

KOBE Mid-long throw linear jet nozzles

MADEL®

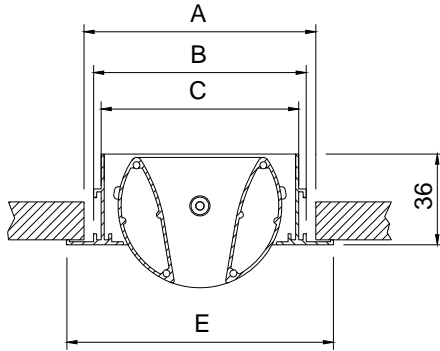
KOBE mid-long throw linear jet nozzles have been designed to combine aesthetics with technical performance. Its mounting is carried out both on the wall and on the ceiling.

With various slot sizes available and an adjustable supply angle of $\pm 30^\circ$, **KOBE** nozzles are suitable for all types of architectures.

KOBE jet nozzles are ideal for installation in large spaces such as shopping centers, airports, stations, sports halls, etc.

Due to their performance and linear aesthetics, along with airflow control, **KOBE** jet nozzles are also suitable for use in residential and commercial facilities.

KOBE nozzles work with a high induction rate that minimizes stratification in large spaces. They can operate with a temperature differential of up to 12°C and have optimum performance with both variable and constant air flow.



	A	B	C	E
15	93,5	84,5	78,5	106
20	93,5	84,5	78,5	106
25	93,5	84,5	78,5	106
30	93,5	84,5	78,5	106
40	107,5	98,5	92,5	120
50	118,5	109,5	103,5	131

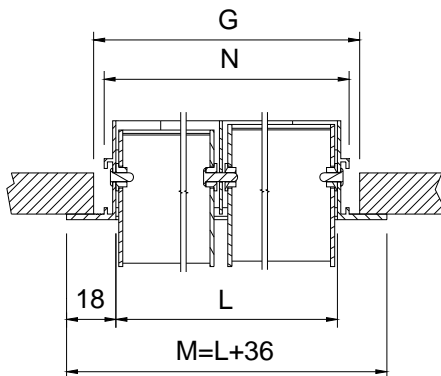
Classification

KOBE Mid-long throw linear jet nozzles.

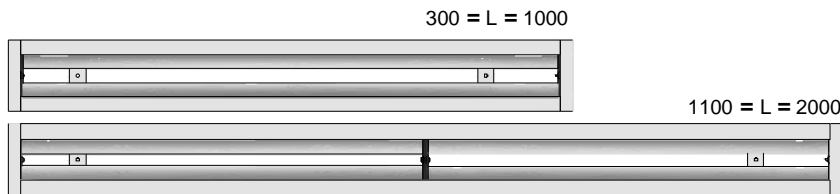
Material

Diffusers made of aluminum with steel shafts and fastening elements.

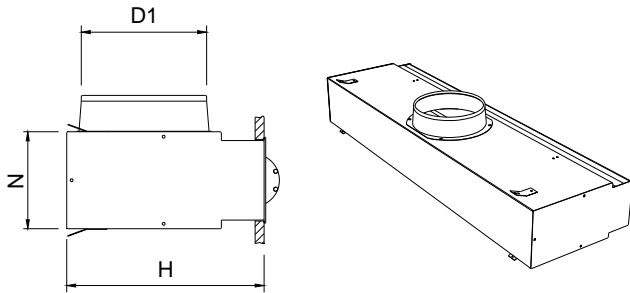
Length (L): From 300 to 2000mm
 Nozzle with a maximum length of 1000 mm. For longer lengths the diffuser incorporates two nozzles of equal size.



