WWW CE

## APPLICATION

IRIS type damper is designed for circular ventilation ducts and provides easy control of air flow through the smooth change of the diameter of the flange.

## CONSTRUCTION

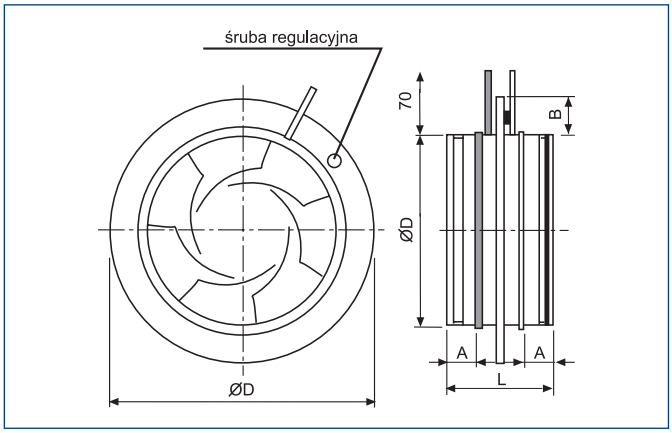
The IRIS damper can be used in both exhaust and supply lines. It is equipped with lever for adjusting the hole diameter and two terminals for connection of flow control. The adjusting lever has two screws that block the desired throttle setting. The IRIS damper is made of galvanized steel and has two rubber seals for tight fitting in the duct.

## INSTALLATION

Dampers should be mounted in the duct, providing straight sections:

- 4 x diameter of the duct before the throttle
- 1 x diameter of the duct behind the throttle

## DIMENSIONS [mm]




## ACOUSTIC CHARACTERISTICS

$L_W$ can be obtained by summing the values from the table below to the value form the chart.

| Type | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|---|---|---|---|---|---|---|---|---|
| 80 | 10 | 16 | 12 | 9 | 5 | -1 | -6 | -23 |
| 100 | 9 | 16 | 11 | 7 | 3 | -1 | -9 | -22 |
| 125 | 12 | 15 | 9 | 7 | 3 | -4 | -15 | -20 |
| 160 | 12 | 13 | 6 | 4 | 0 | -1 | -5 | -17 |
| 200 | 12 | 11 | 6 | 2 | -1 | -1 | -6 | -18 |
| 250 | 15 | 12 | 5 | 3 | 1 | -3 | -12 | -17 |
| 315 | 15 | 10 | 5 | 0 | -1 | -1 | -12 | -23 |
| 400 | 15 | 9 | 6 | 2 | -1 | -4 | -9 | -13 |
| 500 | 14 | 7 | 4 | 1 | -1 | -4 | -8 | -11 |
| 630 | 15 | 7 | 3 | 2 | -1 | -5 | -9 | -11 |
| 800 | 9 | 5 | 3 | 3 | -1 | -6 | -10 | -13 |
| Tot | 6 | 3 | 2 | 2 | 2 | 2 | 2 | 3 |

| Type | Ød | ØD | L | A | B | weight [kg] | article number |
|---|---|---|---|---|---|---|---|
| 80 | 79 | 125 | 110 | 30 | 22 | 0,5 | 19527080 |
| 100 | 99 | 165 | 110 | 30 | 32 | 0,6 | 19527100 |
| 125 | 124 | 210 | 110 | 30 | 42 | 0,9 | 19527125 |
| 160 | 159 | 230 | 110 | 30 | 35 | 1,1 | 19527160 |
| 200 | 199 | 285 | 110 | 30 | 42 | 1,6 | 19527200 |
| 250 | 249 | 335 | 135 | 40 | 42 | 2,1 | 19527250 |
| 315 | 314 | 410 | 135 | 40 | 47 | 3,5 | 19527315 |
| 400 | 398 | 525 | 190 | 60 | 62 | 6,4 | 19527400 |
| 500 | 498 | 655 | 170 | 50 | 77 | 9,6 | 19527500 |
| 630 | 628 | 815 | 170 | 50 | 92 | 15,6 | 19527630 |
| 800 | 798 | 1015 | 270 | 100 | 107 | 25 | 19527800 |

