HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

TECHNICAL DATA

KP
SERIES

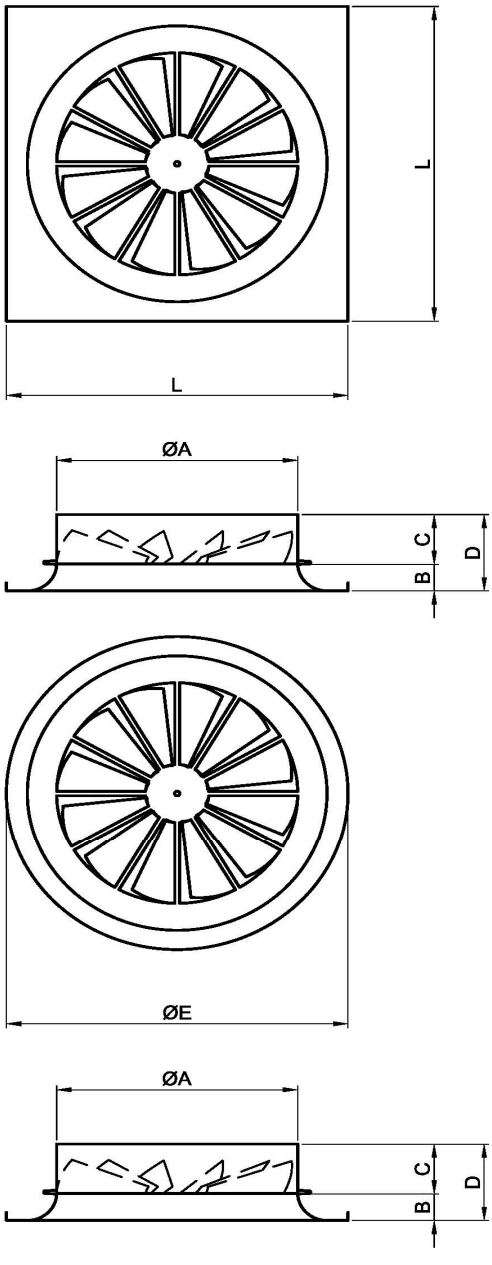
TECHNICAL DATA
The KP series diffusers are composed by an external panel and a round central part. The central body has fixed deflectors which create a elicoidal/centrifugal motion of the air flow. For this reason, this specific air terminal is suitable for applications requiring heating with a strong induction effect. KP diffusers are used for installation heights from 2,6 m to 5,1m.

MATERIAL
The diffuser is manufactured from sheet steel, with white epoxy finish RAL 9010.

MOUNTING
The diffuser has to be fixed with a central M6 screw directly on the plenum bridge. It is supplied with a white screw cover.

VERSIONS
KP with squared panel;
KP6 with squared panel 596x596;
KPD with squared panel 623x623
KPR circular

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.

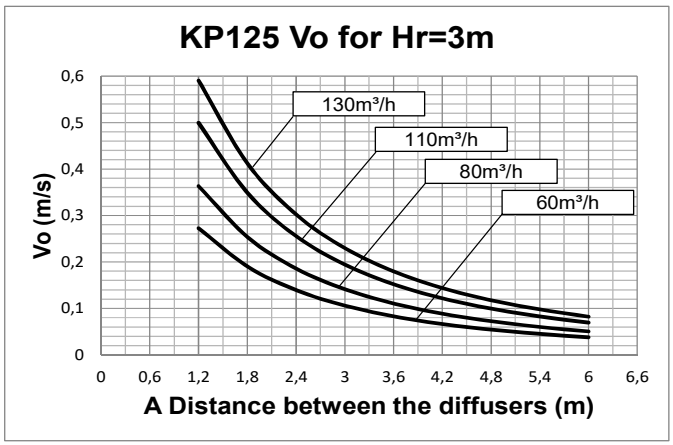


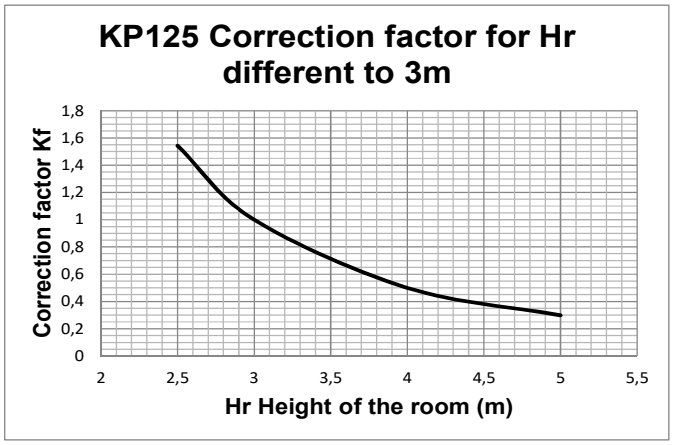
SIZE	A	B	C	D	KP L	KP6 L	KPD L	KPR E	Ak m²
125	122	27	55	82	225	596	623	225	0,0091
160	157	27	55	82	250	596	623	250	0,0146
200	197	27	55	82	300	596	623	300	0,0225
250	247	30	55	85	350	596	623	350	0,0345
315	312	30	55	85	415	596	623	415	0,0537
355	353	38	65	103		596	623	455	0,0676
400	398	38	65	103		596	623	520	0,0850

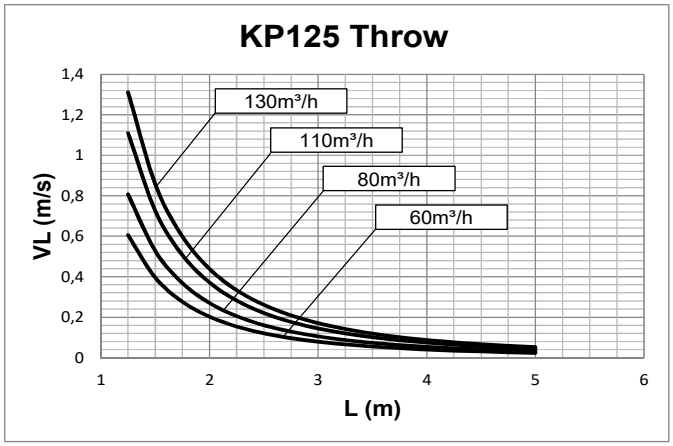
HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