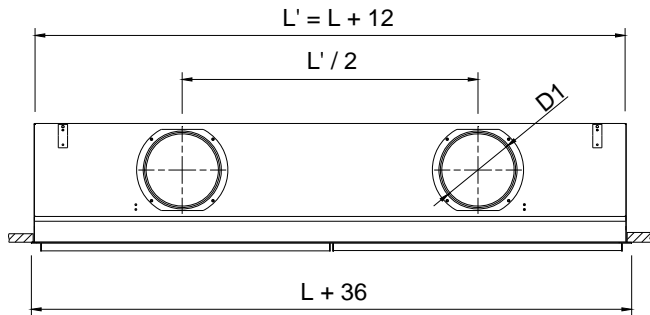
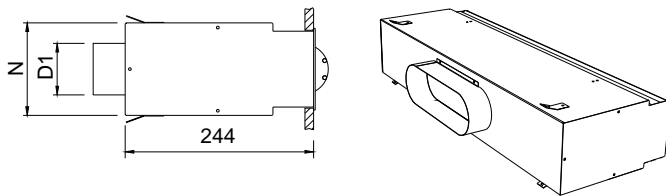
L	M	N	G
500	536	509	517
1000	1036	1009	1017
1500	1536	1509	1517
2000	2036	2009	2017



PLKB



PLKB /S/



Accessories

PLKB Plenum box with a lateral circular connection. It incorporates supports for wall and ceiling suspension. Made in galvanised steel.

.../S/ Plenum box with an upper elliptical connection for flexible duct.

...-R Plenum box with a flow damper in the spigot (available only for lateral connection)

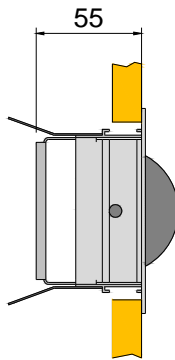
.../AIS/ Thermally insulated plenum box with foam. Density 30 kg / m³ ISO 845. Thermal conductivity 20° C_0,040 W / m°K ISO 3386/1.

Classified reaction to fire B-s2, d0 EN 13501-1.

PLKB | PLKB/S

	0,3 = L = 0,6			0,6 < L = 1			1 < L = 1,5			1,5 < L = 2		
	D1	H	N	D1	H	N	D1	H	N	D1	H	N
KOBE15	1 / 158	244	111	1 / 158	244	111	2 / 158	244	111	2 / 158	244	111
KOBE20	1 / 158	244	111	1 / 158	244	111	2 / 158	244	111	2 / 198	284*	111
KOBE25	1 / 158	244	111	1 / 198	284*	111	2 / 198	284*	111	2 / 198	284*	111
KOBE30	1 / 198	284*	111	1 / 198	284*	111	2 / 198	284*	111	2 / 198	284*	111
KOBE40	1 / 198	284*	125	1 / 198	284*	125	2 / 198	284*	125	2 / 248	334*	125
KOBE50	1 / 198	284*	135	1 / 198	284*	135	2 / 248	334*	135	2 / 248	334*	135

(D)



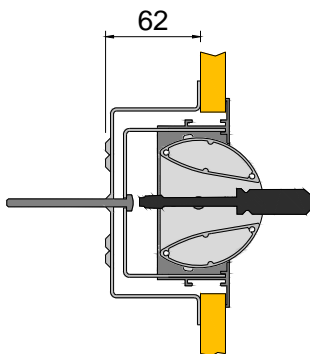
Fixing Systems

(D) Nozzle with brackets for ceiling or wall mounting by threaded rod or wire.

(PM) Set of crossbars for ceiling or wall installation of the nozzle. The nozzle is screwed onto the crossbars.

(PL) Plenum box with circular connection for installation of the nozzle on the ceiling or on the wall. The nozzle is screwed onto the plenum rails.

(PM)



Finishes

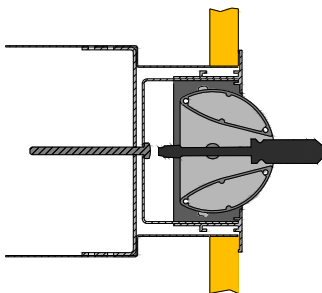
M9016 Painted in white similar to RAL 9016.

R9010 Painted in white RAL 9010.

R9005M Painted in black RAL 9005 matt.

RAL... Painted in other RAL colours.

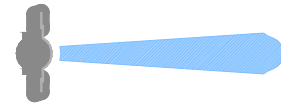
(PL)



Specification text

Supply and mounting of medium-long throw adjustable linear nozzle **KOBE+PLKB-R M9016 20x2000** made of aluminum and white lacquered finish **M9016** or another to be defined by the D.F. With lateral circular connection plenum with flow regulator in the neck **PLKB-R** and elements necessary for assembly. Brand **MADEL**.