**Flow setting:**

In order to set the desired flow rate, use the read out of the housing K factor and the following relationship:

$q = K\sqrt{\Delta_{pm}}$

$\Delta_{pm} = (q/K)^2$

$K = q / \sqrt{\Delta_{pm}}$

q - airflow in l/s

$\Delta_{pm}$ - measured pressure in Pa

K - coefficient form the housing

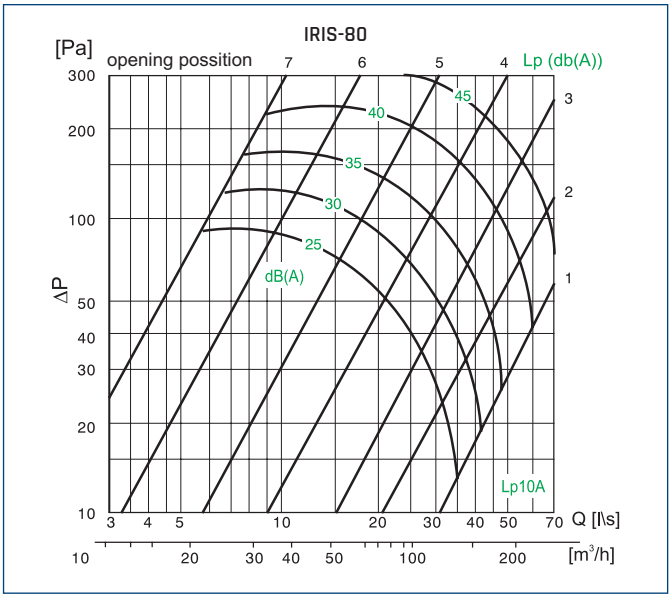
**Example:**

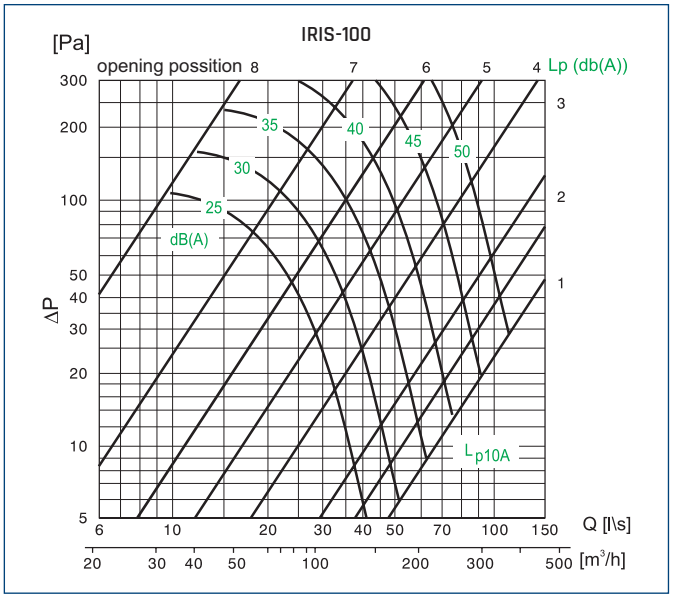
For IRIS-125 at opening possition 1 we can read from the housing the coefficient = 13,8.

