FIXED GEOMETRY
HIGH INDUCTION DIFFUSERS
WITH INTERNAL COLLAR

TECHNICAL CHARACTERISTICS

KPC
SERIES

TECHNICAL CHARACTERISTICS

The **KPC** series diffuser is a support panel on which a rose patter of fixed deflectors is stamped.
This geometry achieves a circular air flow with a large induction effect.
For this reason, the diffuser is ideal both for heating and cooling even with large temperature differences between the injected air and the air in the room.
This particular diffuser series is normally used in spaces with ceilings heights between 2,6 and 4 metres.

DIFFUSER MATERIAL

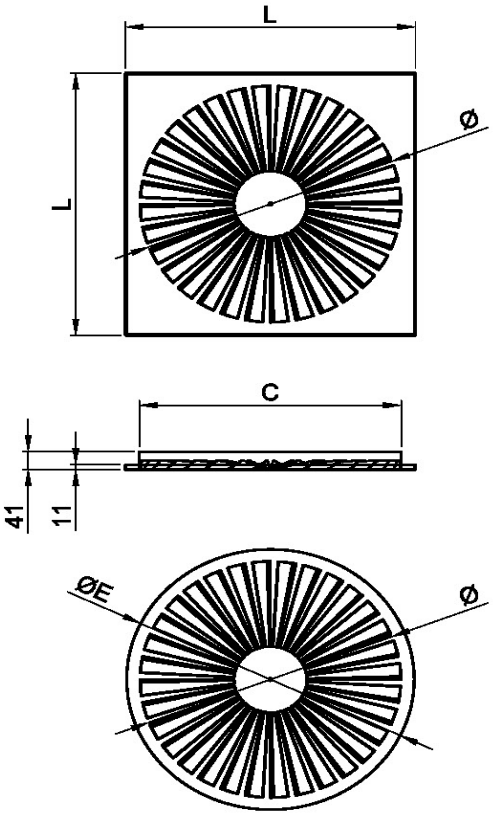
The diffuser is made of carbon steel sheet.
Paint Finish : white colour RAL 9010 or RAL 9003.

DIFFUSER FITTING

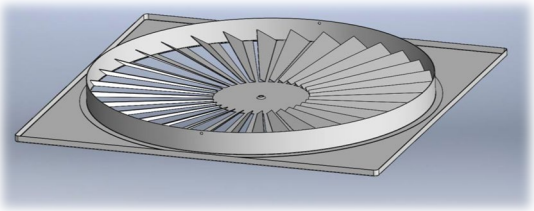
The diffuser is fixed with a central M5 type screw using a fixing bridge to the plenum or the duct. The screw is supplied, together with a white screw cover.

UNSUITABLE ENVIRONMENTS

The products in painted carbon steel are not suitable for installation in environments with high humidity and in environments with a potentially explosive atmosphere or containing powders or vapors of corrosive substances.



SQUARED VERSIONS				
Code	L mm	Ø mm	C mm	Ak m²
KPC300	298	236	238	0,010
KPC400	398	336	338	0,016
KPC500	498	436	438	0,033
KPC600	595	536	538	0,049
KPC625	622	536	538	0,049
KPCT300	595	236	238	0,010
KPCT400	595	336	338	0,016
KPCT500	595	436	438	0,033
KPCD300	622	236	238	0,010
KPCD400	622	336	338	0,016
KPCD500	622	436	438	0,033

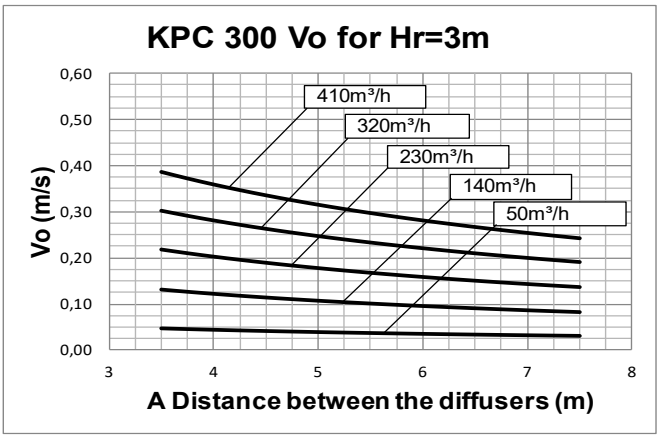


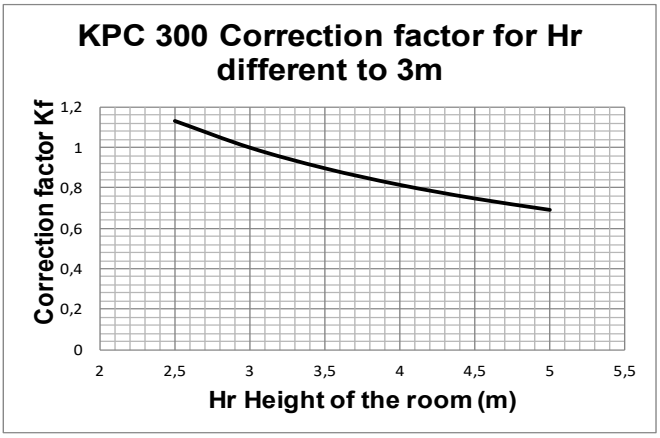
CIRCULAR VERSIONS				
Code	ØE mm	Ø mm	C mm	Ak m²
KPCR300	298	236	238	0,010
KPCR400	398	336	338	0,016
KPCR500	498	436	438	0,033
KPCR600	595	536	538	0,049
KPCR625	622	536	538	0,049

