

FLOW REGULATORS



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RDR
Ø 80 to Ø 250 mm
ADJUSTABLE FLOWS
SELF ADJUSTING FROM 50 to 250 Pa

RDR

The flow regulator RDR is an element placed inside the duct in order to obtain a constant flow within a pressure range from 50 to 250 Pascals.
It is used in air conditionning or ventilation systems either in extraction or blowing mode.



IMPORTANT



- Self adjusting on the pressure range 50 to 250 Pa
- Easy adjustment
- The requested air flow is fixed by a screwdriver «torx n°10»
- Made in plastic material (classified M1) and in galvanized steel for sleeves in Ø 160 to Ø 250 mm
- Use with a maximum temperature of 60°C

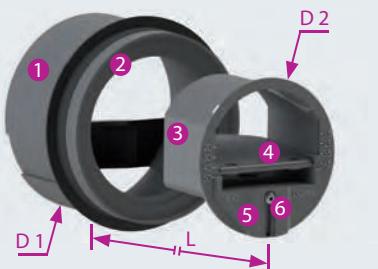
PRÉSENTATION

The self adjusting flow regulator **RDR** can be adjusted on sites according to the requested airflow.

The marks on the sides of the opening indicate the settings.

COMPONENT AND DIMENSIONS

Flow regulator RDR
Ø 80 to Ø 100



| RD | D1 (mm) | D2 (mm) | L (mm) |
|-------|---------|---------|--------|
| Ø 80 | 76 | 76 | 55 |
| Ø 100 | 96 | 93 | 70 |

- ① Sleeve with lip seal
- ② Cage (according to the airflow)
- ③ Regulator casing
- ④ Piece of regulation
- ⑤ Air flow setting
- ⑥ Screw to fix the airflow

Flow regulator RDR
Ø 125 to Ø 250



| RD | D1 (mm) | D2 (mm) | L (mm) |
|-------|---------|---------|--------|
| Ø 125 | 120 | 117 | 86 |
| Ø 150 | 145 | 148 | 91 |
| Ø 160 | 145 | 148 | 91 |
| Ø 200 | 190 | 195 | 91 |
| Ø 250 | 235 | 245 | 120 |

- ① Sleeve with lip seal
- ② Cage (according to the airflow)
- ③ Regulator casing
- ④ Piece of regulation
- ⑤ Air flow setting
- ⑥ Screw to fix the airflow

COMPOSITION OF RDR

| RD | Setting | Flow (m³/h) | Set flow (m³/h) | Code |
|-------|---------------------|-------------|-----------------|------|
| Ø 80 | RDR Ø 80 | 15 à 50 | 50 | 9404 |
| Ø 100 | RDR Ø 80 + 1 cage | 15 à 50 | 50 | 9409 |
| Ø 100 | RDR Ø 100 | 50 à 100 | 100 | 9413 |
| Ø 125 | RDR Ø 80 + 2 cages | 15 à 50 | 50 | 9419 |
| Ø 125 | RDR Ø 100 + 1 cage | 50 à 100 | 100 | 9423 |
| Ø 125 | RDR Ø 125 | 100 à 180 | 180 | 9427 |
| Ø 150 | RDR Ø 80 + 3 cages | 15 à 50 | 50 | 9430 |
| Ø 150 | RDR Ø 100 + 2 cages | 50 à 100 | 100 | 9431 |
| Ø 150 | RDR Ø 125 + 1 cage | 100 à 180 | 180 | 9434 |
| Ø 150 | RDR Ø 150 | 180 à 300 | 300 | 9439 |
| Ø 160 | RDR Ø 80 + 3 cages | 15 à 50 | 50 | 9440 |
| Ø 160 | RDR Ø 100 + 2 cages | 50 à 100 | 100 | 9441 |

