Delta p_{t}$	[Pa]	1	3	7	13	20	29												
	L 0,2	[m]	0,8	1,7	2,6	3,5	4,4	5,4												
KQ43	$L_{WA}$	[dB(A)]		<20	23	30	35	40	43	46	49									
625 x 215	$V_k$	[m/s]		1,6	2,4	3,3	4,1	4,9	5,7	6,5	7,3									
(0,009)	$\Delta p_{t}$	[Pa]		1	3	6	9	13	18	23	29									
	L 0,2	[m]		1,4	2,1	2,8	3,5	4,2	4,9	5,6	6,3									
KQ43	L <sub>WA</sub>	[dB(A)]	· <u> </u>		<20	<20	24	28	32	35	38	40	43	45	47	49				
625 x 315	$V_k$	[m/s]			1,5	2	2,5	3	3,5	3,9	4,4	4,9	5,4	5,8	6,3	6,8				
(0,014)	$\Delta p_{t}$	[Pa]			1	2	3	5	6	8	10	13	15	18	21	25				
	L 0,2	[m]			1,7	2,2	2,8	3,4	3,9	4,5	5	5,5	6,1	6,6	7,2	7,7				
KQ43	$L_{WA}$	[dB(A)]		<20	26	32	37	42	45	48										
825 x 115	$V_k$	[m/s]		1,8	2,7	3,6	4,5	5,4	6,3	7,2										
(0,008)	$\Delta p_{t}$	[Pa]		2	5	8	13	18	25	32										
	L 0,2	[m]		1,5	2,2	2,9	3,7	4,4	5,1	5,9										

10 ≤ LwA < 30 30 ≤ LwA < 40 40 40 ≤ LwA < 50





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#### **QUICK SELECTION**

		Air flow rate																		
Model		m³/h	25	50	75	100	125	150	175	200	225	250	275	300	325	350	400	450	500	550
A <sub>k</sub> [m²]		I/s	(7)	(14)	(21)	(28)	(35)	(42)	(49)	(56)	(63)	(69)	(76)	(83)	(90)	(97)	(111)	(125)	(139)	(153)
KQ43	$L_{WA}$	[dB(A)]			<20	23	28	32	36	39	42	44	46	48	50					
825 x 215	$V_{k}$	[m/s]			1,8	2,4	3	3,6	4,2	4,8	5,4	5,9	6,6	7,2	7,8					
(0,012)	$\Delta p_{t}$	[Pa]			2	4	6	8	11	14	18	22	27	32	37					
	L 0,2	[m]			1,8	2,4	3	3,6	4,2	4,8	5,4	5,9	6,5	7,1	7,7					
KQ43	L <sub>WA</sub>	[dB(A)]				<20	<20	20	24	28	31	33	35	38	40	42	45	48		
825 x 315	$V_{k}$	[m/s]				1,4	1,8	2,2	2,5	2,9	3,2	3,6	3,9	4,3	4,6	5	5,7	6,4		
(0,019)	$\Delta p_{t}$	[Pa]				1	2	3	4	5	7	8	10	11	13	16	20	26		
	L 0,2	[m]				1,9	2,4	2,9	3,4	3,9	4,3	4,8	5,2	5,7	6,2	6,7	7,6	8,6		
KQ43	L <sub>WA</sub>	[dB(A)]		<20	20	27	32	37	41	44	47	49								
1025 x 115	$V_{k}$	[m/s]		1,4	2,1	2,9	3,6	4,3	5	5,7	6,4	7								
(0,01)	$\Delta p_{t}$	[Pa]		0	0	0	0	0	0	0	0	0								
	L 0,2	[m]		1,3	2	2,7	3,3	4	4,7	5,3	6	6,5								
KQ43	L <sub>WA</sub>	[dB(A)]			<20	<20	23	27	31	34	36	38	41	43	44	46	49			
1025 x 215	$V_k$	[m/s]			1,4	1,9	2,4	2,9	3,3	3,8	4,3	4,7	5,2	5,6	6,1	6,6	7,6			
(0,015)	$\Delta p_{t}$	[Pa]			0	0	0	0	0	0	0	0	0	0	0	0	0			
	L 0,2	[m]			1,7	2,2	2,8	3,3	3,8	4,4	4,9	5,4	6	6,5	7,1	7,6	8,7			
KQ43	L <sub>WA</sub>	[dB(A)]					<20	<20	<20	22	25	27	29	32	34	36	39	42	45	47
1025 x 315	$V_k$	[m/s]					1,4	1,7	2	2,3	2,6	2,8	3,1	3,4	3,7	4	4,5	5,1	5,7	6,2
(0,025)	$\Delta p_{t}$	[Pa]					0	0	0	0	0	0	0	0	0	0	0	0	0	0
	L 0,2	[m]					2,2	2,6	3	3,4	3,8	4,2	4,6	5	5,4	5,8	6,5	7,3	8,1	8,8