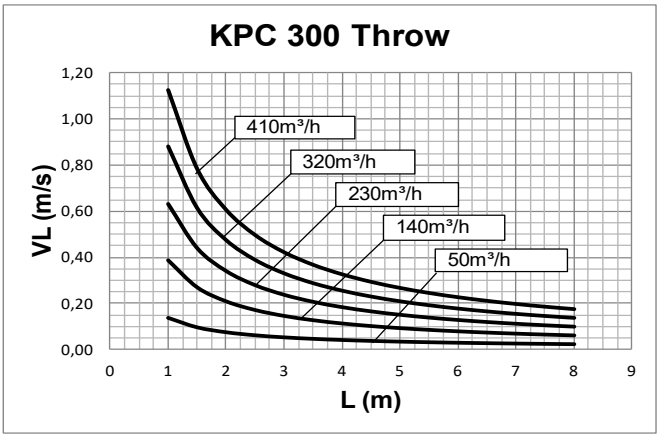
FIXED GEOMETRY
HIGH INDUCTION DIFFUSERS
WITH INTERNAL COLLAR

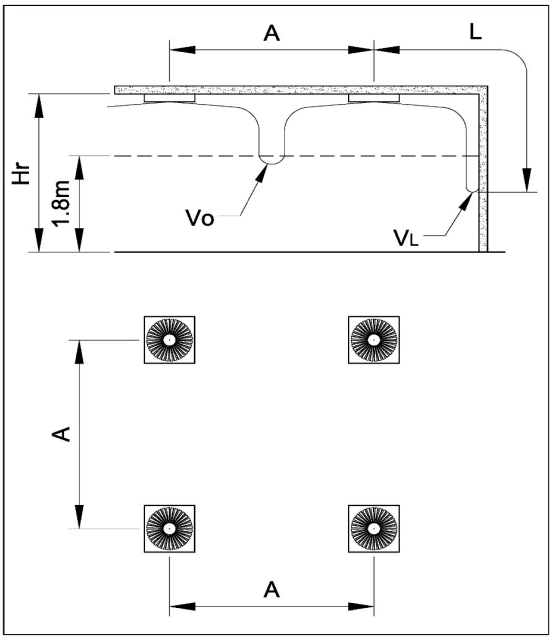
PERFORMANCE KPC 300

KPC
SERIES









Data obtained 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.*

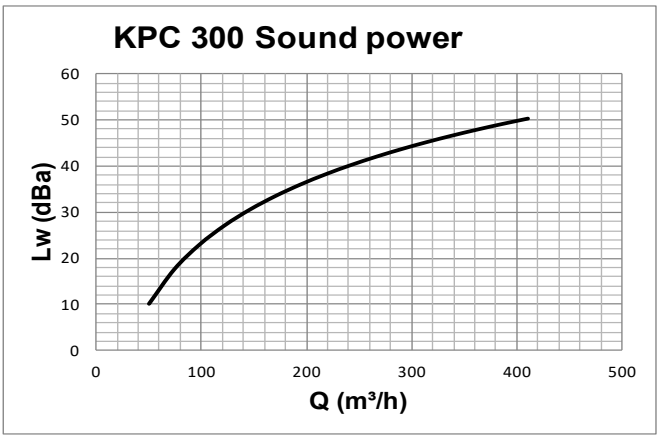
A (m) distance between the diffusers
Vo (m/s) speed at the limit of the occupied zone
L (m) horizontal distance in metres from the centre of the diffuser
VL (m/s) maximum speed in the air stream

For Hr different from 3m:
Vo (h) = Vo x Kf

FIXED GEOMETRY
HIGH INDUCTION DIFFUSERS
WITH INTERNAL COLLAR

PERFORMANCE KPC 300

KPC
SERIES



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*
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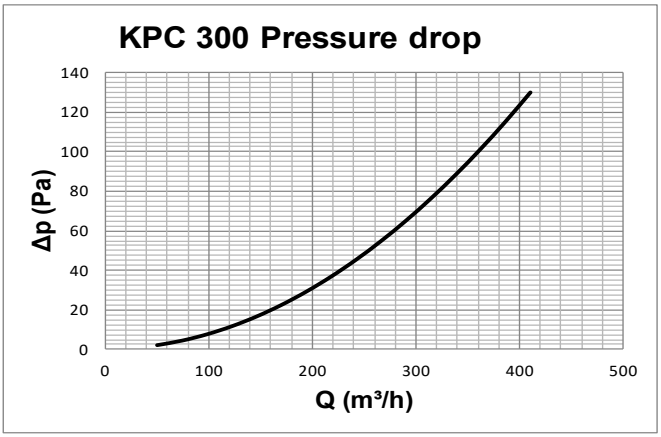

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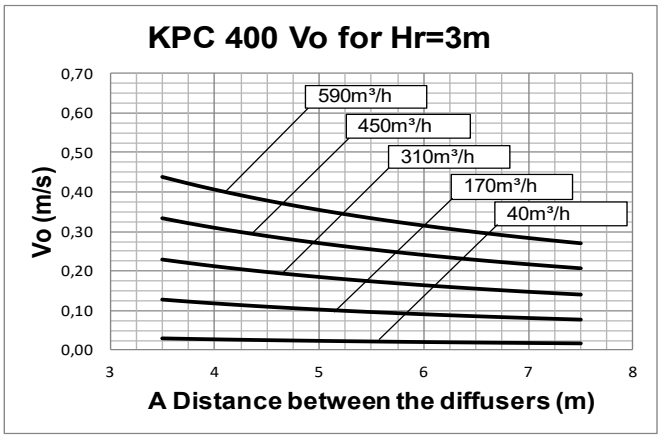
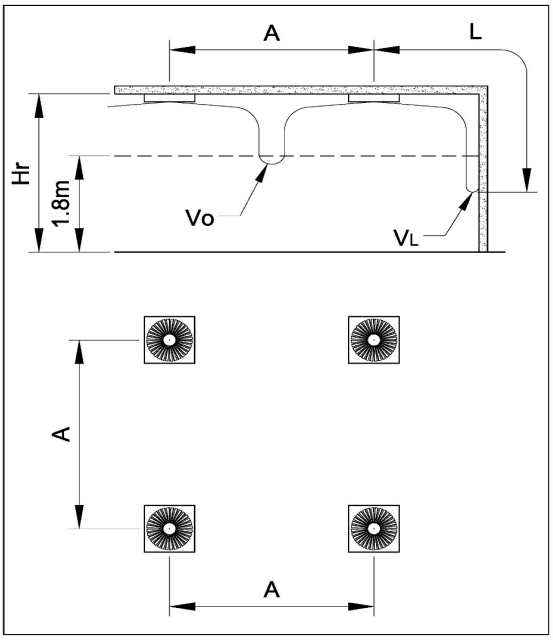
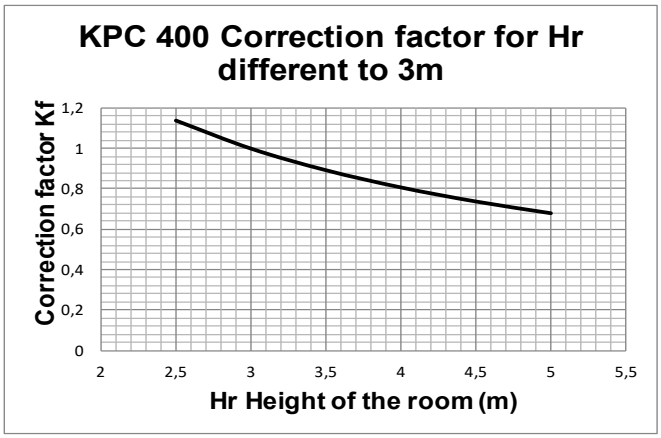
FIXED GEOMETRY
HIGH INDUCTION DIFFUSERS
WITH INTERNAL COLLAR

