



Air valve

KE / KK



KE and KK air valves are intended to use in low- and medium-pressure ventilation systems. Due to adjustable free area of the valve, there is a possibility of accurate setting of the airflow.

◀ Air exhaust valve KK



Air supply valve KE ▶

Air valve KE i KK



Material and finish

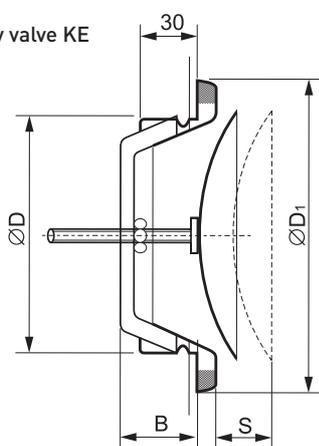
Air valves are available in both air supply (KE) and air exhaust (KK) version. They are made of steel, powder coated with RAL9010 color. On special request it is possible to coat the valve with different RAL color. The valves have adjustable inner cone. The regulation of the airflow is achieved by rotating the inner cone (increasing or decreasing its free area) to the correct setting and locking into place with a lock nut.

Installation

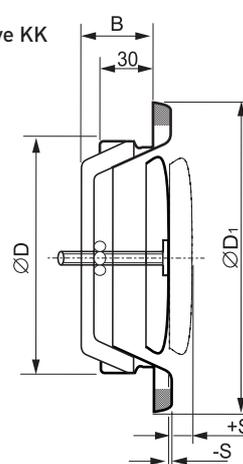
Valves are supplied with the mounting rings. The mounting rings are mounted to the construction barriers with use of screws. The installation of the valve is carried out by screwing the valve body into the mounting ring.

Diameter, weight

Air supply valve KE



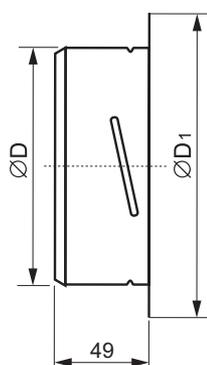
Air exhaust valve KK



Diameter	ØD	ØD ₁	B	Weight
[mm]	[mm]	[mm]	[mm]	[kg]
80	79	120	31	0,14
100	99	140	31	0,19
125	124	170	37	0,31
160	159	210	46	0,5
200	199	250	50	0,73

Diameter	ØD	ØD ₁	B	Weight
[mm]	[mm]	[mm]	[mm]	[kg]
80	79	120	31	0,15
100	99	140	31	0,195
125	124	170	37	0,31
160	159	210	46	0,47
200	199	250	50	0,66

Mounting ring



Height	ØD	ØD ₁	Weight
[mm]	[mm]	[mm]	[kg]
80	79	105	0,04
100	99	125	0,05
125	124	150	0,07
160	159	180	0,10
200	199	225	0,14

