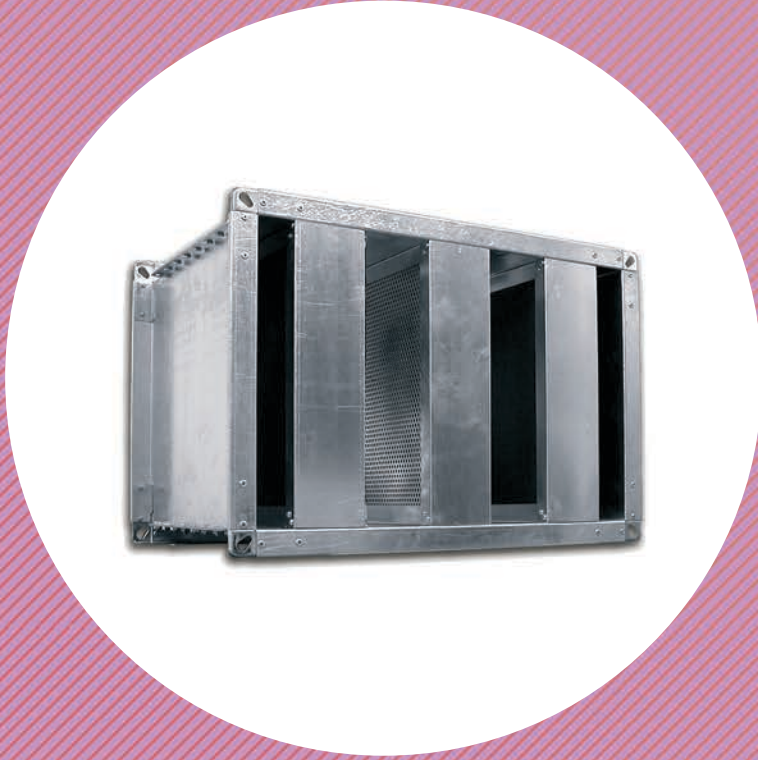


GAA



SUSTURUCU

SOUND ATTENUATOR

KESKLİMA

Tanım

GAA tipi susturucular merkezi klima sistemlerinde ve endüstriyel tesislerde kullanılmak üzere istenen ses yutumunu sağlamak için tasarlanmıştır.

Özellikler

Bu tip susturucularda kaset eni standard olarak 100, 200, 230 veya 300 mm'dir. Tek bir susturucu ünitesi maksimum; 2 m eninde, 2 m yüksekliğinde ve 2 m uzunluğunda olup, bu ölçüleri geçen susturucular parçalı olarak üretilmektedir. GAA tipi susturucular kendinden flanşlıdır ve kanal üzerindeki 20 veya 30 mm'lik flanşlar ile uyumludur. Susturucu kasetlerinde kullanılan ses yutum malzemesi çürümeye ve neme dayanıklı A2 sınıfı yanmaz mineralli yündür. Koruma amacıyla üzerine düz veya perfore sac ile kaplama yapılabilir.

Malzemeler

Susturucu kasası ve kasetleri TS 822 standardına uygun galvanizli sac plakadan şekillendirilmektedir. Köşe parçaları DKP edilmiş sac plakadan üretilip galvaniz kaplama yapılmaktadır. Kasetlerin içi DIN 4102 standardına göre A2 sınıfındaki yanmaz, çürüme ve neme karşı dayanıklı ses yutucu mineralli yün malzeme ile doldurulmaktadır.

Description

The GAA type attenuators are designed for sound attenuation in HVAC systems.

Properties

These attenuators have 100, 200, 230 or 300 mm wide splitters. A single unit can have maximum dimensions of 2 m width, 2 m height and 2 m length. Larger dimensions are produced in divided parts.

The attenuators are self-flanged and are compatible with 20 - 30 mm standard duct flanges. The splitters have glass fiber fabric layer, which is rot-proof and moisture repellent; over the glasswool fillings.

The materials are totally non-flammable. The glass fiber fabric layer also resists abrasion up to 20 m/s velocities.