10 ≤ LwA < 30 30 ≤ LwA < 40 40 ≤ LwA < 50

#### Data valid for:

- Supply air
- Isotherm conditions
- Throw with ceiling effect

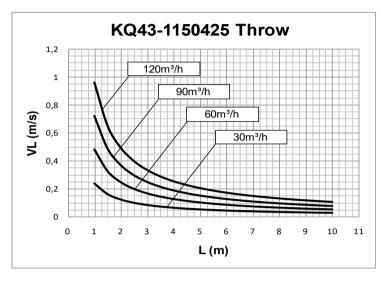
#### Terminology:

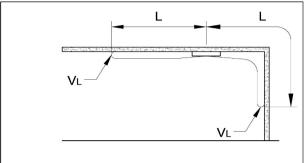
- A<sub>k</sub> = effective free area
- $-V_{k}$  = effective face velocity
- $\Delta pt$  = total pressure loss
- L<sub>WA</sub> = sound power level
- $L_{0,2}$  = throw to terminal velocity at 0,2 m/s



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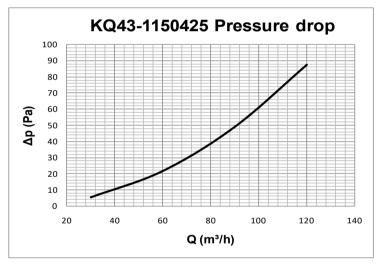
PERFORMANCE KQ43 1150425





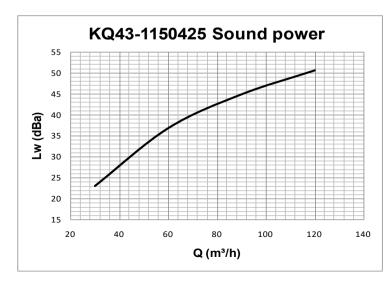
Data measured operating in isothermal conditions in accordance with the international standard:

ISO 5219 1984: Air distribution and air diffusion Laboratory. Aerodynamic testing and rating of air terminal devices.



L (m) horizontal distance in metres from the centre of the diffuser

VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

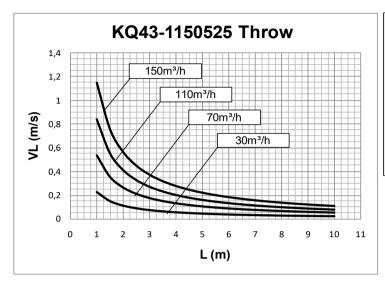
**ISO 3741 1999:** Acoustic - determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms

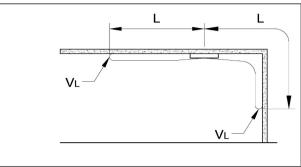
**ISO 5135 1997:** Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.



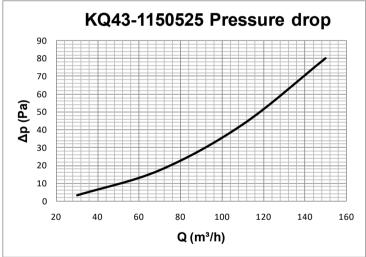
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PERFORMANCE KQ43 1150525



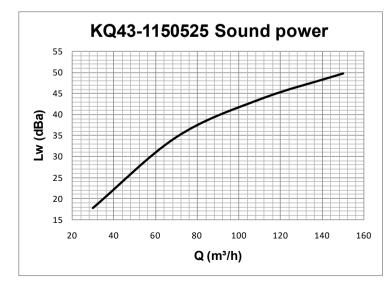


Data measured operating in isothermal conditions in accordance with the international standard:
ISO 5219 1984: Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.