| RD | Setting | Flow (m³/h) | Set flow (m³/h) | Code |
|-------|---------------------|-------------|-----------------|------|
| Ø 160 | RDR Ø 125 + 1 cage | 100 à 180 | 180 | 9444 |
| Ø 160 | RDR Ø 150 | 180 à 300 | 300 | 9449 |
| Ø 200 | RDR Ø 80 + 4 cages | 15 à 50 | 50 | 9455 |
| Ø 200 | RDR Ø 100 + 3 cages | 50 à 100 | 100 | 9456 |
| Ø 200 | RDR Ø 125 + 2 cages | 100 à 180 | 180 | 9457 |
| Ø 200 | RDR Ø 160 + 1 cage | 180 à 300 | 300 | 9464 |
| Ø 200 | RDR Ø 200 | 300 à 500 | 500 | 9468 |
| Ø 250 | RDR Ø 100 + 4 cages | 50 à 100 | 100 | 9475 |
| Ø 250 | RDR Ø 125 + 3 cages | 100 à 180 | 180 | 9476 |
| Ø 250 | RDR Ø 160 + 2 cages | 180 à 300 | 300 | 9477 |
| Ø 250 | RDR Ø 200 + 1 cage | 300 à 500 | 500 | 9483 |
| Ø 250 | RDR Ø 250 | 500 à 700 | 700 | 9488 |

ADJUSTMENT

Before setting the regulator, it's necessary to calibrate the flow :

- Unscrew of 1/4 tour with a screwdriver «torx n°10»
- Adjust the mark to the requested flow
- Screw according to the air-flow

Different other possibilities of setting with intermediary positions.

| | |
|---------------------|--|
| RDR Ø 80 : | intermediary step → $2,5 \text{ m}^3/\text{h}$ |
| RDR Ø 100-125-160 : | intermediary step → $5 \text{ m}^3/\text{h}$ |
| RDR Ø 200 : | intermediary step → $10 \text{ m}^3/\text{h}$ |
| RDR Ø 250 : | intermediary step → $25 \text{ m}^3/\text{h}$ |

RDR Ø 80 and 100 mm



Sample of setting = $50 \text{ m}^3/\text{h}$

RDR Ø 125 to 250 mm



Sample of setting = $180 \text{ m}^3/\text{h}$

INSTALLATION

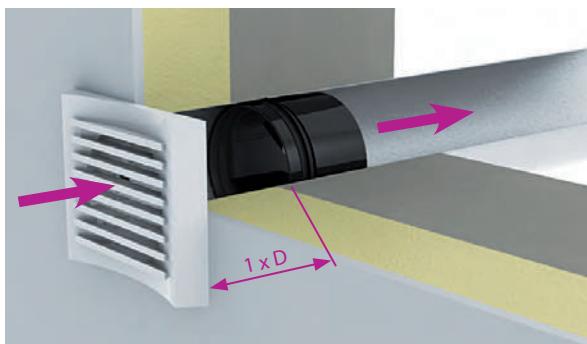
The flow regulators are simply fitted into vertical or horizontal ducts. On the horizontal duct, respect the mention «DOWN» indicated at the front of the product. A leap seal ensures the airtightness.

When the flow regulator is associated with a diffuser, the minimum distance between the diffuser and the regulator is at least one Ø in extraction mode and 3 Ø in blowing mode.

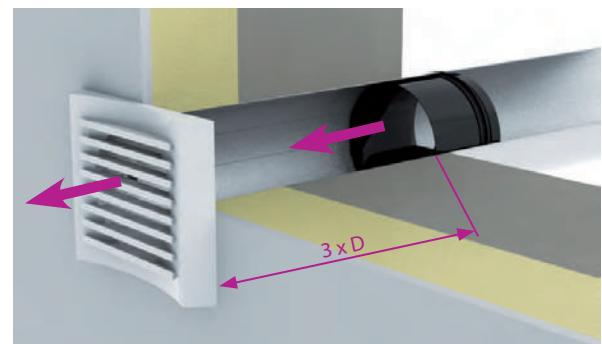


When installing, do not touch the piece of regulation

It is essential to comply with the direction of air flow shown on the sleeve.



Flow regulator in extraction mode



Flow regulator in blowing mode

MAINTENANCE

The flow regulator must remain accessible to permit its maintenance.