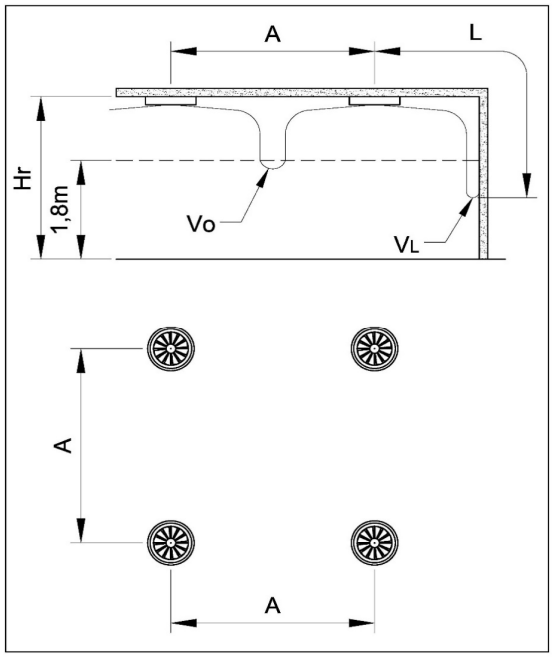
KP
SERIES

PERFORMANCE KP 125









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.*

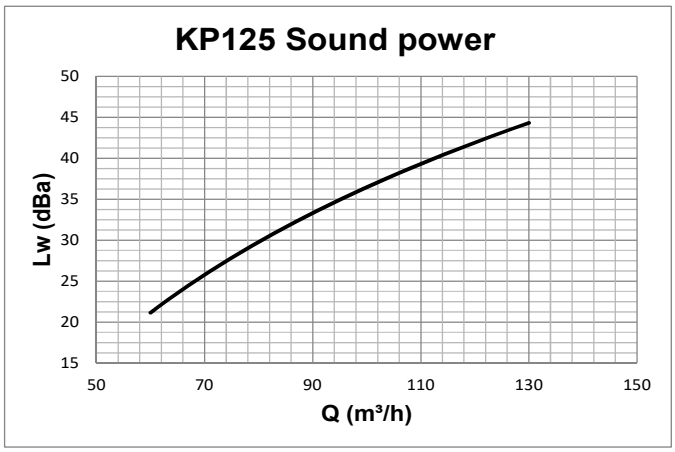
A(m) distance between thwe diffusers
Vo (m/s) speed at the limit of the occupied zone
L (m) horizontal distance in metres from the centre of the diffuser
VL (m/s) maximum speed in the air stream

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

HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

KP
SERIES

PERFORMANCE KP 125



Data measured in reverberation room in accordance with international standards:
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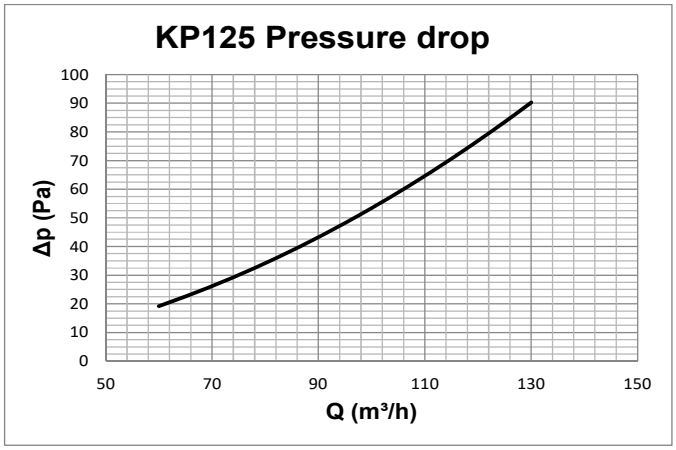

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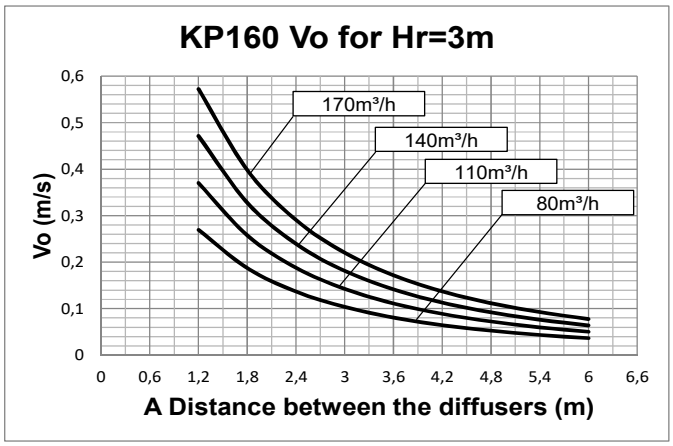
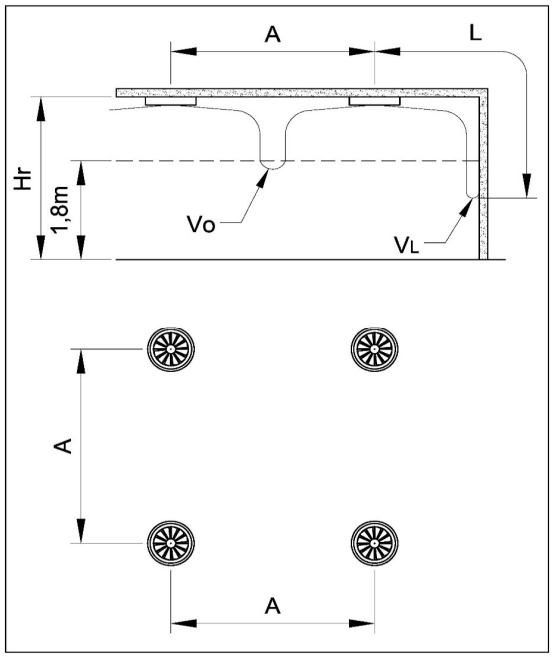
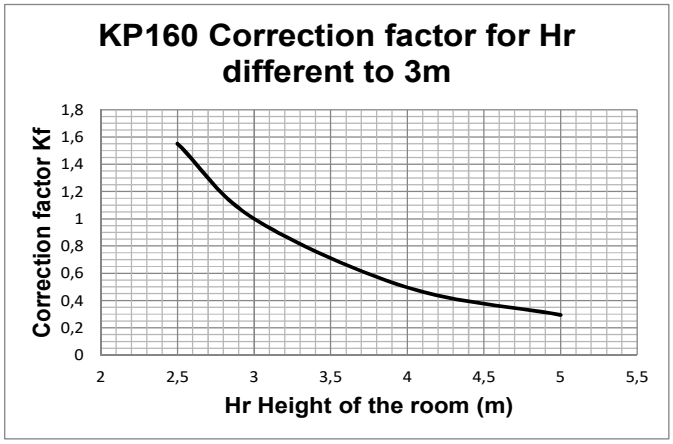
HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

KP
SERIES

PERFORMANCE KP 160



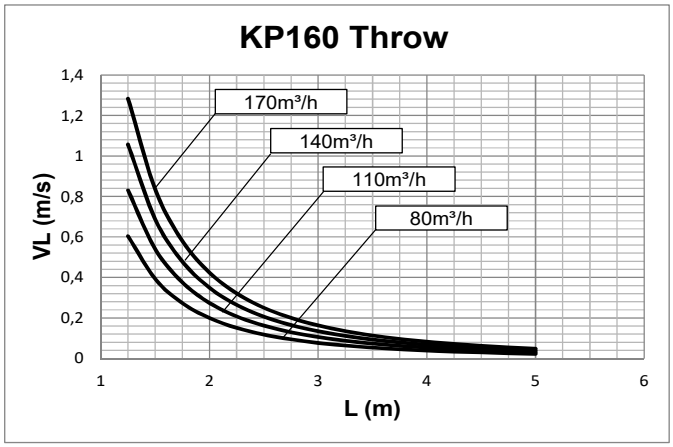




Data measured operating in isothermal conditions in accordance with the international standard: ISO 5219 1984: *Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.*

