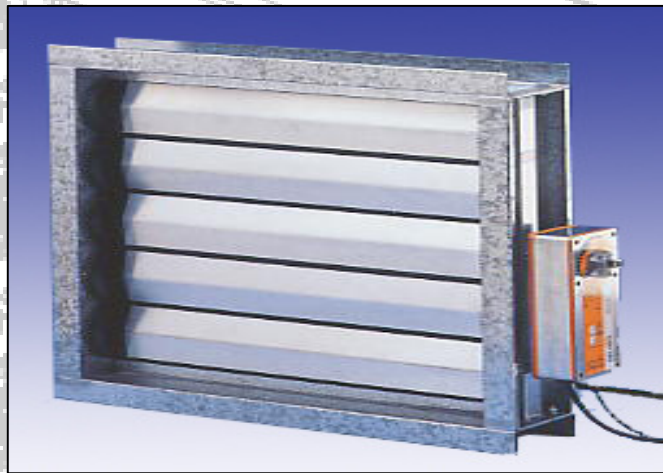


ENERGY SAVING ISOLATION DAMPER

K100, K100-U, K200, K200-U

Description:

- **K100** Low leakage energy saving volume control damper (Insulated Blades)
- **K100-U** Ultra low leakage energy saving volume control damper (Insulated Blades). Blade leakage in accordance with DIN 1946 part4
- **K200** Low leakage isolation volume control damper
- **K200-U** Ultra low leakage isolation volume control damper. Blade leakage in accordance with DIN 1946 part 4



Applications:

- **Multi-leaf dampers** primarily used in air conditioning and ventilation systems for volume control, pressure control and isolation
- This range of dampers are energy saving, reducing air loss considerably over standard products. The K100 & K100-U incorporate insulated blades for improved thermal performance and noise reduction
- Direct fixing to the inlet louvres to form one assembly
- Room isolation in manufacture of pharmaceutical products
- Agricultural stores
- System sterilization



Go green – Use energy saving dampers, save energy and help the environment

Quality – Investment – Innovation

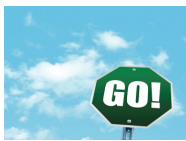
ENERGY SAVING ISOLATION DAMPER K100, K100-U, K200, K200-U

Features:

- K100-U and K200-U ultra low leakage dampers meet the stringent DIN 1946 part 4 standard for blade leakage
- K100 & K100-U dampers incorporate thermal insulation within the blade section
- High strength galvanised channel casing
- Aerofoil section extruded aluminium blade with integral blade edge seal
- Opposed blade action for optimum air control
- Full Length 12.7mm square drive shaft
- Individual blade coupling by plastic gears, running in maintenance free acetal bushes, forming a non-ferrous gearing system
- Manual, electrical or pneumatic control options
- Large single and multiple module assemblies
- Circular Spigot or Flanged connections available
- Face and bypass dampers

Construction:

- Casing – 1.2mm thick galvanised mild steel casing, 132mm deep and 40mm flanges c/w 10mm return edge for flange clamps
- Blades – Aerofoil section extruded aluminium blades, 103mm wide c/w EPDM edge seals. K100 and K100-U blade sections filled with thermal insulation
- Gears – Plastic gear with integral stub spindle. K100-U and K200-U gear fitted with foam/felt side seals running on low friction PTFE strip
- Bushes – 25mm diameter hard acetal, incorporating locking rib. Bushes encased as standard