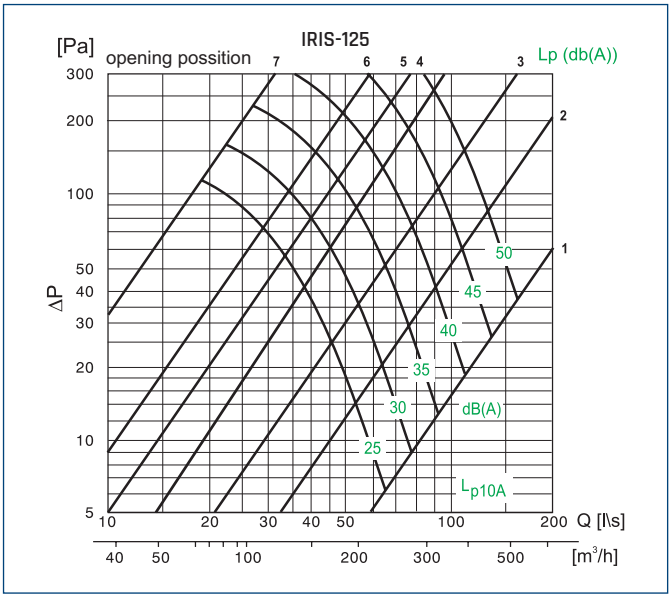
If we measured for example 100 Pa - airflow we can calculated from the formula:

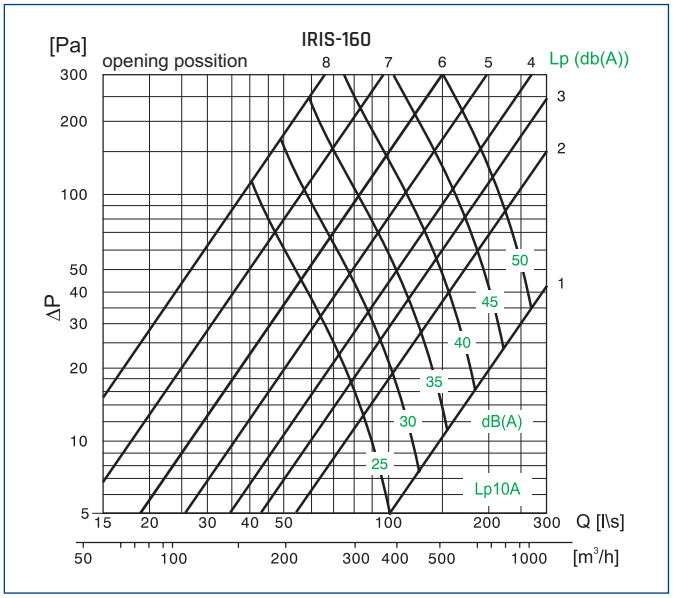
$Q = K \times \sqrt{\Delta_{pm}} = 13{,}8 \times 10 = 138$ l/s (496,8 $m^3/h$)

