

KRU Regulating and shut-off damper

KRU - rectangular regulating and shut-off damper is designed for closing air ducts and adjusting the air flow in ventilation systems.

KRU - sealed regulating and shut-off damper with thermally insulated blades, air tightness class 4 (EN 1751).

Damper versions:

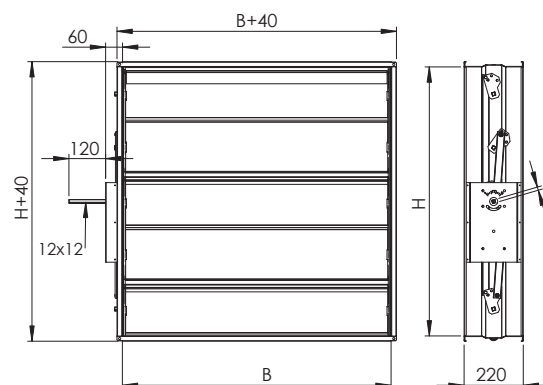
KRU - sealed regulating and shut-off damper.

KRU-25 - sealed regulating and shut-off damper with thermally insulated blades, the measured thermal transmittance $U_d = 2,5 \text{ W}/(\text{m}^2\text{K})$.

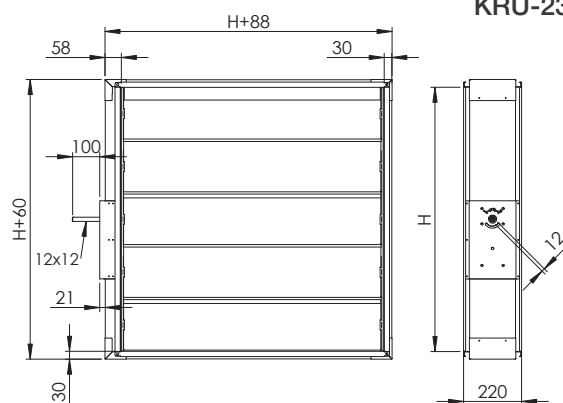
KRU-23 - sealed regulating and shut-off damper with thermally insulated blades and an thermally insulated external casing, the measured thermal transmittance $U_d = 2,3 \text{ W}/(\text{m}^2\text{K})$.



KRU/KRU-25



KRU-23



Areas of use

Used in air duct systems, in which significant temperature differences and good tightness and thermal insulation are required.

The normal operation temperature area is $-40^{\circ}\text{C} \dots +80^{\circ}\text{C}$.

Structure and dimensions

KRU dampers are manufactured of galvanized steel. The blades rotate in the case on polyamide bearings. The damper has profiled blades with polyamide covers at the ends and silicone-sealed edges. The blades are filled with mineral wool.

All blades have a profiled sandwich structure and smooth surface to prevent thermal bridges and dirt accumulation.

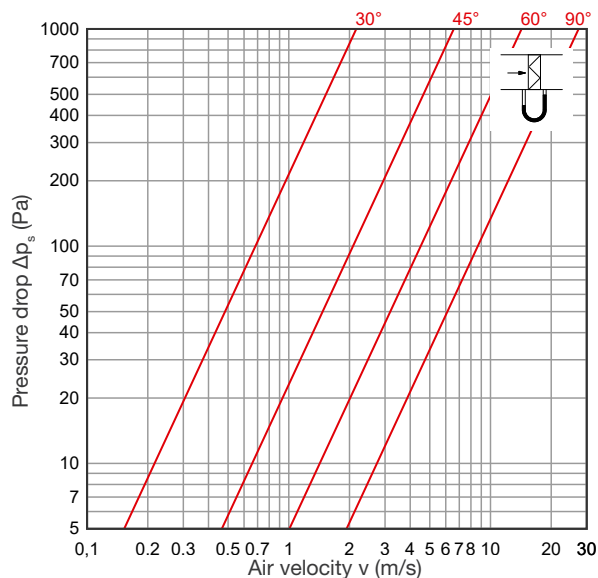
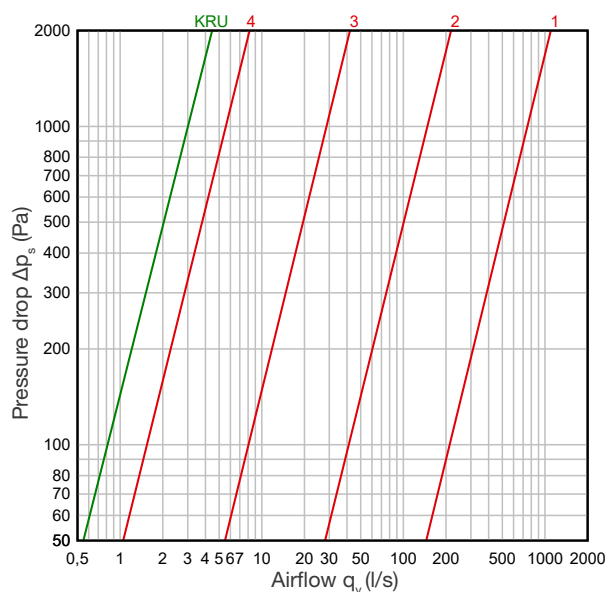
The dampers are equipped with a motor base. When the surface area is bigger than 4 m^2 , the damper is compiled of two or more units, of which each is equipped with their own actuator.