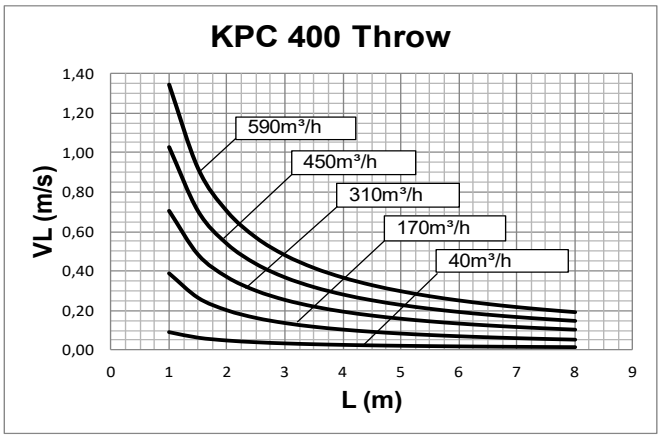
PERFORMANCE KPC 400

KPC
SERIES









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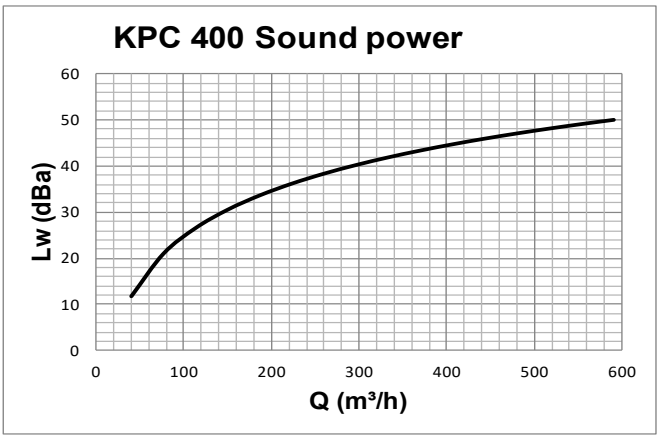
VL (m/s) maximum speed in the air stream

For Hr different from 3m:
Vo (h) = Vo x Kf

FIXED GEOMETRY HIGH INDUCTION DIFFUSERS WITH INTERNAL COLLAR

PERFORMANCE KPC 400

KPC SERIES



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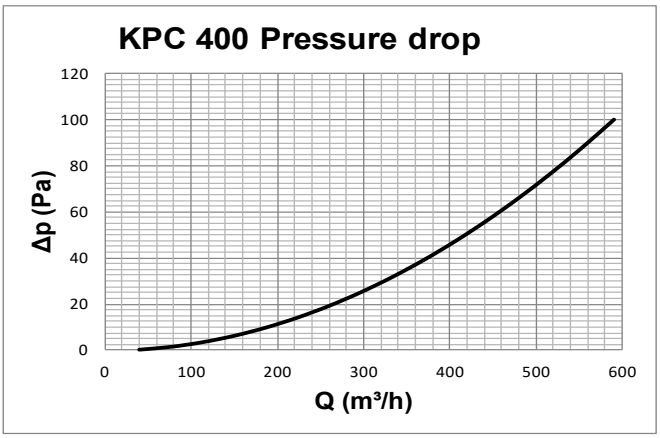

