



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

TECHNICAL DATA

TECHNICAL DATA :

The KPZ 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.
Possibility of producing AISI 304 or AISI 316 stainless steel versions with gloss or satin finish.

MOUNTING :

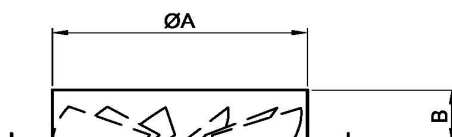
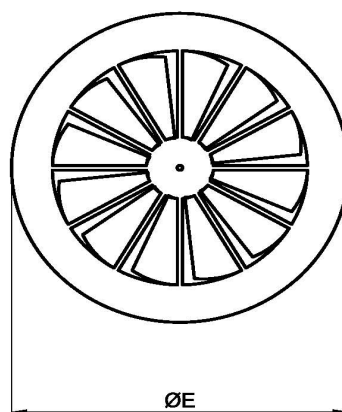
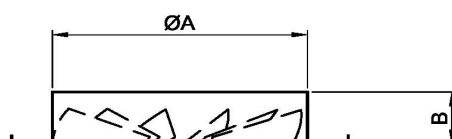
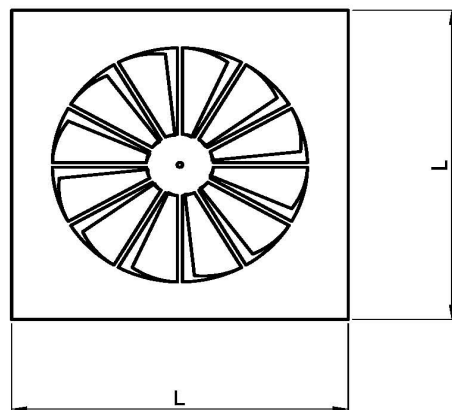
The diffuser has to be fixed with a central M6 screw directly on the plenum bridge. It is supplied with a white screw cover.

VERSIONS :

KPZ with squared panel;
KPZ6 with squared panel 596x596;
KPZD with squared panel 623x623
KPRZ 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.



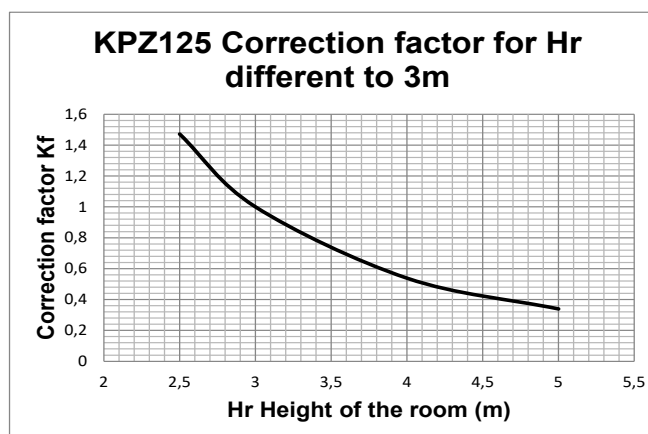
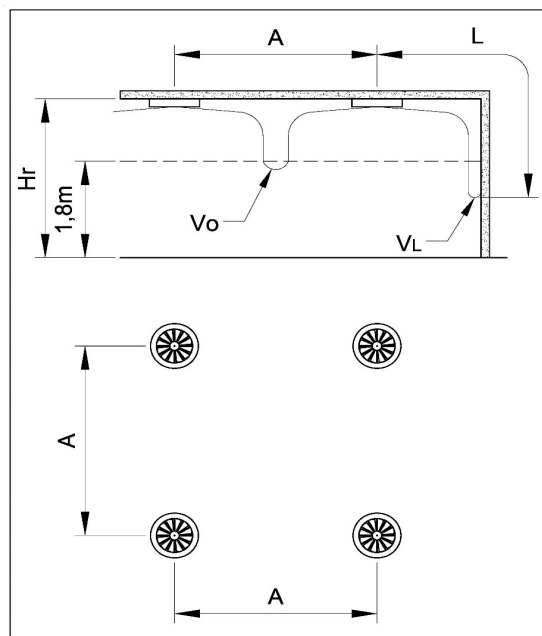
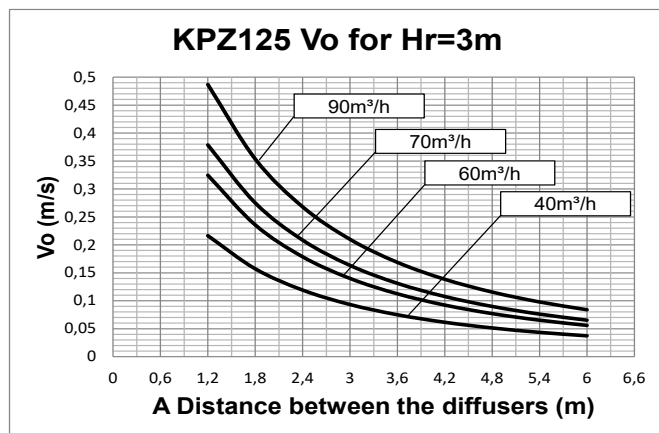
size	A	B	KPZ L	KPZ6 L	KPZD L	KPRZ E	Ak m²
125	122	55	171	596	623	171	0,00910
160	157	55	214	596	623	214	0,01462
200	197	55	264	596	623	264	0,02245
250	247	55	326	596	623	326	0,03445
315	312	55	404	596	623	404	0,05370
355	353	65	448	596	623	448	0,06755
400	398	55	500	596	623	500	0,08495



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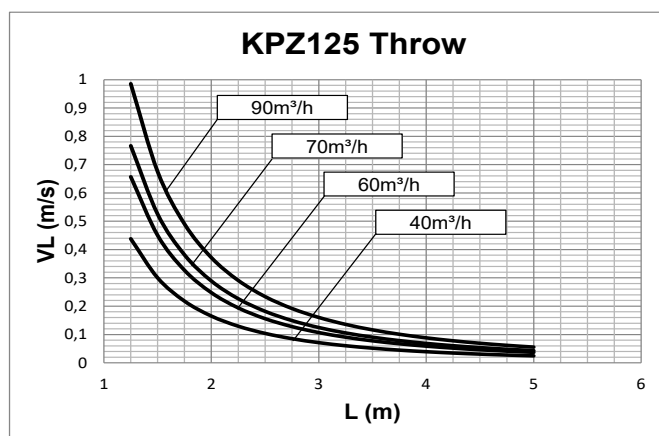
KPZ
SERIES

PERFORMANCE KPZ 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 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