KOBE SERIES



RECOMMENDED VELOCITY.

	Vfmin m/s	Vfmax m/s
15	2,5	14
20	2,5	14
25	2,5	12
30	2,5	12

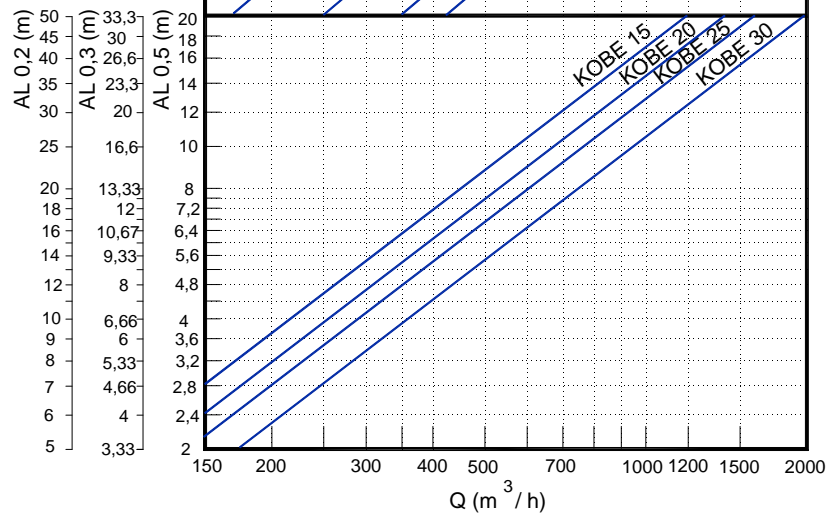
FREE FACE AREA (m2).

L x H	Afree (m2)	Qmin (m3/h)	Qmax (m3/h)
15	0,0145	130	730
20	0,0194	175	977
25	0,0242	220	1045
30	0,0291	260	1250

