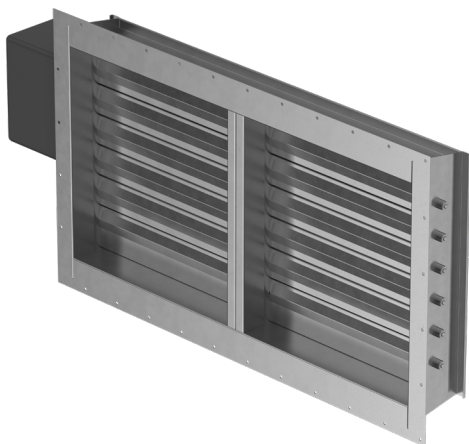


CFD-02TM IMO A CLASS FIRE DAMPER

For heavy industry ventilation systems



OVERVIEW

The CFD-02TM High Temperature Tunnel Damper is engineered for critical tunnel ventilation applications where reliable airflow control and smoke management are essential. Designed for operation in both normal and emergency conditions, the damper plays a key role in supporting tunnel ventilation strategies and maintaining system performance during fire events.

The damper is capable of operating at elevated temperatures associated with tunnel fires, enabling the control and extraction of smoke and hot gases while maintaining operational integrity. Its robust construction and flexible configuration options allow the CFD-02TM to be tailored to the specific aerodynamic, spatial, and access requirements of each installation.

KEY FEATURES

Casing

The damper casing is formed from 3.0 mm thick sheet steel into a rigid channel section to ensure proper alignment of blades and shafts. The CFD-02TM is available as a single unit, maximum size 2550mm x 1900mm, or as a multiple unit assembly. The insertion length is 300mm.

Blades

The blades are a formed double skin aerofoil section of 2.0 mm sheet steel and operate with a parallel linkage. They seal against a flame-retardant PVC strip attached to the blades and top and bottom stops. Blade stops at the top and bottom of the casing and sprung side seals provide excellent low leakage characteristics.

MATERIALS

PART	MATERIAL	FINISHING
Case	Mild steel	Galvanised
Case	Stainless steel 1.4307 (304L)	-
	Stainless steel 1.4404 (316L)	
Blades	Mild steel	Galvanised
Blades	Stainless steel 1.4307 (304L)	-
	Stainless steel 1.4404 (316L)	
Shafts	Stainless steel 1.4307 (304L)	-
	Stainless steel 1.4404 (316L)	
Bearings	Phosphor bronze self-lubricated plain 'Oilite'	-

TECHNICAL SPECIFICATION

- Has been successfully tested for operation in temperatures of 400°C for 2 hours
- The design has been proven to withstand, with blades closed, repetitive loading of 6000 Pascals due to pressure transients, 7.8 million cycles
- The damper has been Fire Endurance tested in accordance with UL555 and BS476 PT20 for 2 hours
- UL Damper Hose Stream tested after Fire test in accordance with ASTM E2226 15b
- Blade Deflection tested at 4000Pa at 400 C for 1 hour
- 100,000 cycle tested (automatic operation) – endurance tested
- SIL 2 rated in accordance with IEC 61508-2:2010
- Electric and pneumatic actuator options
- Option to offset actuator with pantograph arrangement
- Thermal jacket option to protect actuator from high temperature environment

INSTALLATION

Dampers are typically provided with integral drilled flanges that allow for bolting to ductwork, structural divisions, wall sleeves and similar. Flanges and drillings can be to Halton standard or customer specification.

Installation and maintenance instructions are provided with each damper delivery.