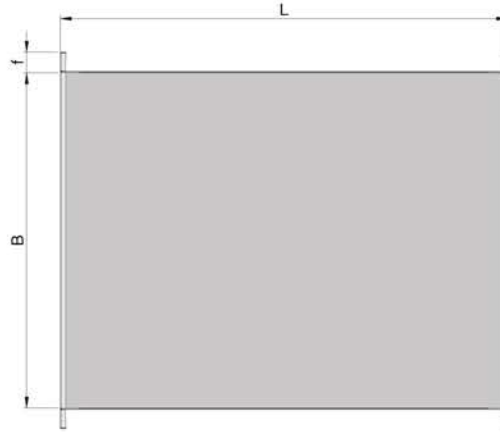
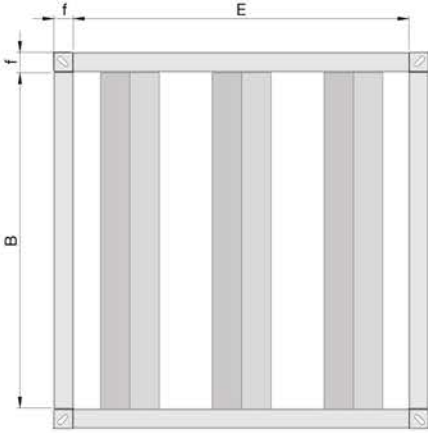
To increase the attenuation at higher frequencies, the surfaces of the splitters can be covered with 0.5 mm thick, plain galvanized steel sheets. On request, the glasswool fabric can be protected with an additional perforated steel sheet.

Materials

The main casing and the splitter casings is manufactured from galvanized TS 822 norm steel sheets.

The splitters are filled with glasswool, conforming with DIN 4102 Class A2.

Ölçülendirme - Dimensions:



M	Kaset Eni(mm) 100, 200, 230 veya 300 mm
k	Kaset Sayısı
n	Kasetler Arasındaki Boşluk
L	Susturucunun veya Kasetin Uzunluğu, (mm)
B	Susturucunun veya Kasetin Yüksekliği, (mm)
E	Susturucu Eni ($E=k \times [m + n]$) (mm)

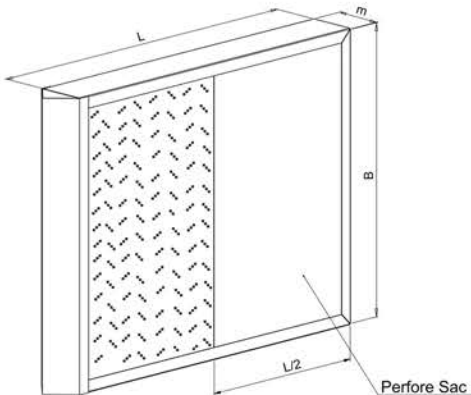
M	Splitter width(mm) 100, 200, 230 or 300 mm
k	Number of splitters
n	Space between splitters
L	Length of the attenuator, (mm)
B	Height of the attenuator, (mm)
E	Width of the attenuator ($E=k \times [m + n]$) (mm)

Kasetler - Splitters

Perforeli / Düz Saçlı - With Perforated / Plain Sheets

Bu tip Kasetlerde, hava ile temas eden yüzeyler cam tülü ile kaplıdır.

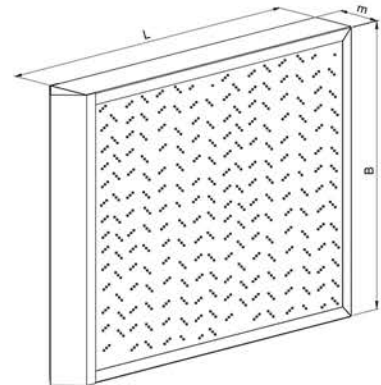
One half of the surface that is in contact with the passing air, is covered with perforated or plain sheet.



Perforesiz / Sacsız - Without perforated / Plain sheets

Bu tip kasetlerde, hava ile temas eden yüzeylerin yarısı perfore veya düz saç, diğer yarısı cam tülü ile kaplıdır. Perfore kapamalar yüzeylerde birbirine göre şaşırtmalı olarak monte edilir.

All the surface that are in contact with the passing air are covered with glass fiber fabric.



Seçim - Selection

Susturucu boyutlarının ve ses yutumu için aşağıdaki bilgilerin tarafımıza bildirilmesi gerekmektedir:

- Susturucu için izin verilen maksimum boyutlar
- İklimlendirme veya havalandırma ünitesinin ürettiği ses seviyesi
- İstenen ses yutumu
- Kanaldaki debi
- İzin verilen basınç kaybı

Please contact with us, with the information:

- Maximum permissible dimensions
- Sound level produced by nearby equipments
- Required attenuators
- Air flow rate
- Permissible pressure drop across the attenuator

Ses Yutum Değerleri

Bu sayfalarda verilen değerler, çabuk seçim için fikir vermek amacı ile hazırlanmış olup, doğru seçim ilgili yazılım kullanılarak yapılmalıdır.

