



HIGH INDUCTION DIFFUSERS FOR CIRCULAR DUCTS

KO
SERIES

INSTALLATION

TECHNICAL DATA

KO series diffusers for round ducts are an absolutely innovative solution. This diffuser permits to adapt the round shape of the air terminal diffuser to the round duct where the diffuser will be mounted.

It's important to receive the correct values of the duct diameter during the order processing phase. It will be in charge to our production plant to make the diffuser with the same curving of duct (see before page for diameter limits).

KO series diffusers have an exceptional versatility. Indeed, it is possible to orient the air flow on frontal side without modification on free area, pressure drop and acoustic level, for any position of deflecting blades.

MATERIALS

Diffuser in galvanised sheet steel, deflectors in abs, gate in galvanized sheet steel.

FINISH

Diffuser painted white in epoxy powder finish RAL 9010 and deflectors in black colour RAL 9005.

MOUNTING

The diffuser has to be fixed with threaded screws on sight directly in the channel.

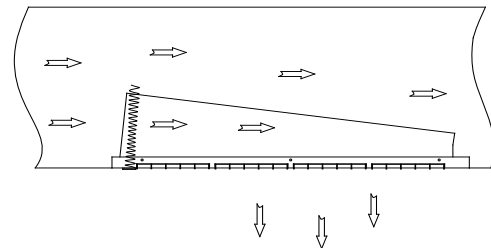
REGULATION

The deflectors can be adjusted manually.

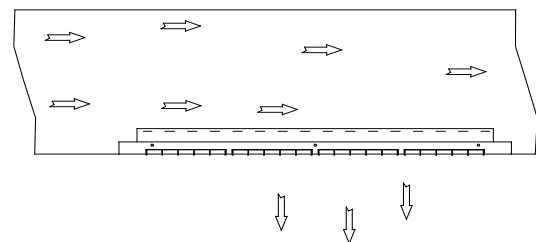
UNSUITABLE ENVIRONMENTS

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.

FITTING WITH COLLECTING DAMPER



FITTING WITH SLIDING DAMPER





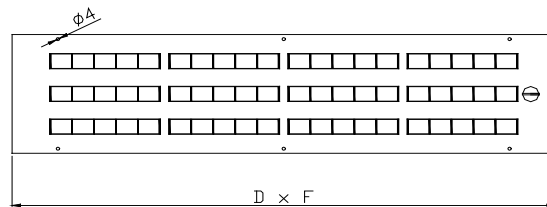
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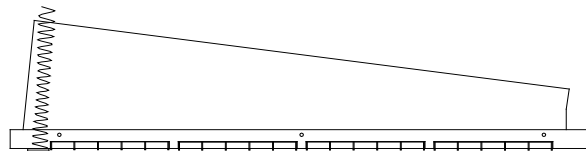
KO

Diffuser with adjustable deflectors - dimensions from mm. 425 x 65 to mm. 1025 x 315.



KO + SB

Diffuser with adjustable deflectors and with collecting gate.



KO + SG

Diffuser with adjustable deflectors and with slide gate.



KOI = Diffuser with horizontal deflectors

SB = Collecting gate

SG = Slide gate

425x65 = Nominal dimension of the hole in mm

Ø 300 = Diameter of the duct in mm

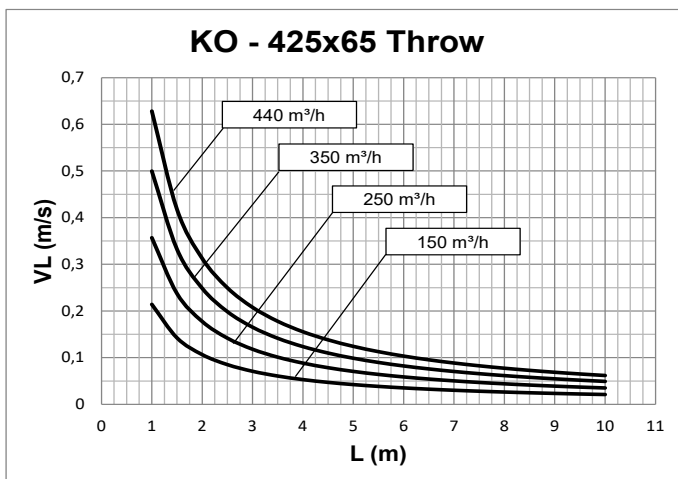
| Nominal dimension of the hole | Ak | D | F | G | Duct diameter | |
|----------------------------------|--------|------|-----|----|---------------|---------|
| | | | | | Minimum | Maximum |
| 425 x 65 | 0,0054 | 450 | 100 | 55 | 140 | 400 |
| 525 x 65 | 0,0061 | 550 | 100 | 55 | 140 | 400 |
| 425 x 115 | 0,0163 | 450 | 164 | 55 | 300 | 900 |
| 525 x 115 | 0,0185 | 550 | 164 | 55 | 300 | 900 |
| 625 x 115 | 0,0231 | 650 | 164 | 55 | 300 | 900 |
| 825 x 115 | 0,0320 | 850 | 164 | 55 | 300 | 900 |
| 1025 x 115 | 0,0397 | 1050 | 164 | 55 | 300 | 900 |
| 425 x 215 | 0,0211 | 450 | 264 | 55 | 600 | 2400 |
| 525 x 215 | 0,0304 | 550 | 264 | 55 | 600 | 2400 |
| 625 x 215 | 0,0379 | 650 | 264 | 55 | 600 | 2400 |
| 825 x 215 | 0,0526 | 850 | 264 | 55 | 600 | 2400 |
| 1025 x 215 | 0,0654 | 1050 | 264 | 55 | 600 | 2400 |
| 525 x 315 | 0,0481 | 550 | 364 | 55 | 1000 | 2400 |
| 625 x 315 | 0,0600 | 650 | 364 | 55 | 1000 | 2400 |
| 825 x 315 | 0,0831 | 850 | 364 | 55 | 1000 | 2400 |
| 1025x315 | 0,1033 | 1050 | 364 | 55 | 1000 | 2400 |



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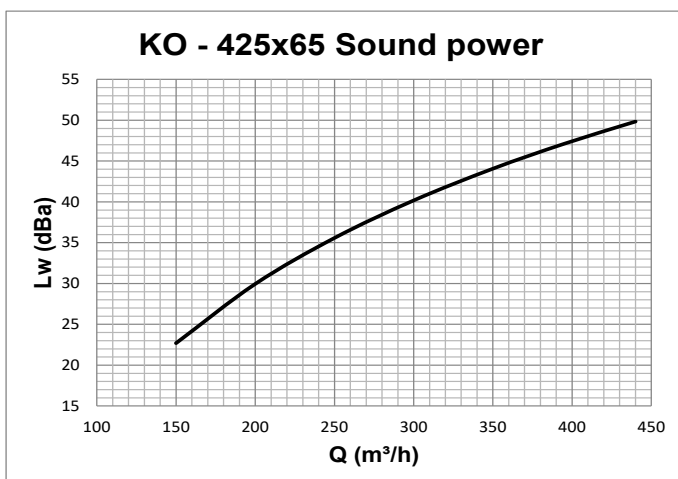
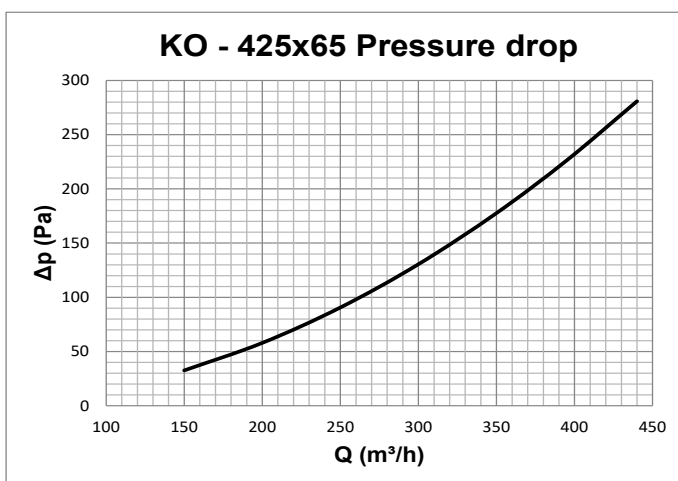
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425x65
PERFORMANCE