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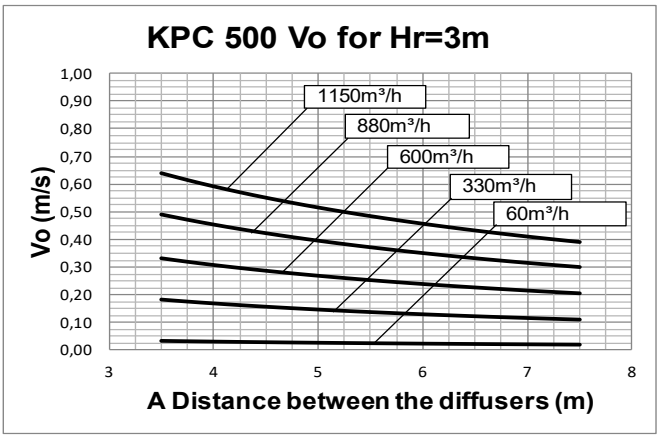
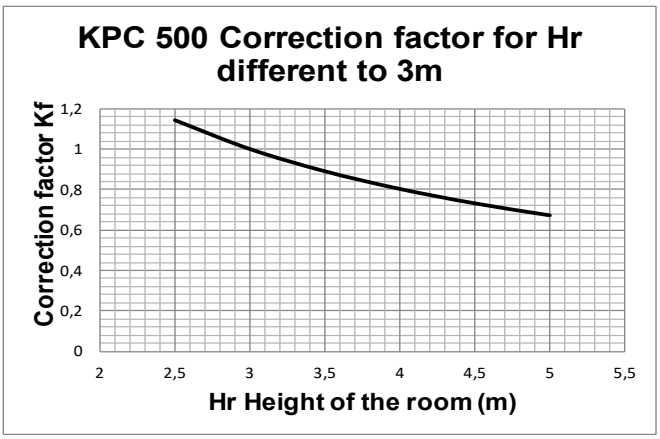
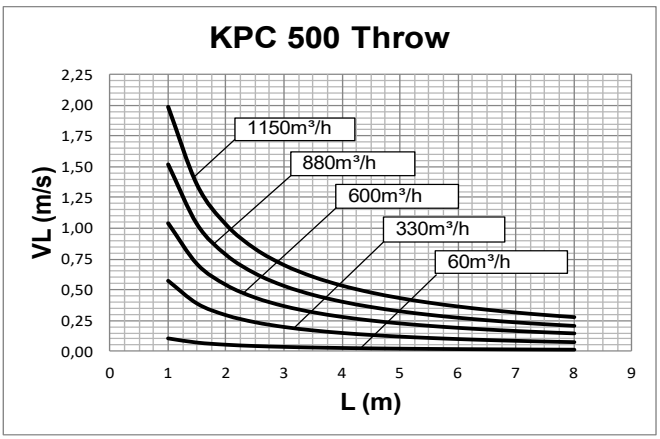
FIXED GEOMETRY
HIGH INDUCTION DIFFUSERS
WITH INTERNAL COLLAR

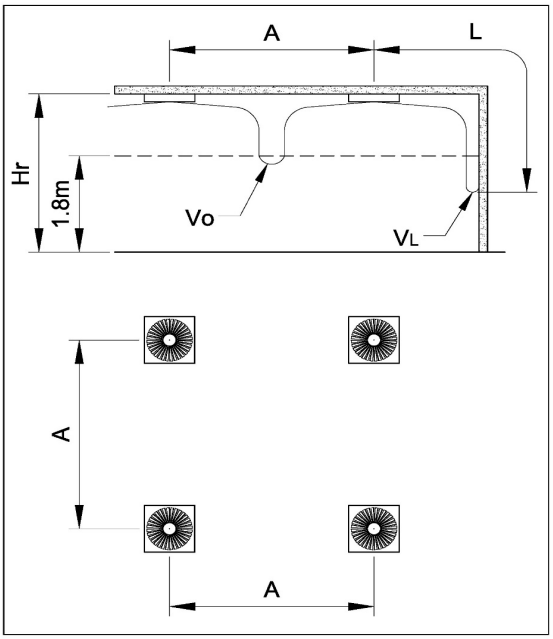
PERFORMANCE KPC 500

KPC
SERIES









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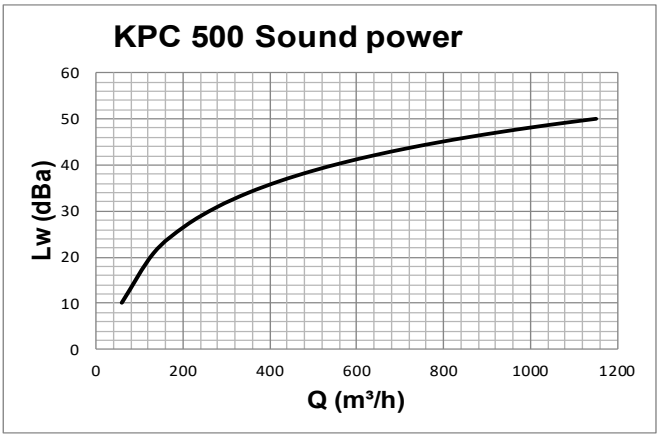
FIXED GEOMETRY
HIGH INDUCTION DIFFUSERS
WITH INTERNAL COLLAR

PERFORMANCE KPC 500

KPC
SERIES



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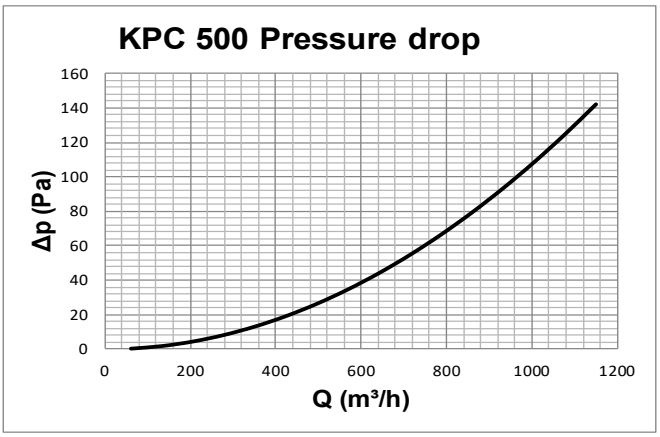