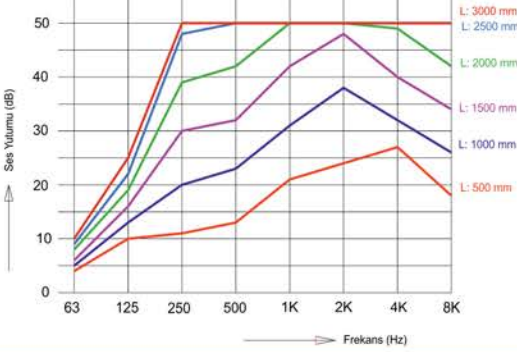
*Kapama Saçlı Tip (GAA...AS)
Kaset Eni: 100 mm*

Sound Absorption Values

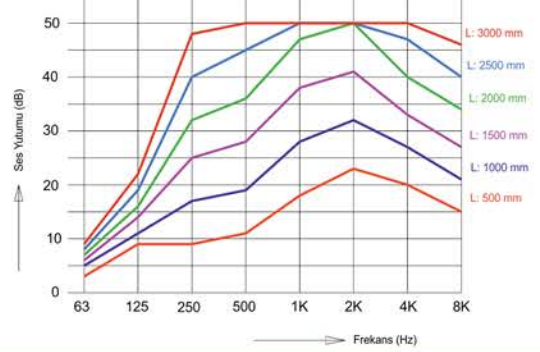
The values given on these pages have been prepared with the aim of giving an idea for quick selection, and the correct selection must be made using the relevant software.

With pertorated plain sheet type (GAA...AS) Splitter width: 100 mm

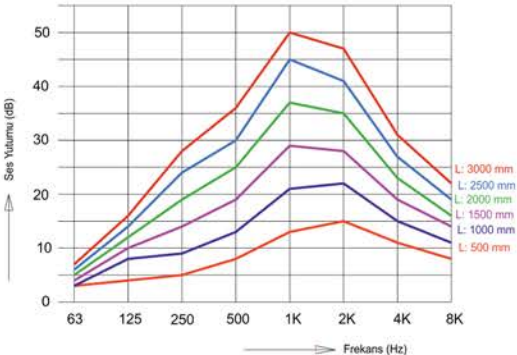
Kasetler arası boşluk n= 40 mm



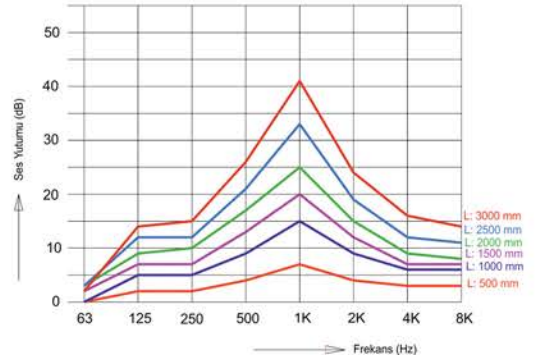
Kasetler arası boşluk n= 60 mm



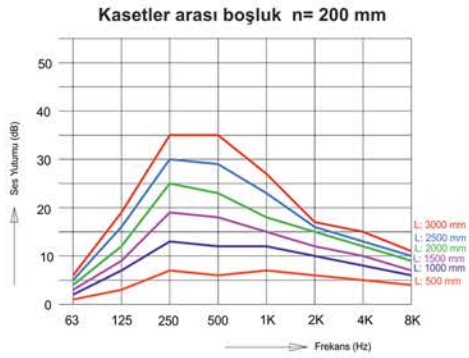
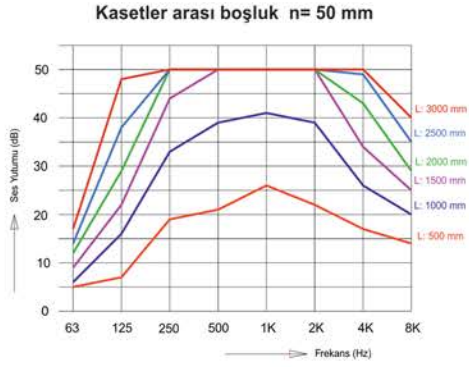
Kasetler arası boşluk n= 100 mm



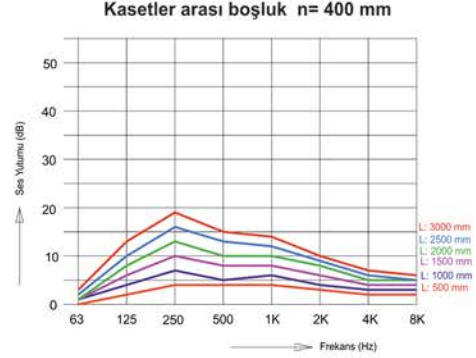
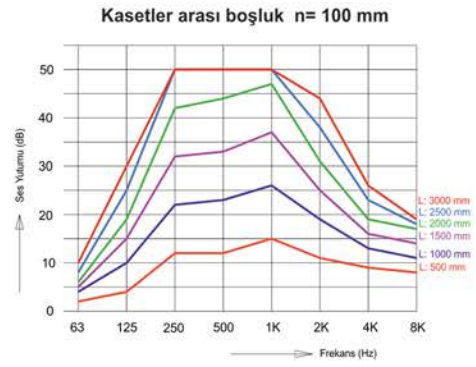
Kasetler arası boşluk n= 200 mm