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

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



Data measured in reverberation room in accordance with international standards:
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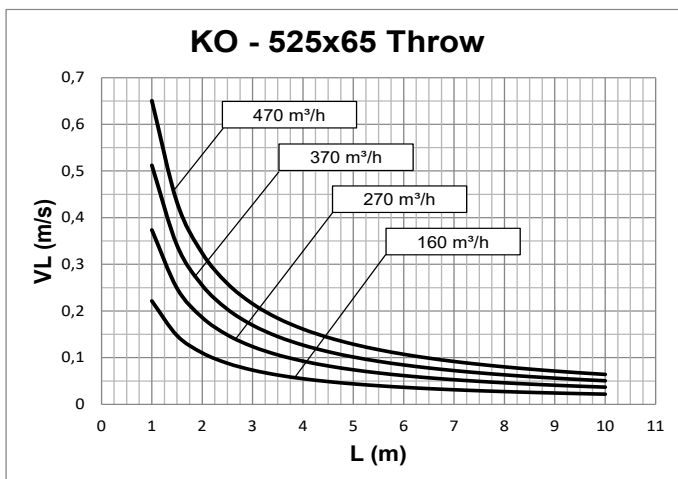
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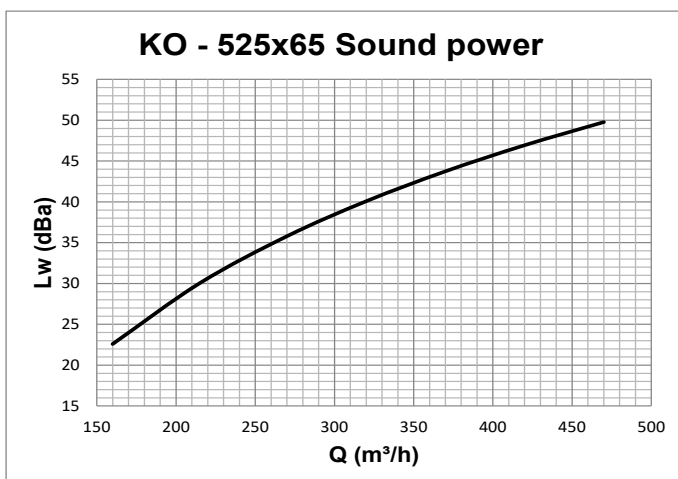
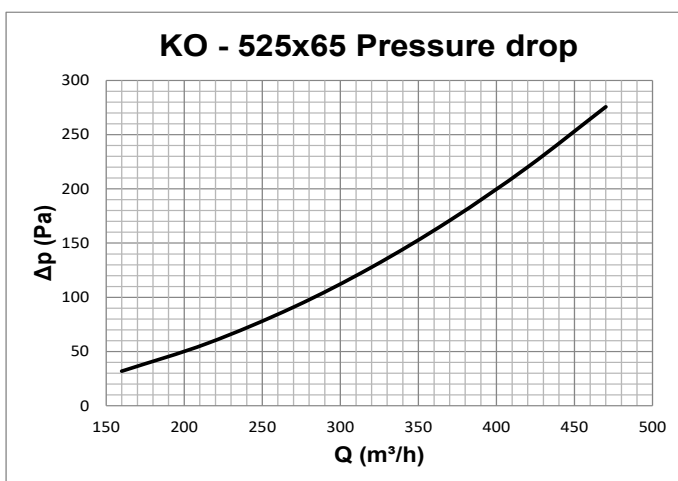
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525x65
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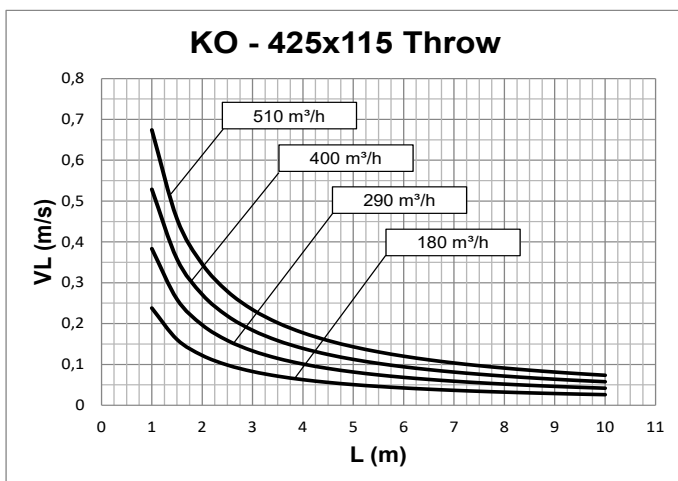
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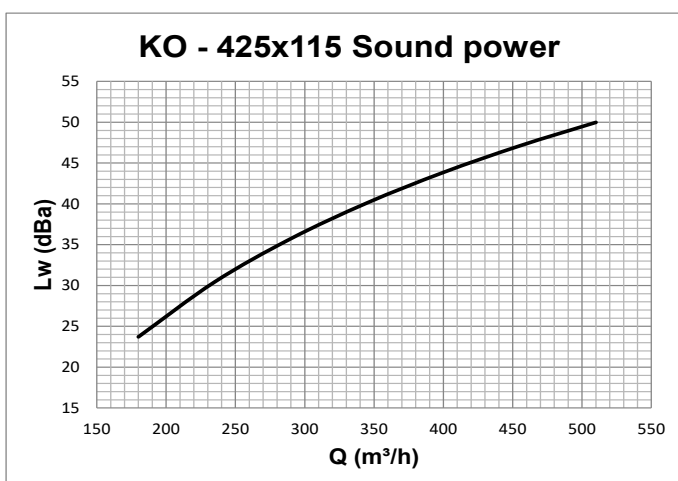
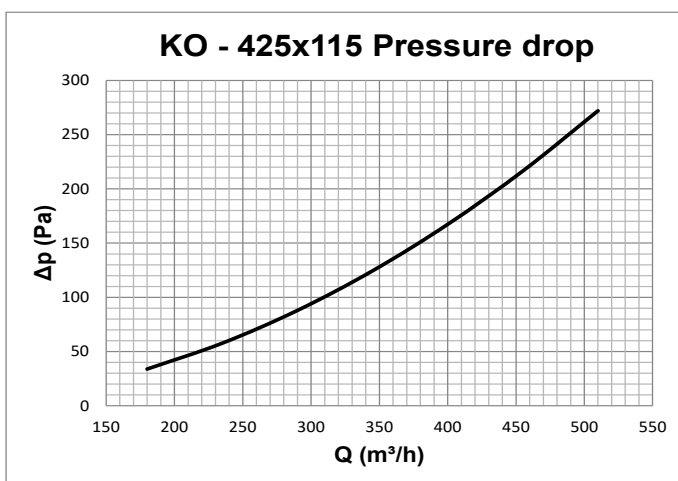
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425x115 PERFORMANCE