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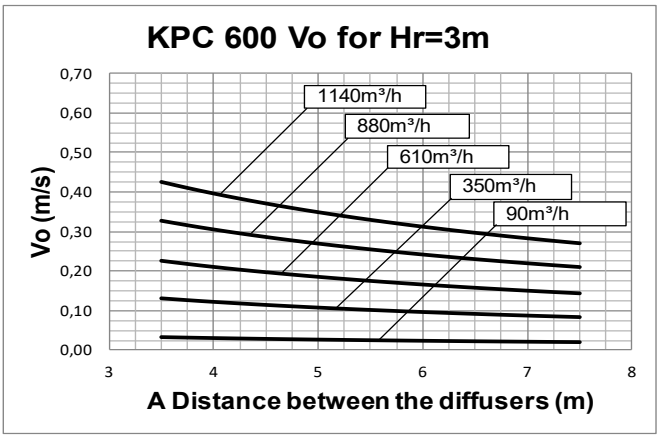
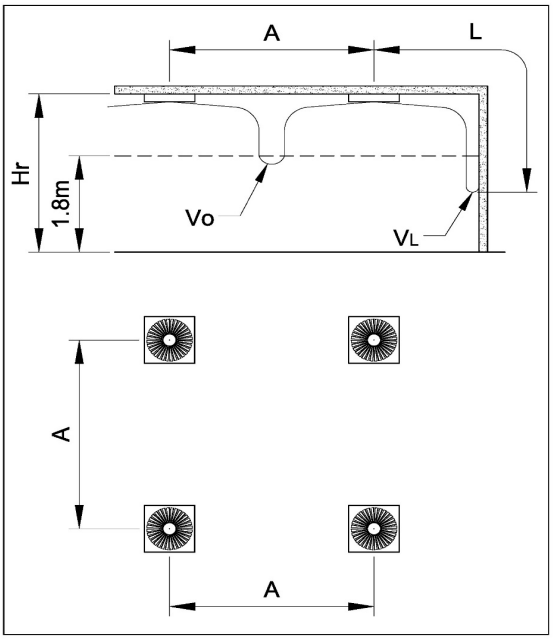
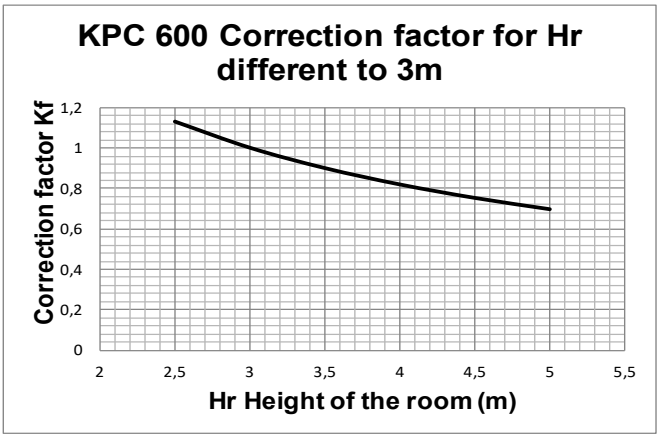
FIXED GEOMETRY
HIGH INDUCTION DIFFUSERS
WITH INTERNAL COLLAR

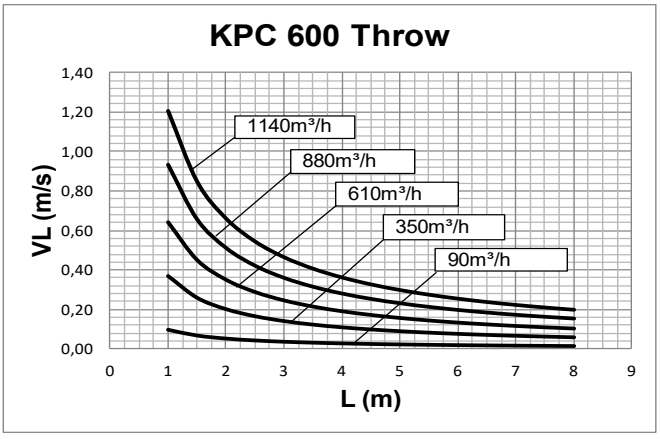
PERFORMANCE KPC 600

KPC
SERIES









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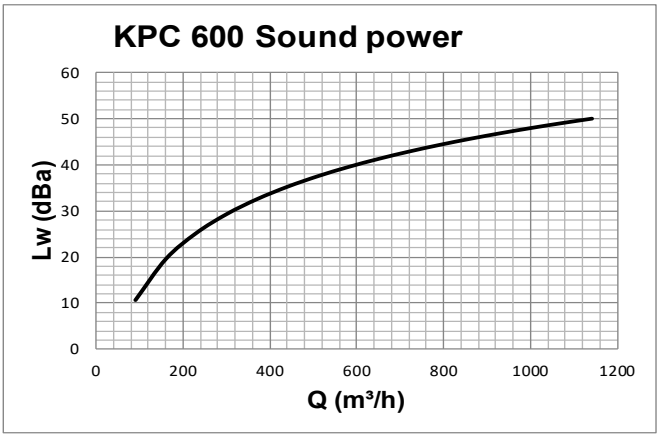
FIXED GEOMETRY HIGH INDUCTION DIFFUSERS WITH INTERNAL COLLAR

PERFORMANCE KPC 600

KPC SERIES



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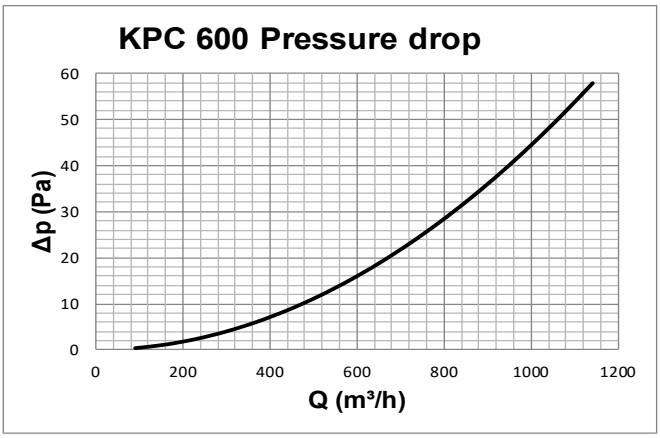