L (m) horizontal distance in metres from the centre of the diffuser

VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

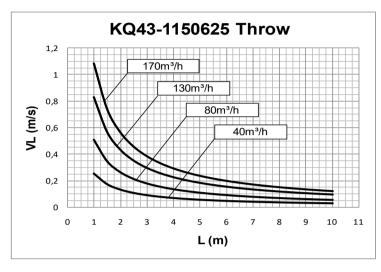
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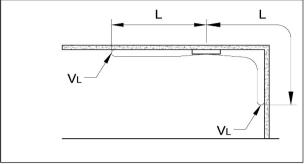
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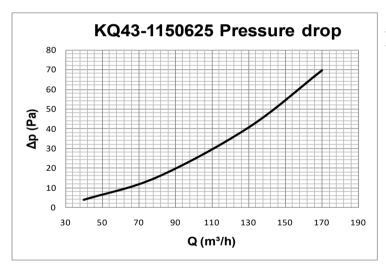
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PERFORMANCE KQ43 1150625



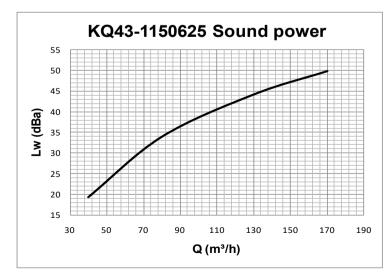


Data measured operating in isothermal conditions in accordance with the international standard:
ISO 5219 1984: Air distribution and air diffusion Laboratory. Aerodynamic testing and rating of air terminal devices.



L (m) horizontal distance in metres from the centre of the diffuser

VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

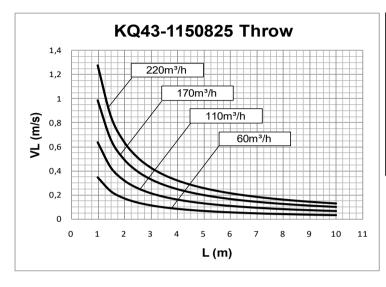
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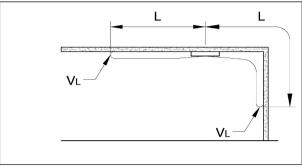
**ISO 5135 1997:** Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.



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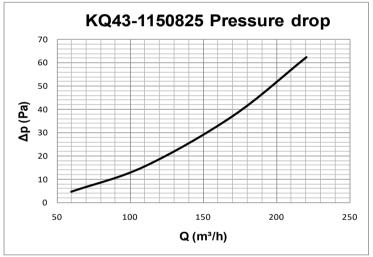
PERFORMANCE KQ43 1150825





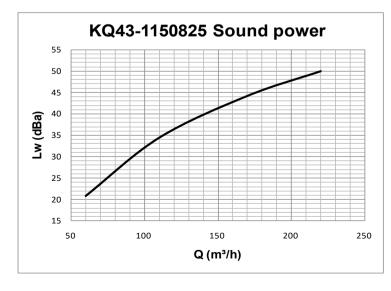
Data measured operating in isothermal conditions in accordance with the international standard:

ISO 5219 1984: Air distribution and air diffusion Laboratory. Aerodynamic testing and rating of air terminal devices.