A(m) distance between thwe 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

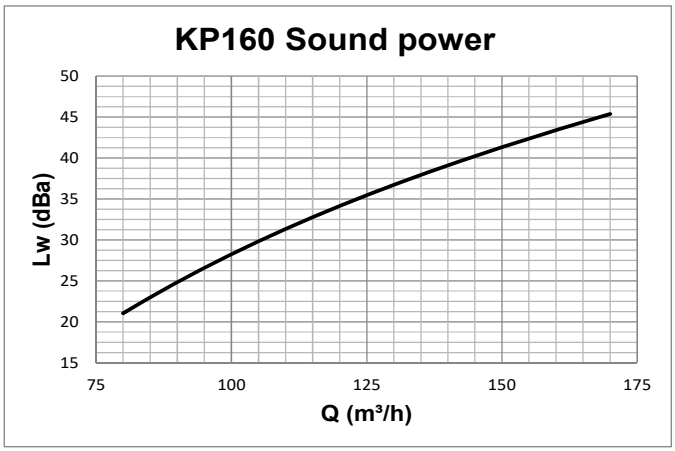
For Hr different from 3m:
Vo (h) = Vo x Kf



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

PERFORMANCE KP 160

KP
SERIES



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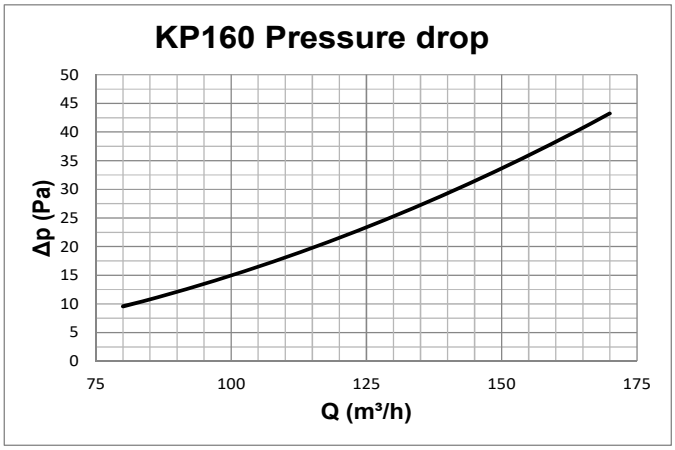

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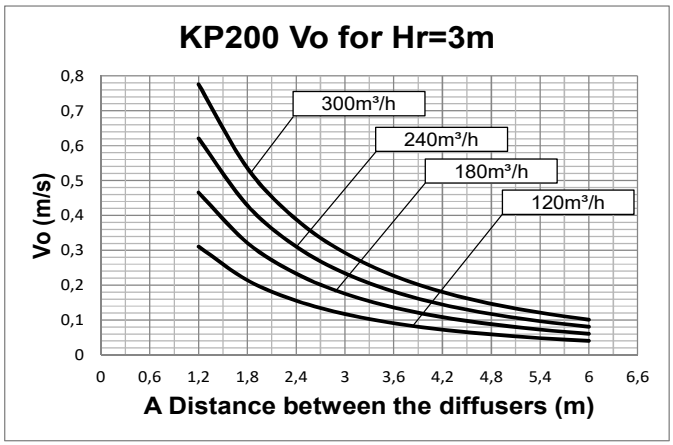
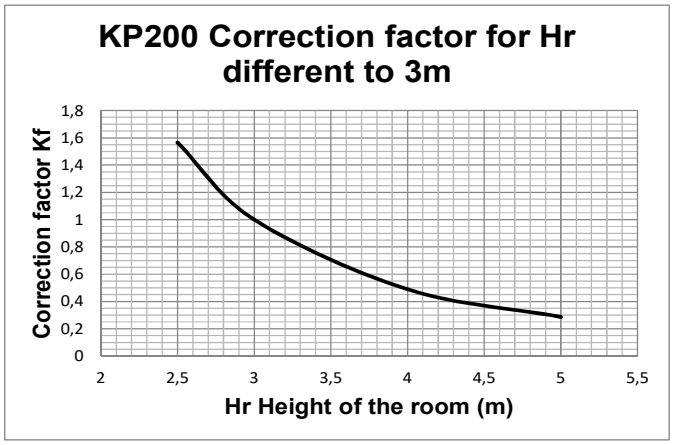
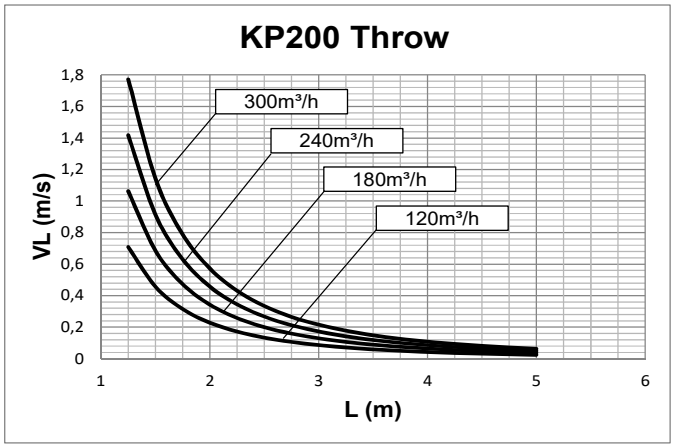
HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

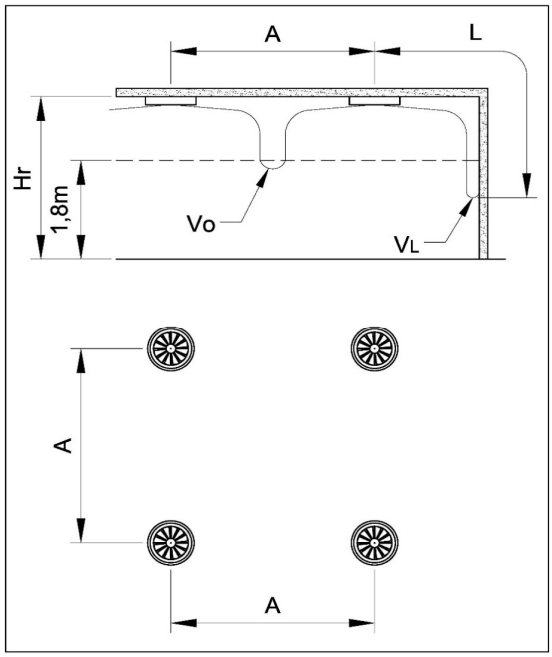
KP
SERIES

PERFORMANCE KP 200









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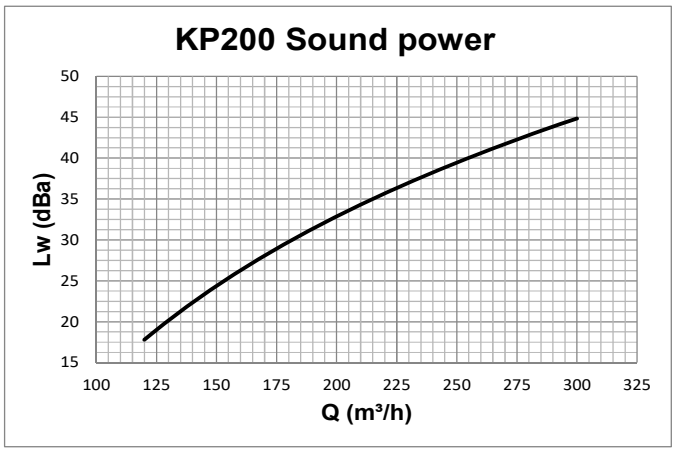
For Hr different from 3m:
Vo (h) = Vo x Kf

HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

PERFORMANCE KP 200

KP
SERIES



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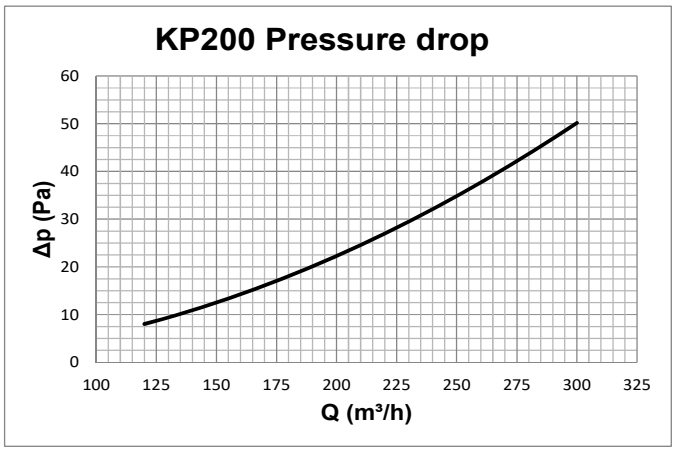

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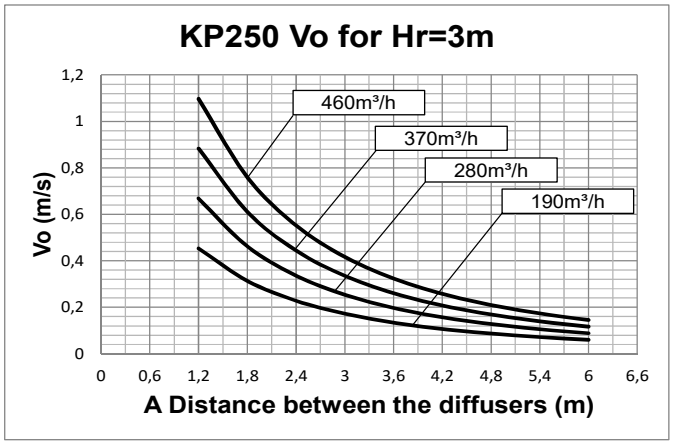
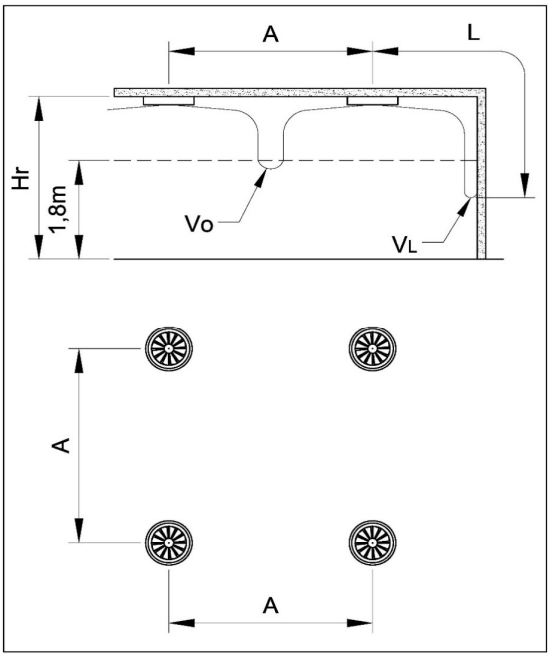
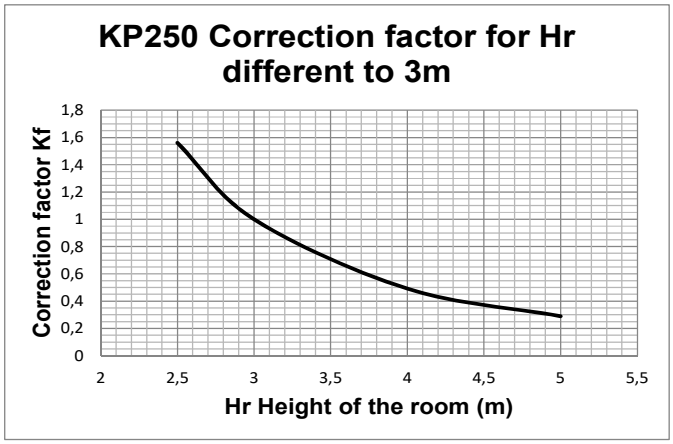
HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

KP
SERIES

PERFORMANCE KP 250







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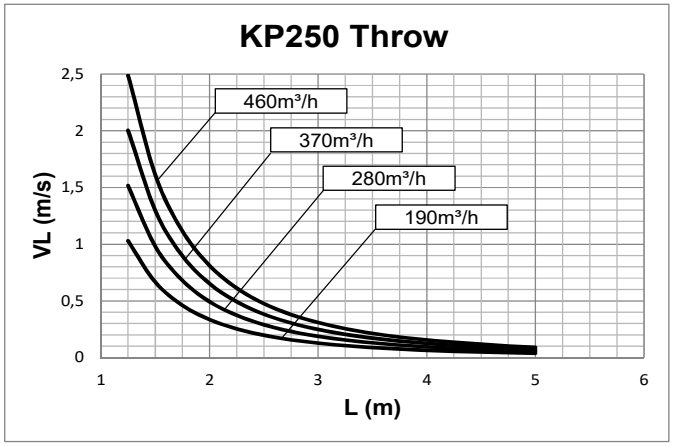
L (m) horizontal distance in metres from the centre of the diffuser
VL (m/s) maximum speed in the air stream

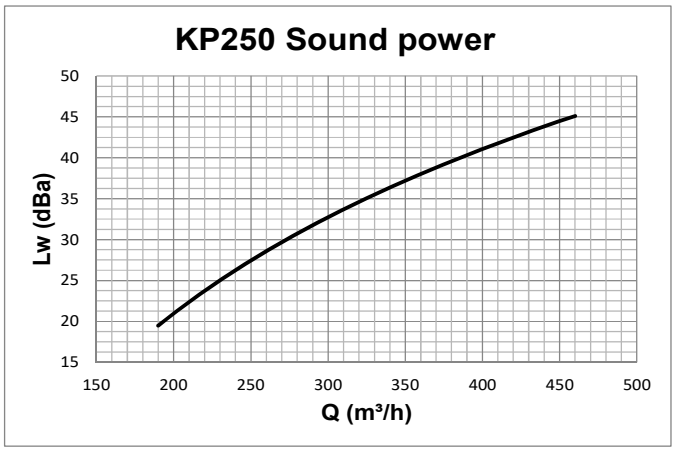
For Hr different from 3m:
Vo (h) = Vo x Kf