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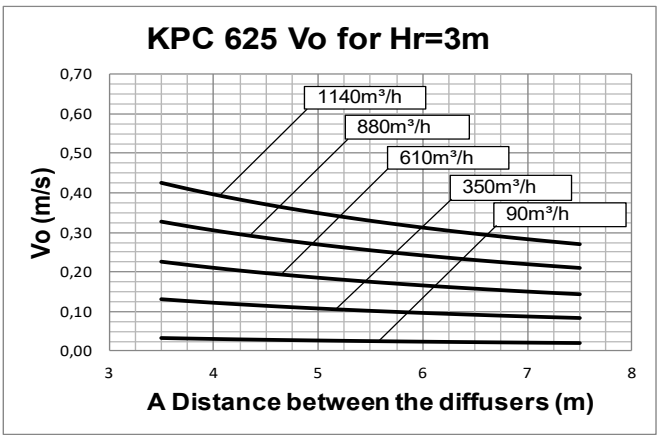
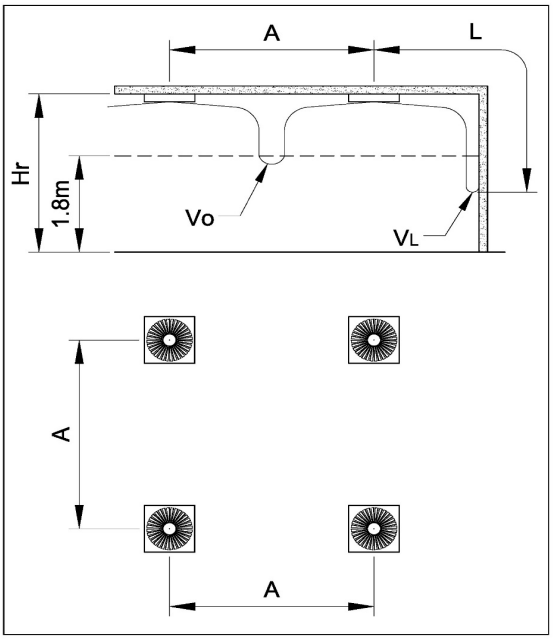
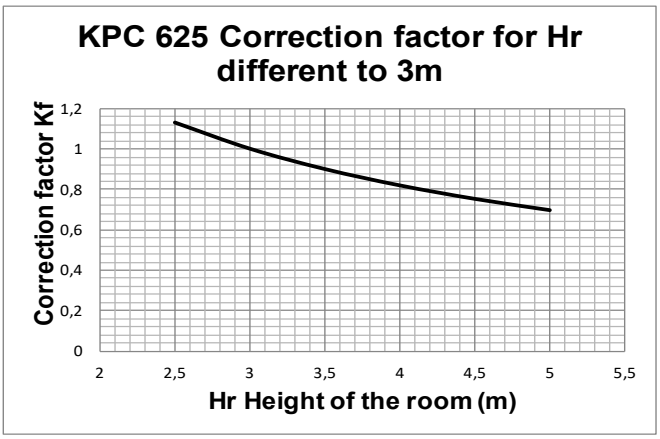
FIXED GEOMETRY
HIGH INDUCTION DIFFUSERS
WITH INTERNAL COLLAR

PERFORMANCE KPC 625

KPC
SERIES







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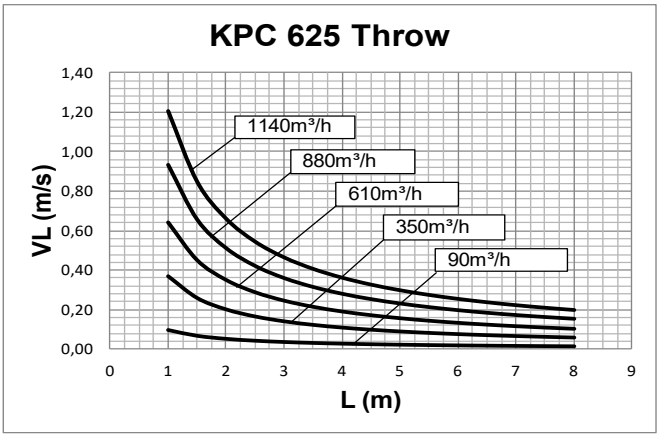
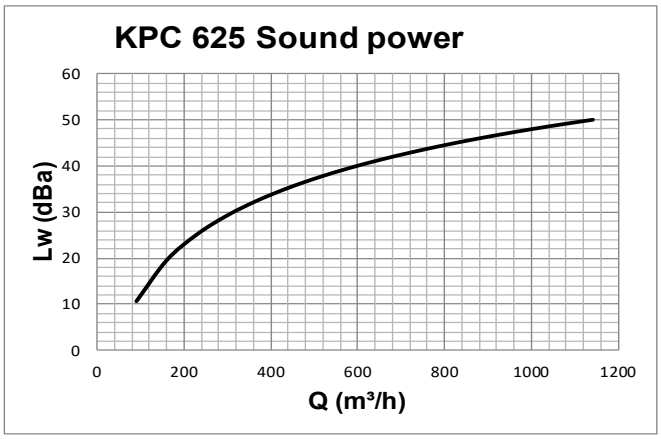
For Hr different from 3m:
Vo (h) = Vo x Kf



FIXED GEOMETRY
HIGH INDUCTION DIFFUSERS
WITH INTERNAL COLLAR

PERFORMANCE KPC 625

KPC
SERIES



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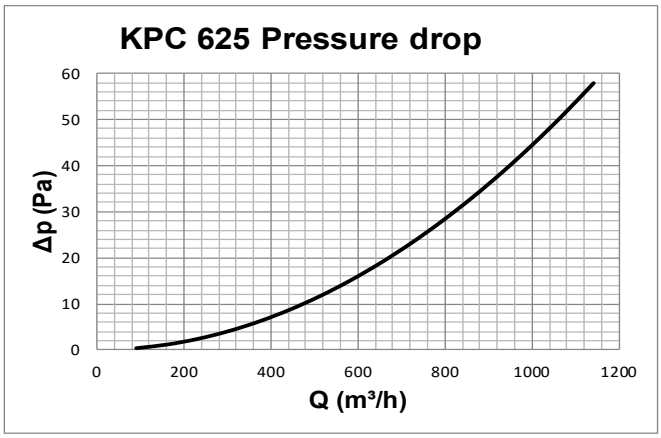