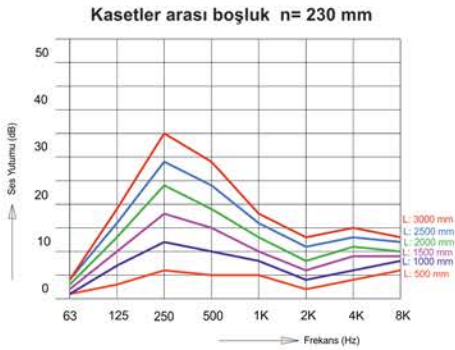
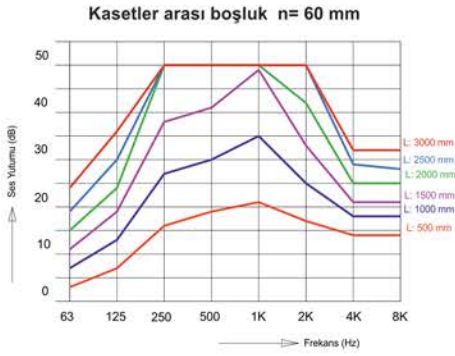
Kapama Saclı Tip (GAA...AS)
Kaset Eni: 200 mm



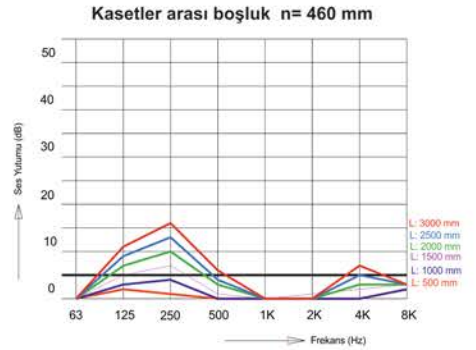
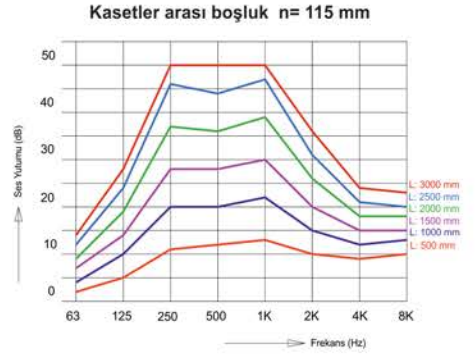
With pertorated plain sheet type (GAA...AS) Splitter width: 200 mm



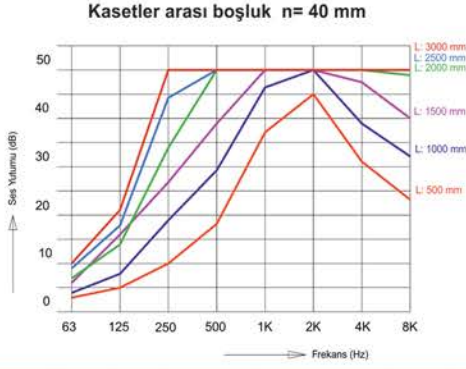
Kapama Saclı Tip (GAA...AS)
Kaset Eni: 230 mm



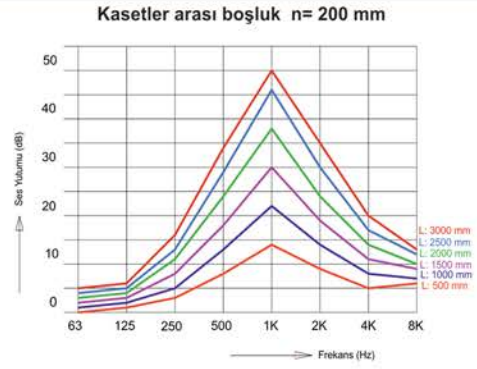
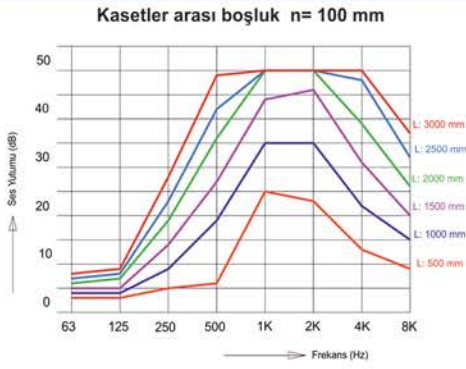
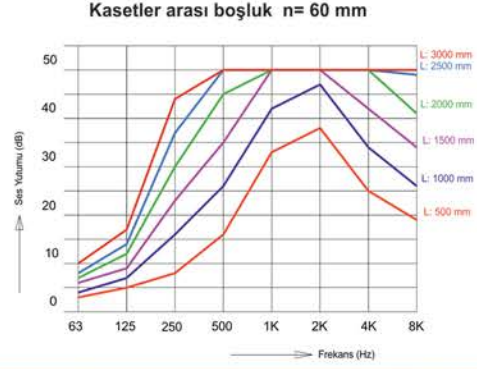
With pertorated plain sheet type (GAA...AS) Splitter width: 230 mm