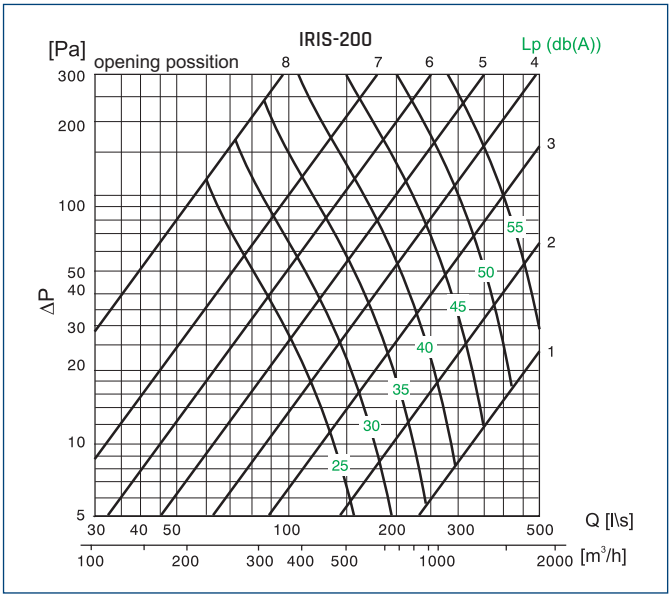
## PERFORMANCE CURVES

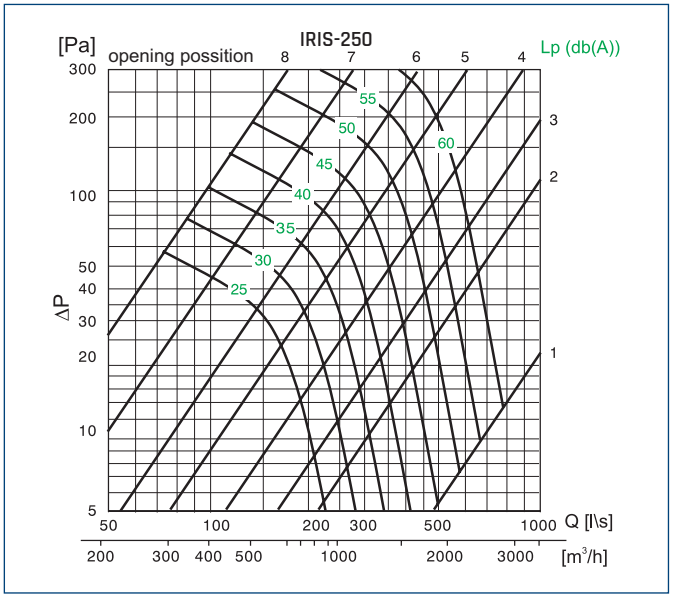
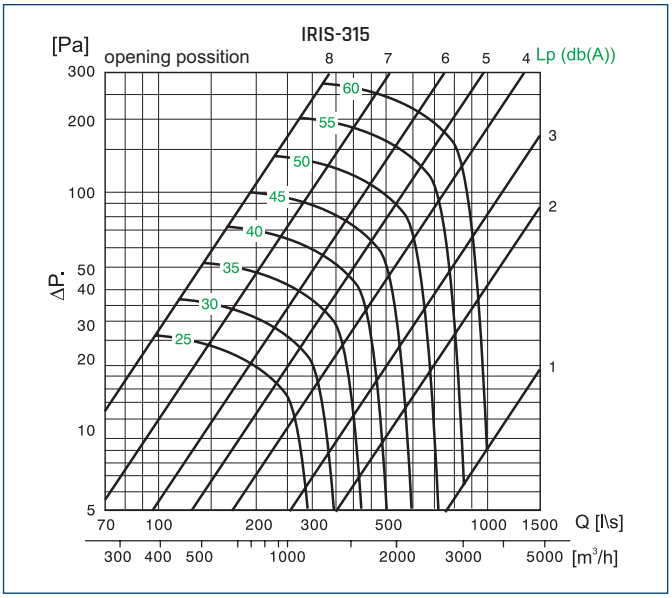
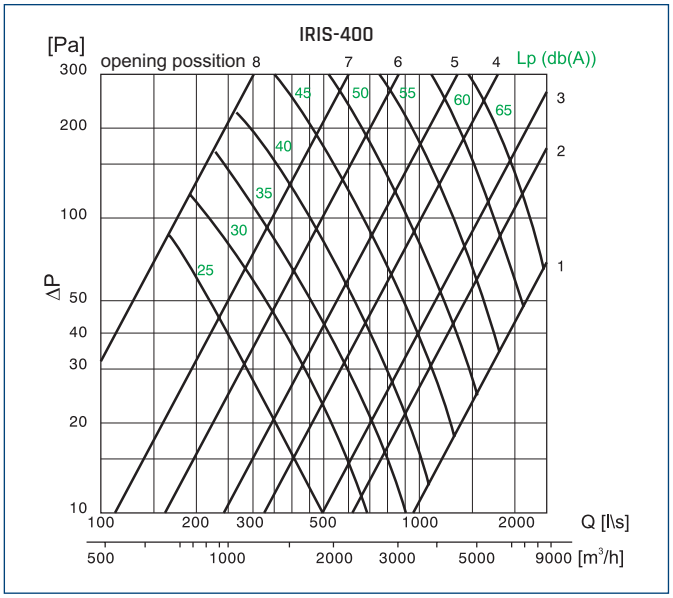