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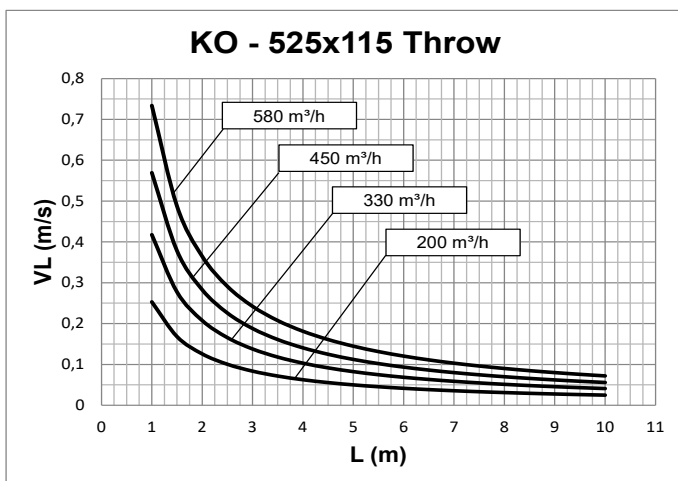
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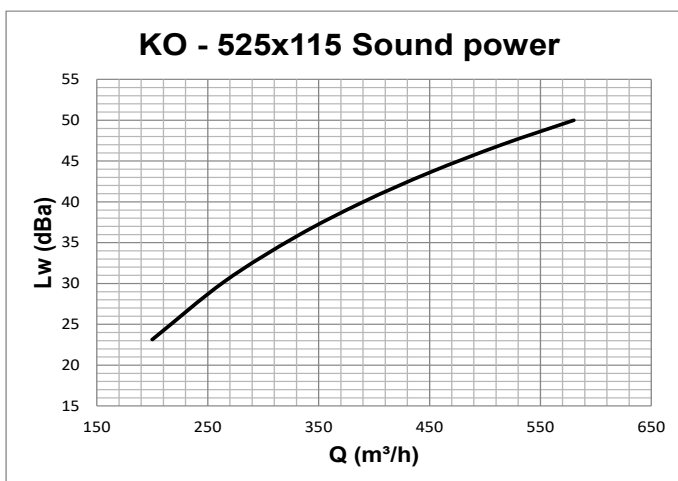
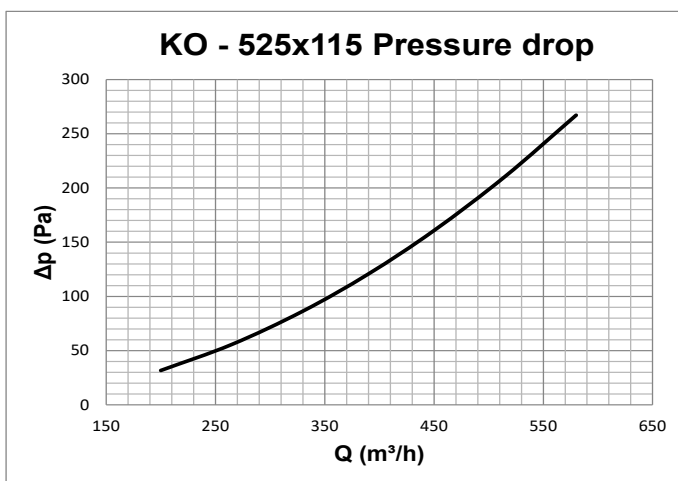
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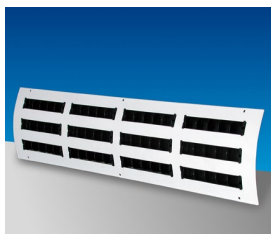
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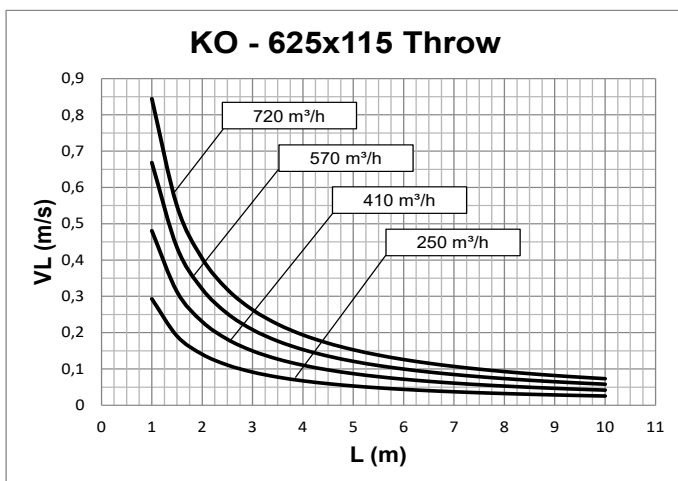
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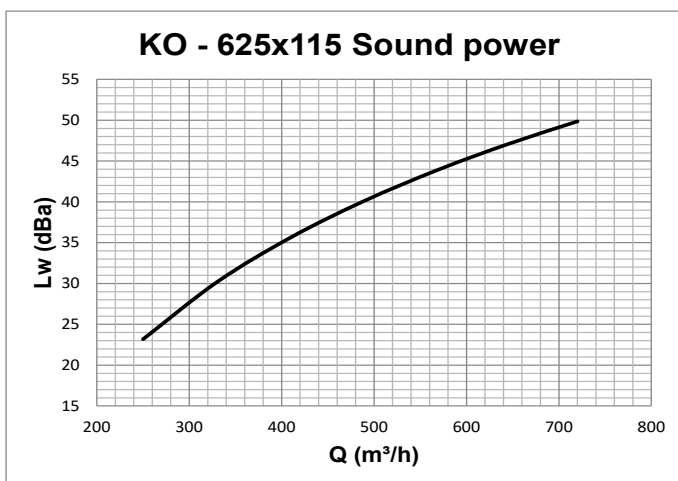
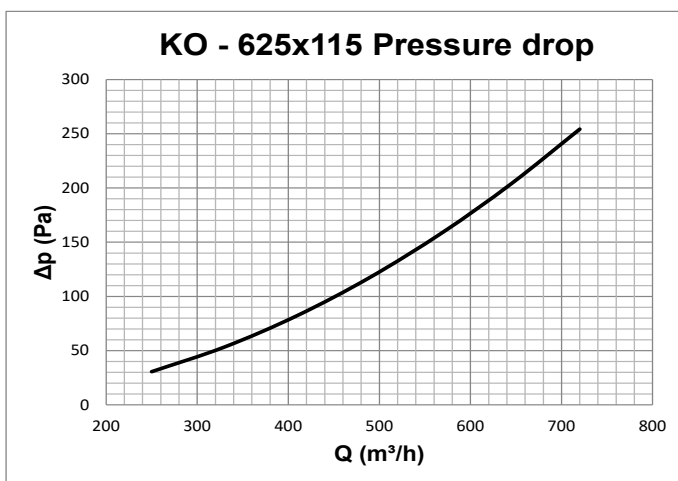
625x115
PERFORMANCE