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

KP
SERIES

PERFORMANCE KP 250



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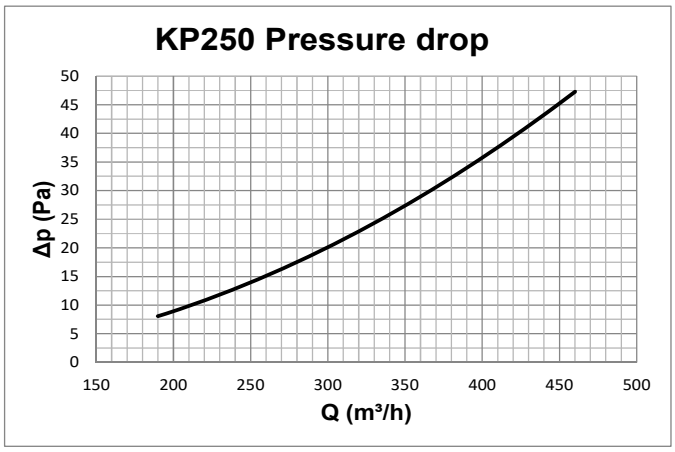

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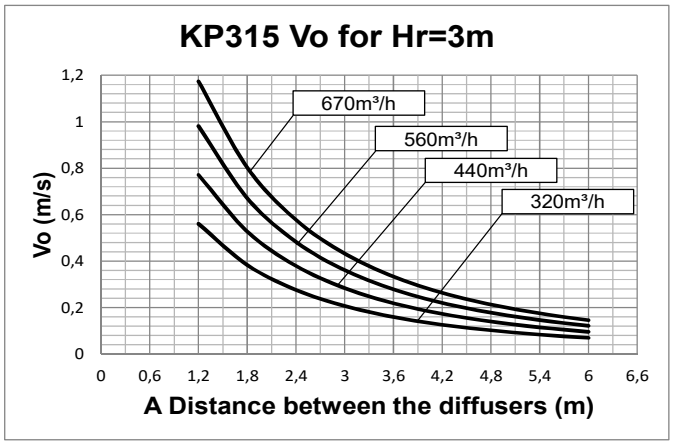
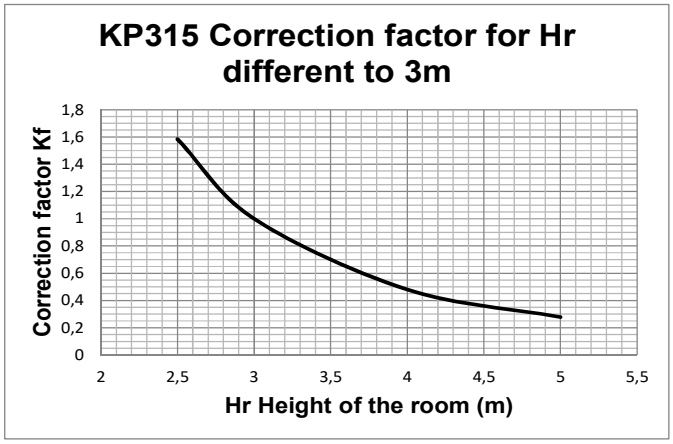
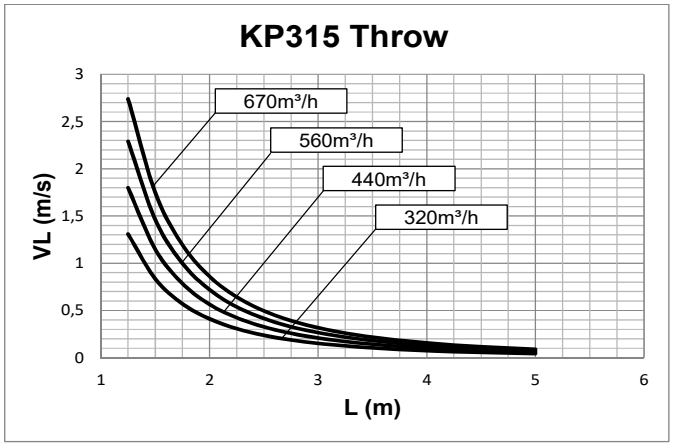
HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

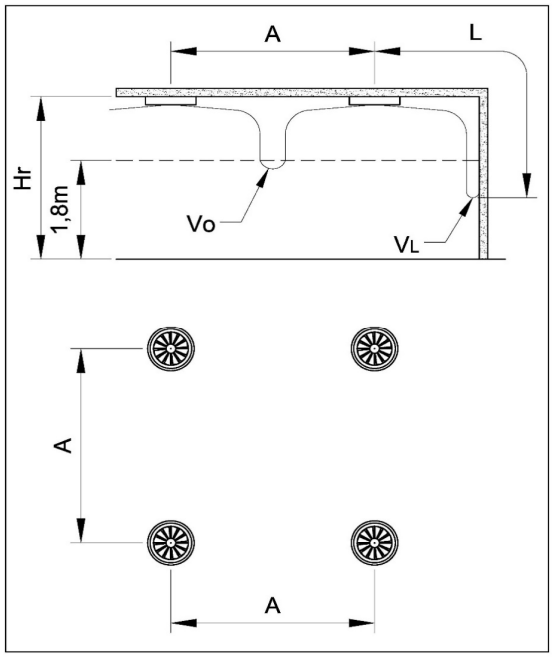
KP
SERIES

PERFORMANCE KP 315









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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:
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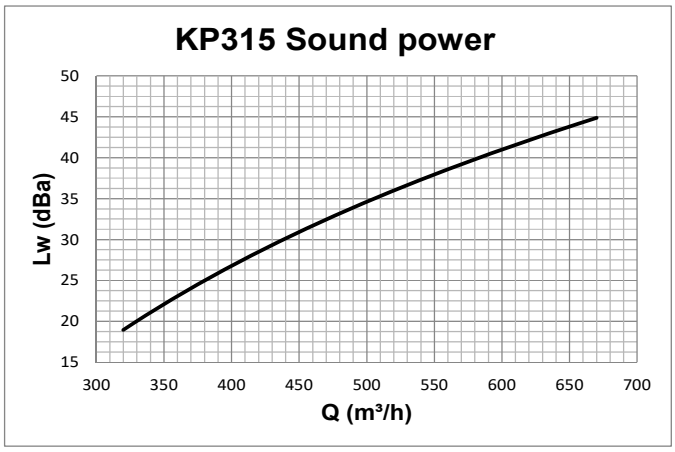
HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

PERFORMANCE KP 315

KP
SERIES



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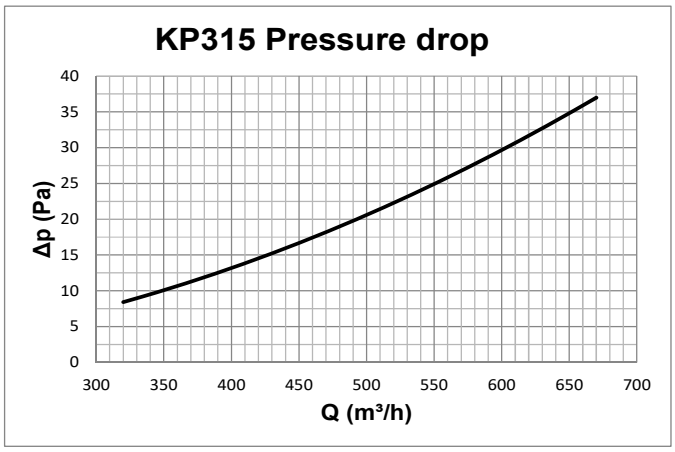