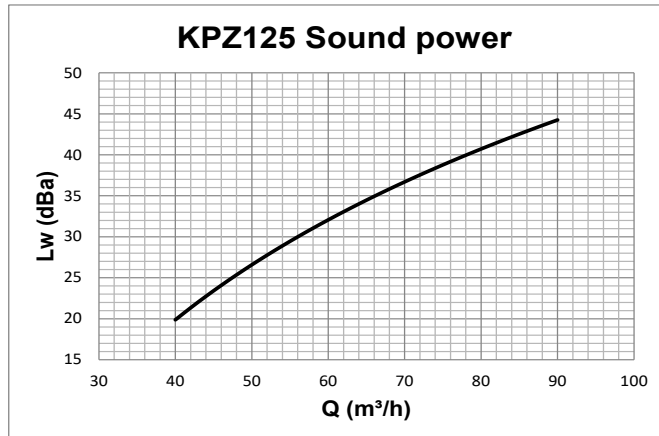
For Hr different from 3m:
 $V_o(h) = V_o \times K_f$



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

PERFORMANCE KPZ 125

KPZ
SERIES

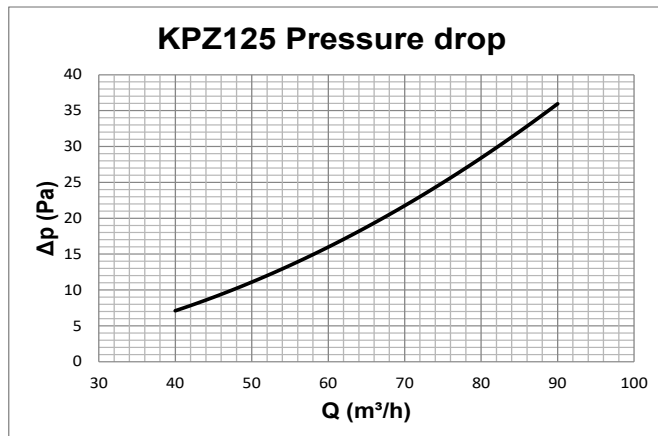


Data measured in reverberation room in accordance with international standards:

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:

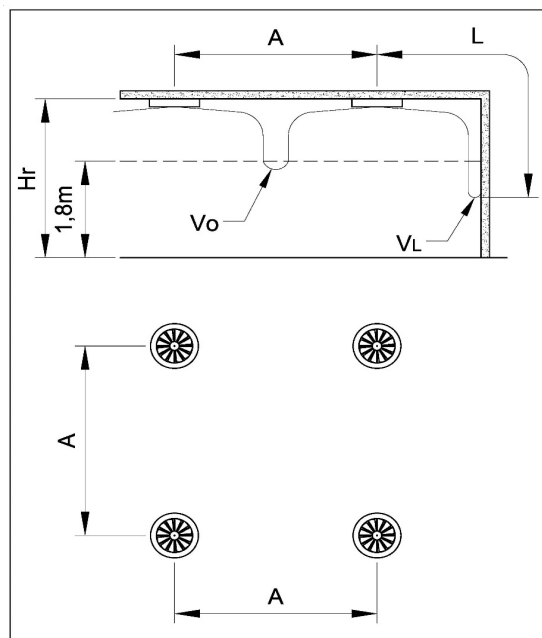
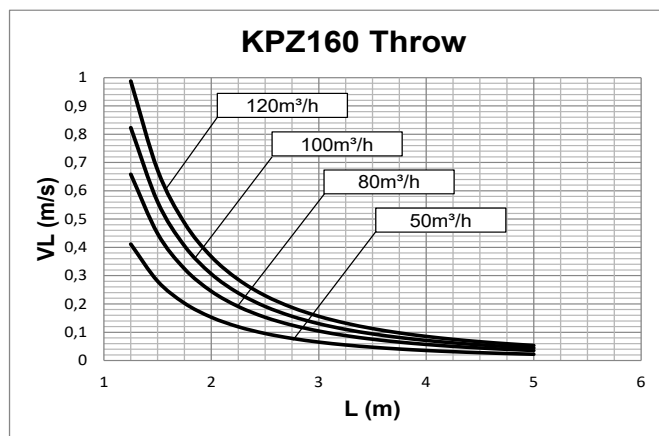
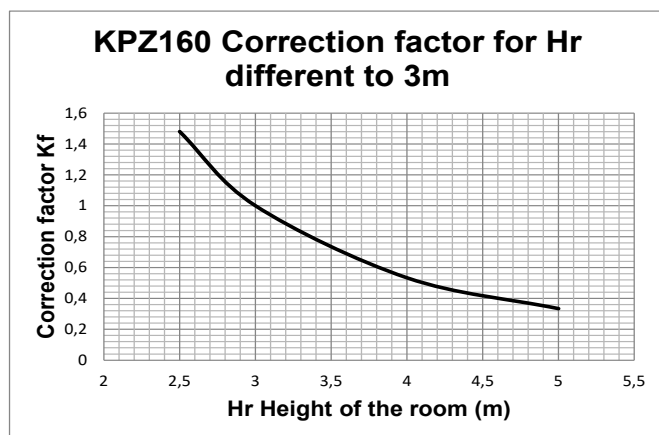
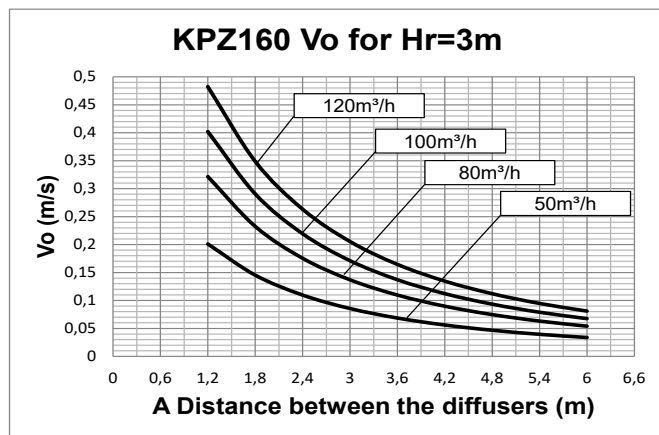
ISO 5219 1984: *Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.*



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

PERFORMANCE KPZ 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 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