L (m) horizontal distance in metres from the centre of the diffuser

VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

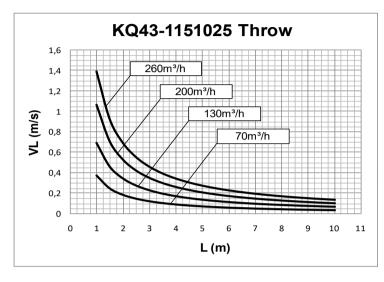
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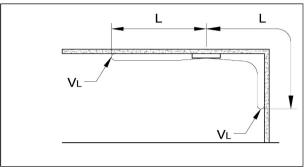
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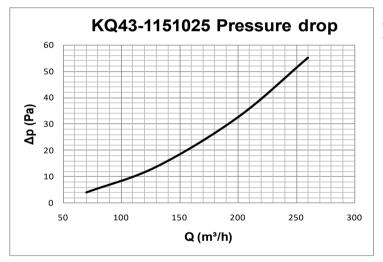
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PERFORMANCE KQ43 1151025



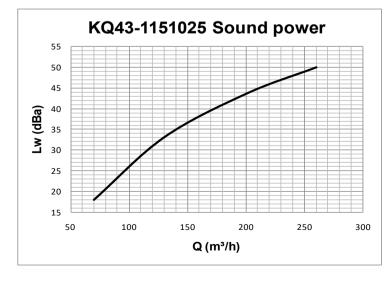


Data measured operating in isothermal conditions in accordance with the international standard:
ISO 5219 1984: Air distribution and air diffusion Laboratory. Aerodynamic testing and rating of air terminal devices.



L (m) horizontal distance in metres from the centre of the diffuser

VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

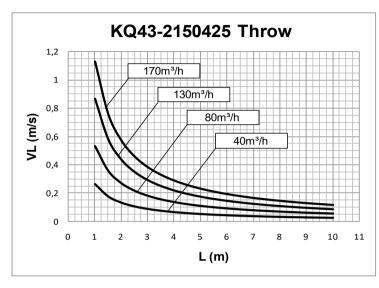
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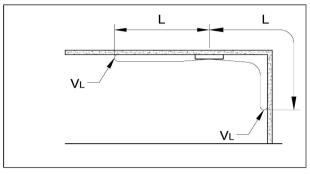
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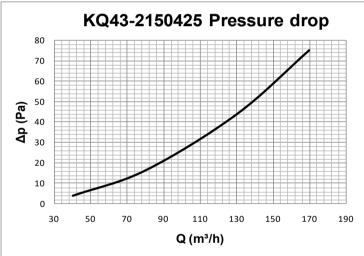
PERFORMANCE KQ43 2150425





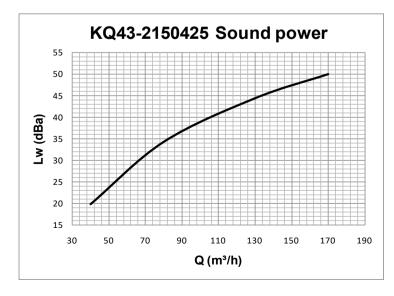
Data measured operating in isothermal conditions in accordance with the international standard:

ISO 5219 1984: Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.



L (m) horizontal distance in metres from the centre of the diffuser

VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

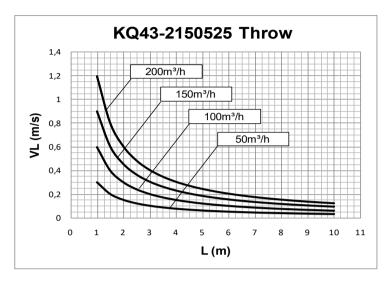
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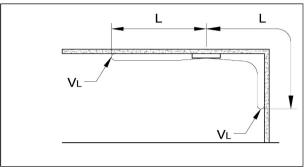
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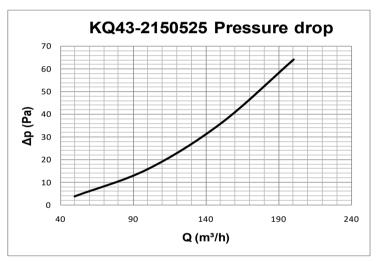
PERFORMANCE KQ43 2150525





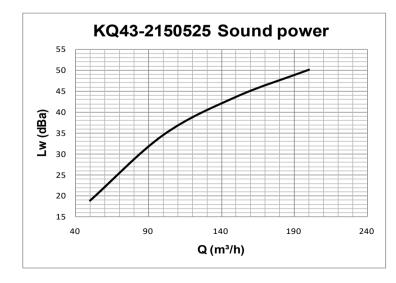
Data measured operating in isothermal conditions in accordance with the international standard:

ISO 5219 1984: Air distribution and air diffusion Laboratory. Aerodynamic testing and rating of air terminal devices.