Kapama Sacsız Tip (GAA...AA)
Kaset Eni: 100 mm

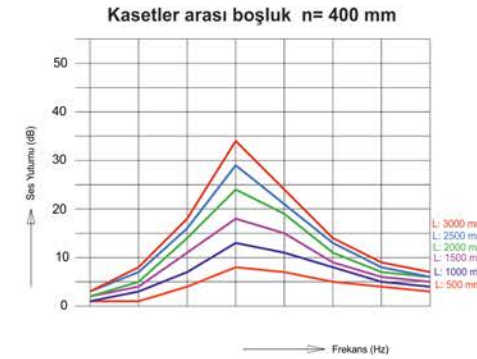
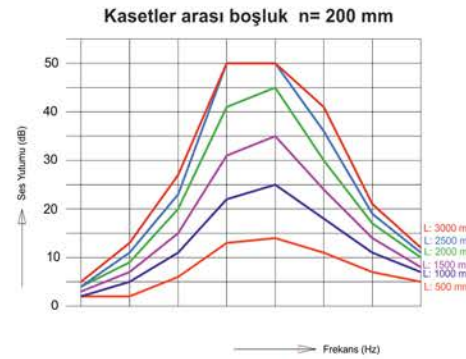
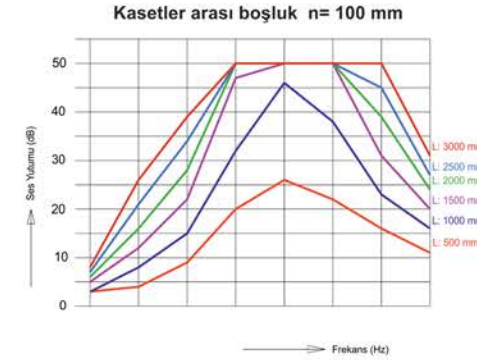
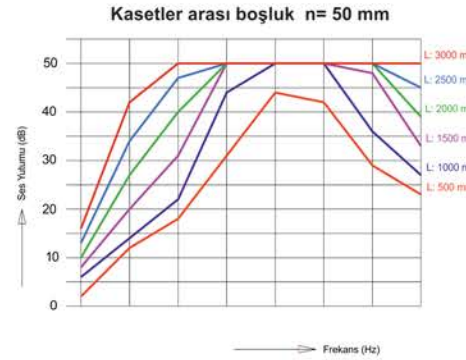