Characteristics

\varnothing 80 - 100 - 125 mm

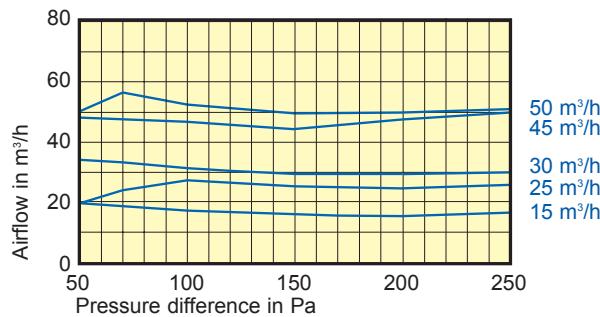
The curves show the flow variations in m^3/h of RDR \varnothing 150, 160 and 200 mm in extraction according to the difference of pressure in Pascal (pressure range of 50 to 250 Pa). The values given are averages which may vary of :

- + or - 3 m^3/h for airflow $\leq 50 m^3/h$

- + or - 5 % for airflow $> 50 m^3/h$

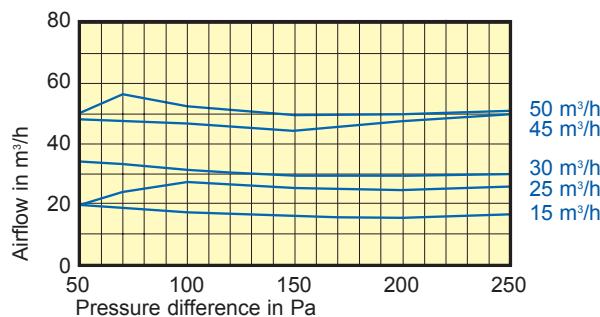
Flow regulators are characterized by their noise level in dB(A).

FLOW REGULATOR \varnothing 80 - 15 to 50 m^3/h



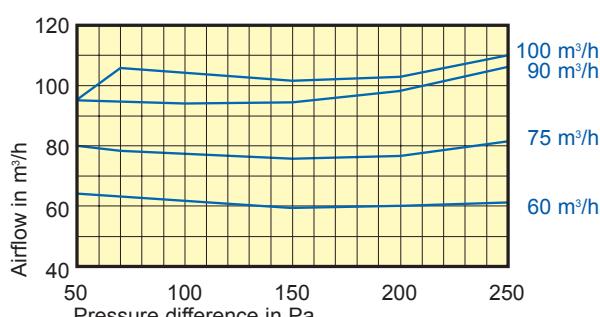
| Flow (m^3/h) | Lw in dB(A) | | | |
|------------------|-------------|--------|--------|--------|
| | 50 Pa | 100 Pa | 150 Pa | 200 Pa |
| 15 | 25 | 29 | 32 | 35 |
| 30 | 26 | 31 | 35 | 38 |
| 45 | 27 | 33 | 36 | 39 |
| 50 | 32 | 37 | 39 | 42 |

FLOW REGULATOR \varnothing 100 - 15 to 50 m^3/h



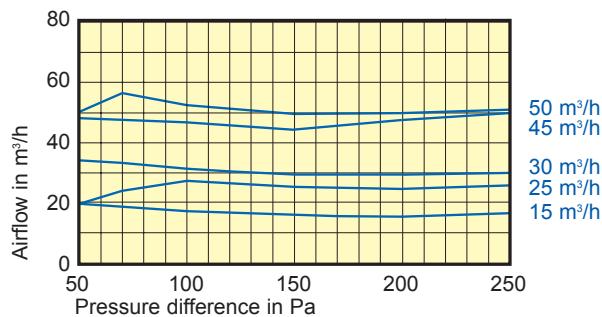
| Flow (m^3/h) | Lw in dB(A) | | | |
|------------------|-------------|--------|--------|--------|
| | 50 Pa | 100 Pa | 150 Pa | 200 Pa |
| 15 | 25 | 29 | 32 | 35 |
| 30 | 26 | 31 | 35 | 38 |
| 45 | 27 | 33 | 36 | 39 |
| 50 | 32 | 37 | 39 | 42 |