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VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

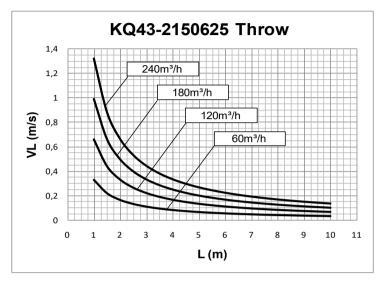
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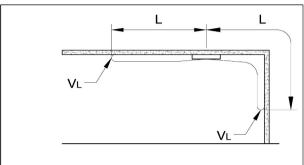
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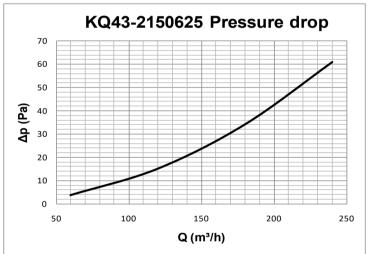
PERFORMANCE KQ43 2150625





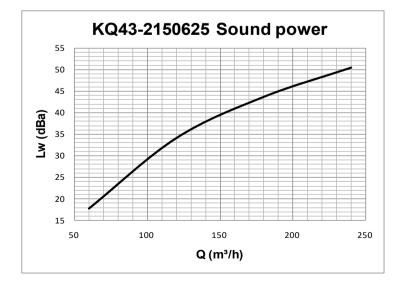
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Data measured in reverberation room in accordance with international standards:

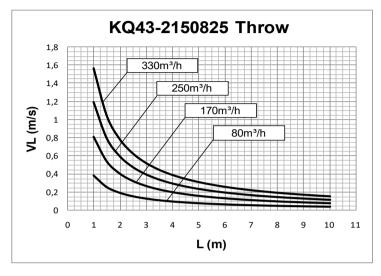
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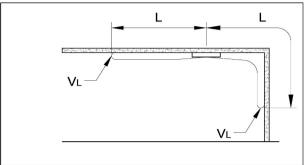
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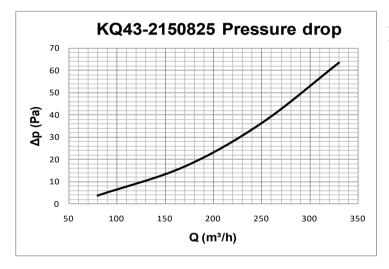
PERFORMANCE KQ43 2150825





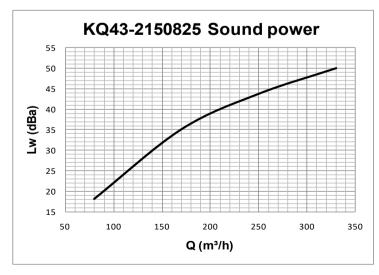
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Data measured in reverberation room in accordance with international standards:

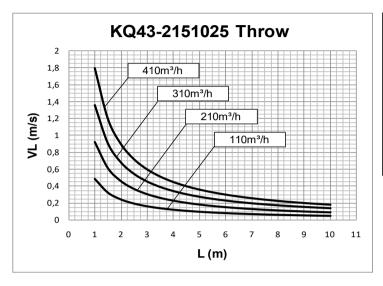
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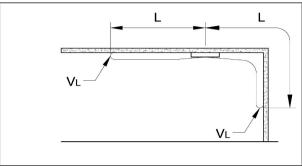
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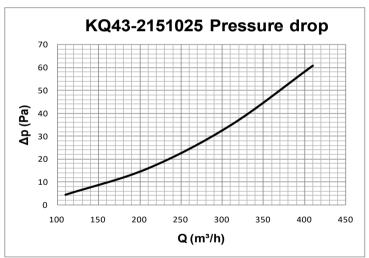
KQ - 43 SERIES

PERFORMANCE KQ43 2151025



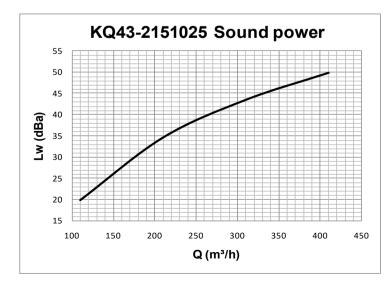


Data measured operating in isothermal conditions in accordance with the international standard:
ISO 5219 1984: Air distribution and air diffusion Laboratory. Aerodynamic testing and rating of air terminal devices.