Without pertorated plain sheet type (GAA...AA) Splitter width: 100 mm



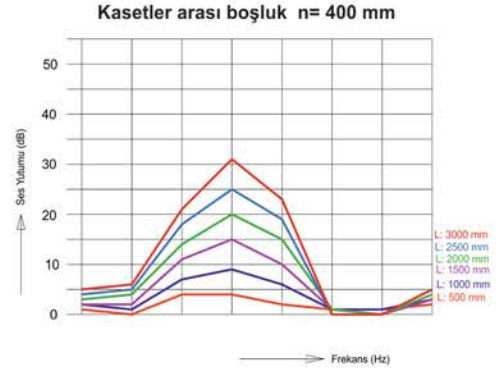
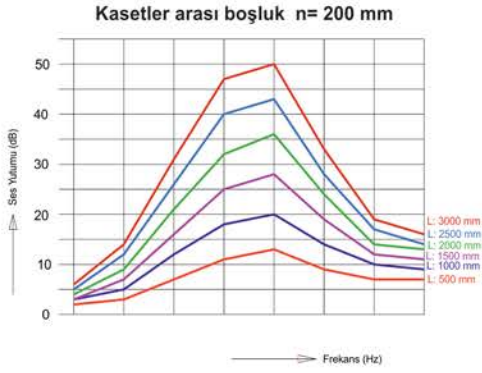
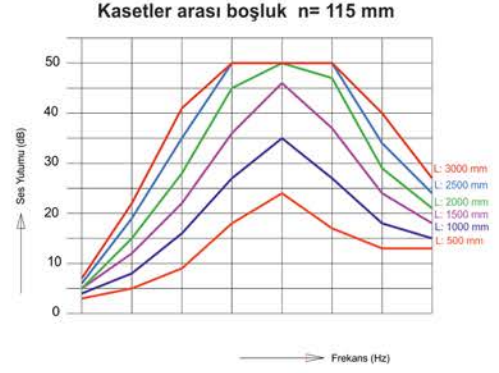
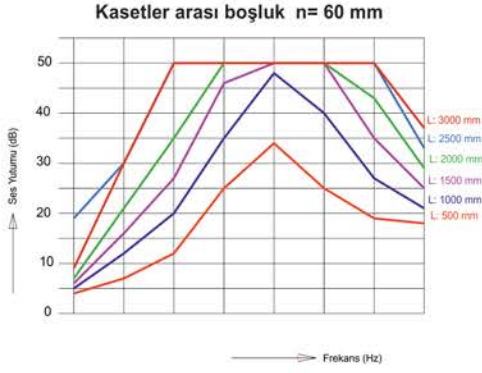
Kapama Sacsız Tip (GAA...AA)
Kaset Eni: 200 mm

Without pertorated plain sheet type (GAA...AA) Splitter width: 200 mm



Kapama Sacsız Tip (GAA...AA)
Kaset Eni: 230 mm

Without pertorated plain sheet type
(GAA...AA) Splitter width: 230 mm



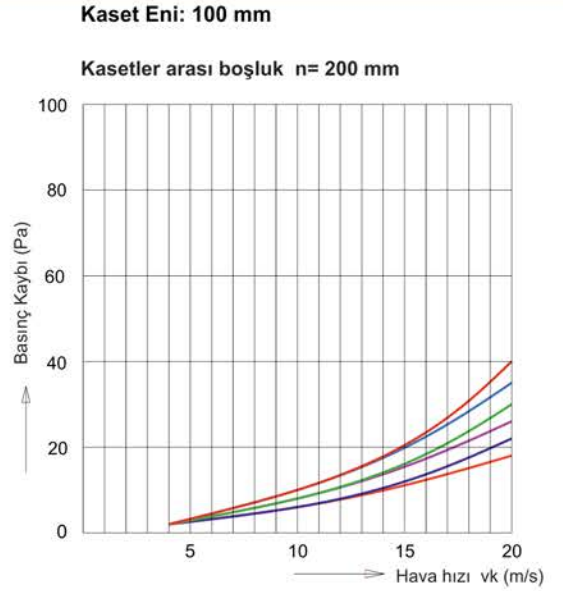
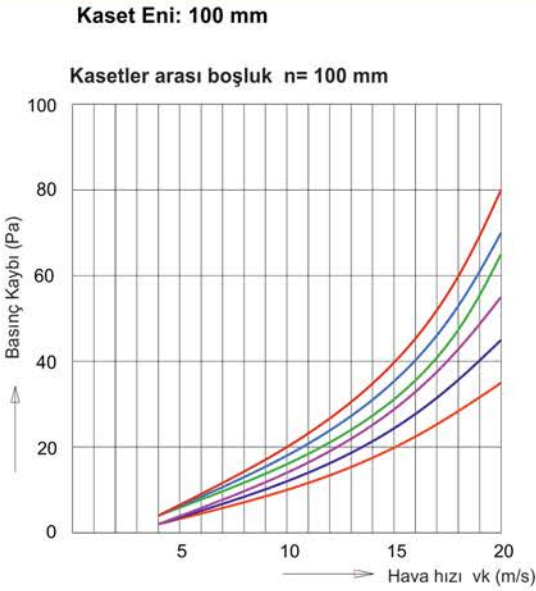
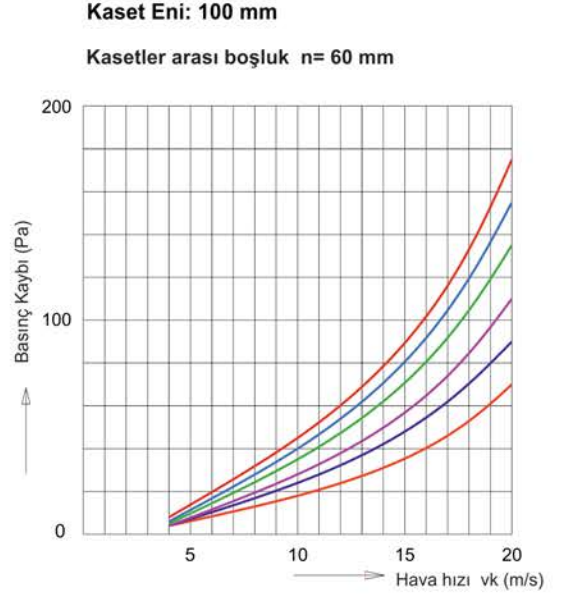
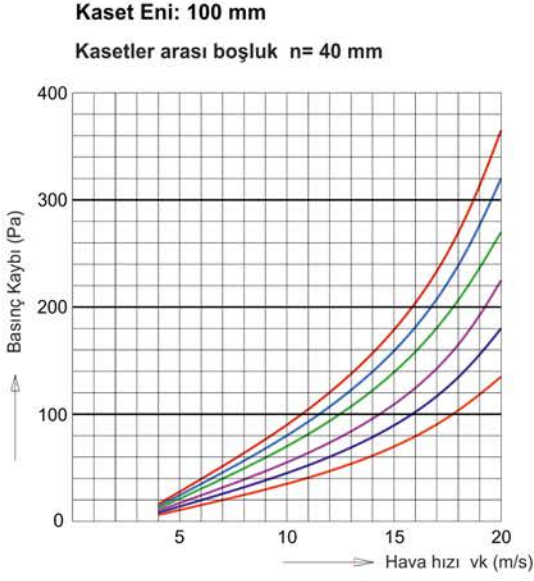
Ses Üretim Değerleri - Sound Generation Values