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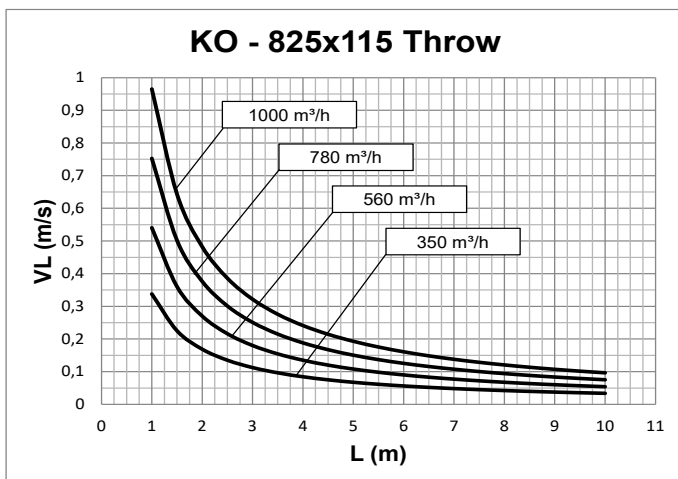
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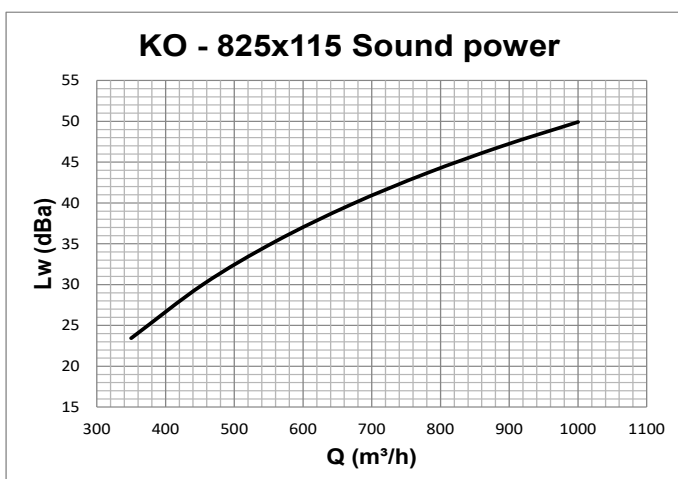
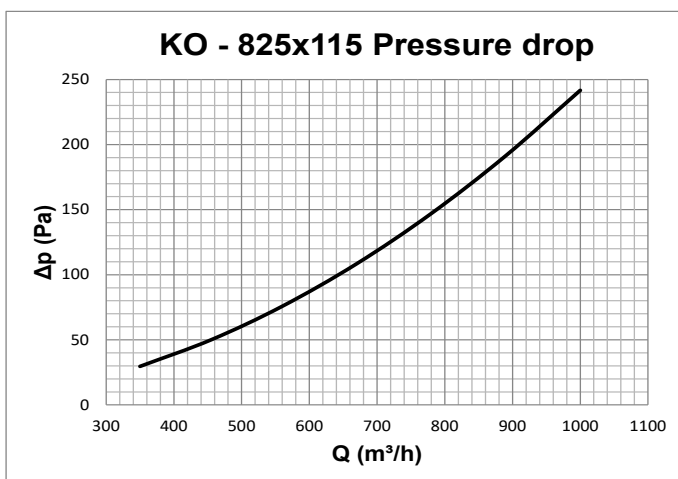
KO
SERIES

825x115
PERFORMANCE



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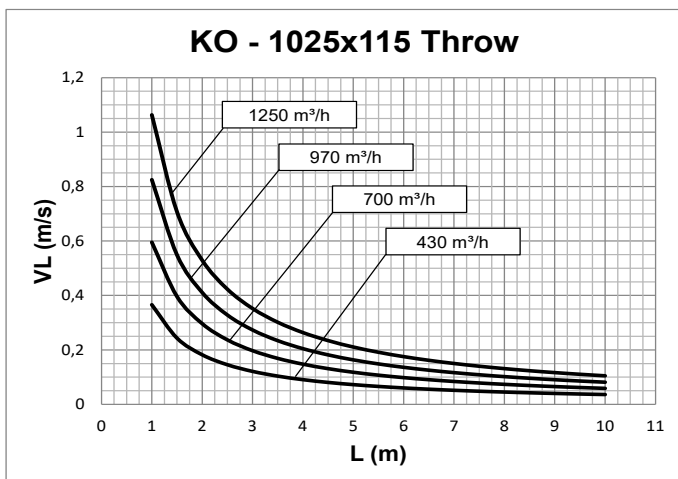
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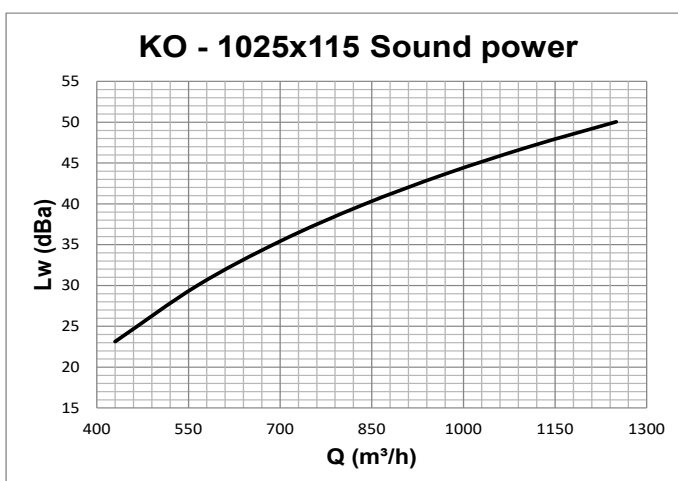
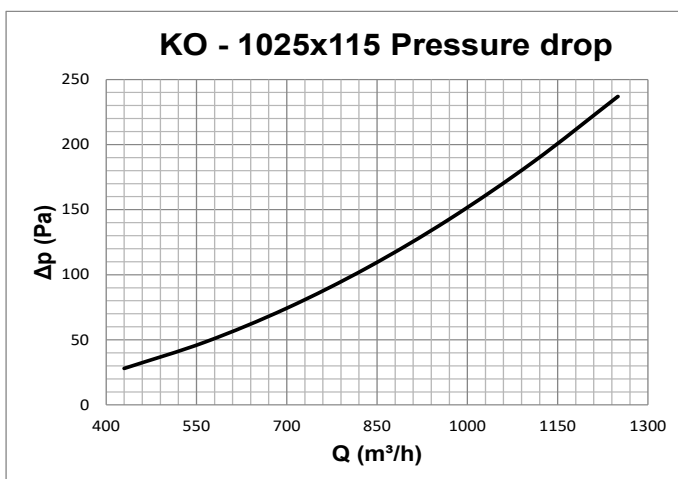
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SERIES