L (m) horizontal distance in metres from the centre of the diffuser

VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

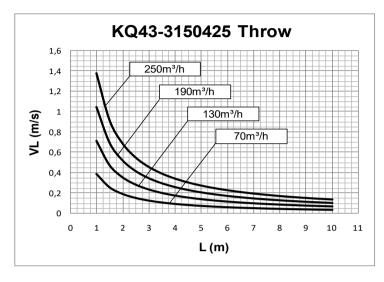
**ISO 3741 1999:** Acoustic - determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms

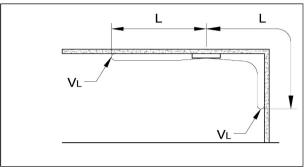
**ISO 5135 1997:** Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.



KQ - 43 SERIES

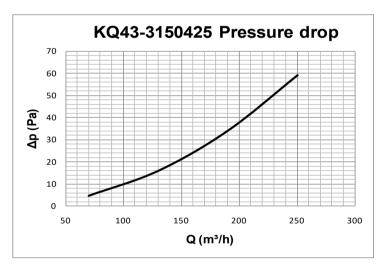
PERFORMANCE KQ43 3150425





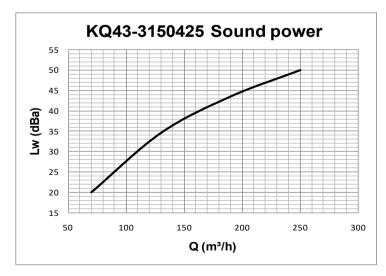
Data measured operating in isothermal conditions in accordance with the international standard:

ISO 5219 1984: Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.



L (m) horizontal distance in metres from the centre of the diffuser

VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

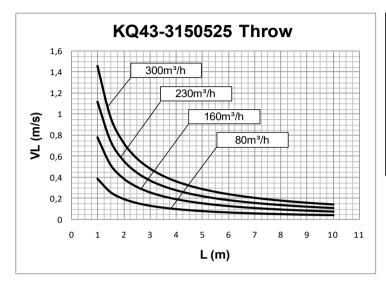
**ISO 3741 1999:** Acoustic - determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms

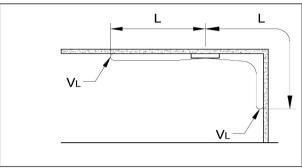
**ISO 5135 1997:** Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.



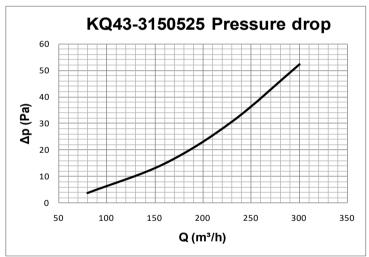
KQ - 43 SERIES

PERFORMANCE KQ43 3150525



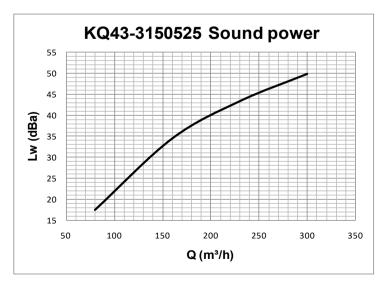


Data measured operating in isothermal conditions in accordance with the international standard:
ISO 5219 1984: Air distribution and air diffusion Laboratory. Aerodynamic testing and rating of air terminal devices.