m/s	4	6	8	10	12	14	16	18	20
dB(A)	21	31	38	43	47	51	54	57	60

Vk: Kaset Ara Boşluklarındaki Hava Hızı –
Vk: Air Velocity On Space Between Splitters

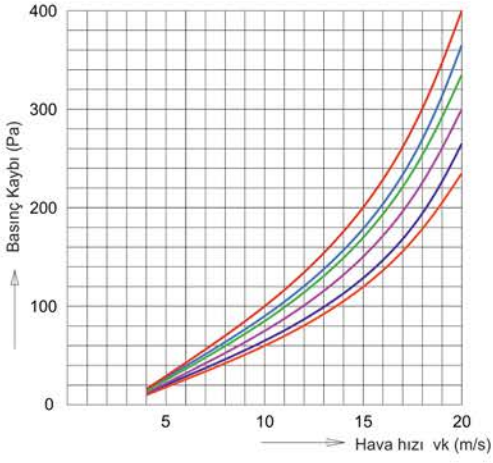
Vk: Debi – Flow Rate
 $(m^3/h) / 3600/B/[(E/1000)-(k*m/1000)]$

Basınç Kaybı - Pressure Loss



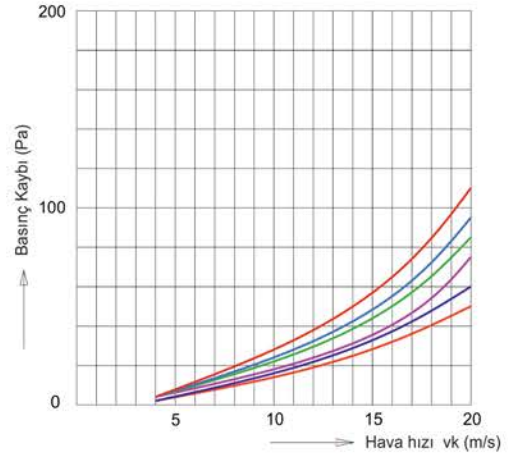
Kaset Eni: 200 mm

Kasetler arası boşluk n=50 mm



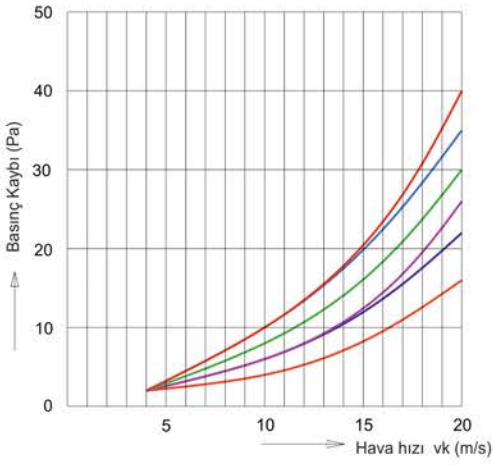
Kaset Eni: 200 mm

Kasetler arası boşluk n= 100 mm



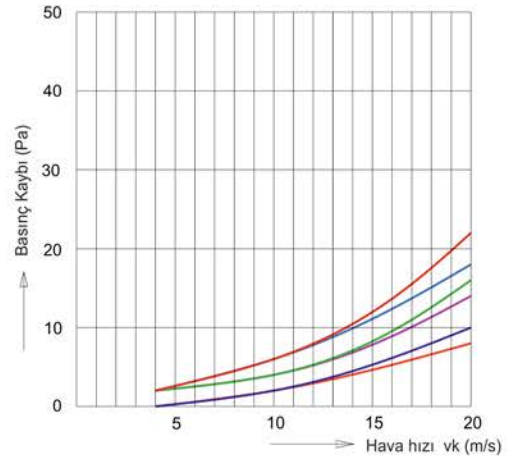
Kaset Eni: 200 mm

Kasetler arası boşluk n=200 mm



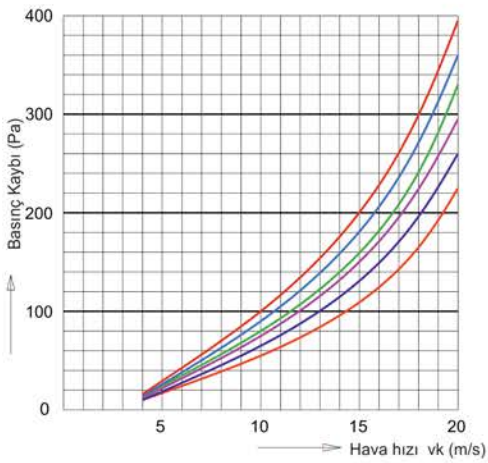
Kaset Eni: 200 mm

Kasetler arası boşluk n= 400 mm



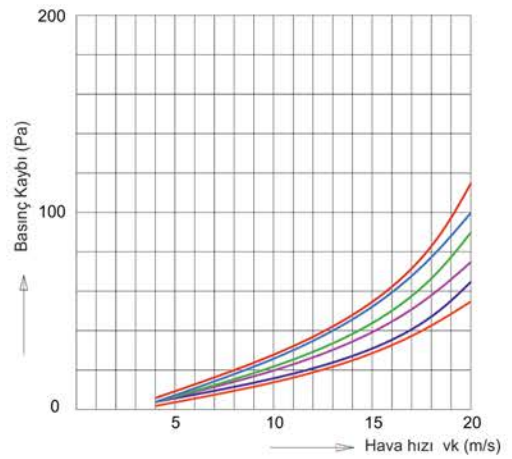
Kaset Eni: 230 mm

Kasetler arası boşluk n= 60 mm



Kaset Eni: 230 mm

Kasetler arası boşluk n= 115 mm



Teknik Şartname

Susturucu, istenilen ses yutumunu gerçekleştirecek şekilde tasarlanmış olacaktır. Kasası ve kasetleri TS 822 standardına uygun galvanizli sacdan imal edilecektir. Kendinden flanşlı, kanal flanşlarına kolaylıkla monte etmeyi sağlayan köşe parçaları kendi üzerinde olacaktır.

Kasetlerin hava çarpan alın yüzeyleri, aerodinamik direnci azaltmak için hava akışını kolaylaştıracak kesit profilinde yapılacaktır.