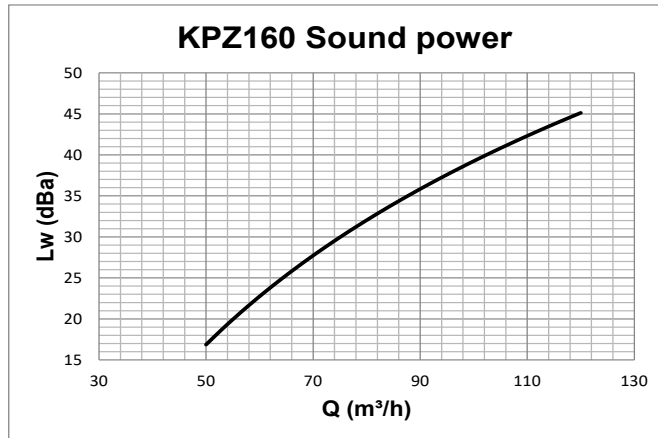
For Hr different from 3m:
 $V_o(h) = V_o \times K_f$



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

PERFORMANCE KPZ 160

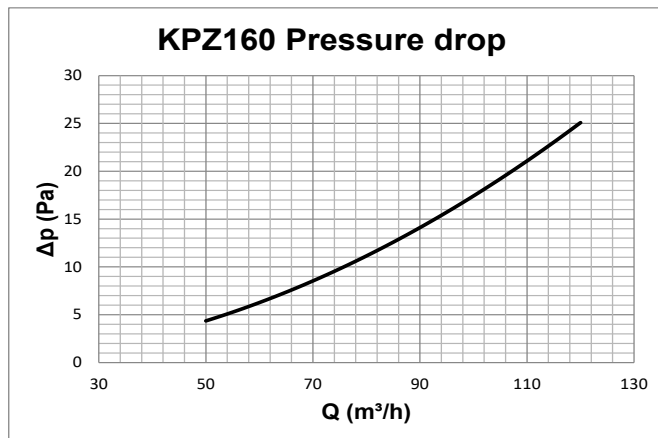


Data measured in reverberation room in accordance with international standards:

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

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

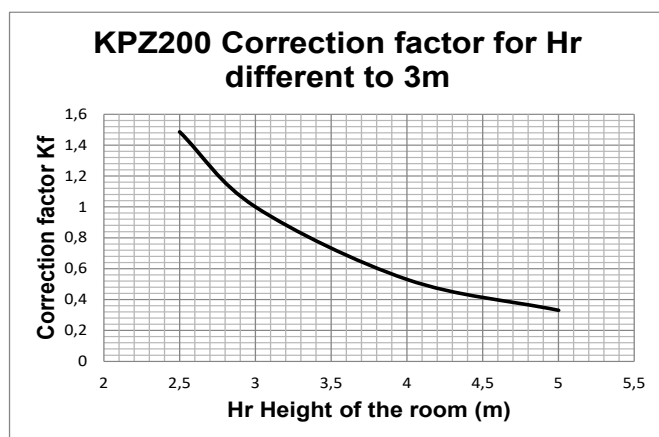
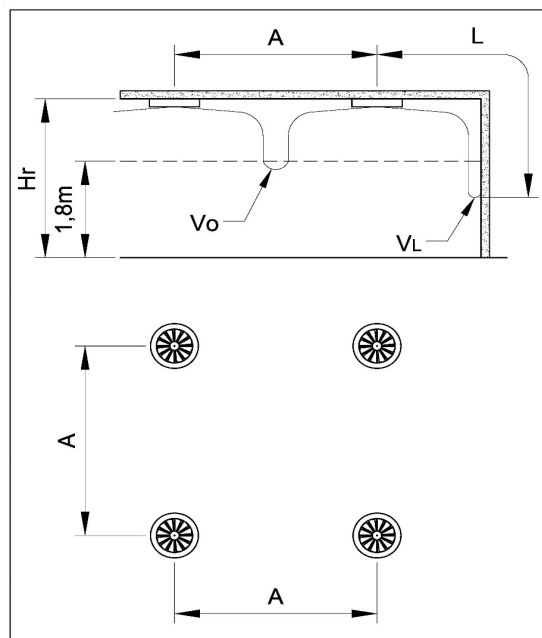
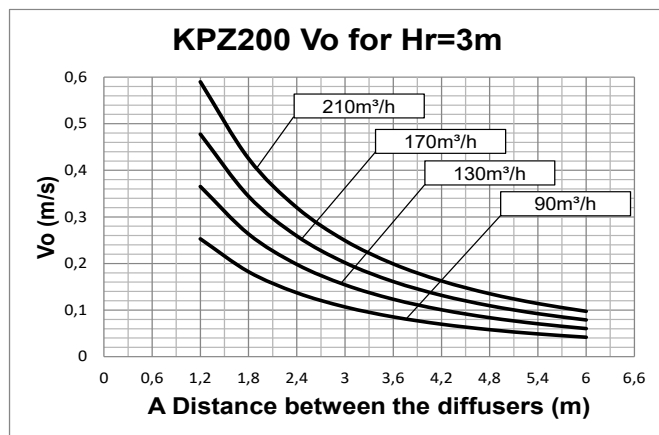
ISO 5219 1984: *Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.*



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

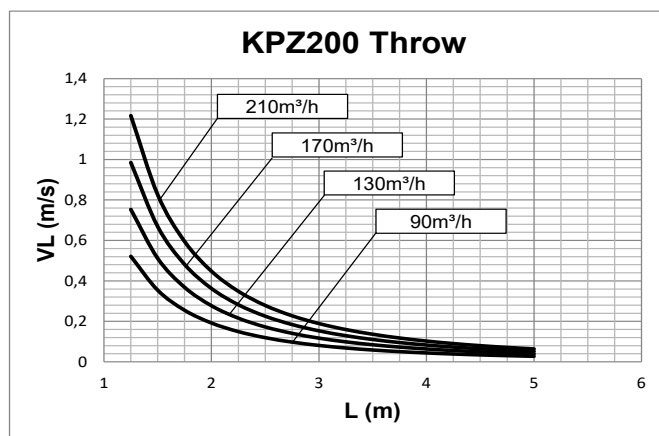
KPZ
SERIES

PERFORMANCE KPZ 200



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



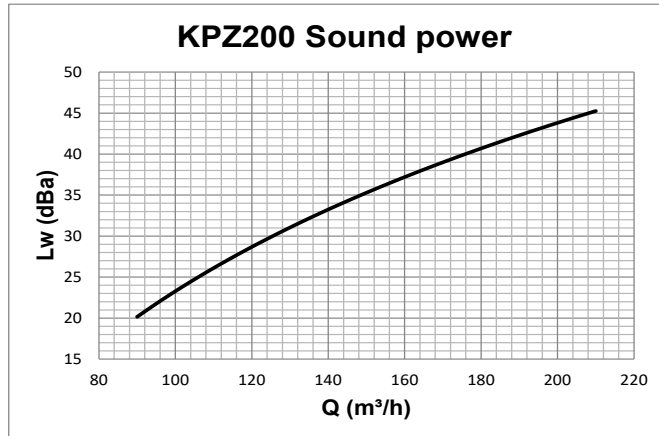
For Hr different from 3m:
 $V_o(h) = V_o \times K_f$