FLOW REGULATOR \varnothing 100 - 50 to 100 m^3/h

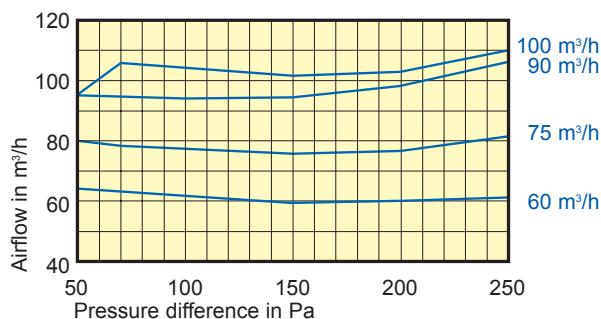


| Flow (m^3/h) | Lw in dB(A) | | | |
|------------------|-------------|--------|--------|--------|
| | 50 Pa | 100 Pa | 150 Pa | 200 Pa |
| 60 | 32 | 37 | 39 | 42 |
| 75 | 32 | 37 | 40 | 42 |
| 90 | 32 | 38 | 41 | 44 |

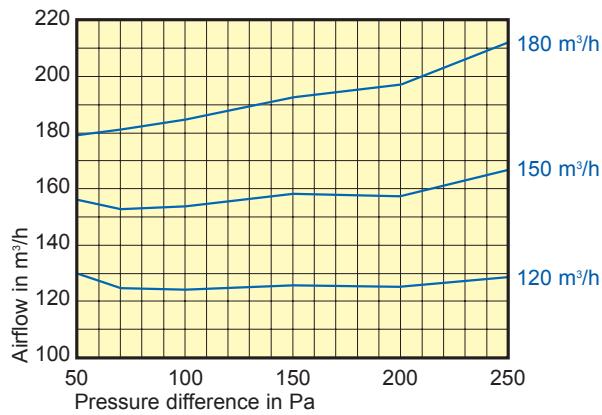
FLOW REGULATOR Ø 125 - 15 to 50 m³/h



FLOW REGULATOR Ø 125 - 50 to 100 m³/h



FLOW REGULATOR Ø 125 - 100 to 180 m³/h



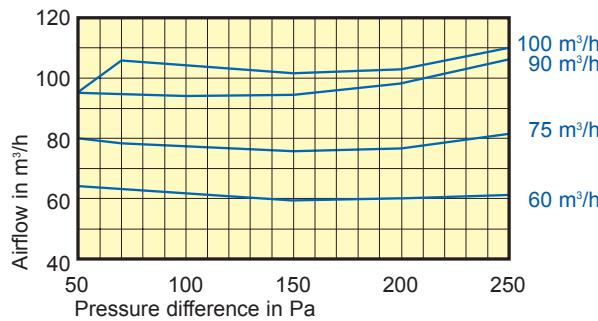
Characteristics

Ø 150 - 160 - 200 mm

The curves show the flow variations in m³/h of RDR Ø 150, 160 and 200 mm in extraction according to the difference of pressure in Pascal (pressure range of 50 to 250 Pa). The values given are averages which may vary of 5 % either way.

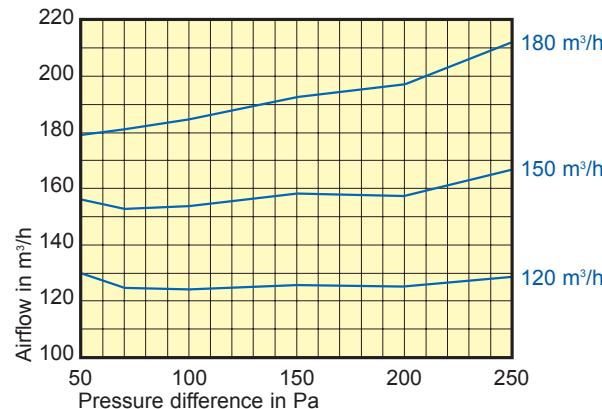
Flow regulators are characterized by their noise level in dB(A).