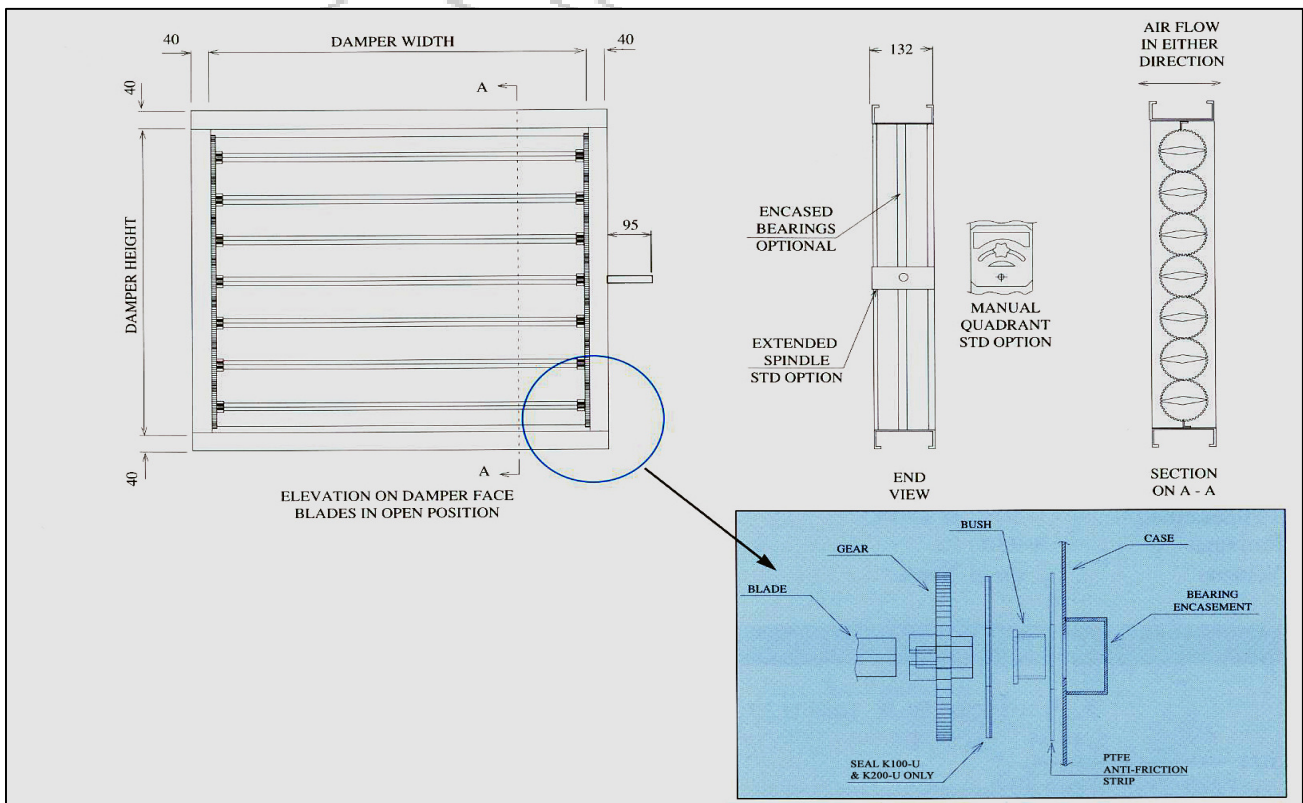


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ENERGY SAVING ISOLATION DAMPER

K100, K100-U, K200, K200-U

Damper Construction



Size Range:

- K100, K200 – 100 W x 108 H to 1250 W x 1250 H in a single module
- K100-U, K200-U – 100 W x 108 H x 1000 W x 1008 H in a single module
- For larger multiple module assemblies, please consult our technical department
- Circular, flat oval, spigot & flanged units are available



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We reserve the right to make specification changes without prior notice or obligation

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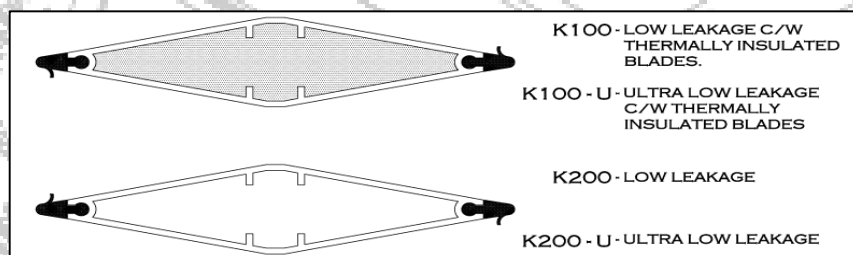
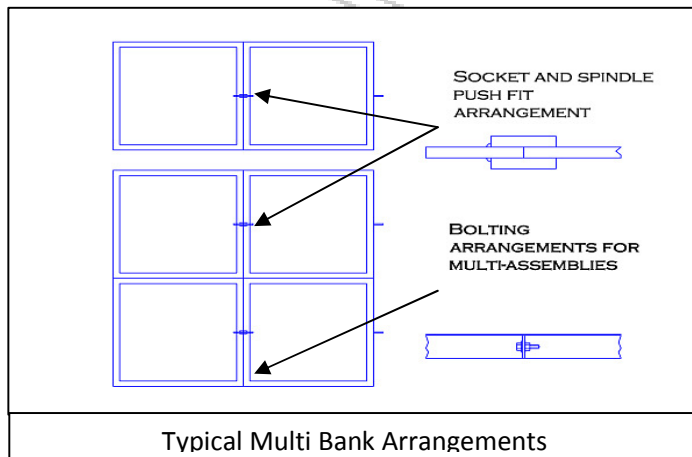
KONVEKTA

AIR CONTROL EQUIPMENT

K100/K200

ENERGY SAVING ISOLATION DAMPER

K100, K100-U, K200, K200-U



Blade
Section

Options:

- Damper casing materials of 316 grade stainless steel, Aluminium and PVC
- Dampers incorporating oilite bearings
- External linkages or gears
- Parallel bladed dampers
- Face and bypass dampers
- Damper casings to suit customer requirements
- Flange drillings
- Powder coated casing & blades in either Epoxy or Polyester
- Concealed Motors



Go green – Use energy saving dampers, save energy and help the environment

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ENERGY SAVING ISOLATION DAMPER

K100, K100-U, K200, K200-U

Operating Conditions:

- Temperature: -10°C to +90°C
- Pressure: ± 2500Pa
- Velocity: up to 20m/s

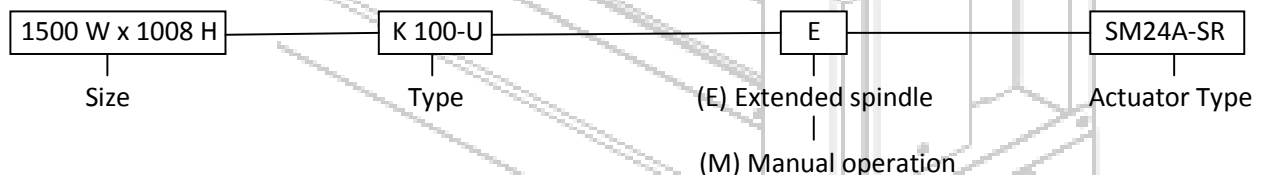
Control Options:

- M = Manual operated quadrant
- E = Extended spindle for motorization (by others)

Factory Fitted Actuators:

- Electrical actuator options – 24/110/240 volt units. Double acting /open-close, modulating, spring return
- Pneumatic actuator options. Double acting/open-close, modulating, spring return

ORDERING

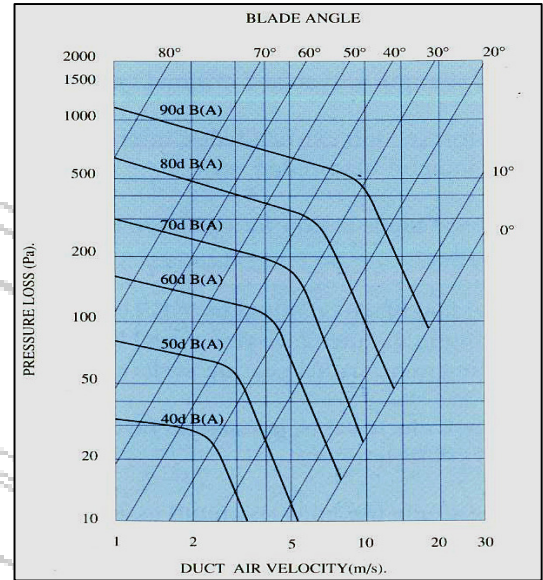
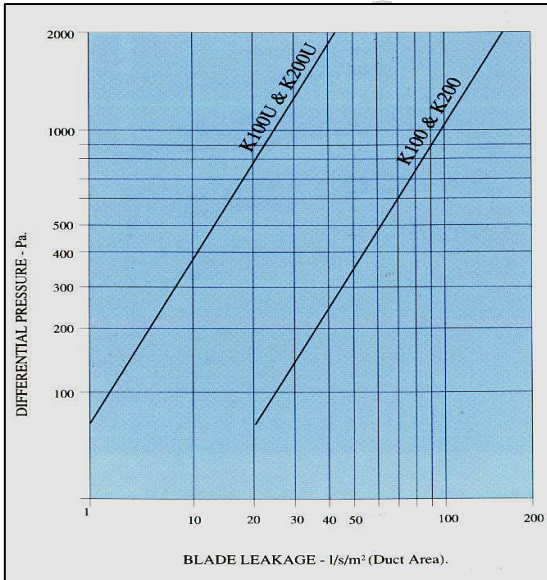


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ENERGY SAVING ISOLATION DAMPER

K100, K100-U, K200, K200-U



LA-A-Weighted sound power level related to a 0.5m² duct (dB(A))
Correction factors for noise levels

A (m ²)	0.5	1.0	1.5	2.0	3.0	4.0
K (db)	0	+3	+5	+6	+8	+9

1. Damper torque due to aerodynamic loading

$$T_{air} = \frac{a \times \Delta p \times A}{100}$$

2. Damper torque required to close the dampers

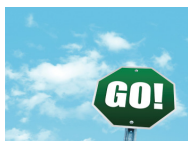
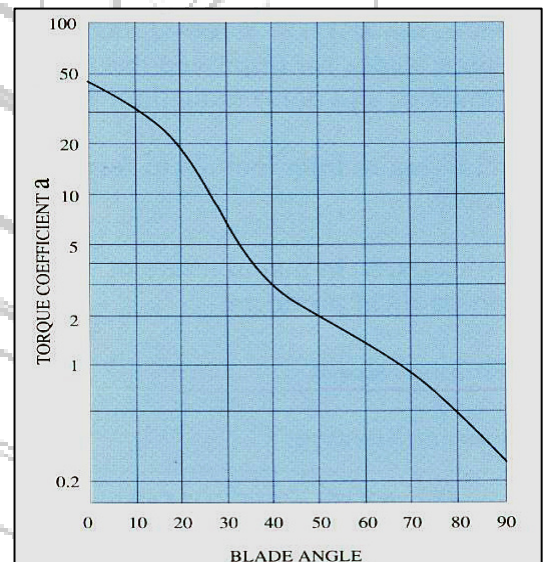
$$T_c = 20A$$

a- Torque coefficient

Δp - Total pressure difference across damper (Pa)

A- Damper area (in²)

T- Torque (Nm)



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