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

PERFORMANCE KPZ 200

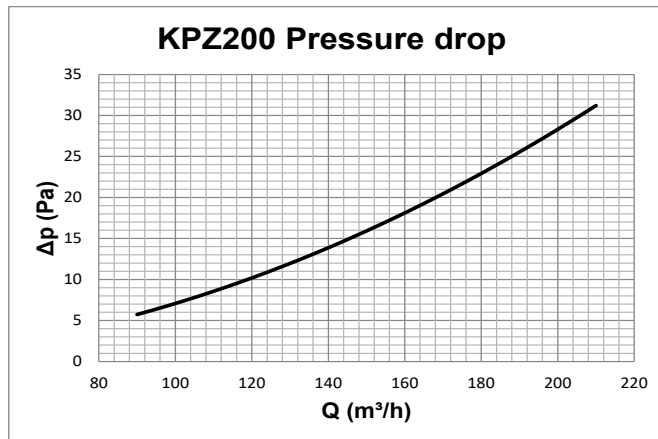


Data measured in reverberation room in accordance with international standards:

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

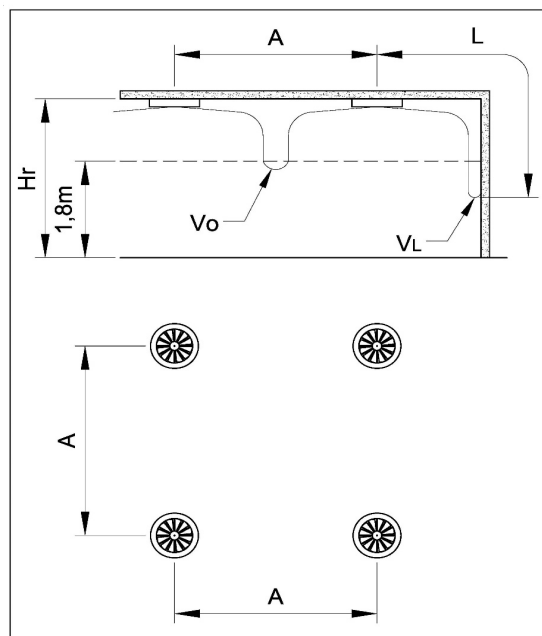
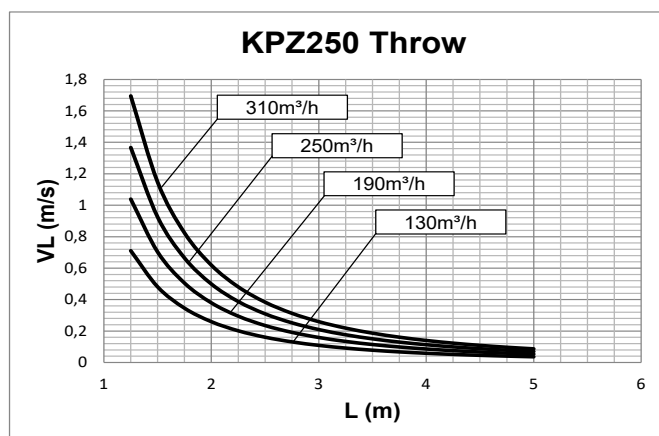
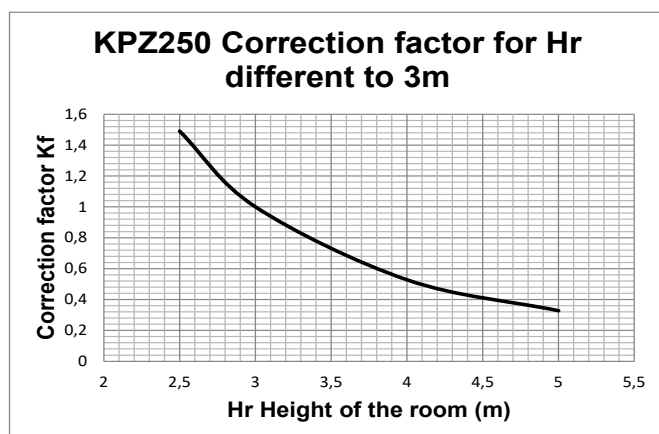
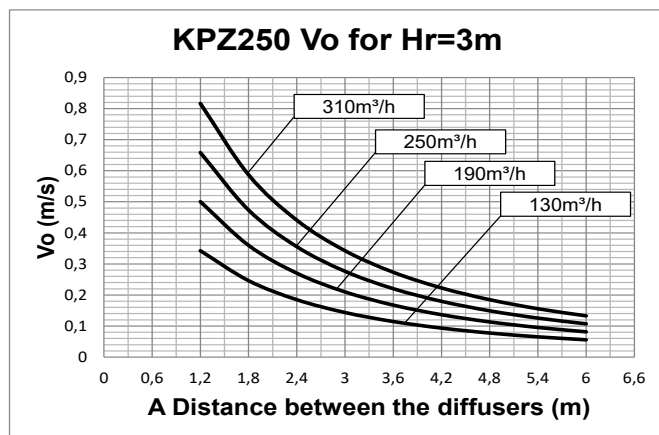
ISO 5219 1984: *Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.*



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

PERFORMANCE KPZ 250



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 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

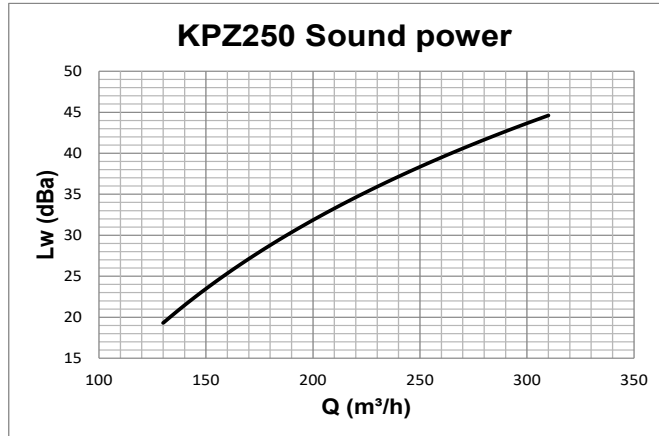
For Hr different from 3m:
 $V_o(h) = V_o \times K_f$



