Product Data Sheet ES36 / 05-02

Actionair Energy/Shield 36

Air Control and Shut-off Dampers

Application

The damper is suitable for systems requiring air control, system balancing and shut-off.

Features and Design Guide

Energy/Shield 36/R.
Opposed blade movement.

Energy/Shield 36/P
Parallel blade movement

Choice of Control Options.
Standard: Extended Spindle,
Optional: Manual Quadrant
Electric Control.

Specification

Air control system balancing, and shut-off dampers with triple-vee 1.6mm thick x 157mm wide, galvanised steel blades. Housed in a 1.2mm thick x 160mm deep galvanised steel frame with 40mm flanges, and with pre-punched corner holes to suit proprietary duct flanges.

Low closed blade leakage is achieved by stainless steel side gasketting, and synthetic blade seals.

Blade axles are 11.1mm hexagonal zinc plated steel.

Synthetic blade bearings give a corrosion resistant, hard wearing and free running operation.

The blade drive mechanism is mounted out of the airstream to minimise pressure drop and noise generation.

Casing leakage conforms to DW144 class C up to 1000 Pa.

Closed Blade leakage conforms to EN1751 class 2.

Energy/Shield 36/R Damper with extended shaft control illustrated.

Application Parameters

Energy/Shield 36 dampers of maximum width and height are suitable for system pressures up to 1000 Pa, and duct velocity up to 10 m/s.

Operating temperature range is -40°C to +70°C. Note: actuators may only be suitable for lower temperatures.

Energy/Shield 36 dampers are designed for applications in normal dry filtered air systems. When exposed to fresh air intakes and/or inclement conditions, the dampers should be subject to a planned inspection and maintenance programme.

Energy/Shield 36 is not recommended for installation with blades running vertically.

Size Parameters

Available in 1mm increments

Single Modules
Widths from 200 - 1200mm
Heights from 200 - 1800mm

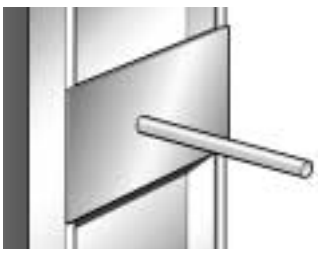
Multiple Width Configuration
Available as 2 single units, up to a maximum of 2480mm wide. Multiple dampers are driven from each side.

Multiple Height Configuration

Unlimited height.

All multiples are joined together (by others) with galvanised 1.2mm thick 75mm wide joining strips provided. For very large assemblies, additional support may be required - please refer to our Actionair Sales Office.

Control Options



Option X
12.7mm diameter x 150mm Zinc plated steel Extended Spindle for motorised control. Supplied as standard. Loose for site fitting by others.

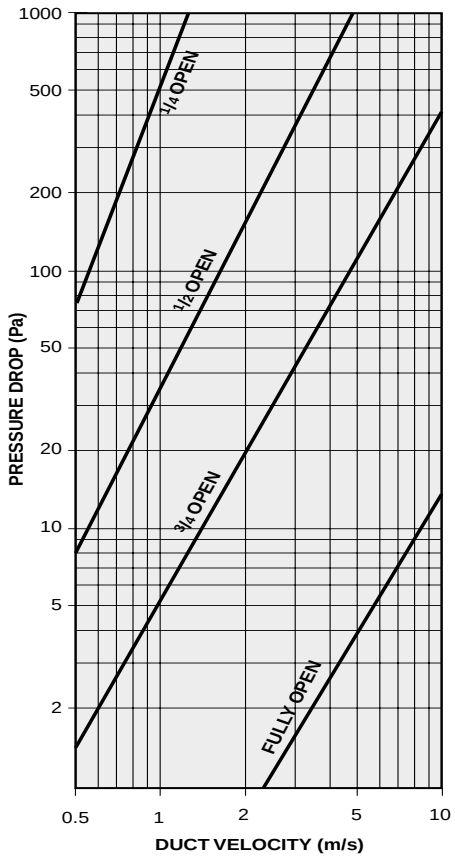
Option Q
Manual Quadrant Control. Supplied loose for site fixing by others.

Option E
Belimo Actuators for 24V or 230V open/closed or spring return operation and 24V modulating are available.