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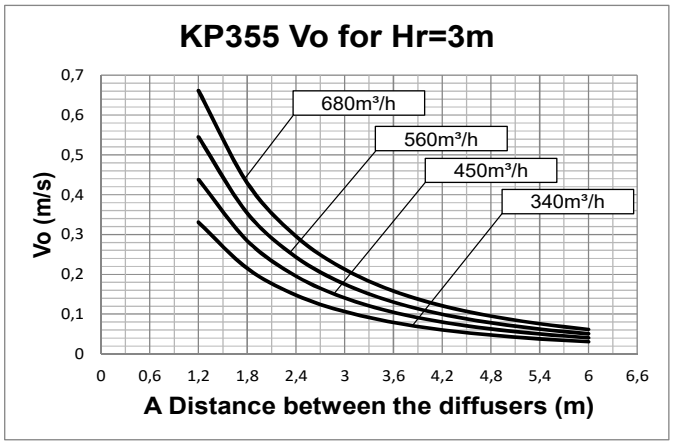
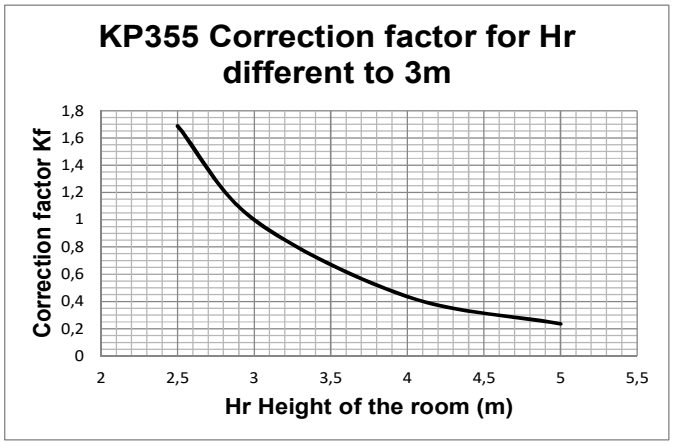
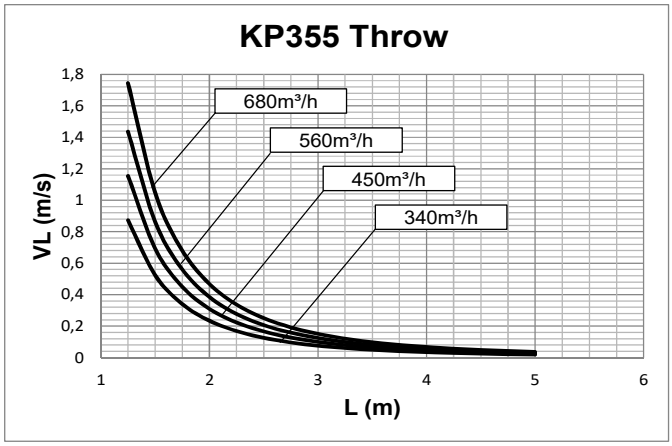
HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

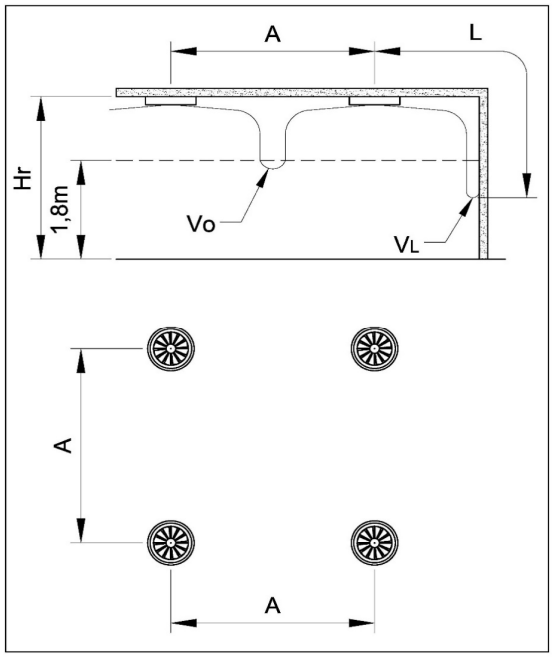
KP
SERIES

PERFORMANCE KP 355









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KP
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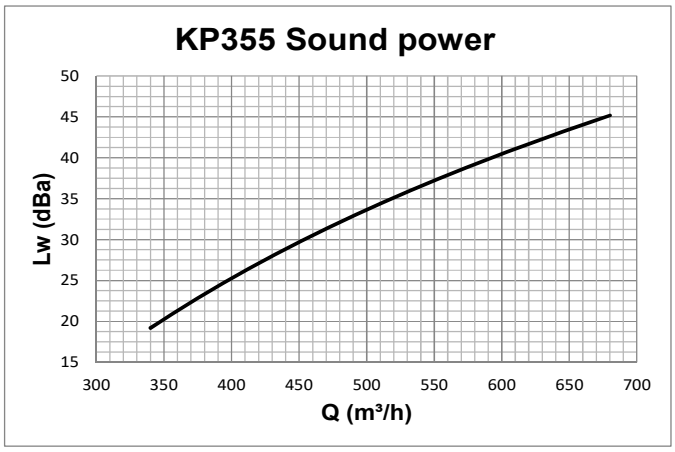
PERFORMANCE KP 355



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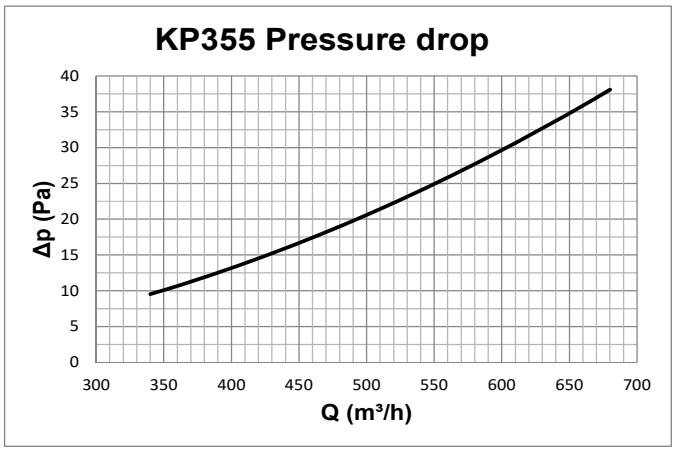