Selection of KK and KE valves

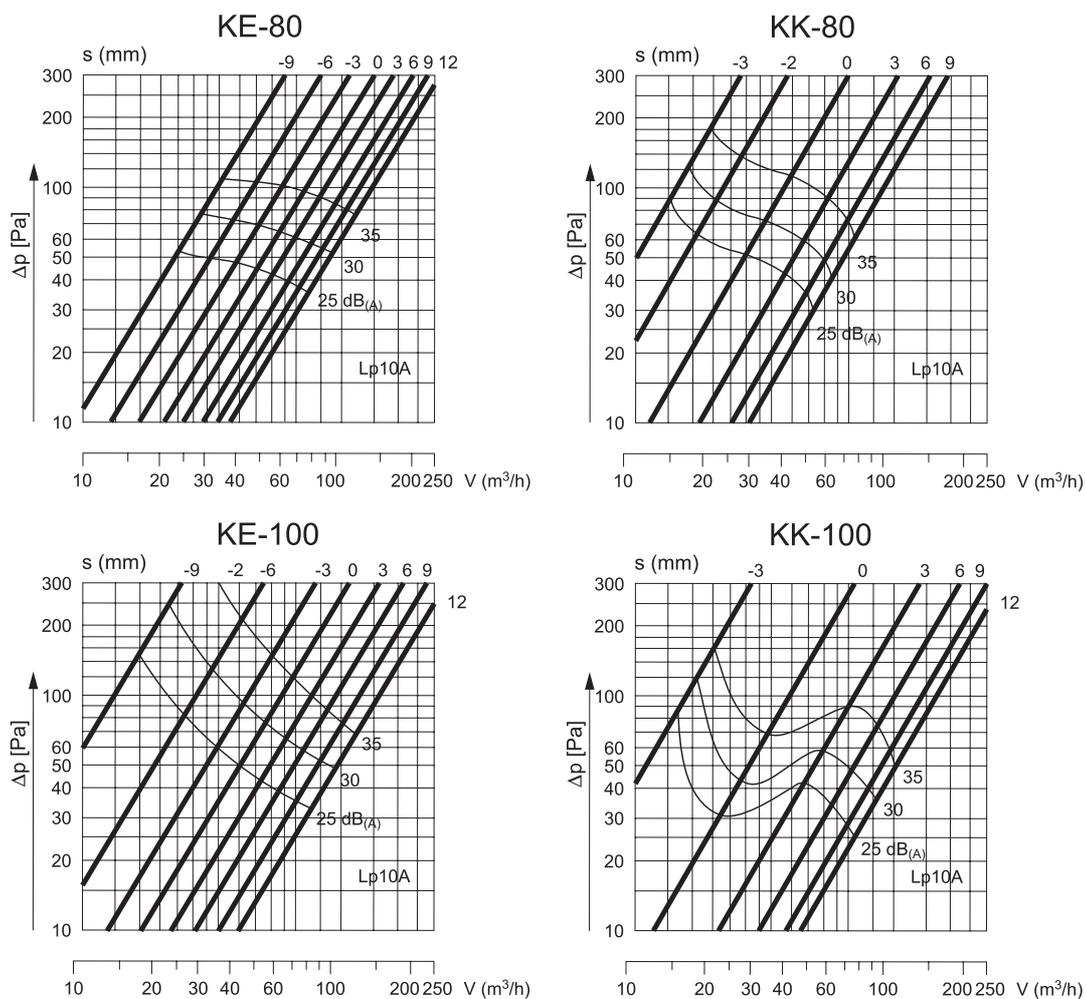


Designation:

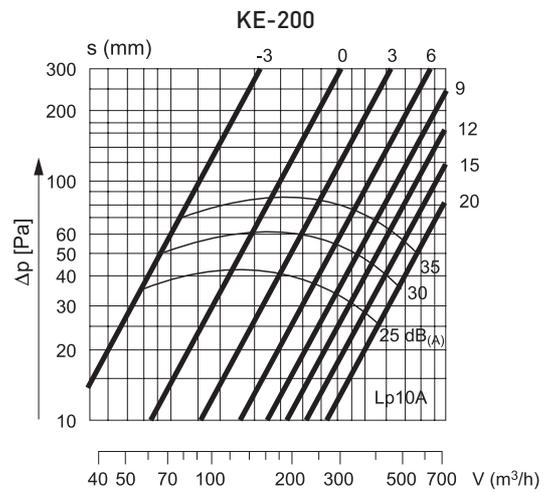
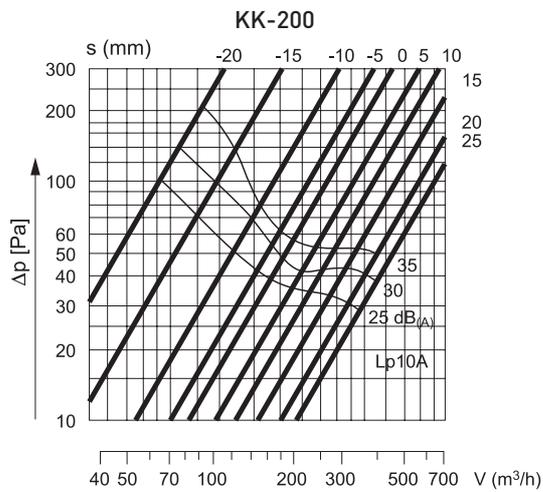
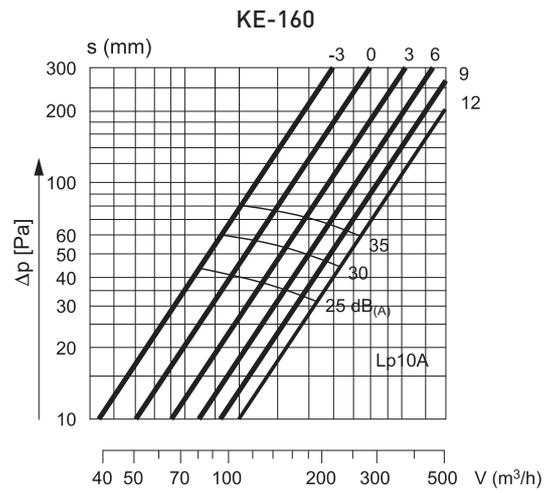
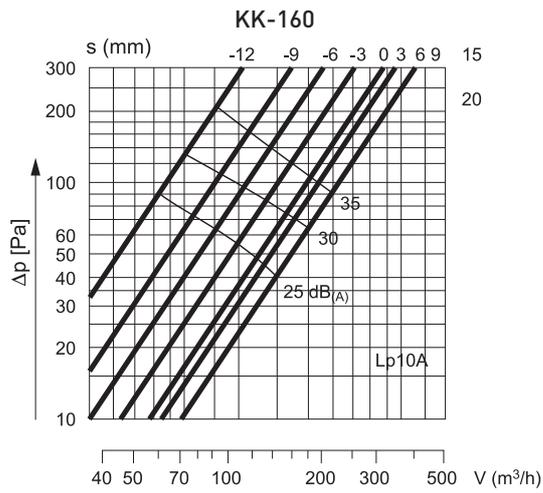
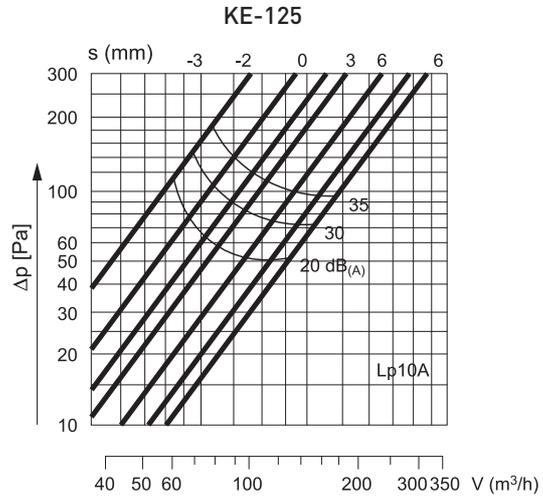
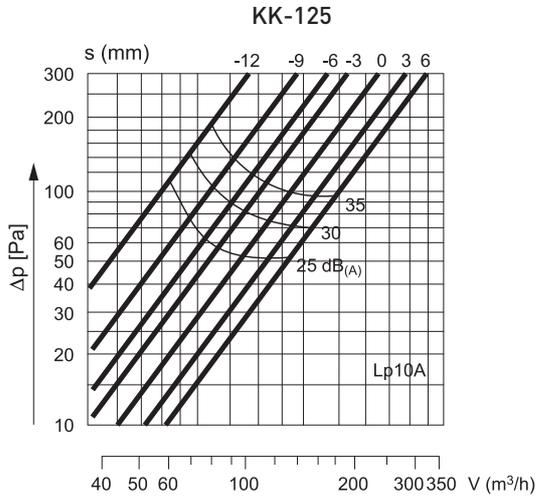
V	[m ³ /h]	Volume flow rate
s	[mm]	Gap size
Δp	[Pa]	Local pressure drop
L_w	[dB _(A)]	Sound power level
L_{p10A}	[m ²]	Acoustic pressure with attenuation
ΔL	[dB]	Attenuation
K	[dB]	Correction coefficient

Nomograph I

Characteristics of the air flow resistance and sound of operation in function of volume flow and inner cone position



Selection of KK and KE valves



Selection of KK and KE valves



Characteristics of sound attenuation

Average sound attenuation from the ductwork into the space along with final sound reflection on the connection to the ceiling.