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

PERFORMANCE KPZ 250

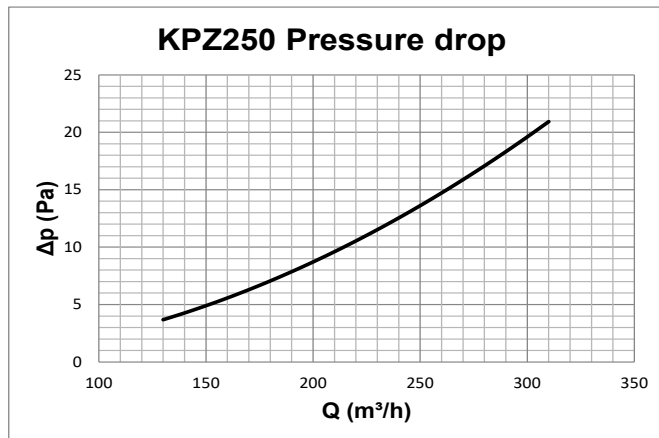


Data measured in reverberation room in accordance with international standards:

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

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

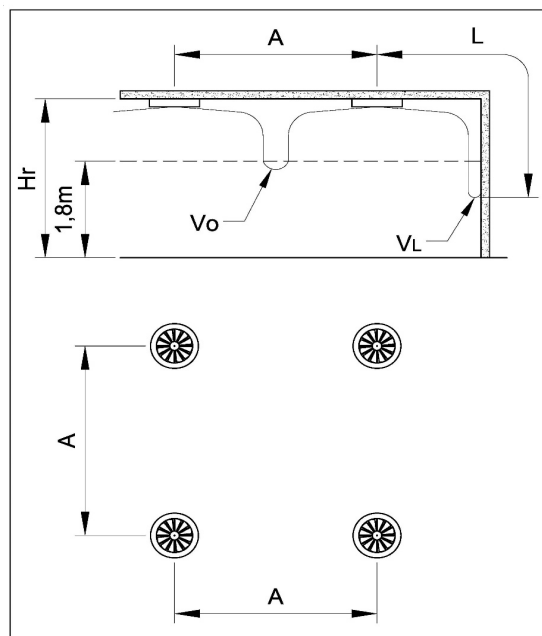
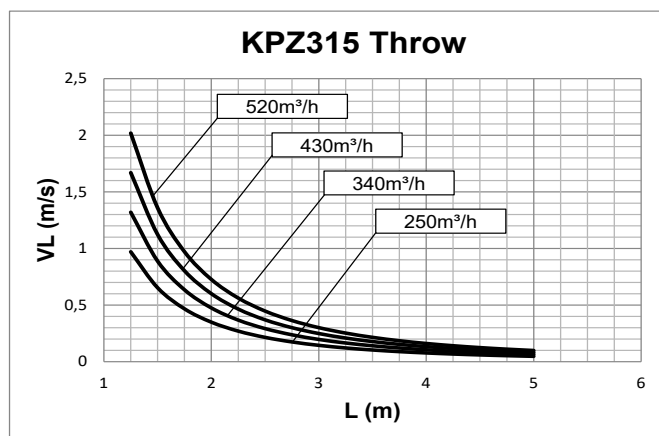
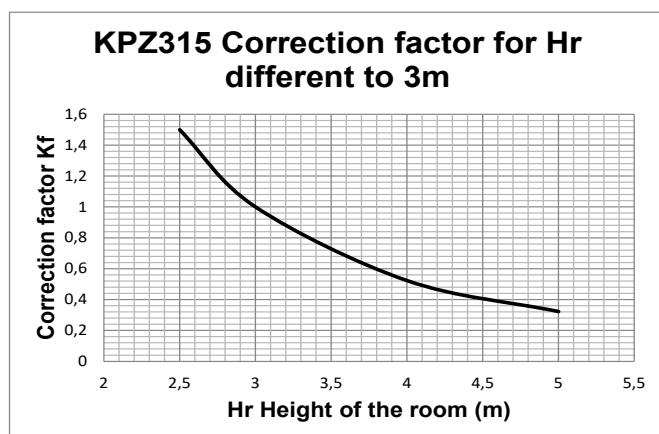
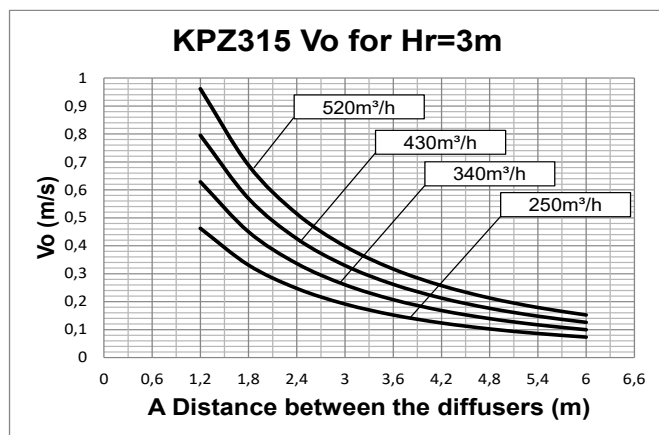
ISO 5219 1984: *Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.*



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

PERFORMANCE KPZ 315



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

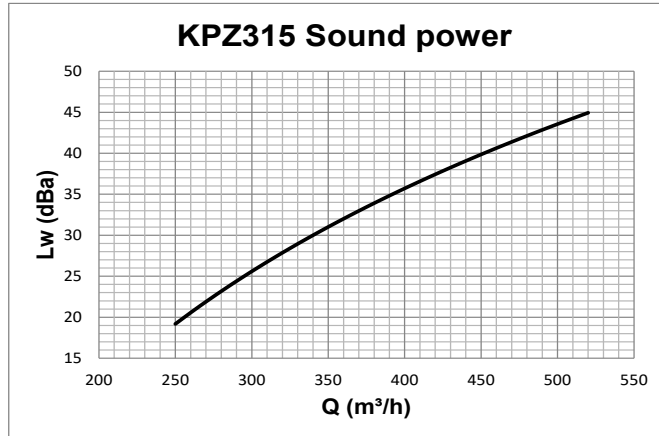
For Hr different from 3m:
 $Vo(h) = Vo \times Kf$