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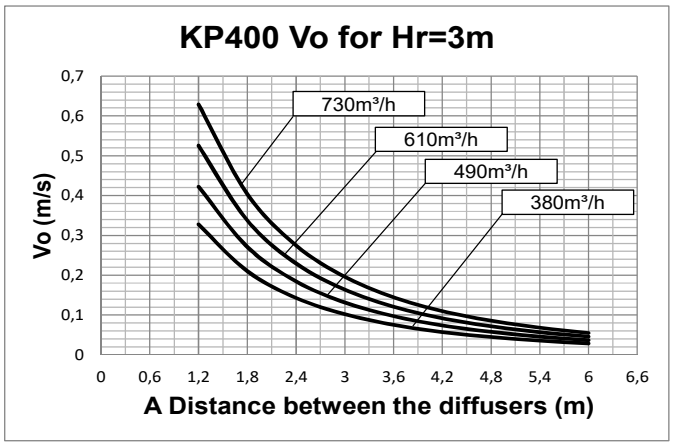
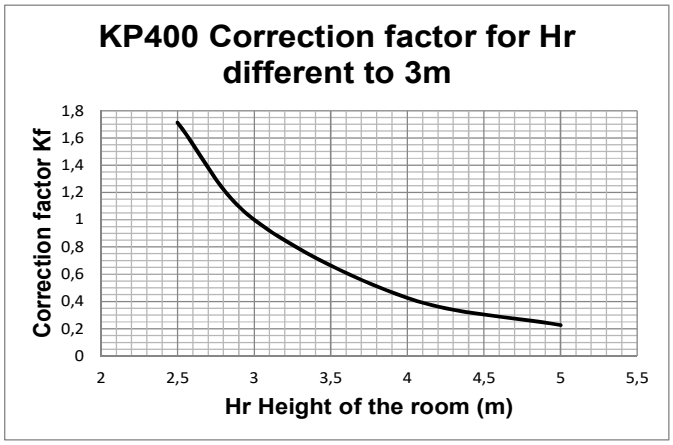
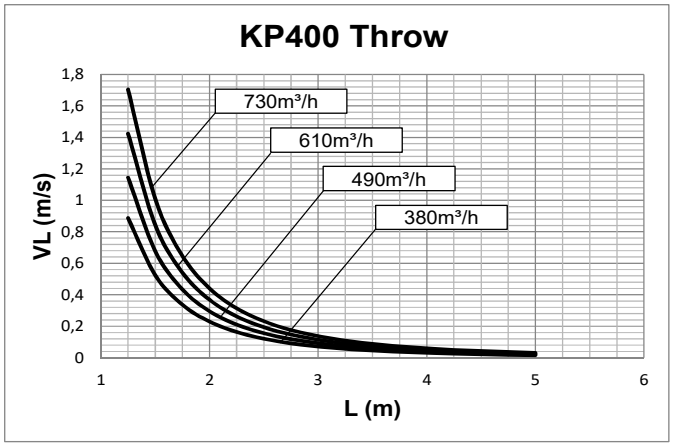
HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

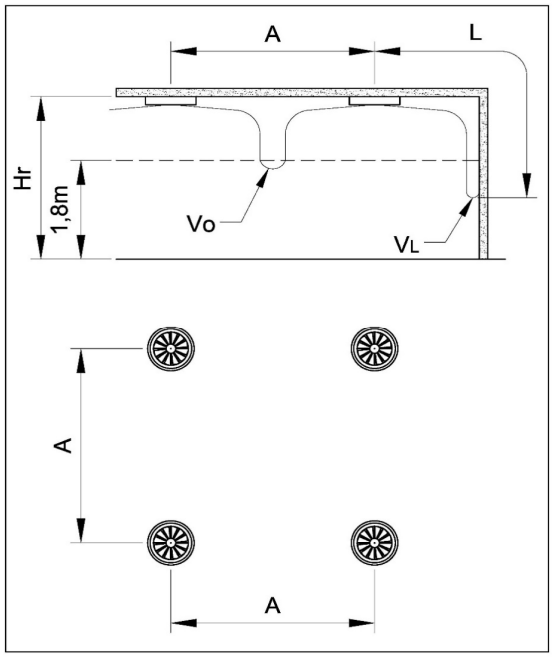
KP
SERIES

PERFORMANCE KP 400









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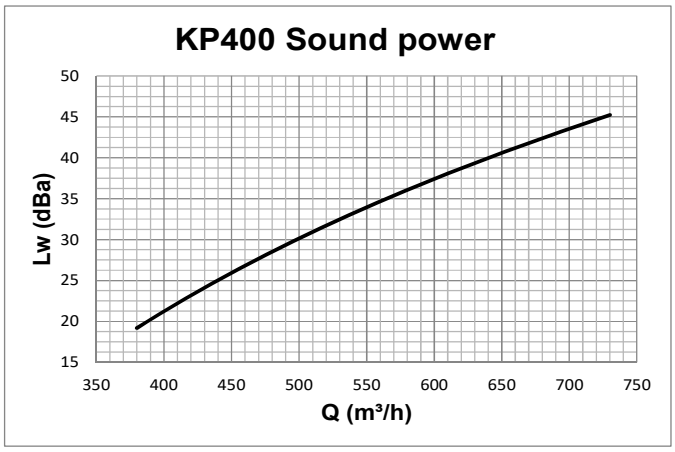
HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

PERFORMANCE KP 400

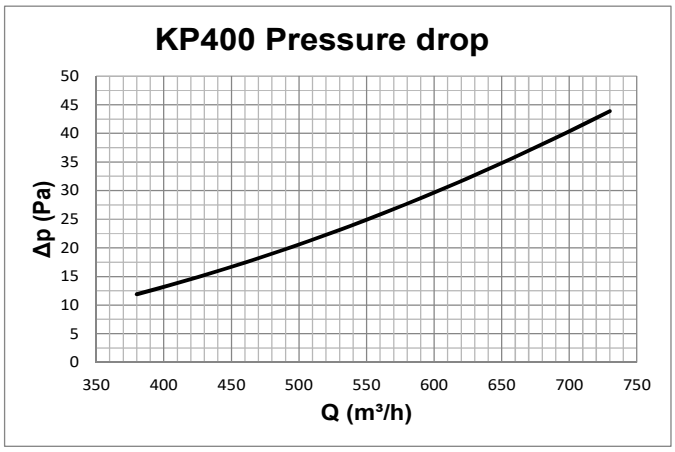
KP
SERIES



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*

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.*

The data presented does not consider the attenuation given by the area of installation. This attenuation is normally between 6 and 10 dBA and is determined by the room size, the shape of the environment and the interior features.

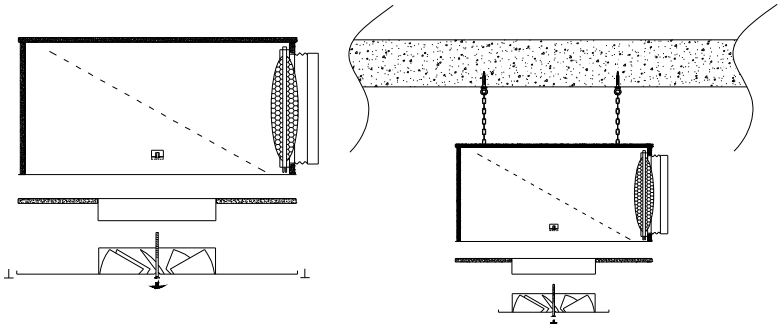


Data measured operating in isothermal conditions in accordance with the international standard:
ISO 5219 1984: *Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.*

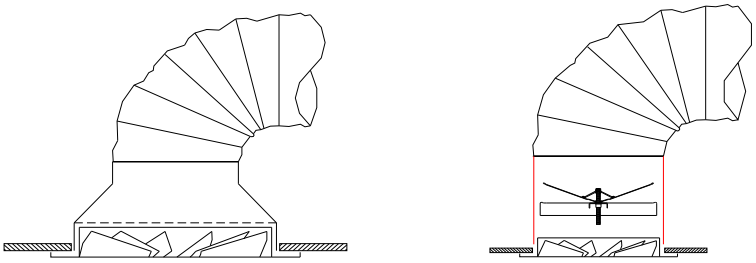
HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