FLOW REGULATOR Ø 150/160 - 50 to 100 m³/h



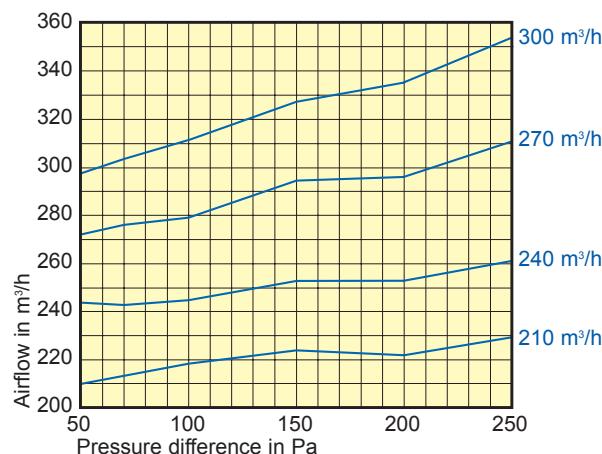
| Flow (m ³ /h) | Lw in dB(A) | | | |
|--------------------------|-------------|--------|--------|--------|
| | 50 Pa | 100 Pa | 150 Pa | 200 Pa |
| 60 | 32 | 37 | 39 | 42 |
| 75 | 32 | 37 | 40 | 42 |
| 90 | 32 | 38 | 41 | 44 |

FLOW REGULATOR Ø 150/160 - 100 to 180 m³/h



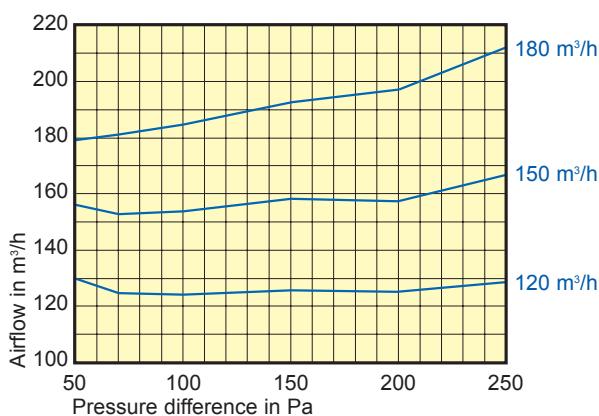
| Flow (m ³ /h) | Lw in dB(A) | | | |
|--------------------------|-------------|--------|--------|--------|
| | 50 Pa | 100 Pa | 150 Pa | 200 Pa |
| 120 | 30 | 37 | 39 | 42 |
| 150 | 33 | 37 | 41 | 45 |
| 180 | 34 | 40 | 44 | 47 |

FLOW REGULATOR Ø 150/160 - 180 to 300 m³/h

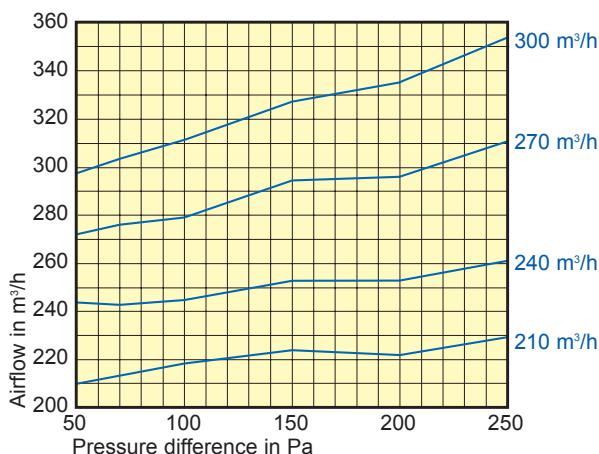


| Flow (m ³ /h) | Lw in dB(A) | | | |
|--------------------------|-------------|--------|--------|--------|
| | 50 Pa | 100 Pa | 150 Pa | 200 Pa |
| 210 | 34 | 40 | 42 | 44 |
| 240 | 35 | 41 | 44 | 47 |
| 270 | 37 | 43 | 45 | 49 |
| 300 | 33 | 37 | 42 | 45 |