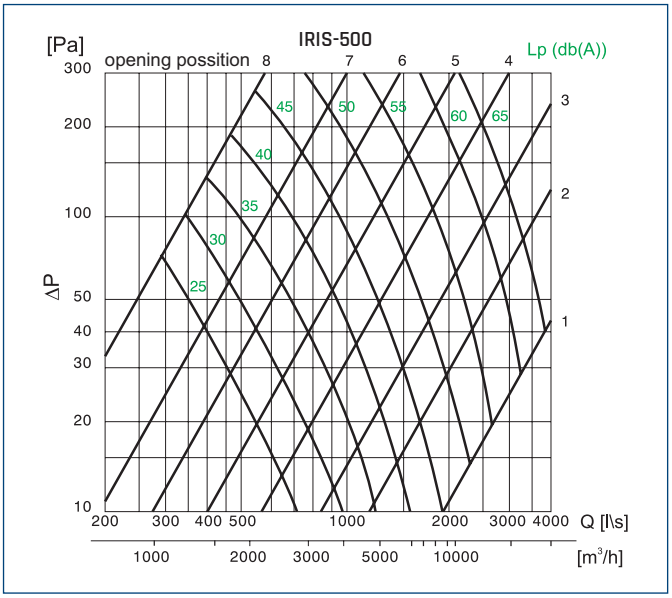
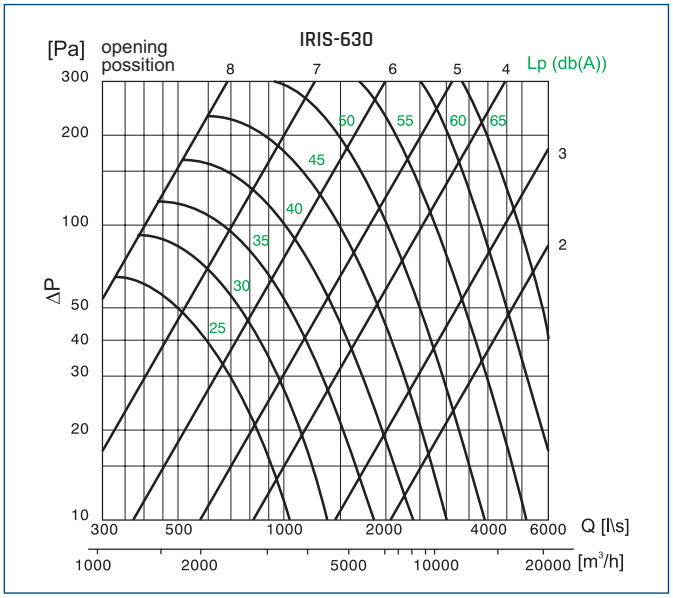
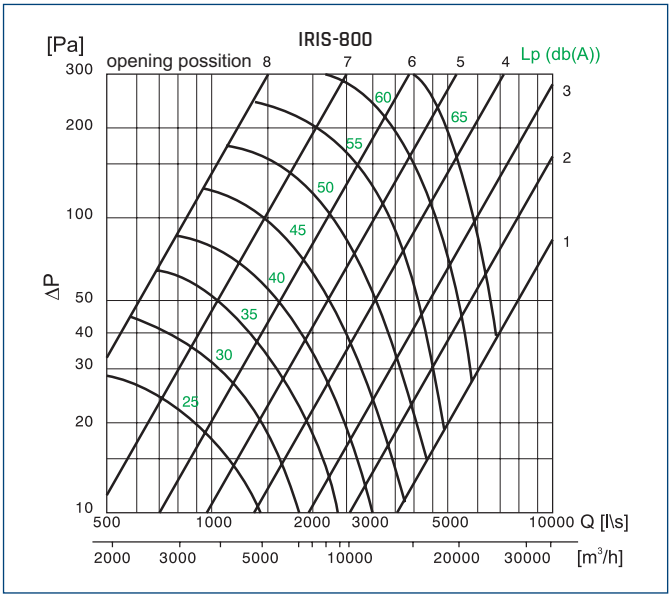





## PERFORMANCE CURVES