Kasetlerin içi neme, çürümeye ve DIN 4102 standardı A2 sınıfına göre yanmaya dayanıklı ses yutma özelliğine uygun olarak mineralli yün ile doldurulmuş olacaktır.

Specification Text

Splitter type sound attenuator for HVAC applications. The attenuator casing and the splitter casings is manufactured from galvanized TS 822 norm steel sheets. The splitters will be filled with glasswool and covered with glasswool fabric, conforming with DIN 4102 Class A2. If necessary, the splitter surfaces will be covered with plain galvanized steel sheets, to increase the attenuation at high frequencies. The attenuator will be self-flanged on its casing. The leading edge of the splitters will be made with an aerodynamic sectional profile to reduce the flow resistance.

On request, the glasswool fabric can be protected with an additional perforated steel sheet.

Sipariş Kodlaması - Order Code

Model - Model	GAA . 10 . AA . 10 - ExBxL (n-k)	ØE (mm) 2.Sayfaya Bknz. Refer to page 2.
Kaset Eni - Splitter Width	10100 mm 20200 mm 30230 mm	
Kapama Saçı - Covering Sheet	AAKapama Saclsız - Without Covering Sheet APPerfore Kapama Sacli - With Perforated Sheet ASDüz Kapama Sacli - With Plain Sheet	
Flanş - Flange	00Flanşsız - Without Flange 10Flanşlı - With Flange	Standart Ölçüler Standard Dimensions