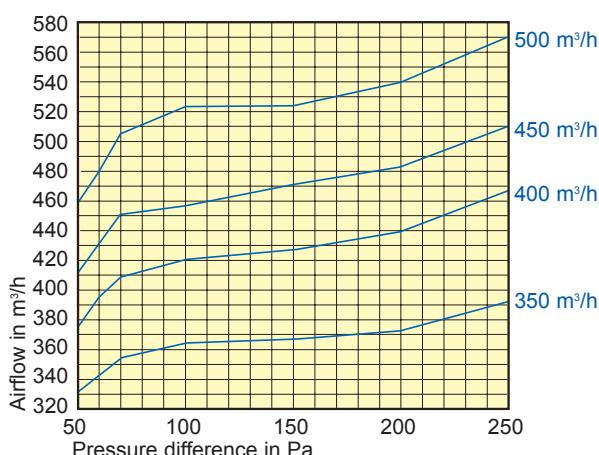
FLOW REGULATOR Ø 200 - 100 to 180 m³/h



FLOW REGULATOR Ø 200 - 180 to 300 m³/h



FLOW REGULATOR Ø 200 - 300 to 500 m³/h



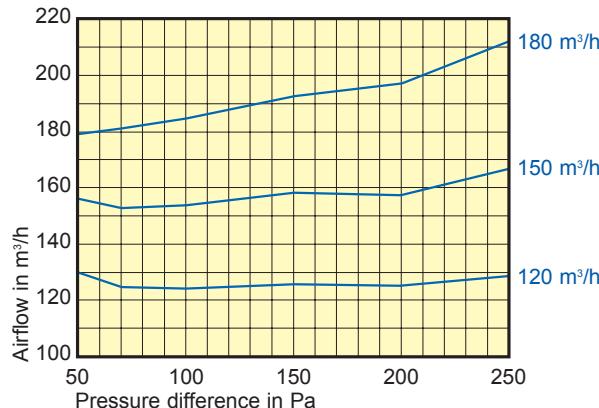
Characteristics

Ø 250 mm

The curves show the flow variations in m³/h of RDR Ø 150, 160 and 200 mm in extraction according to the difference of pressure in Pascal (pressure range of 50 to 250 Pa). The values given are averages which may vary of 5 % either way.

Flow regulators are characterized by their noise level in dB(A).

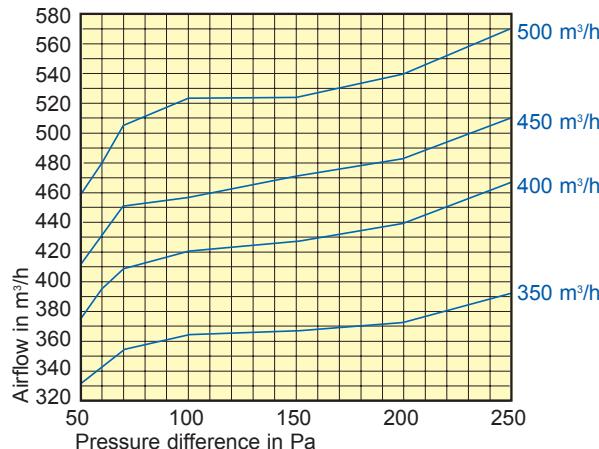
FLOW REGULATOR Ø 250 - 180 to 300 m³/h



| Flow (m ³ /h) | Lw en dB(A) | | | |
|--------------------------|-------------|--------|--------|--------|
| | 50 Pa | 100 Pa | 150 Pa | 200 Pa |
| 120 | 30 | 37 | 39 | 42 |
| 150 | 33 | 37 | 41 | 45 |
| 180 | 34 | 40 | 44 | 47 |



FLOW REGULATOR Ø 250 - 300 to 500 m³/h



| Flow (m ³ /h) | Lw en dB(A) | | | |
|--------------------------|-------------|--------|--------|--------|
| | 50 Pa | 100 Pa | 150 Pa | 200 Pa |
| 350 | 35 | 40 | 44 | 47 |
| 400 | 37 | 42 | 45 | 50 |
| 450 | 38 | 44 | 46 | 51 |
| 500 | 39 | 46 | 48 | 53 |



FLOW REGULATOR Ø 250 - 500 to 700 m³/h

