

# ICBB

## Inert gas damper

HAGAB®



### Type approved Proven design



#### THE PRODUCT

Pressure relief damper and fire damper for premises with stationary extinguishing systems. Pneumatic drive unit opens and holds the damper open for as long as the extinguishing gas is released into the room.

ICBB is based on Hagab's circular damper design in the Intact series.

Type approval: **SP Certification SC0001-13**

The damper has been fitted with a pneumatic drive unit to allow operation from a fixed gas extinguishing system.

#### GENERAL

In premises with sensitive or valuable equipment, stationary extinguishing systems are often installed that function automatically if fire or fire gas is detected.

So-called inert gases (extinguishing gases) are forced out under high pressure via a nozzle system into the protected room. Once a sufficient concentration of extinguishing gas is released, the fire goes out.

When the extinguishing system is triggered the major increase in pressure can cause structural damage to the building unless the pressure is relieved.

The aim of the inert gas damper is to ensure this pressure is relieved while also **protecting against the spread of flames** and fire gas from fires in adjoining premises. An extinguishing system only protects the room in which it is mounted. It is therefore important that you first secure sensitive areas so that no flames or fire gas can penetrate if there is a fire in adjoining spaces.

If a fire starts in the protected room, it is of course equally important that the extinguishing system is of the proper dimension and that it works satisfactorily. In both cases, the inert gas damper forms an **important part of the overall solution**.

Normally the damper is in the closed position, thus protecting the room from fire in adjoining spaces. When the extinguishing gas system is triggered, the damper opens temporarily to depressurize and then closes to maintain the concentration of extinguishing gas in the room.

#### MATERIAL

Consists of a plain sheet metal cylinder in the connecting duct's size. An external sheet-metal jacket and intermediate gypsum layer. The damper blade consists of two sheet-metal rods with intermediate gypsum.

Between the inner cylinder and the damper blade there is a seal to prevent leakage of both hot and cold fire gases.

# ICBB

## Inert gas damper

### TECHNICAL DATA

Klassificering	Standard
Fire class	EI 60
Dimensions	125-630
Leakage class acc. to AMA VVS & Kyl 16	3*
Pressure class acc. to AMA VVS & Kyl 16	B
Leakage class according to C**	EN 1751
Min gas pressure for opening	6 bar
Max pressure gas extinguisher conn.	220 bar
Dim. gas extinguisher conn.	Wittford 21,8 x 14/1 in.thread

\*Leakage over closed damper blade. \*\*Leakage class for housing.

### SIZING

The free opening area in a room is extremely important when sizing a gas extinguishing system. The system designer is responsible for ensuring that the correct opening area is provided. This is calculated from important parameters such as release time, room volume and gas extinguishing volume. An incorrect opening area will have a negative impact on the system's ability to extinguish. It is therefore **important to install the correct sized damper.**

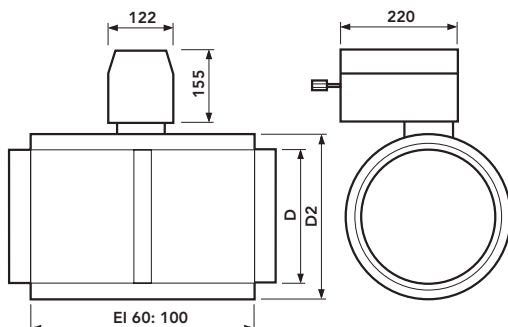
The open area for the safety grille is aprox. 83%. For the security grille it is aprox. 73%.

### TECHNICAL DATA

ICBB, Fire Resistance Class EI 60

Conn. dim	125	160	200	250	315	400	500	630
Net area, dm <sup>2</sup>	0,98	1,69	2,74	4,41	7,16	11,76	18,63	29,90

### DIMENSIONS AND WEIGHTS



### EXAMPLE DESCRIPTION

#### QJC (acc. to AMA VVS & Kyl 22)

Inert gas damper, Hagab type ICBB in size 315 made of galvanized steel plate for walls with a fire resistance class of EI 60.

#### Accessories:

The damper is fitted with a security grille on the installation side and a safety grille on the operating side.

### SPECIFICATION

Code example **ICBB-315-1**  
Inert gas damper **ICBB-aaa-b**

Size (aaa) nominal diameter, mm (coupling dimension 100-630) \_\_\_\_\_  
aaa = See dimension table

Material (b) \_\_\_\_\_  
b = 1 Galvanized steel plate  
b = 2 Stainless steel plate (SS2343)

### ACCESSORIES

- Safety grille
- Security grille
- Electrical limit switch
- Electrical limit switch EX classed

Size D aaa	D <sup>2</sup>	EI 60 weight kg
125	185	7
160	220	8
200	260	9
250	310	11
315	375	13
400	460	18
500	560	22
630	690	29

Dimensions in mm.