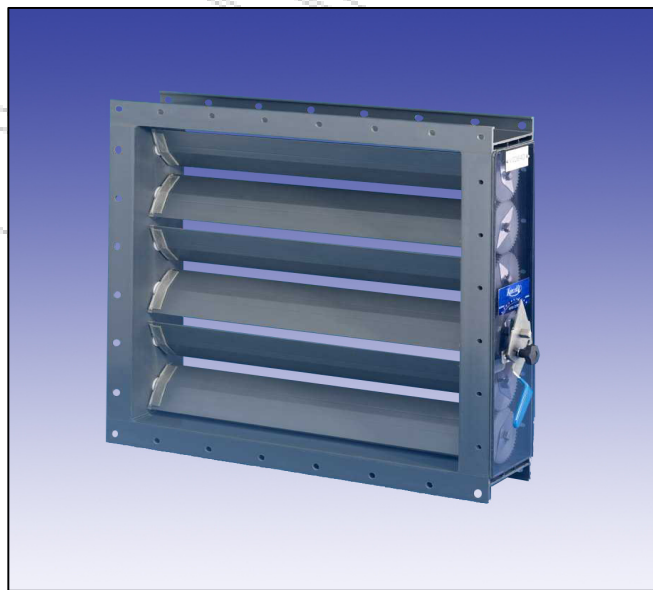


## PVC SPECIAL APPLICATION DAMPER

### K500-X (PVC)

#### Description:

- K500-X - Plastic special application multi-leaf opposed blade volume control damper



#### Applications:

- The K500-X opposed blade volume control damper is a corrosive resistant product for use in corrosive atmospheres and with aggressive media
- These multi-leaf dampers are primarily used in ventilation systems for volume control, pressure control and air balance where there are airborne contaminant present
- Coastal installations
- Sewage treatment plants
- Water treatment works
- Fume cupboard extract systems
- Variable air volume fume cupboard systems

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## PVC SPECIAL APPLICATION DAMPER K500-X (PVC)

### Features:

- Rigid PVC double skin casing
- Aerofoil section extruded PVC blade
- Opposed blade action for optimum air control
- Individual blade coupling by plastic gears, running in maintenance free bushes
- External gears c/w blade position indicators and clear PVC cover
- Encased bearing, with one casing penetration
- Suitable for GRP cladding
- Manual, electrical or pneumatic factory fitted control options

### Construction:

- Casing – PVC-U extruded 6.00mm thick double skin casing, 160mm deep with 50mm flanges
- Blades – PVC-U extruded Aerofoil section double skin blades, 103mm wide
- Linkage (External) – Polypropylene gear, fitted with 25mm diameter integral stub shaft
- Bushes – PTFE flanged bush, 25mm diameter x 2.5mm thick
- Drive Spindle – 316 grade Stainless steel, 12.7mm square full length shaft

### Options:

- GRP clad casings
- Low Leakage damper using specially coated K200 aluminium blades with EPDM edge
- Circular, spigot and flange connections
- Flange drillings
- Backing flanges

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## PVC SPECIAL APPLICATION DAMPER

### K500-X (PVC)

#### Operating Conditions:

- Temperature: -10°C to +60°C
- Pressure: ± 2500Pa
- Velocity: up to 20m/s

#### Control Options:

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

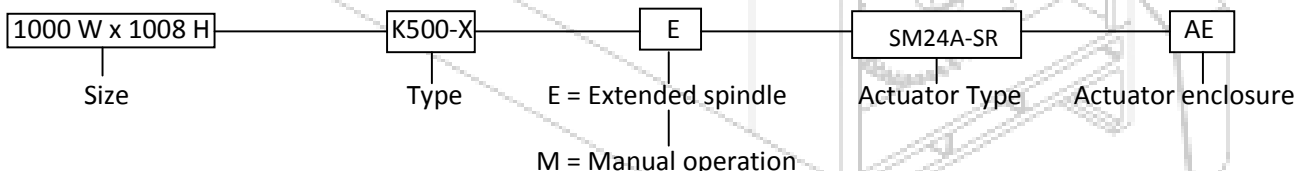
#### Factory Fitted Actuators:

- 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

#### Size Range:

- 100 W x 108 H to 1000 W x 1250 H in a single module
- Multi-unit assemblies available
- Circular, flat oval, spigot & flanged units are available

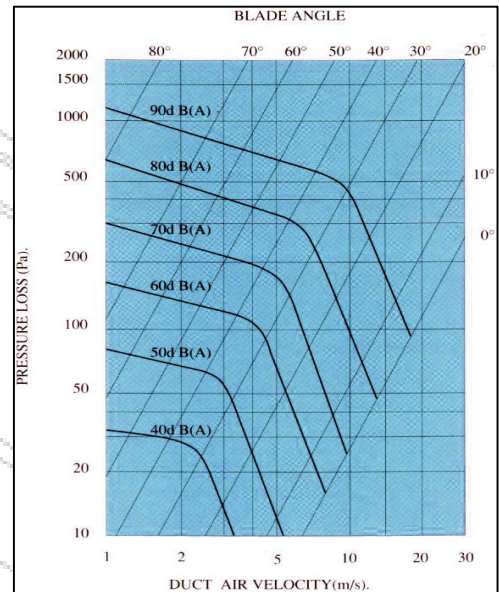
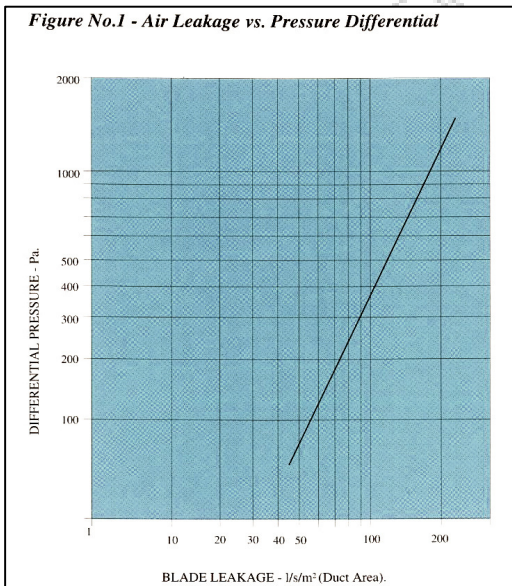
#### ORDERING



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## PVC SPECIAL APPLICATION DAMPER

### K500-X (PVC)



**LA-A-Weighted sound power level related to a 0.5m<sup>2</sup> duct (dB(A))**  
**Correction factors for noise levels**

A (m <sup>2</sup> )	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**

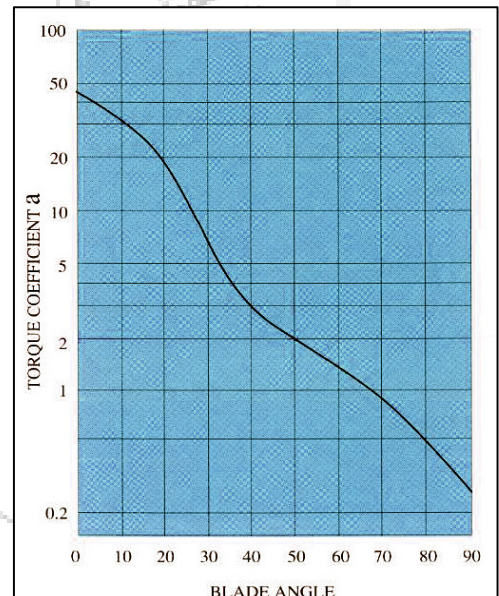
$$T_c = 20A$$

a- Torque coefficient

$\Delta p$ - Total pressure difference across damper (Pa)

A- Damper area (in<sup>2</sup>)

T- Torque (Nm)



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