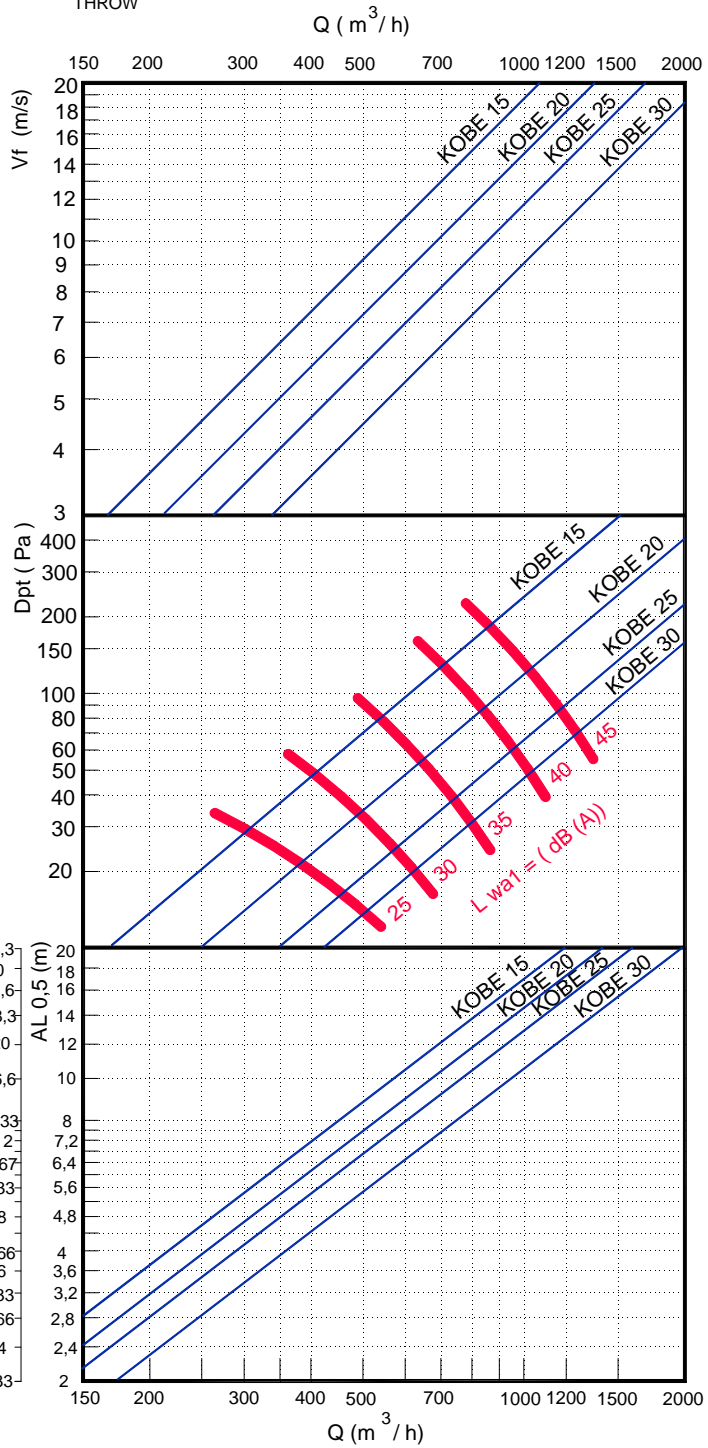
L=1000mm

	Coanda efect
K_I	1,33

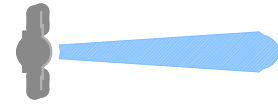
$$AL' = K_I \times AL$$



FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL, THROW



KOBE SERIES



RECOMMENDED VELOCITY.

	Vfmin m/s	Vfmax m/s
40	2,5	10
50	2,5	10

FREE FACE AREA (m2).