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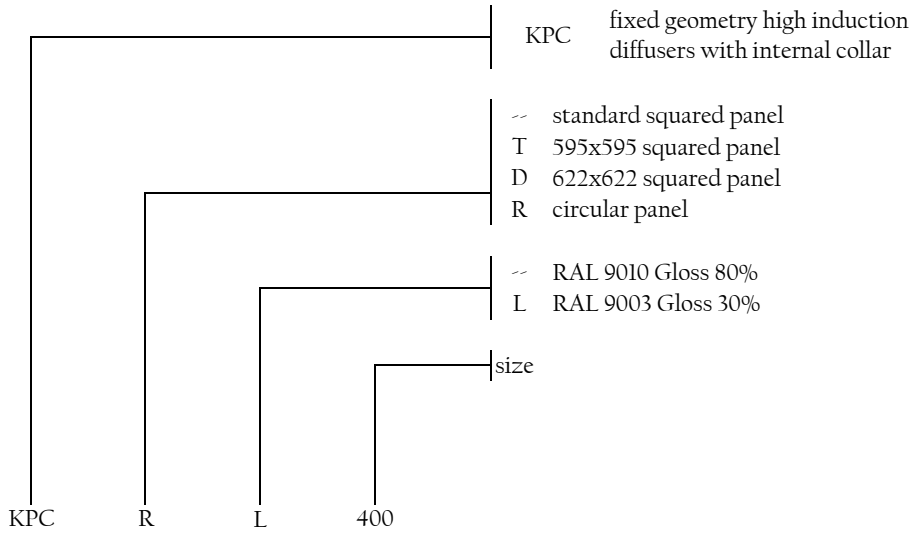
FIXED GEOMETRY
HIGH INDUCTION DIFFUSERS
WITH INTERNAL COLLAR

HOW TO ORDER

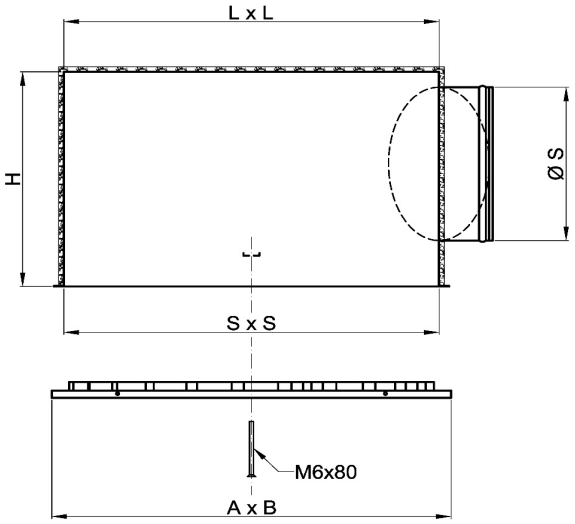
KPC
SERIES



FIXED GEOMETRY
HIGH INDUCTION DIFFUSERS

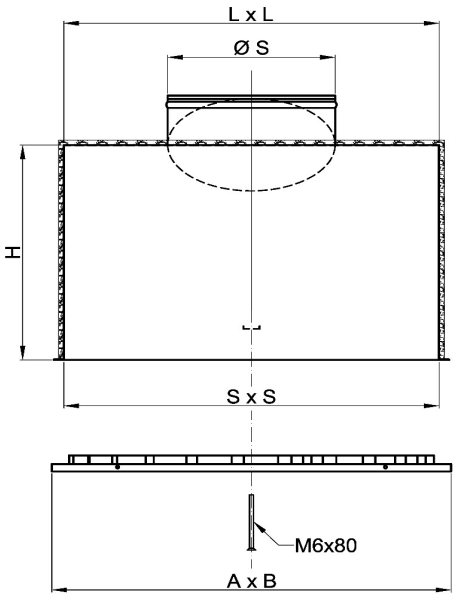
PP80
PP81

PLENUM IN SEEL SHEET



PLENUM PP80
Made of galvanized sheet steel.
Lateral connection.
Mounting bridge for mounting diffuser with central screw.
Complete with hooks for ceiling suspension.

optionals:
polyethylene insulation;
equalizer steel mesh;
control damper into the fitting.



Made of galvanized sheet steel.
Rear connection.
Mounting bridge for mounting diffuser with central screw.
Complete with hooks for ceiling suspension.

optionals:
polyethylene insulation;
equalizer steel mesh;
control damper into the fitting.

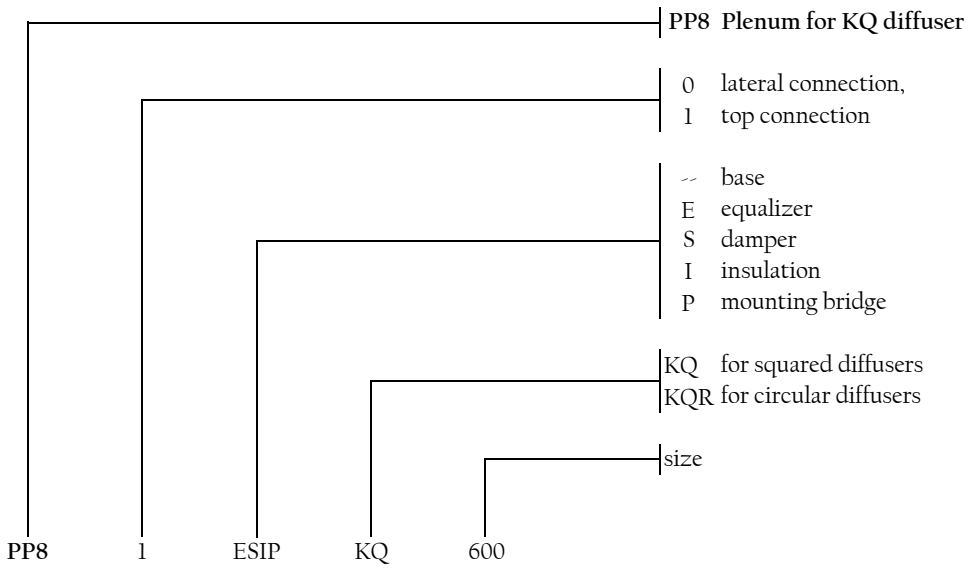
Nominal dimensions of the diffuser A x B	Real dimansions of the panel	L x L	S x S	H	N° connections	S	Connection and damper material raccordo
300 x 300	296	260	290	240	1	123	ABS (*)
400 x 400	396	360	390	290	1	199	ABS (*)
500 x 500	496	460	490	290	1	199	ABS (*)
600 x 600	596	560	590	290	1	250	ABS (*)
625 x 625	621	585	615	290	1	250	ABS (*)
800 x 800	796	760	790	400	1	301	steel
825 x 825	821	785	815	340	1	301	steel