L (m) horizontal distance in metres from the centre of the diffuser

VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

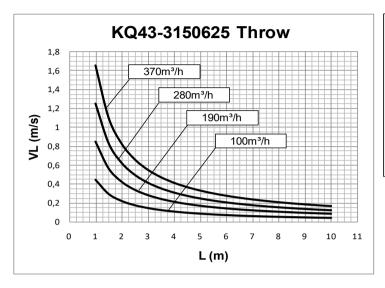
**ISO 3741 1999:** Acoustic - determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms

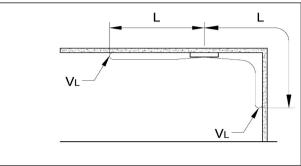
**ISO 5135 1997:** Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.



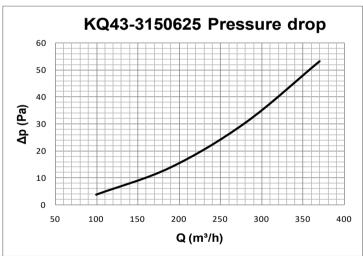
KQ - 43 SERIES

PERFORMANCE KQ43 3150625



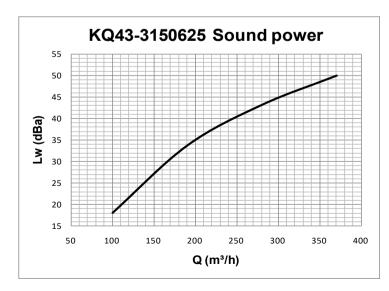


Data measured operating in isothermal conditions in accordance with the international standard:
ISO 5219 1984: Air distribution and air diffusion Laboratory. Aerodynamic testing and rating of air terminal devices.



L (m) horizontal distance in metres from the centre of the diffuser

VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

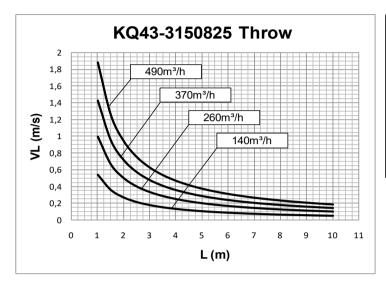
**ISO 3741 1999:** Acoustic - determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms

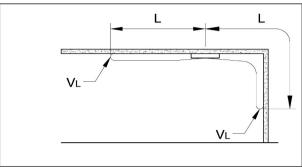
**ISO 5135 1997:** Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.



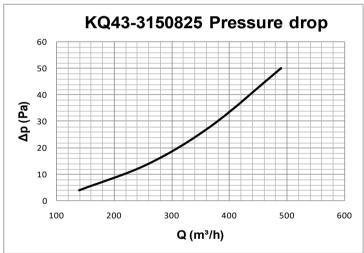
KQ - 43 SERIES

PERFORMANCE KQ43 3150825



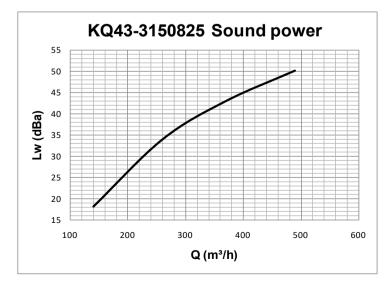


Data measured operating in isothermal conditions in accordance with the international standard:
ISO 5219 1984: Air distribution and air diffusion Laboratory. Aerodynamic testing and rating of air terminal devices.



L (m) horizontal distance in metres from the centre of the diffuser

VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

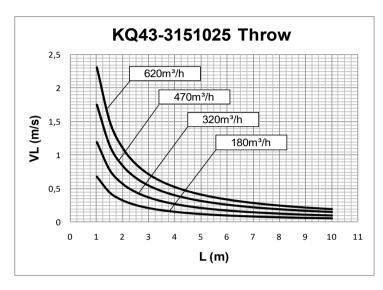
**ISO 3741 1999:** Acoustic - determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms

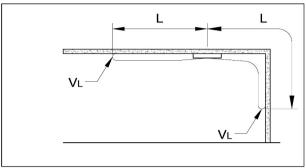
**ISO 5135 1997:** Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.