L x H	Afree (m2)	Qmin (m3/h)	Qmax (m3/h)
40	0,0388	350	1400
50	0,0485	440	1750

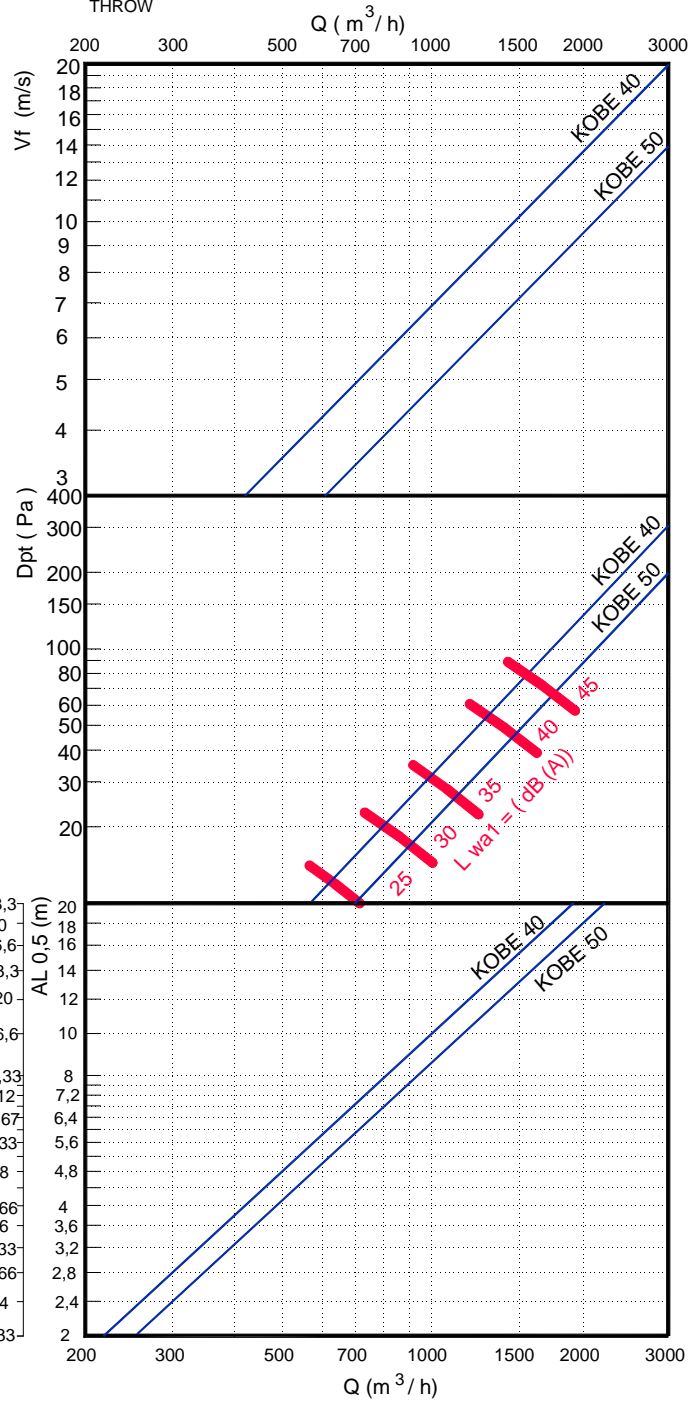
L=1000mm

	Coanda efect
K_j	1,33

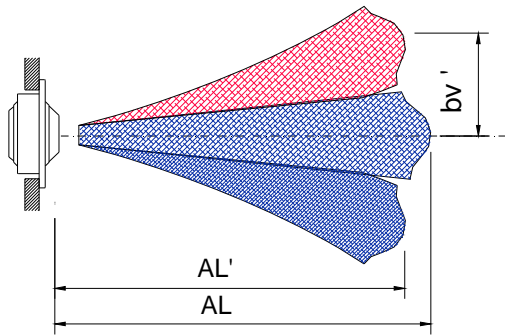
$AL' = K_j \times AL$

AL 0,2 (m)	AL 0,3 (m)	AL 0,5 (m)
50	33,3	20
45	30	18
40	26,6	16
35	23,3	14
30	20	12
25	16,6	10
20	13,3	8
18	12	7,2
16	10,67	6,4
14	9,33	5,6
12	8	4,8
10	6,66	4
9	6	3,6
8	5,33	3,2
7	4,66	2,8
6	4	2,4
5	3,33	2

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL, THROW

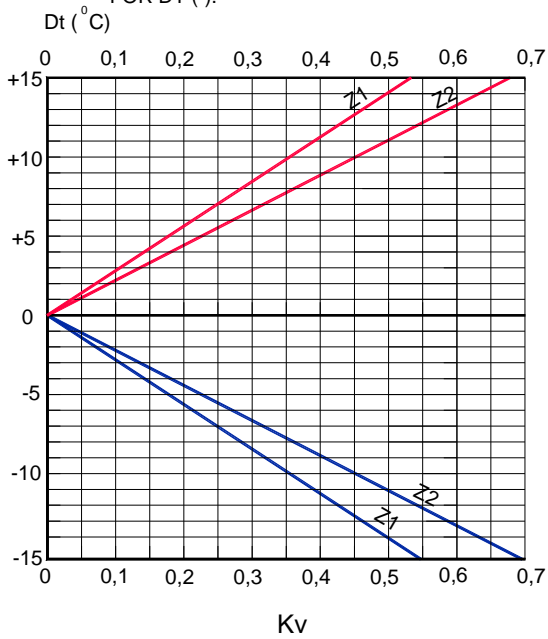


KOBE SERIES



Z1	Z2
KOBE 15	KOBE 40
KOBE 20	KOBE 50
KOBE 25	
KOBE 30	

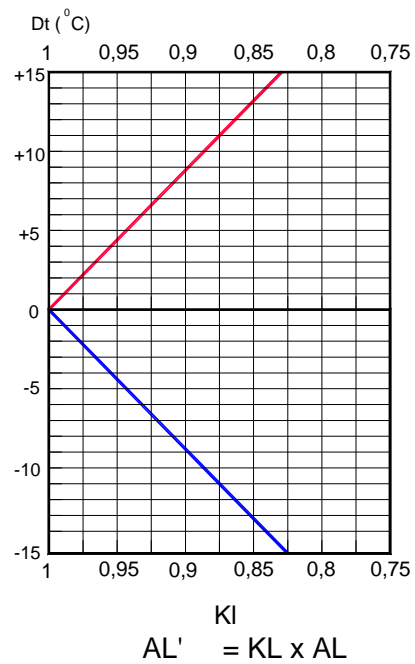
CORRECTION FACTOR FOR VERTICAL DIFFUSION (bv) FOR DT (-).



$$bv' = Kv \times AL$$

Kv = Correction factor for the vertical diffusion.