1025x115 PERFORMANCE



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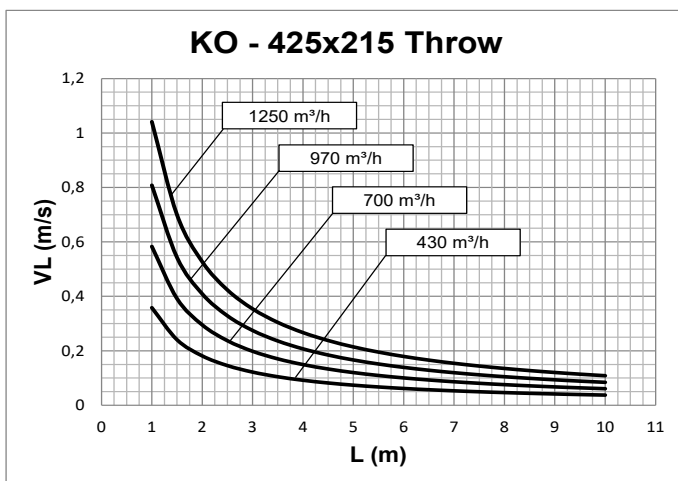
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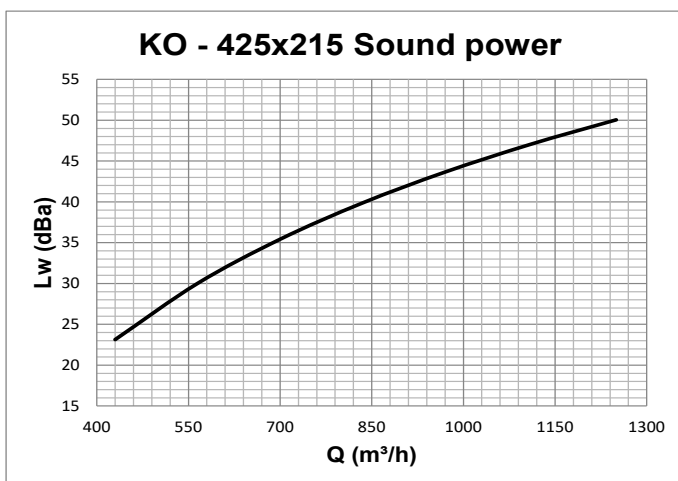
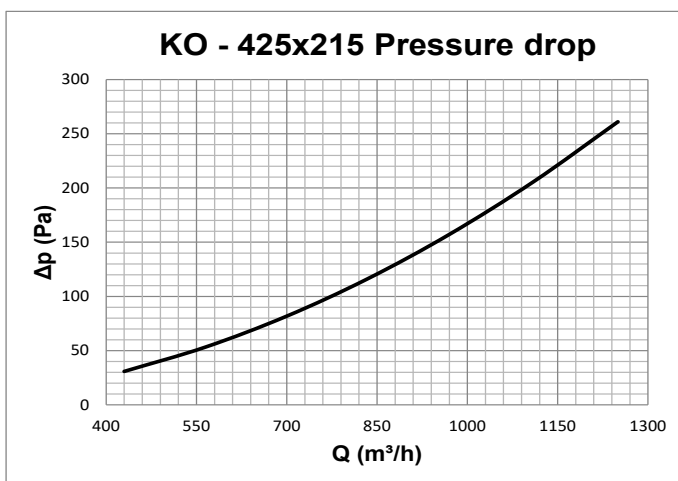
425x215
PERFORMANCE