Measurements

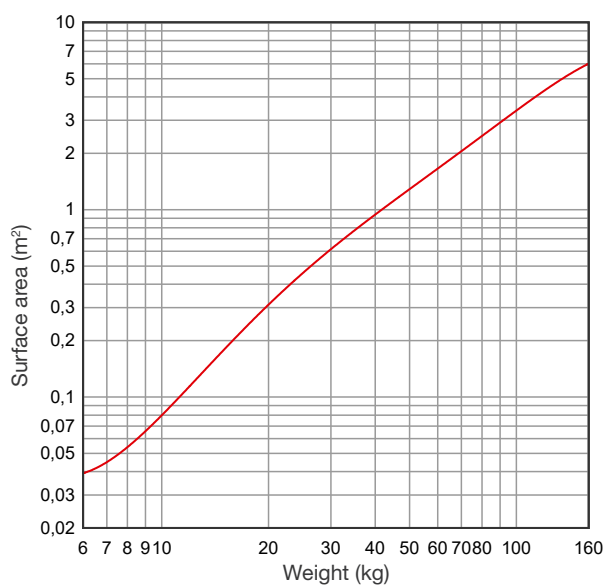
Width B	200,, 2500 mm
Height H	200, +50,, 2950 mm (the blade width is 200 mm)
B x H	If the surface area is $>4 \text{ m}^2$, use two or more dampers

Technical data

KRU type of damper external casing leakage class is C and the air tightness class of the damper is 4 (according to EN 1751:2014).



Damper weight



Torque

The torque needed for closing the damper.

Damper height, H	Width B				
	500	1000	1500	2000	2600
2000	20	30	30	30	30
1500	20	20	30	30	30
1000	15	20	20	30	30
500	15	15	20	20	20

Actuator capacity ☐ 15 Nm ☐ 20 Nm ☐ 30 Nm

Marking

		KRU 25	ZM	B x H	D1=XXX	L=XXX
Marking						
KRU	Edge-sealed damper for shut-off and regulation, air tightness class 4					
KRU 25	Edge-sealed damper for shut-off and regulation with thermally insulated blades, $U_d=2,5 \text{ W/(m}^2\text{K)}$					
KRU 23	Edge-sealed damper for shut-off and regulation with thermally insulated blades and casing, thermal conductivity $U_d=2,3 \text{ W/(m}^2\text{K)}$					
Material						
	Galvanized steel (DX51D+Z275), standard material (not marked)					
H	acid-proof steel (AISI 316L)					
ZM	Magnelis®, zinc-magnesium coated steel (ZM310)					
Duct dimensions						
	Width B x height H (mm)					
Round connection						
D1	Round connection on one side (add the location of the actuator viewed from room)					
D2	Round connections on sides					
Wall mount						
R	Wall profile (L profile width 50 mm), actuator on the right					
L	Wall profile (L profile width 50 mm), actuator on the left					

Example: KRU 25 400x400 D1=400 L

Installation

KRU-type dampers are installed to ventilation units or ducts using euro(E20) or z-joining profiles. Blades can be installed horizontally or vertically.

When installing damper the cross-sectional requirement must be monitored. The deviance of the dampers body is $\pm 1^\circ$. Bigger angel deviation can cause stuck of the blades.

For round connection suitable joint must be ordered and used. The connection is mounted to the duct with rivets. If the round connection is only on one side, add the location of the actuator to the product marking seen from the room side. When using a damper with an actuator, note that there is sufficient space between the damper and any other parts, for example duct or wall, for replacing the actuator.

