



ADJUSTABLE CONSTANT AIR VOLUME DAMPERS

SYSTEM POWERED MECHANICAL REGULATOR

KVR-R TYPE



Type KVR-R

KVR-R (constant volume control damper) (front)



KVR-R (constant volume control damper) (back)

Constant volume control dampers made of fire retardant plastics. The range covers an air flow range between 15 up to 700 m³/h (4-195 l/s) within a pressure range from 50 up to 250 Pa. Air flow can easily be adjusted within the air flow range of each damper.

Application:

- To obtain constant air volumes in ventilation and air conditioning systems within a pressure range from 50 up to 250 Pa.
- For air supply or exhaust duct systems.
- Maximum working temperature 60°C.

Colour:

- Black

Composition:

- Valve and piston made out of fire retardant plastics M1.
- Body in fire retardant plastics M1 or steel for diameter 150 to 250.
- Stainless steel calibrated spring.
- Rubber air-tight sealing.

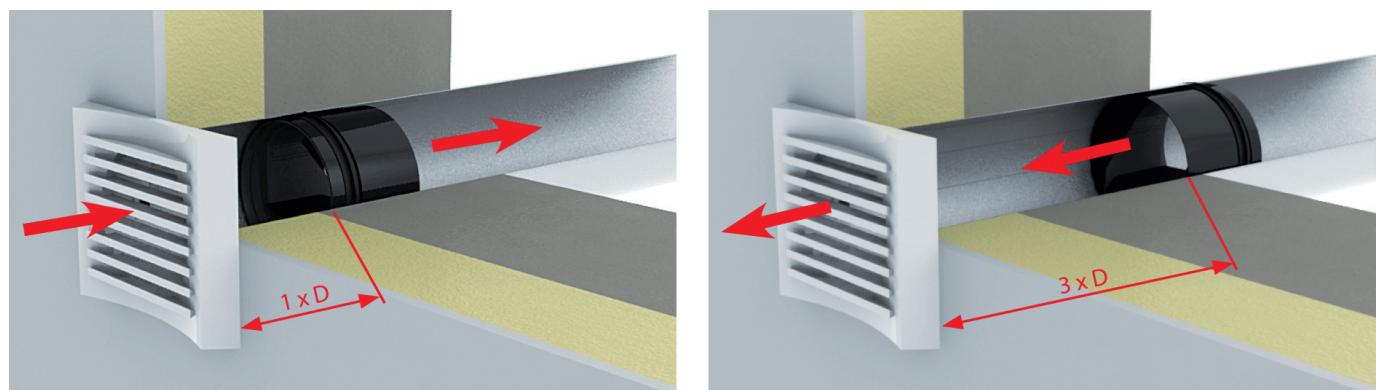
Mounting:

- For mounting inside round ducts.
- Horizontal as well as vertical mounting applicable.
- For horizontal mounting, the BAS marking has to be at the bottom.
- To be installed in accordance with the correct air flow direction.
- To be installed in the air intake at a minimum distance of three times the diameter of the duct starting from the air intake grilles and at the same distance from places with a high degree of turbulence in the duct, such as branches, bends, etc.
- To be installed in the air outtake at a minimum distance of one time the diameter of the duct starting from the extraction grilles and at the same distance from places with a high degree of turbulence in the duct, such as branches, bends, etc.
- The volume control damper has to be easily accessible for maintenance.

Type KVR-R

Recommended air flow:

KVR-R Ø mm	m3/h		CFM		l/s	
	Min	Max	Min	Max	Min	Max
Ø 80	15	50	9	29	4	14
Ø 100	15	100	9	59	4	28
Ø 125	15	180	9	106	4	50
Ø 150	100	300	59	177	28	83
Ø 160	100	300	59	177	28	83
Ø 200	180	500	106	294	50	139
Ø 250	300	700	177	412	83	194