CORRECTION FACTOR FOR THROW (L0.2) DT (-).



$$AL' = KI \times AL$$

KI = Correction factor for the throw.

KOBE SERIES



RECOMMENDED VELOCITY.

	Vfmin m/s	Vfmax m/s
15	2,5	9,5
20	2,5	8,5
25	2,5	8
30	2,5	8

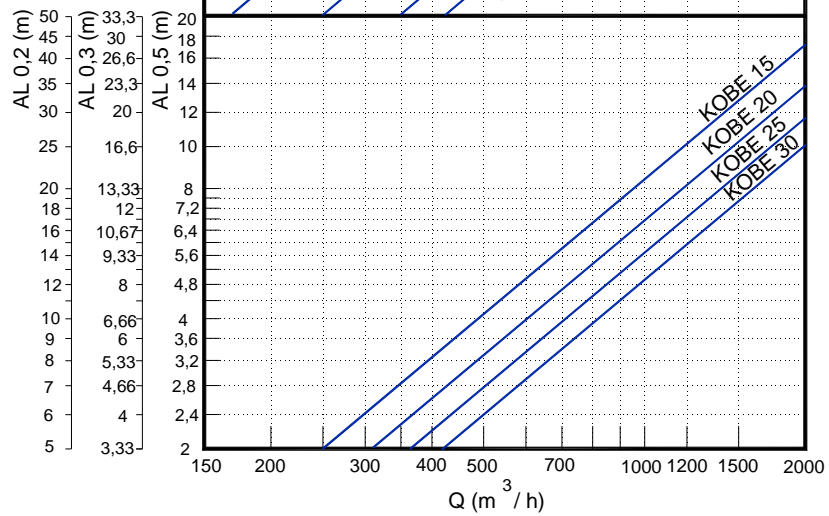
FREE FACE AREA (m2).

L x H	Afree (m2)	Qmin (m3/h)	Qmax (m3/h)
15	0,0145	130	500
20	0,0194	175	600
25	0,0242	220	700
30	0,0291	260	840