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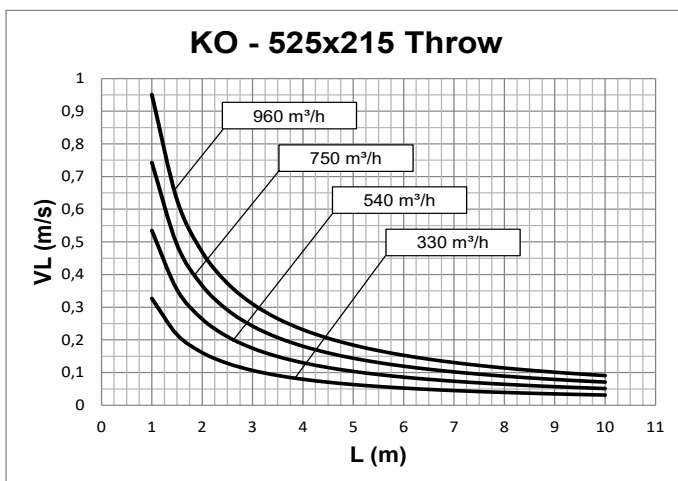
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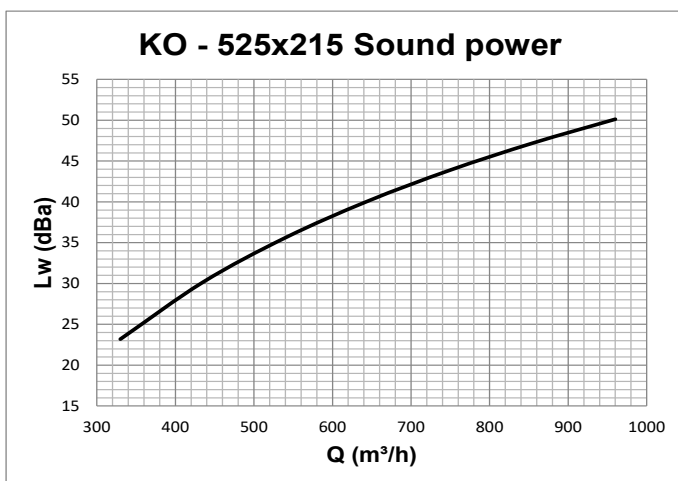
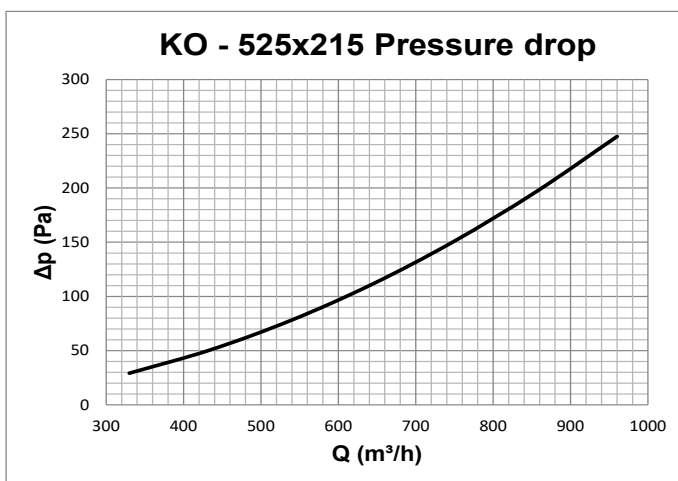
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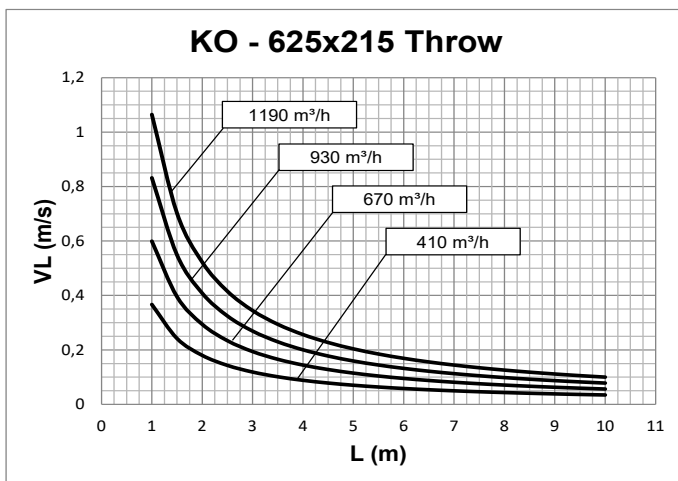
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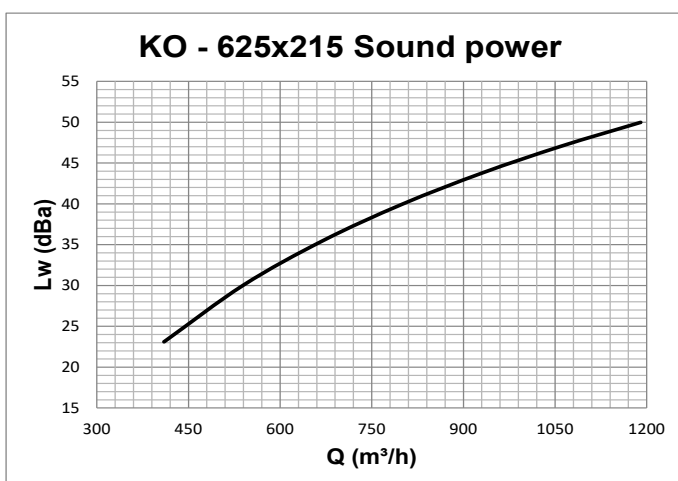
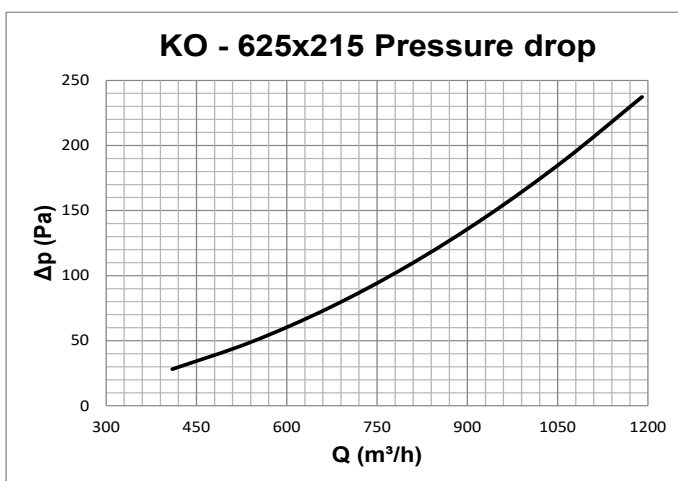
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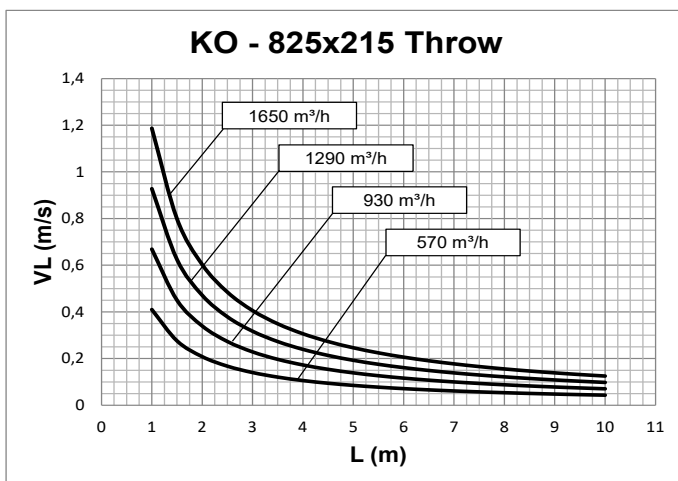
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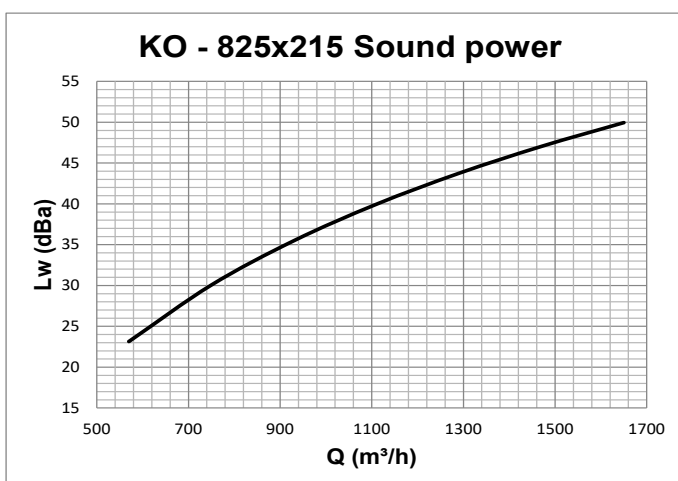
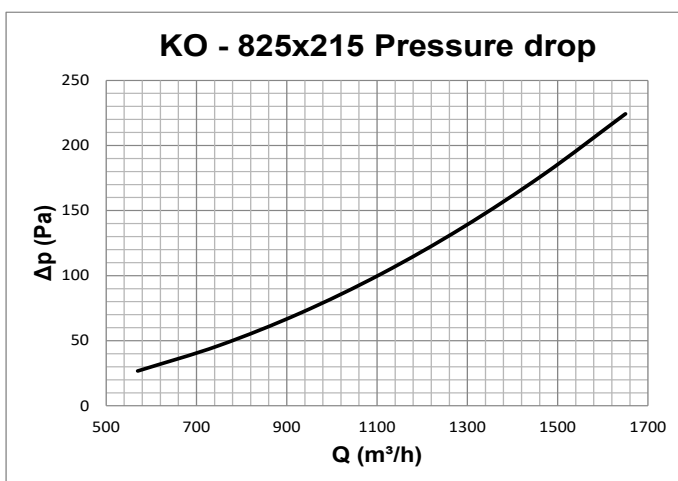
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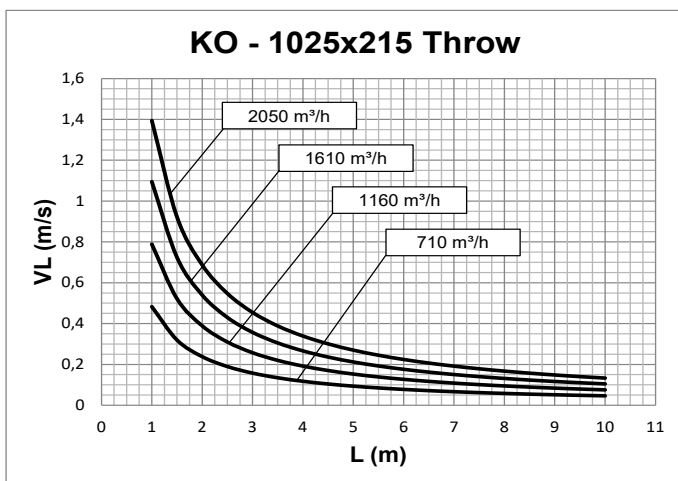
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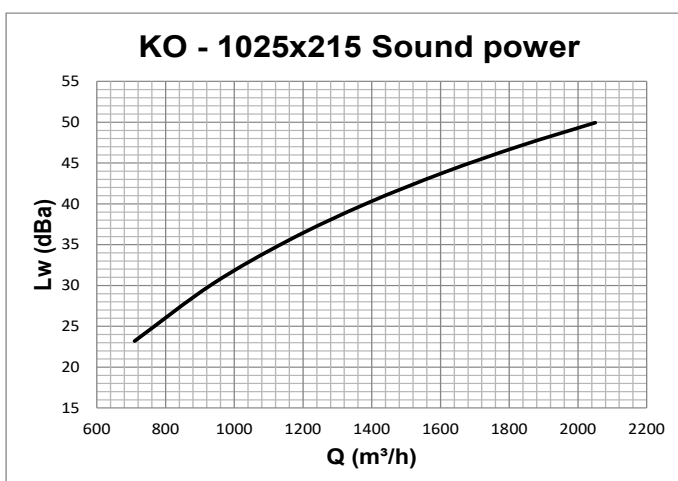
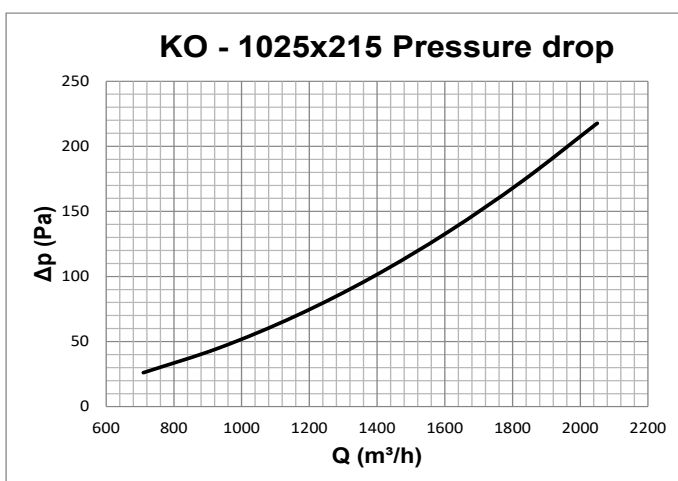
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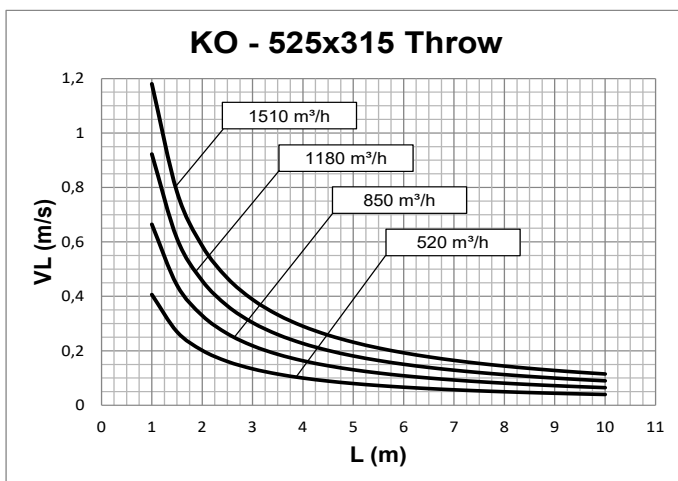
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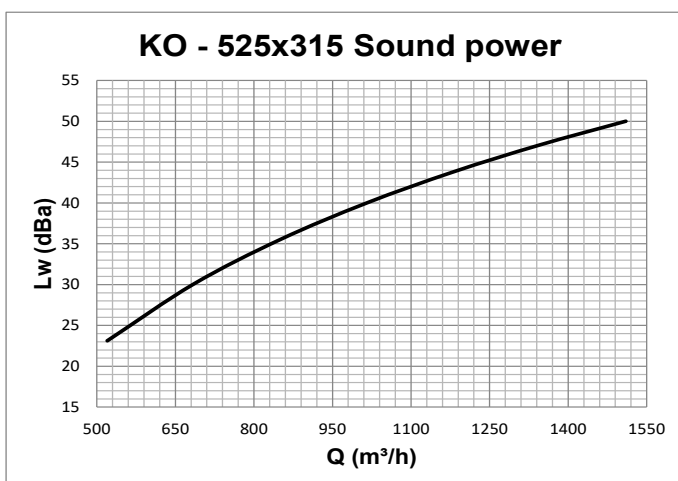
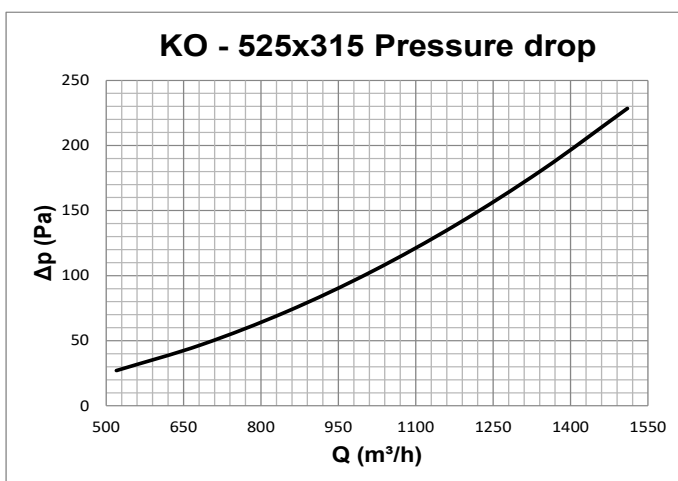
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525x315
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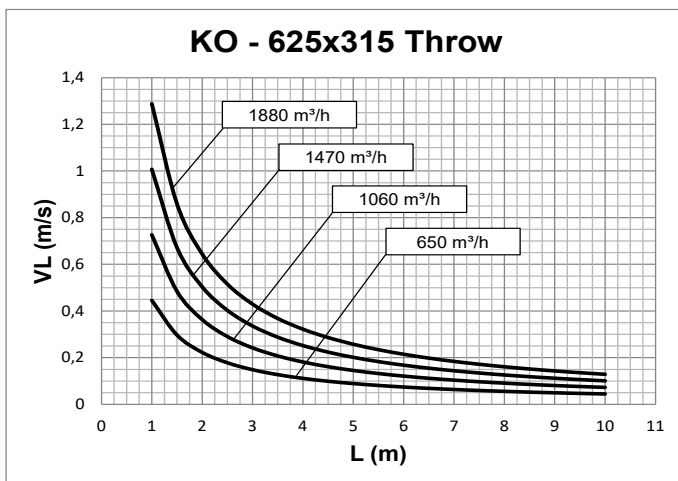
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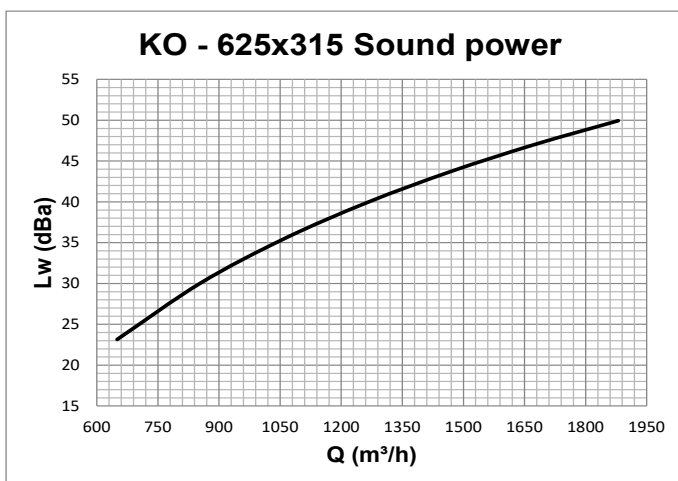
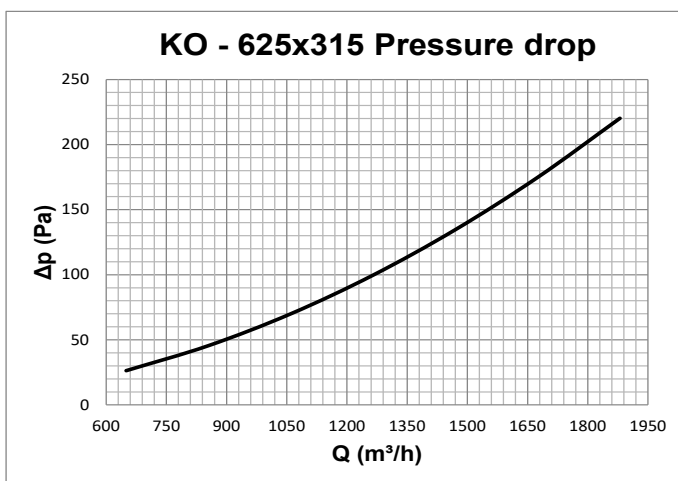
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ISO 5135 1997: *Acoustic - determination of sound power levels of noise from air-terminal devices; air terminal units; dampers and valves by measurement in a reverberation room.*