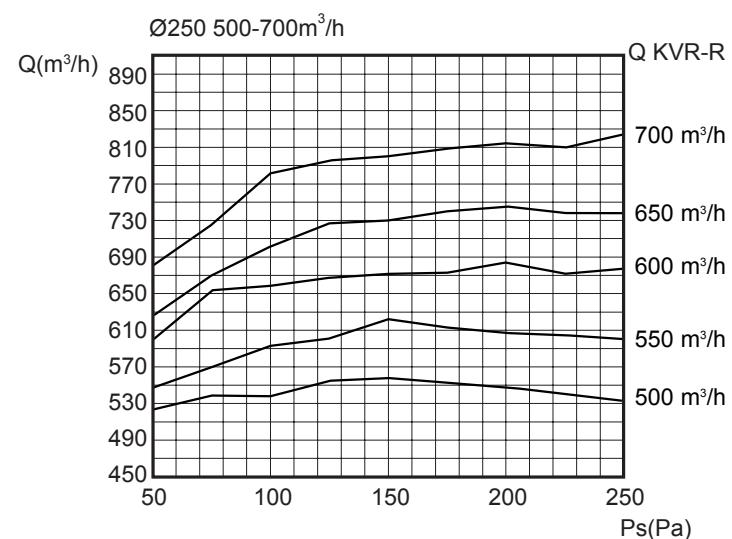
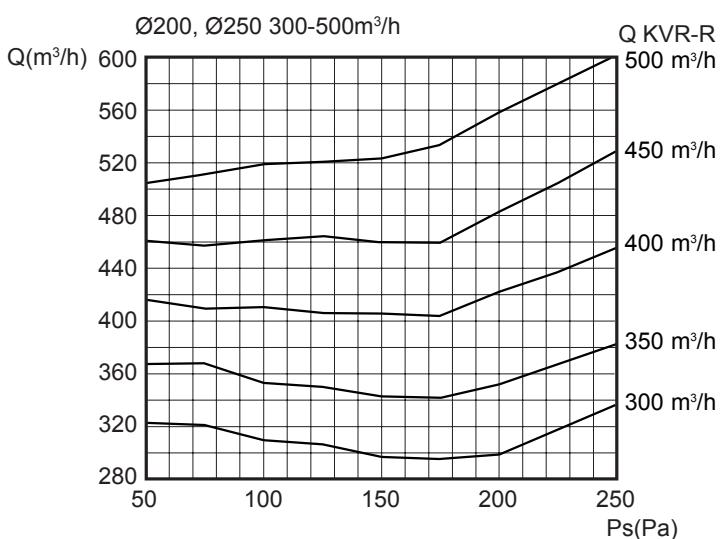
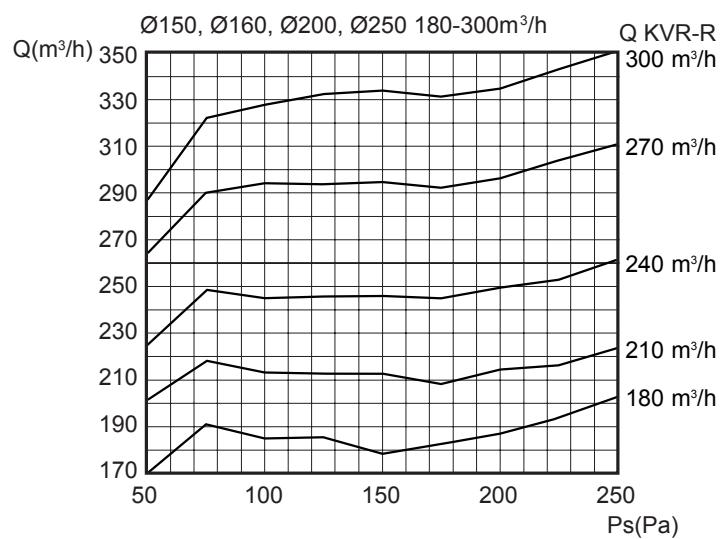
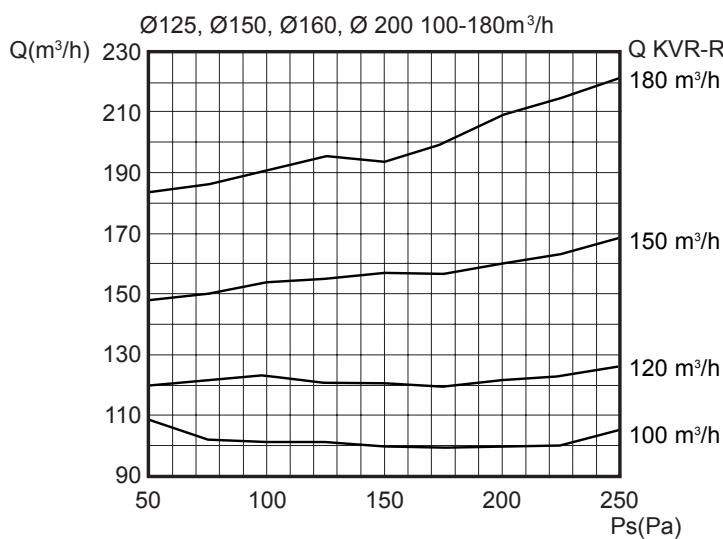
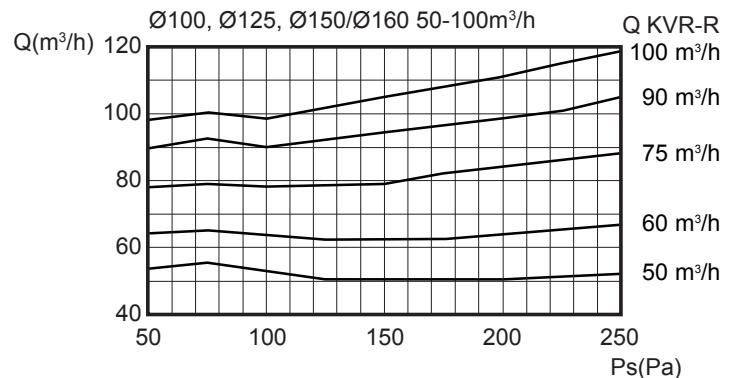
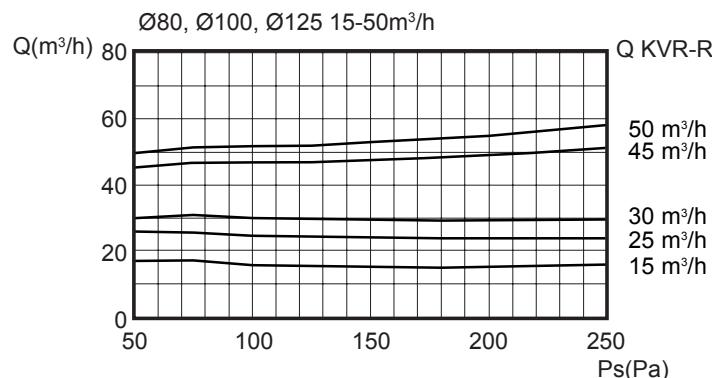
Accessories:

- Screw driver or bit Torx T10 for unscrewing the screw for adjusting the air flow rate of the regulator.

Other available products:

- **KVR-R-HP:** High pressure constant volume dampers with a pressure range between 150 and 600 Pa.

Pressure loss



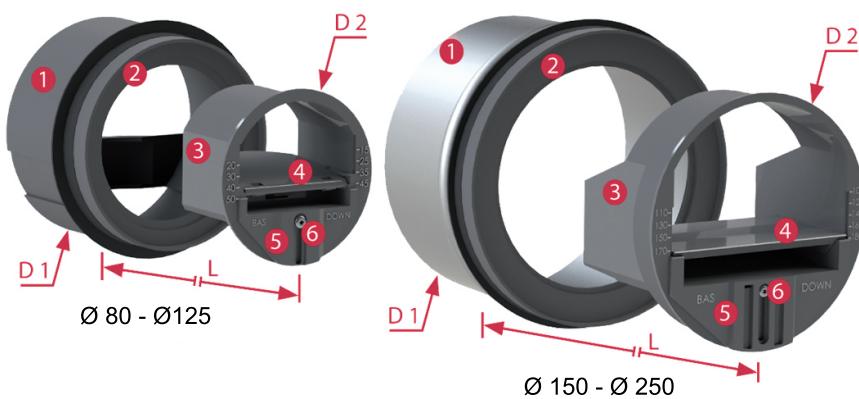
Symbols and specifications

- Q (m^3/h) = Air flow ratio in m^3/h
- Q KVR-R = Set flow rate in the volume control damper
- Ps(Pa) = Static pressure loss in the volume control damper in Pa
- The graphs characterize the variations in the air flow in extraction with respect to the pressure differential in Pascal at a pressure set between 50 and 250 Pa. The flow rates shown are average values and may vary as follows:

For Ø80: +/- 3 m^3/h

For Ø100 and Ø125: +/- 3 m^3/h for air volume $\leq 50 \text{ m}^3/\text{h}$, +/- 5% for air volume $> 50 \text{ m}^3/\text{h}$

For Ø150, Ø160, Ø200 and Ø250: +/- 5%



KVR-R Ø mm	D1(mm)	D2(mm)	L(mm)
Ø 80	76	76	55
Ø 100	96	93	70
Ø 125	120	117	86
Ø 150	146	148	91
Ø 160	146	148	91
Ø 200	190	195	91
Ø 250	245	236	127

Construction

- 1. Collar with sealing
- 2. Intermediate piece according to the air flow rate
- 3. Casing
- 4. Regulating element
- 5. Air flow rate regulating module
- 6. Blocking screw for regulating module m³/h

Adjustment**Sound data**

Qv (m ³ /h)	L _w			
	50Pa	100Pa	150Pa	200Pa
15	25	29	32	35
25	26	30	33	36
30	26	31	35	38
45	27	33	36	39
50	29	35	37	41
60	32	37	39	42
75	32	37	40	42
90	32	38	41	44
100	33	39	42	45
120	30	34	39	42
150	33	37	41	45
180	34	40	44	47
210	34	40	42	44
240	35	41	44	47
270	37	43	45	49
300	33	37	42	45
350	35	40	44	47
400	37	42	45	50
450	38	44	46	51
500	39	46	48	53



OUR TECHNOLOGY | YOUR WELLBEING

BARCOL-AIR | AIR DISTRIBUTION

Cantekooweg 10-12 - 1442 LG Purmerend, The Netherlands

T +31 (0)299 689 300 | E export@barcol-air.nl

WWW.BARCOL-AIR.NL