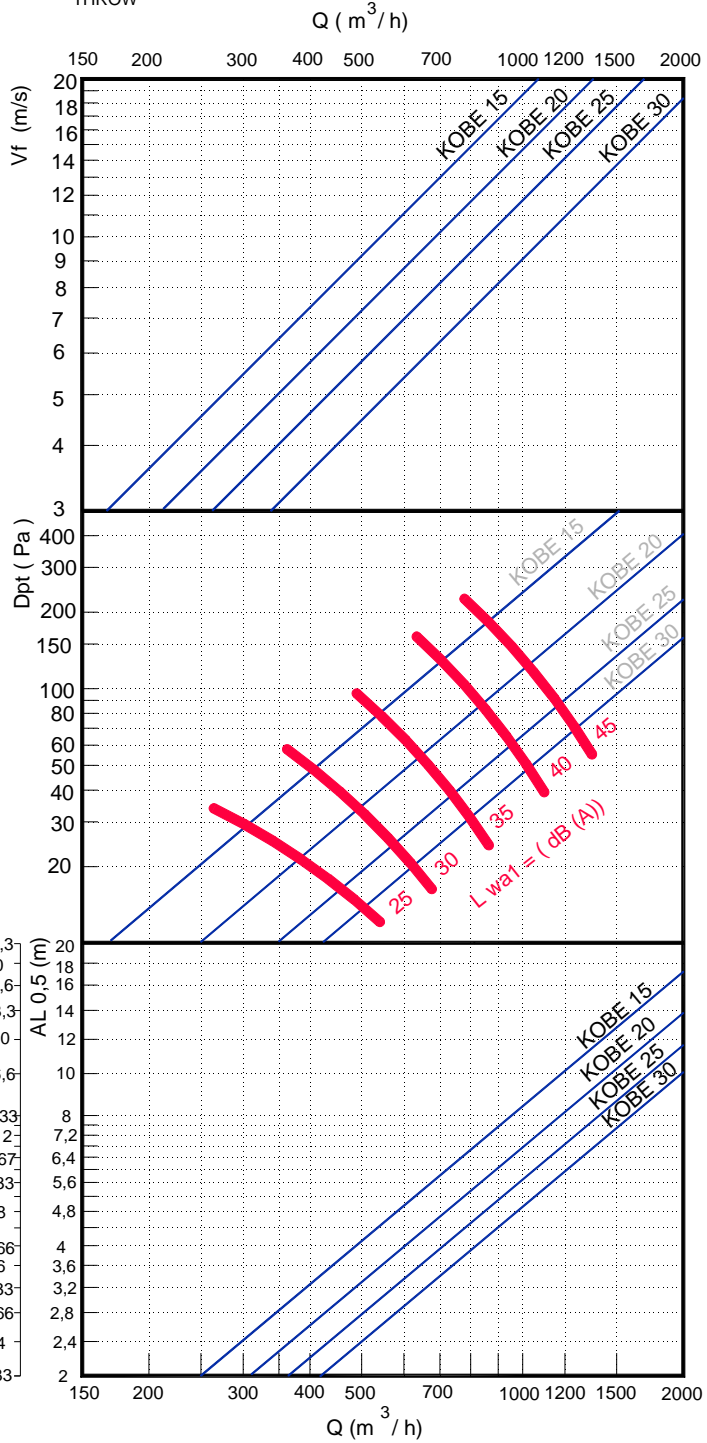
L=1000mm

	Coanda efect
K_I	1,33

$AL' = K_I \times AL$



FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL, THROW



KOBE SERIES



RECOMMENDED VELOCITY.

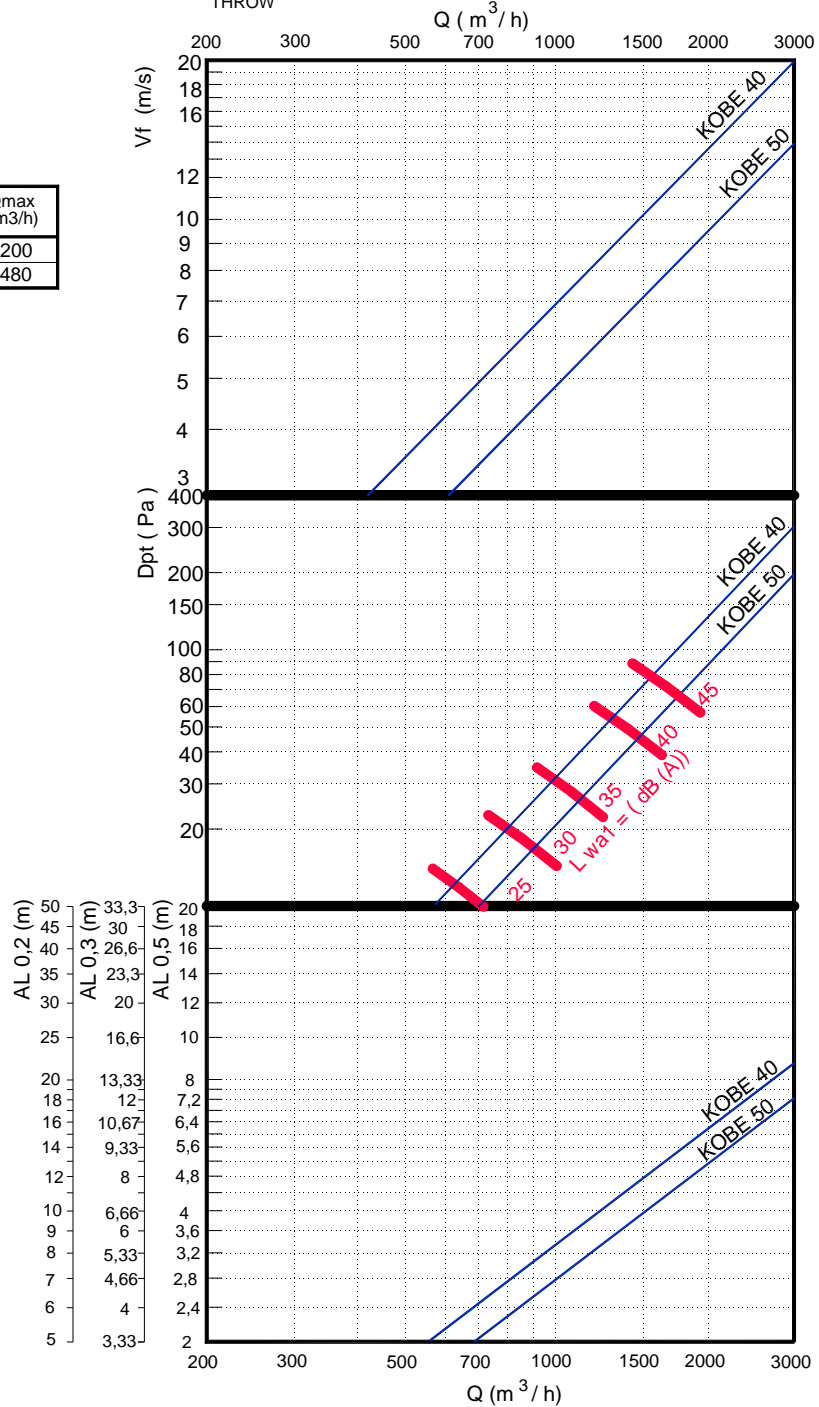
	Vfmin m/s	Vfmax m/s
40	2,5	8,5
50	2,5	8,5