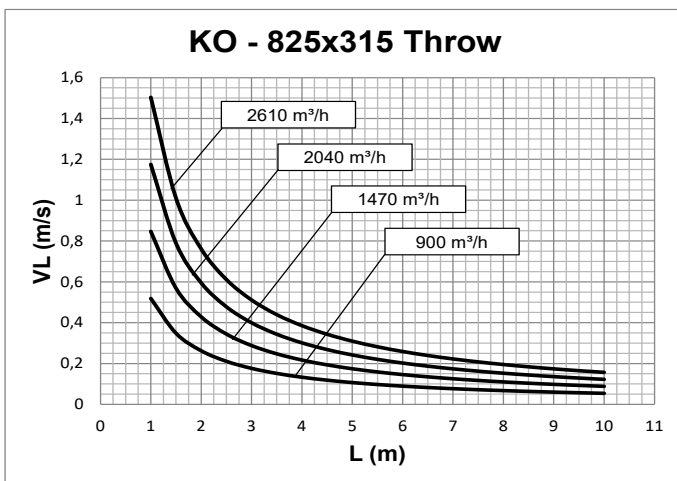
The data presented does not consider the attenuation given by the area of installation. This attenuation is normally between 6 and 10 dBA and is determined by the room size, the shape of the environment and the interior features.