KP
SERIES

TECHNICAL DATA
INSTALLATION

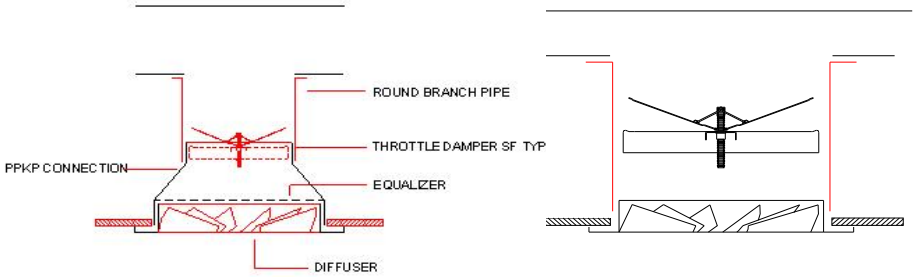


Installation with plenum

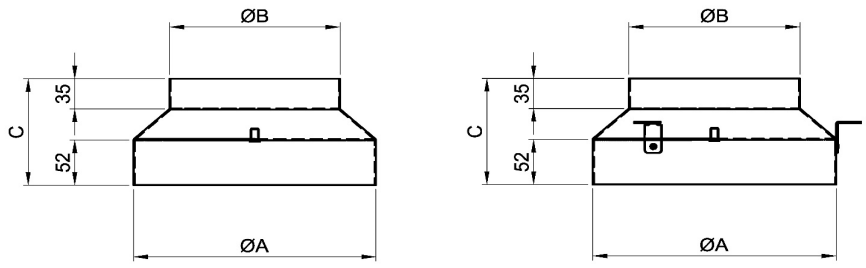


Installation with coupling and flexible duct

Installation with coupling butterfly damper and flexible duct



Installation with branch and steel duct



Models of coupling

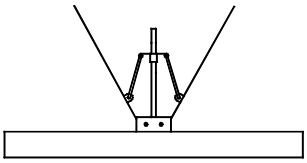
PPKP PPKPA

PPKP PPKPA	125	160	200	250	315	355	400
ØA	128	163	203	253	318	358	403
ØB	98	123	148	178	198	248	248
C	90	95	113	123	160	160	160

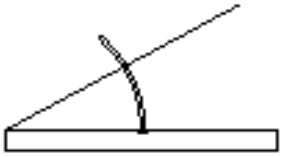
HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ROUND NEK

KP
SERIES

ACCESSORIES
HOW TO ORDER

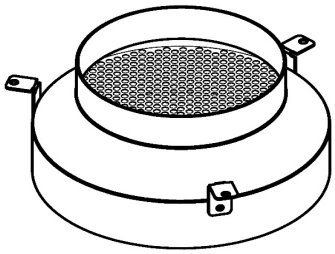


SF — Butterfly damper
available for all diameters
specify diameter at order stage

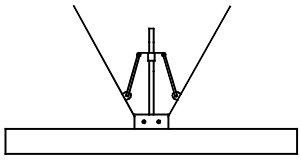


SB — Collection damper forKU5/6/9 diffusers
available for diameters 100 to 500 included
specify diameter at order stage

PPKP — Coupling with equalizer
avaiable for all the diameters
specify diameter at order stage

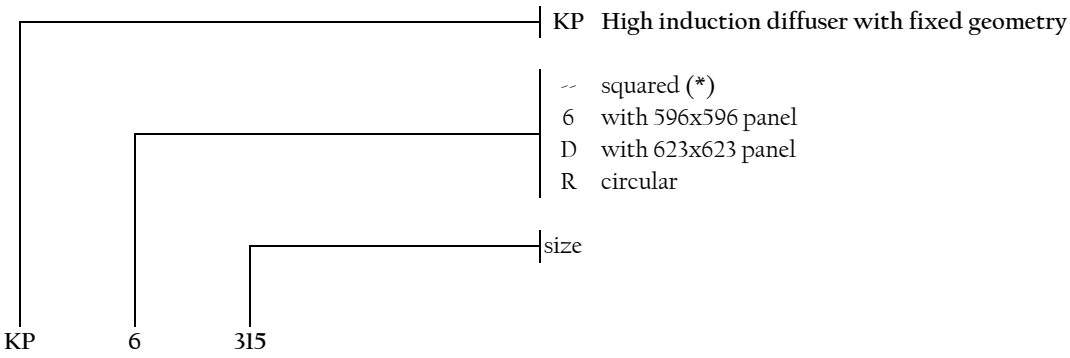


PPKPA — Coupling with equalizer
and hooks for ceiling suspension
avaiable for all the diameters
specify diameter at order stage



SF — Butterfly damper
for coupling

diffuser	damper
125	SF 100
160	SF 125
200	SF 150
250	SF 180
315	SF 200
400	SF 250



(*) Not avaiable for KP315 e KP400

PLENUM FOR CIRCULAR DIFFUSER

PP 60
SERIES

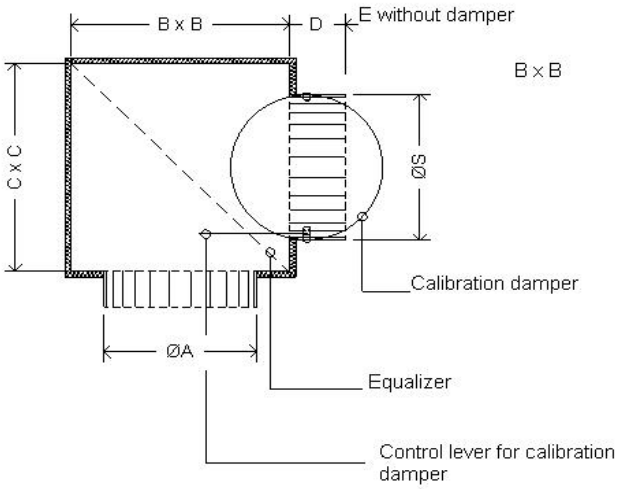
OVERVIEW

PLENUM :
The PP60 plenums, also named "calm cases", allow the correct entry of air in the neck of the diffuser thus ensuring that the throw of air in the room is homogenous along all the circumference of the diffuser.

Materials :
PP 60 standard plenum : galvanized steel sheet.
Insulation: expanded polyethylene certified for the reaction to fire according european class B-s2 d0.

Versions :
Made from insulated steel sheet with expanded polyethylene, ideal for the supply of air, and in simple sheet steel normally used for air extraction.

Accessories:
Regulation damper and equalizing net in the connection of the plenum.



nominal deck diameter mm	A mm	B mm	C mm	D mm	E mm	N° of connections	S [mm] mm	connection and damper material
125	127	225	225	90	60	1	121	ABS (*)
160	162	250	250	90	60	1	156	ABS (*)
200	202	300	300	90	60	1	196	ABS (*)
250	252	350	350	90	60	1	246	ABS (*)
315	317	400	400	90	60	1	311	steel
355	357	450	450	90	90	1	346	steel
400	402	500	500	90	90	1	396	steel

(*) steel on request

PLENUM FOR CIRCULAR DIFFUSER

PP 60
SERIES

HOW TO ORDER