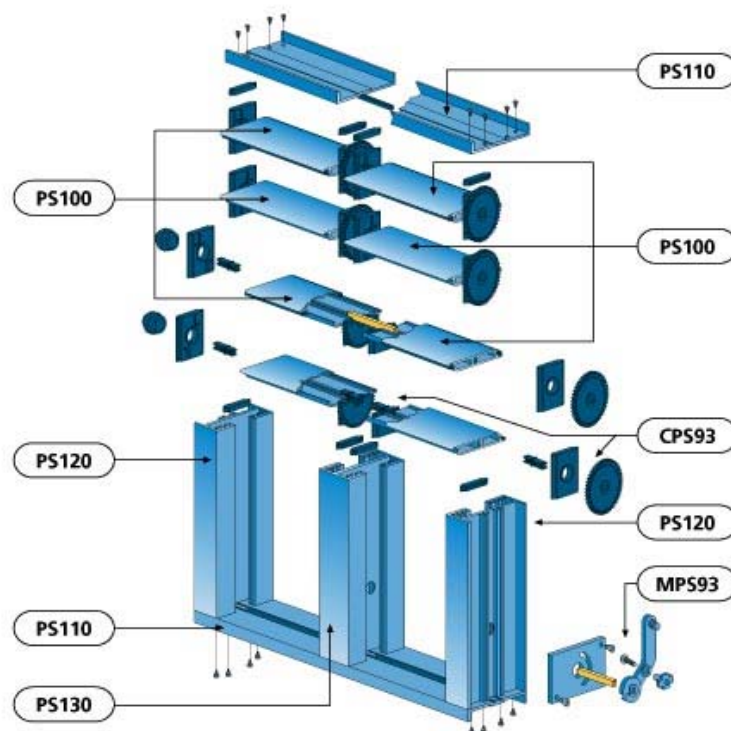


AIRPAK ARD100 Damper Specification

The AIRPAK ARD100 dampers are of an extruded aluminium design with integral flanges and stiffening ribs. The blades are aerofoil shaped and are fitted with a flexible edge seal for low leakage characteristics, and are eminently suitable for volume control in ducted systems. The toothed drive gears and bearings are high strength ABS plastic and are concealed within the damper housing, resulting in a clean internal and external finish. The 12 mm square brass drive shaft is suitable for motorized operation, or can be fitted with a manual lockable quadrant.



Exploded View of AIRPAK ARD100D Damper

Standard internal air stream dimensions are height in increments of 100mm from 110mm and lengths to suit. Standard size restrictions are as follows:

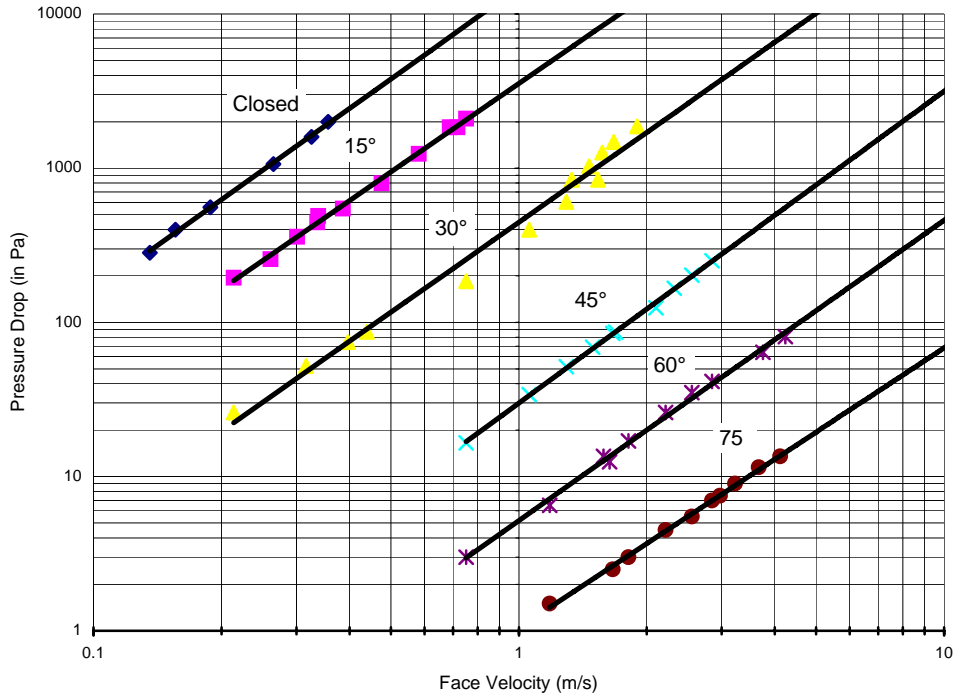
Minimum single section size	110H x 200W (1 Blade)
Maximum single section size	710H x 1500W (7 Blades) or 1210H x 1200W (12 Blades)
Maximum double section size	1210H x 2400W (10 Blades)
Maximum triple section size	710H x 3600W (7 Blades)

The ARD100 damper must be installed square and free of twist. It is essential that the damper be mounted with the blades horizontal for longer, maintenance free operation. For permanently set operation, the damper can be installed with the blades vertical.



The ARD100 dampers have been an independently laboratory tested for leakage and pressure drop performance. The pressure drop characteristics are as per graph.

ARD 100 Damper Pressure Drop at 1.2 kg/m³ air density.



Damper actuator torque requirements can be calculated from the following formulae:

$$\text{Single Damper Torque (Nm)} \quad M = (n \times 0.25) + 2$$

$$\text{Double Damper Torque (Nm)} \quad M = (n \times 0.5) + 2$$

Where n is the number of blades high.