HIGH INDUCTION DIFFUSERS FOR CIRCULAR DUCTS

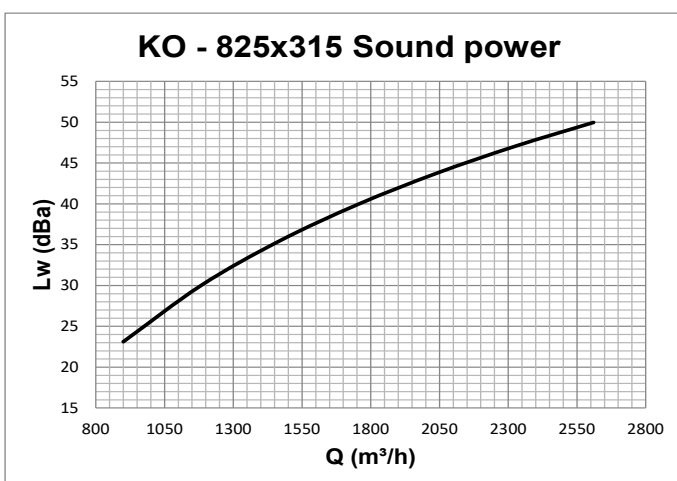
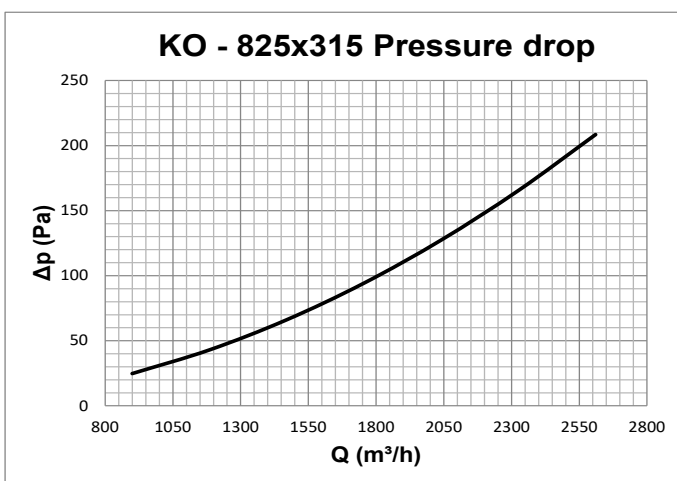
KO
SERIES

825x315
PERFORMANCE



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

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



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.*

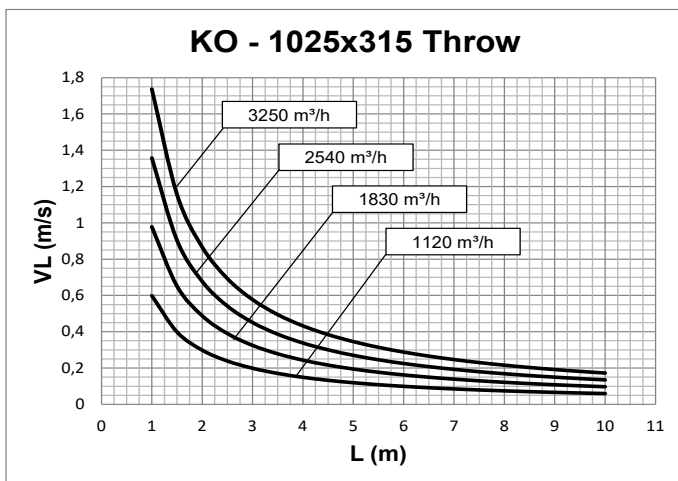
The data presented does not consider the attenuation given by the area of installation. This attenuation is normally between 6 and 10 dBA and is determined by the room size, the shape of the environment and the interior features.



HIGH INDUCTION DIFFUSERS FOR CIRCULAR DUCTS

KO
SERIES

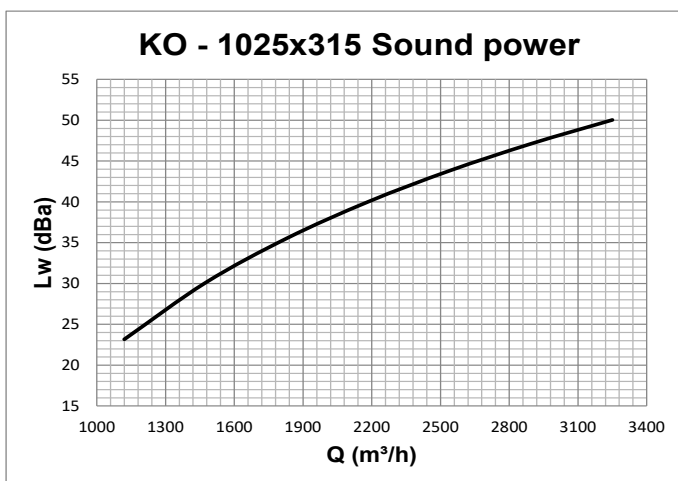
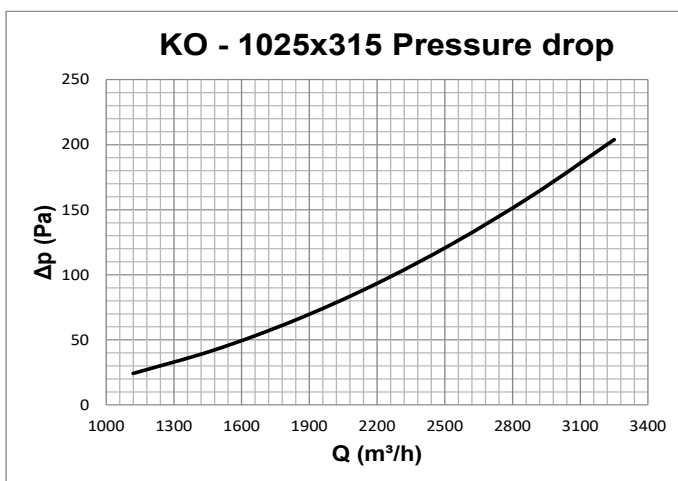
1025x315 PERFORMANCE



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

L (m) horizontal distance in metres from the centre of the diffuser

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



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.



HIGH INDUCTION DIFFUSERS FOR CIRCULAR DUCTS

KO
SERIES

HOW TO ORDER