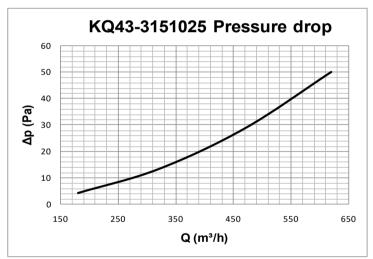
KQ - 43 SERIES

PERFORMANCE KQ43 3151025



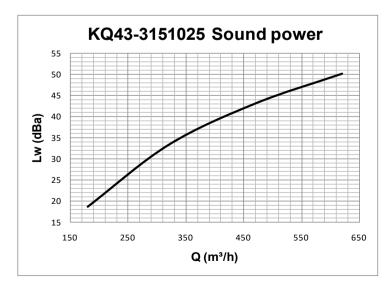


Data measured operating in isothermal conditions in accordance with the international standard:
ISO 5219 1984: Air distribution and air diffusion Laboratory. Aerodynamic testing and rating of air terminal devices.



L (m) horizontal distance in metres from the centre of the diffuser

VL (m/s) maximum speed in the air stream



Data measured in reverberation room in accordance with international standards:

**ISO 3741 1999:** Acoustic - determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms

**ISO 5135 1997:** Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.



PP20 PP21 SERIES

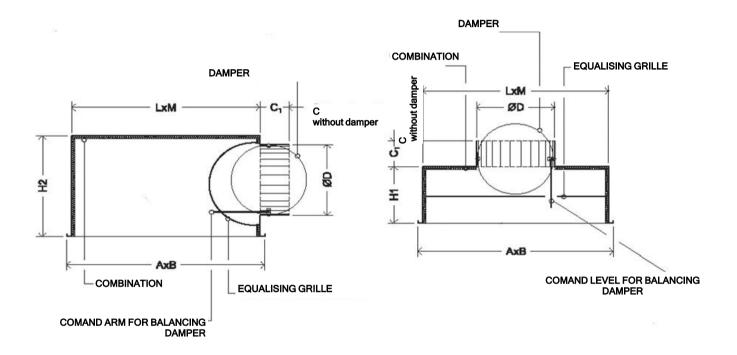
**PLENUM** 

#### **OVERVIEW:**

The plenums for the KQ43 diffusers are in galvanised steel sheeting and can be supplied with damper and equaliser.

#### **PP 20 - PLENUM WITH LATERAL CONNECTION**

**PP 21 - PENUM WITH REAR CONNECTION** 



Plenum	Panel Dimensions	АхВ	LxM	С	C1	ØD	H1	H2	connecton material
PP20 - 115 x 425	150x450	144x444	114x414	65	65	96	200	300	steel
PP20 - 115 x 525	150x550	144x544	114x514	65	65	96	200	300	steel
PP20 - 115 x 625	150x650	144x644	114x614	60	90	121	200	300	ABS (*)
PP20 - 115 x 825	150x850	144x844	114x814	60	90	156	200	350	ABS (*)
PP20 - 115 x 1025	150x1050	144x1044	114x1014	60	90	196	200	350	ABS (*)
PP20 - 215 x 425	250x450	244x444	214x414	60	90	121	200	350	ABS (*)
PP20 - 215 x 525	250x550	244x544	214x514	60	90	156	200	350	ABS (*)
PP20 - 215 x 625	250x650	244x644	214x614	60	90	156	200	350	ABS (*)
PP20 - 215 x 825	250x850	244x844	214x814	60	90	196	200	350	ABS (*)
PP20 - 215 x 1025	250x1050	244x1044	214x1014	60	90	196	200	350	ABS (*)
PP20 - 315 x 425	350x450	344x444	314x414	60	90	156	200	350	ABS (*)
PP20 - 315 x 525	350x550	344x544	314x514	60	90	156	200	350	ABS (*)
PP20 - 315 x 625	350x650	344x644	314x614	60	90	196	200	350	ABS (*)
PP20 - 315 x 825	350x850	344x844	314x814	60	90	246	250	350	ABS (*)
PP20 - 315 x 1025	350x1050	344x1044	314x1014	60	90	246	250	350	ABS (*)

<sup>(\*)</sup> Steel on request





PP20 PP21 SERIES

**PLENUM** 