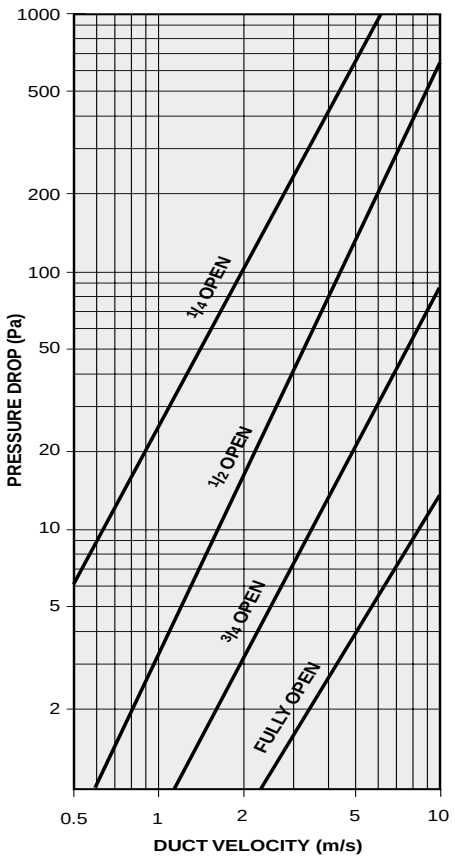
Technical Data

Graphs showing Pressure Drop Vs Velocity at intermediate Blade positions.

E/S 36/R (Opposed Blade)

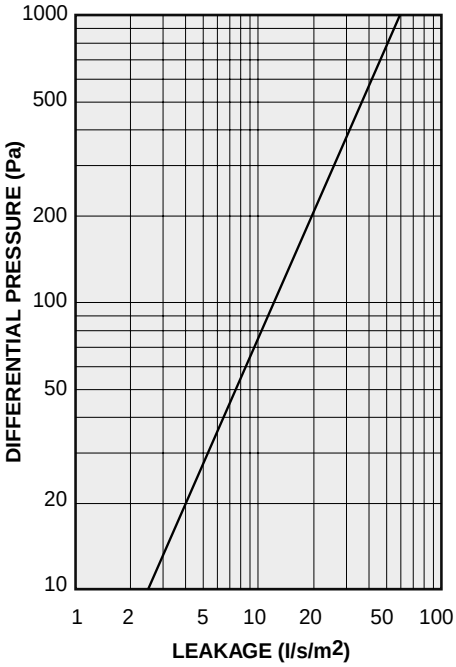


E/S 36/P (Parallel Blade)

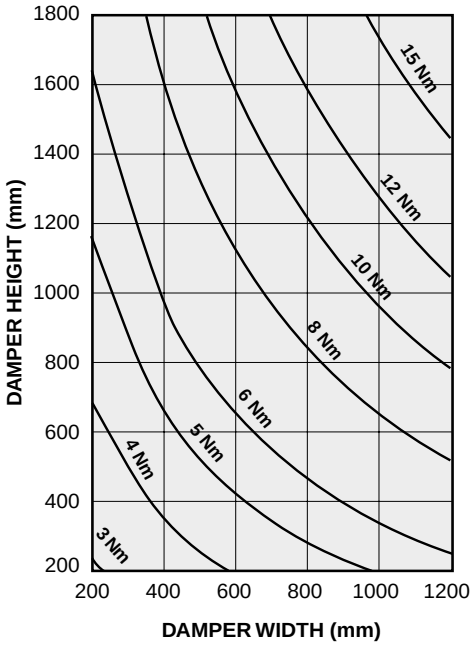


Damper Leakage

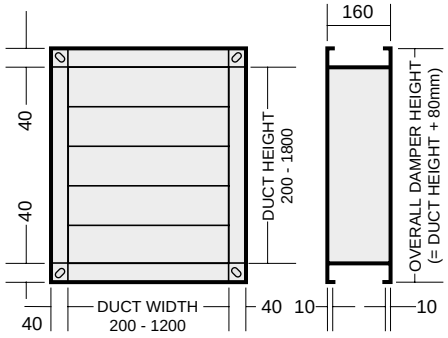
1000mm wide x 1000mm high Damper

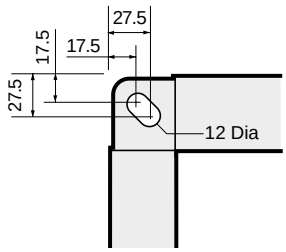


Damper Torques



Dimensions





Ordering Procedure

Example

2	E/S.36	R	Q	400 x 400
QTY	SERIES	TYPE	CONTROL OPTION	DUCT SIZE

Model Type

E/S.36 Air Balancing Damper

Operation

- R Opposed Blade Movement
- P Parallel Blade Movement

Control

- X Extended Shaft for motorisation by others
- Q Manual Hand Quadrant
- E Motor
  (Please state type and voltage of motor separately)

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Quality System Certificate No 017 Assessed to ISO 9002

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