FREE FACE AREA (m2).

L x H	Afree (m2)	Qmin (m3/h)	Qmax (m3/h)
40	0,0388	350	1200
50	0,0485	440	1480

L=1000mm

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL, THROW



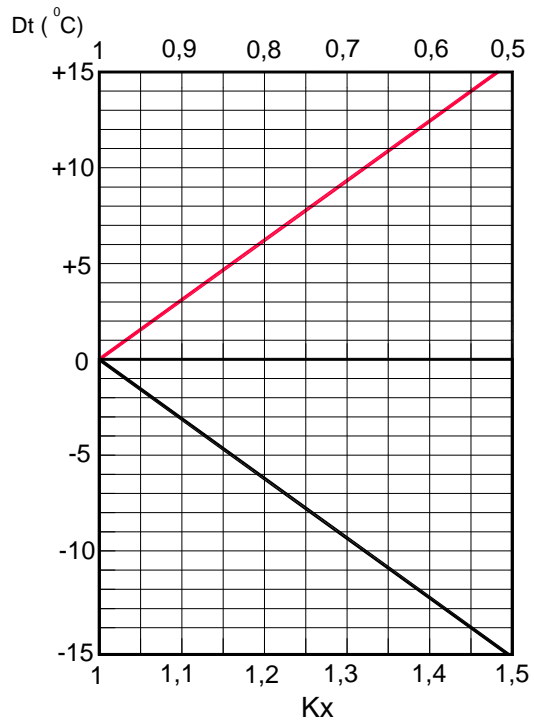
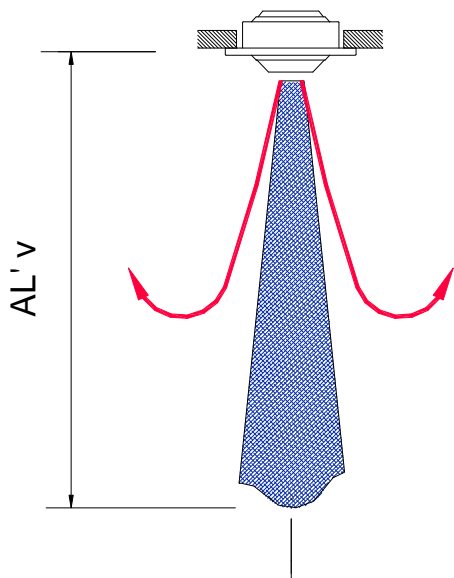
	Coanda efect
K_I	1,33

$AL' = K_I \times AL$

KOBE SERIES



CORRECTION FACTOR FOR VERTICAL THROW (ALv) DT



$$AL'v = Kx \times AL$$