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

PERFORMANCE KPZ 315

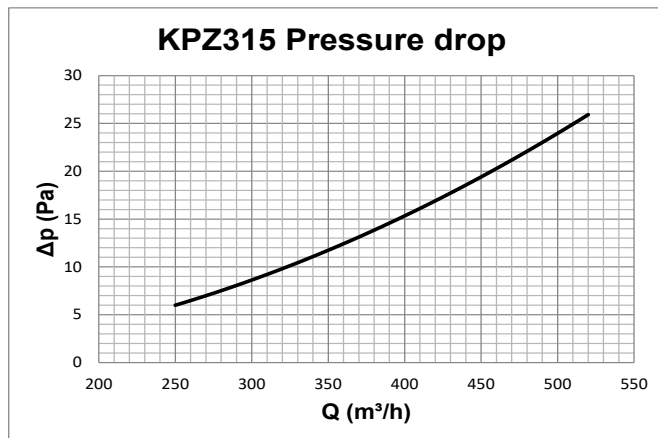


Data measured in reverberation room in accordance with international standards:

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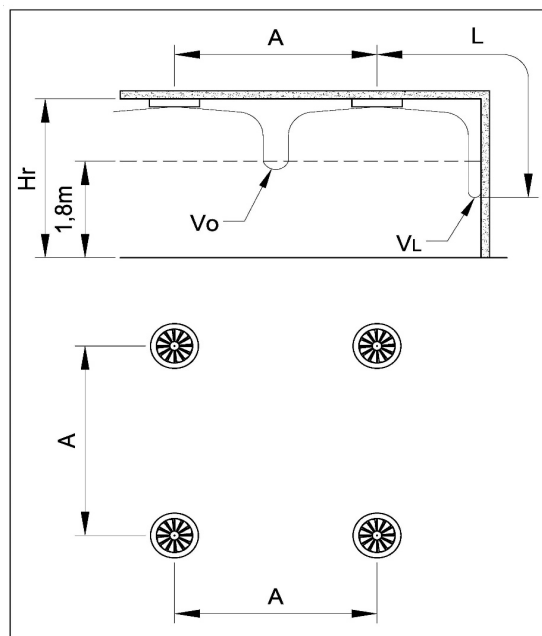
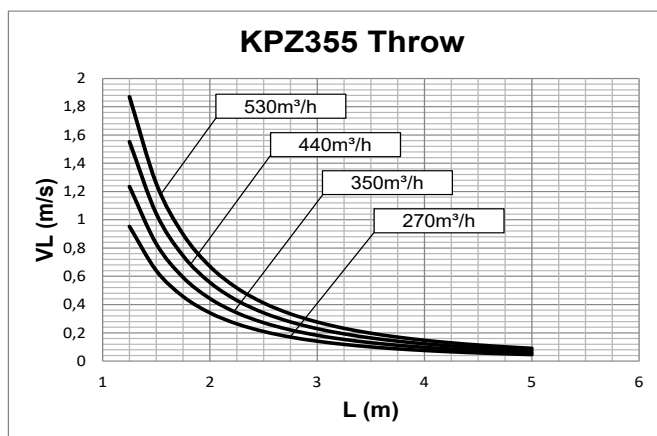
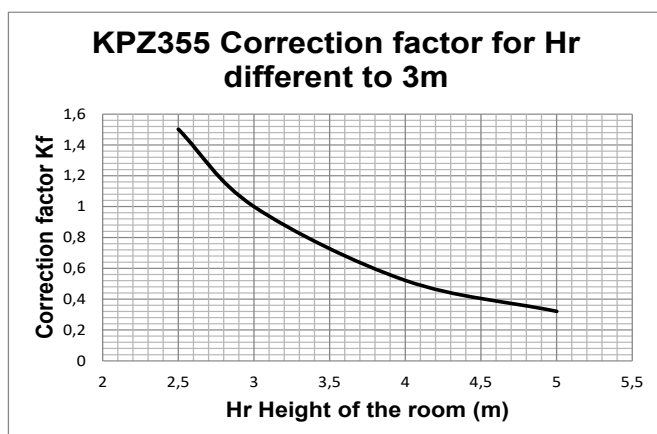
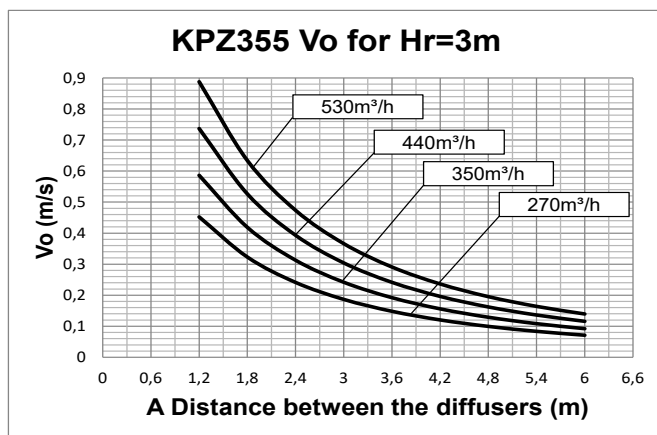
ISO 5219 1984: *Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.*



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

PERFORMANCE KPZ 355



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

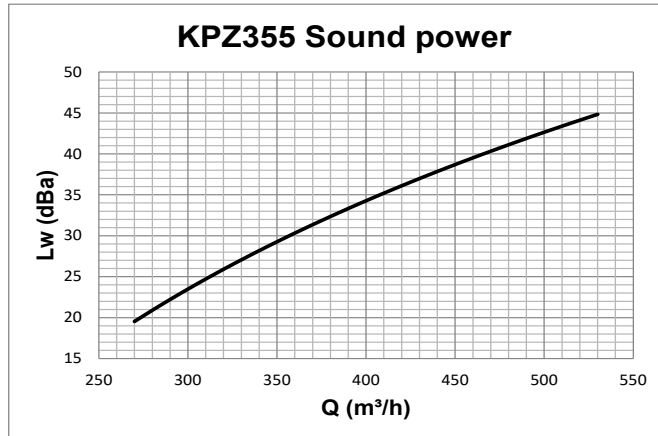
For Hr different from 3m:
 $V_o(h) = V_o \times K_f$



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

PERFORMANCE KPZ 355

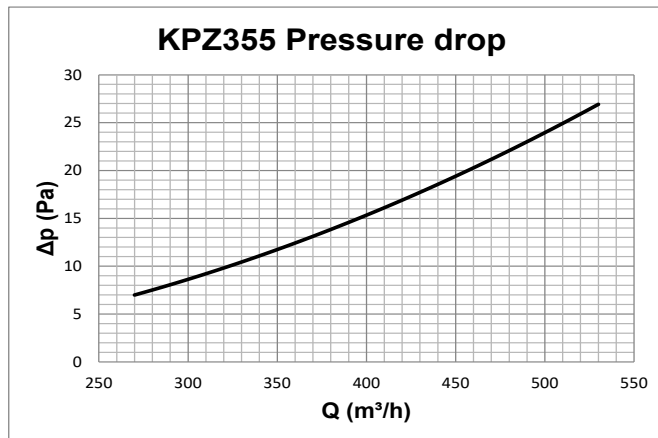


Data measured in reverberation room in accordance with international standards:

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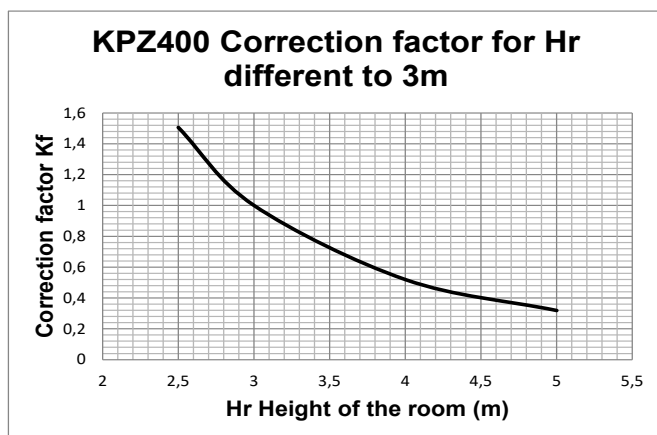
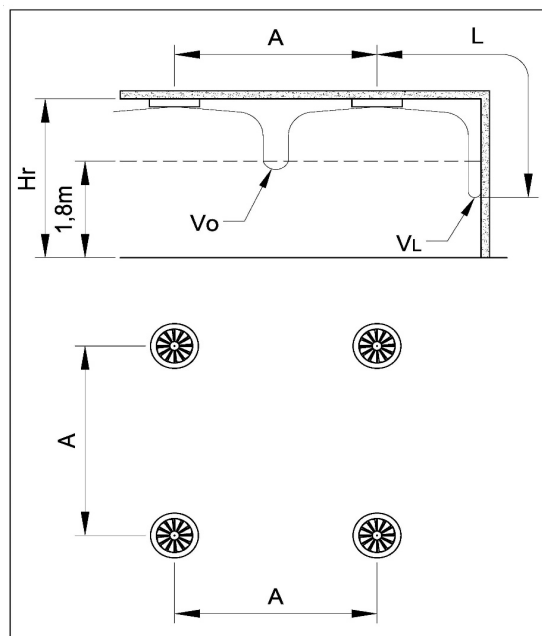
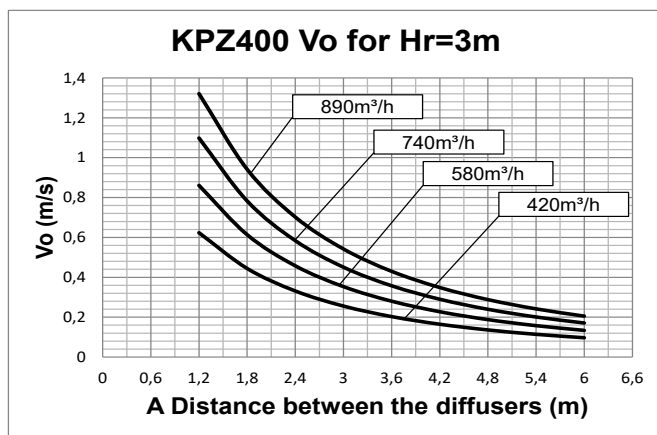
ISO 5219 1984: *Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.*



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

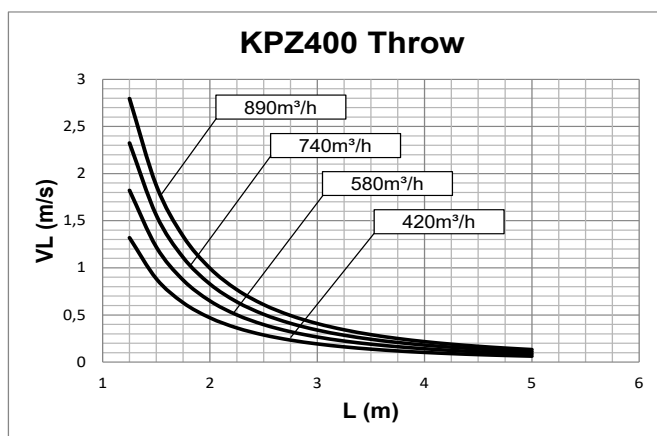
KPZ
SERIES

PERFORMANCE KPZ 400



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 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



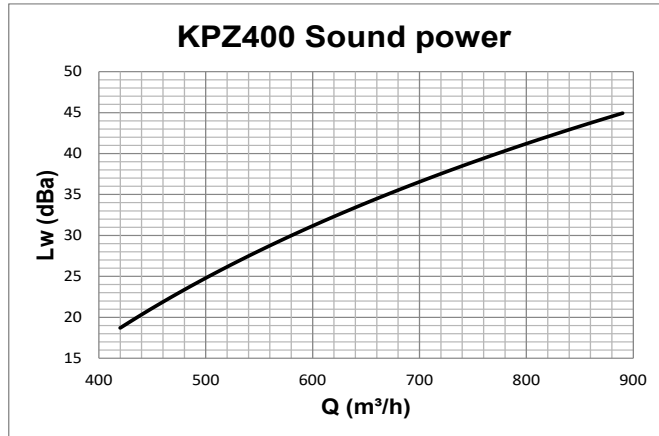
For Hr different from 3m:
 $V_o(h) = V_o \times K_f$



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

PERFORMANCE KPZ 400

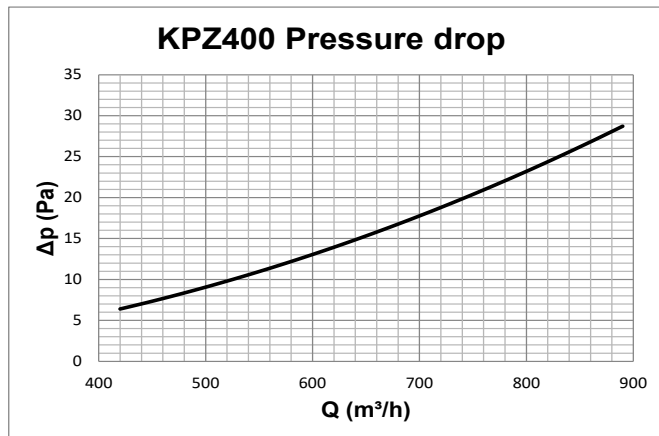


Data measured in reverberation room in accordance with international standards:

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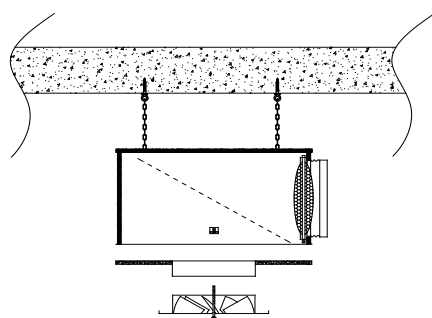
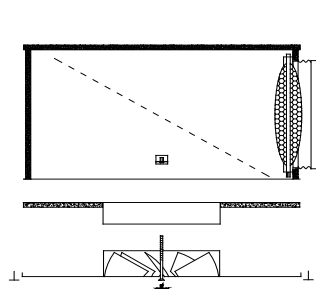
ISO 5219 1984: *Air distribution and air diffusion - Laboratory. Aerodynamic testing and rating of air terminal devices.*



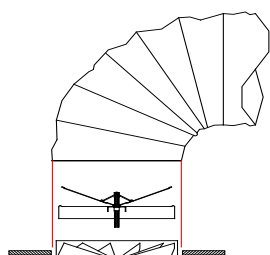
HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

TECHNICAL DATA INSTALLATION

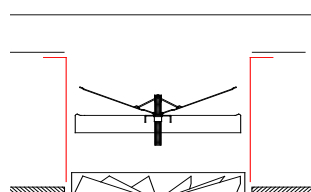


Installation with plenum



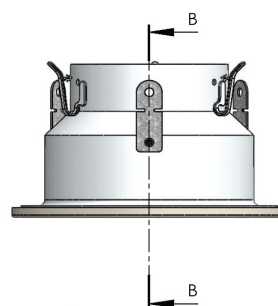
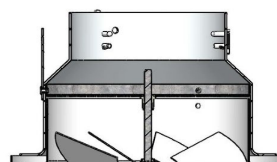
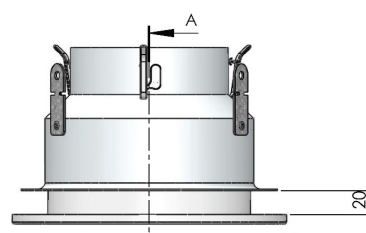
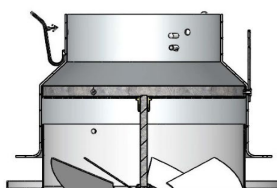
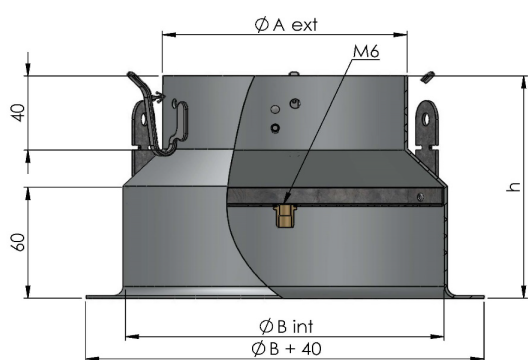
Installation with coupling
and flexible duct

Installation with coupling
butterfly damper
and flexible duct



Installation with branch
and steel duct

Connector PPKPY



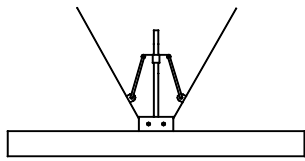
PPKPY	125	160	200	200/180	250	315	355	400
ØA	98	123	158	178	198	248	278	315
ØB	125	160	200	200	250	315	355	400
h	115	120	112,5	122,5	127,5	135	140	155



HIGH INDUCTION DIFFUSER WITH FIXED GEOMETRY ANGLED NEK

KPZ
SERIES

ACCESSORIES HOW TO ORDER



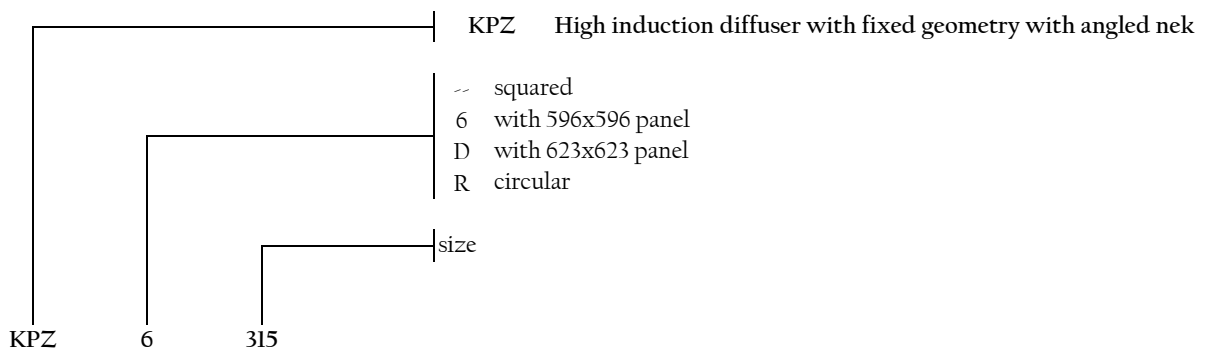
SF

Butterfly damper
available for all diameters
specify diameter at order stage
Installation on the diffuser: specify the diameter of the diffuser
Installation on the connector PPKPY: specify the size ØA of the connector



SB

Collection damper for KU5/6/9 diffusers
available for diameters 100 to 500 included
specify diameter at order stage





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.

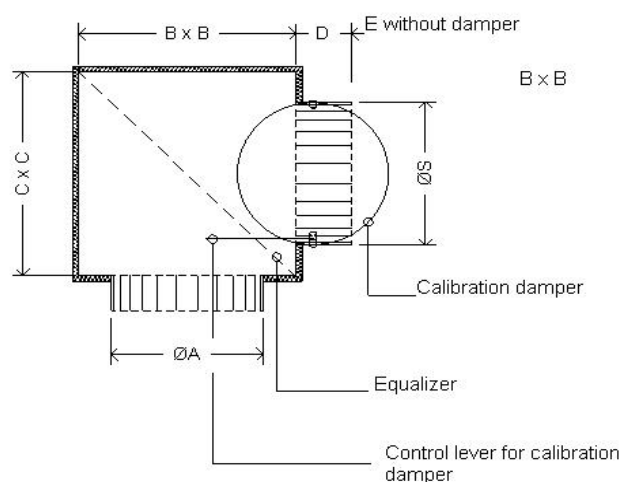
Insulation: expanded polyethylene certified for the reaction to fire according to european class B-s2 d0.

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



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

