

Knife Edge Dampers

Knife edge dampers use a flat blade that moves linearly across the duct opening to provide positive shut-off. In the open position, the blade fully retracts fully to allow minimal pressure drop; in the closed position, the blade cuts through the airstream to seal the duct. These are typically used where dirty, hot, corrosive, or high-dust gases make other damper types less reliable.

These dampers follow the same material concepts as regular dampers. The knife edge itself is made out of 16 GA and it's made to seal up against the metal seat. The knife edge seals are used in high solvent processes. These types of seals create less of a surface area for "gunk" to build up on, making it easier for the actuator to break them open if needed.

Benefits of Knife Edge Dampers:

- Extremely reliable isolation in harsh conditions
- Very low pressure drop
- Positive shut-off with high seal integrity
- Suitable for high temps and extreme environments
- Field-Serviceable - All parts can be replaced in the field without removing the damper from the frame.