KE	S [mm]	Sound attenuation							
		Average frequency in octaves [Hz]							
		63	125	250	500	1,0k	2,0k	4,0k	8,0k
80	-3	24	21	16	12	9	7	5	5
	+3	24	19	13	10	7	4	4	4
	+9	24	19	13	9	6	3	3	4
100	-3	22	17	13	10	8	8	6	9
	+3	21	16	11	8	6	7	4	7
	+9	22	16	11	8	6	6	3	6
125	-9	22	16	11	8	6	5	6	7
	0	20	15	10	7	5	4	3	6
	+9	20	15	9	6	4	3	3	5
160	-3	18	14	9	7	6	7	6	8
	+6	18	13	8	6	5	5	6	6
	+12	18	13	8	5	4	4	5	6
200	0	16	12	9	8	9	9	9	8
	+9	16	11	8	6	7	7	7	7
	+15	17	11	7	6	6	5	6	6
Tolerance ±			6	3	2	2	2	2	3

KK	S [mm]	Sound attenuation							
		Average frequency in octaves [Hz]							
		63	125	250	500	1,0k	2,0k	4,0k	8,0k
80	-9	24	20	14	10	8	5	5	6
	0	24	19	13	9	6	3	4	5
	+12	24	19	13	9	5	2	3	4
100	-6	23	17	13	11	9	9	10	12
	0	23	17	12	9	7	7	7	9
	+12	22	16	11	7	5	5	5	7
125	-12	21	15	12	11	8	9	12	11
	-3	20	15	10	8	6	6	6	10
	+6	21	14	9	7	4	4	6	8
160	-15	18	14	12	10	9	9	13	15
	-5	14	13	10	7	6	6	9	10
	+5	14	13	8	5	4	4	7	7
200	-20	17	13	11	9	8	10	13	11
	0	17	11	7	6	5	6	8	6
	+20	17	10	6	4	3	4	8	4
Tolerance ±			6	3	2	2	2	2	3

Distribution of the sound level

$$L_w = L_{p10A} + K$$

Value of the correction coefficient in different frequency bands

KE	Correction coefficient K [dB]						
	Average frequency in octaves [Hz]						
	125	250	500	1,0k	2,0k	4,0k	8,0k
80	2	2	1	0	-3	-9	-17
100	4	3	2	0	-7	-15	-30
125	2	7	3	-2	-10	-20	-32
160	5	7	3	-2	-10	-19	-32
200	8	6	4	-3	-10	-19	-32
Tolerance ±	3	2	2	2	2	2	3

KK	Correction coefficient K [dB]						
	Average frequency in octaves [Hz]						
	125	250	500	1,0k	2,0k	4,0k	8,0k
80	1	-2	1	0	-3	-10	-22
100	-2	-4	-3	0	-1	-8	-16
125	4	3	1	-1	-3	-12	-22
160	-1	0	1	0	-4	-13	-26
200	0	-5	1	2	-13	-28	-32
Tolerance ±	3	2	2	2	2	2	3



Accessories and order code:

While ordering, please provide the information using the following method:

<VALVE TYPE> - <oD> - SL - <RAL>

Where:

<VALVE TYPE>	- KE or KK
<oD>	- Nominal diameter: 80, 100, 125, 160, 200
SL	- Finish: powder coated steel
<RAL>	- RAL color*

* optional values - default values will be used if optional values are not specified

Order example

KK - 160 - SL9010