(*) Steel on request

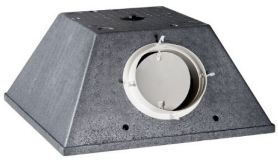
FIXED GEOMETRY
HIGH INDUCTION DIFFUSERS

PP80
PP81

HOW TO ORDER



Standard sizes
200
300
400
500
600
625
800
825



PS PLENUM

OVERVIEW

PPS
SERIES

OVERVIEW :

The PPS series of polystyrene assemblable plenum boxes have a density of 45 kg/m3, with a Fire class 1 quality, eternally crystallised.

The transformation process and the special properties of the material, make the PPS a very compact and lightweight plenum.

These special features combined to the trapezoidal shape that distinguish it, allows the fixing of the unit in completed countersealing structure. This facilitates both the realisation and maintenance of the system. Given the light weight, the plenum is positioned on the structure of the counter ceiling, eliminating therefore the necessity of using hanging clips for fixing to the ceiling.
This has the advantage of reducing considerably the fitting time and a saving of the space used of over 50%, compared to a traditional plenum box.

The PPS has an excellent thermal acoustic insulation characteristic. It does not therefore require additional insulating material.

The PPS plenums can be supplied already assembled with a square 600x60mm diffuser panel , model KQ1, complete with regulation damper in ABS and equalizer, ready for installation.

As an alternative, there is also a version assembled but without the diffuser fitted.

Lastly a kit is also available, comprising the plenum, the connection "C", bar "A" and assembly diagram.

Installation: once the diffuser has been fitted to the plenum using the screw "V" (PPS-V680T) to bar "A, the plenum is positioned on the counter ceiling structure.

TECHNICAL CHARACTERISTICS:

fire reaction:
Class 1 - Test report CSI DC01/378F05.
Euroclass E - Test report CSI DC01/656F07

Mechanic resistance:
10% deformation with 226kPa pressure - Test report CSI 0936/FPM/MATs/07.

Water absorption:
Increase average volume 3,26% in full immersion, tested according to UNI EN 12087 method 2A - Test report CSI 0936/FPM/MATs/07_2.

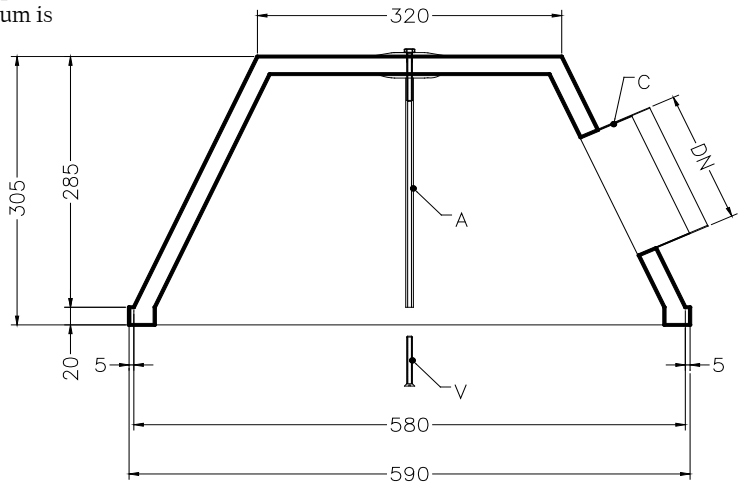
Thermal conductivity:
Δ (average) 0,0320 W/mK - Test report CSI 0037/DC/TTS/07.

Thermal resistance:
R (average) 0.637 m²K/W - Test report CSI 0037/DC/TTS/07.

Test certificate type:
Certificate CSI DE/1831/07 issued in conformity to directive 89/106/CEE on the bais of UNI EN 13163/2003 and UNI EN 13172/2003.

The documentation indicated above can viewed in electronic form in Italian with prior agreement from the Technical Department.

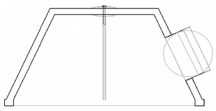
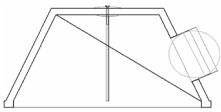
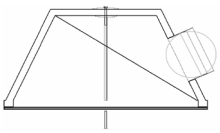
ASSEMBLED PPS



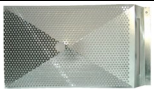
PS PLENUM

PPS
SERIES

CODES

Image	Description	Connector diameter	Code
	Plenum in PS already assembled with connector in ABS with damper and without equalizer.	125	PPS-PS125
		160	PPS-PS160
		200	PPS-PS200
		250	PPS-PS250
	Plenum in PS already assembled, complete with connector in ABS with damper and equalizer.	125	PPS-PES125
		160	PPS-PES160
		200	PPS-PES200
		250	PPS-PES250
	Plenum in PS already assembled, complete with connector in ABS with damper, equalizer and diffuser KQ1 600.	125	PPS-KQ1PES125
		160	PPS-KQ1PES160
		200	PPS-KQ1PES200
		250	PPS-KQ1PES250

ACCESSORIES

	Only PS bell shape body with fixing bar (withour connector)		PPS-KIT
	Equalizer for plenum		PPS-E
	Connector in ABS	125 160 200 250	RR10-125 RR10-160 RR10-200 RR10-250
	Damper for connectors in ABS	125 160 200 250	RRS10-125 RRS10-160 RRS10-200 RRS10-250
	Fixing screw (usually already included in the DIFFUSER)		PPS-V680T