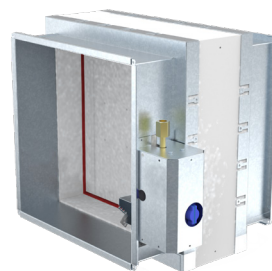


IRBB

Inert gas damper

HAGAB®

Type approved



THE PRODUCT

Rectangular damper to prevent the spread of fire and fire gas for placement in structural elements with a fire resistance rating of EI 120 or EI 60. Additional fire insulation is required only if the damper is installed outside the wall. The damper can be installed with the drive unit in any direction.

The chassis and damper blade are built from silicate plates with a high level of heat resistance. On both sides there is a sheet metal frame with a guide or flange to connect a duct, safety grille or security grille.

Normally, when the damper is closed, leakage class 2 is maintained by placing a seal between the blade and chassis. When heat is detected, the seal expands to prevent leakage.

The damper has a pneumatic drive unit to allow operation from a fixed gas extinguisher system. The drive unit is mounted on the right side** with upward connection.

The product is type approved: **RISE Certifying SC0001-13**

The damper shaft should be mounted horizontally, upright or turned 180 degrees, up-side-down.

MATERIAL

Sheet metal parts made in galvanized steel plate.

TECHNICAL DATA

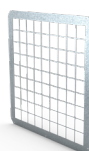
Fire class:	EI 60 / EI 120
Dimensions:	200x200 - 1000x800 / 200x400 - 1000x800
Leakage class acc. to AMA VVS & Kyla 25:	2*
Pressure class acc. to AMA VVS & Kyla 25:	B
Min gas pressure for opening:	6 bar
Max gas pressure extinguisher conn. :	220 bar
Dimensions gas extinguisher conn. :	G1/2" in. thread (Former thread W21,8 x14/1 until 1 July 2024)

* Leakage over closed damper blade.

ACCESSORIES

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

The side with the drive unit is the inside of the damper.



Safety grille



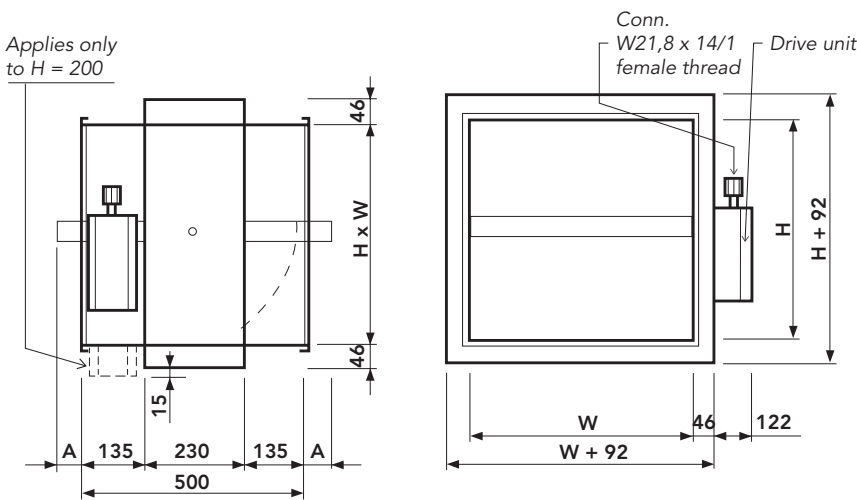
Security grille

IRBB

Inert gas damper

DIMENSIONS AND WEIGHTS

GUIDE DESIGN



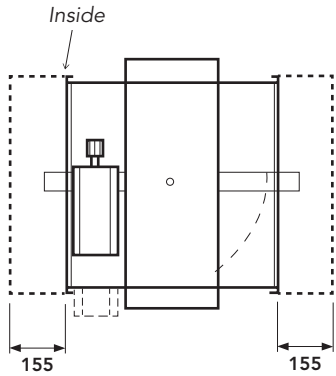
DIMENSIONS

H	A
200 – 500	–
600	40
700	90
800	140

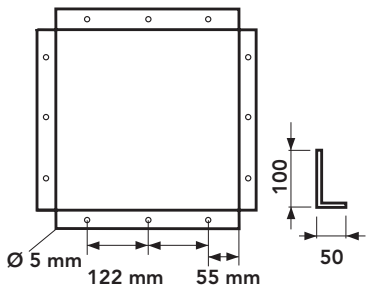
Dimensions in mm.

ACCESSORY SAFETY GRILLE / SECURITY GRILLE

For height 600 and up.



ACCESSORY INSTALLATION PLATES



IRBB

Inert gas damper

WEIGHT IN KG

IRBB fire class EI 60

W H	200	250	300	350	400	450	500	600	700	800	900	1000
200	17	18	19	20	22	23	24	27	29	32	34	37
250	18	19	20	21	23	24	25	28	31	35	36	39
300	19	20	22	23	25	26	27	30	33	36	39	41
350	20	21	23	24	26	27	29	32	35	38	41	43
400	22	23	25	26	28	29	31	34	37	40	43	46
450	23	25	27	28	30	31	33	36	39	42	45	48
500	25	27	29	30	32	33	35	38	42	45	48	51
600	28	29	31	33	35	36	38	42	45	49	52	56
700	30	32	34	36	38	40	42	45	49	53	57	60
800	33	35	37	39	41	43	45	49	53	57	61	65

Width (W) and Height (H) in mm.

WEIGHT IN KG

IRBB fire class EI 120

W H	200	250	300	350	400	450	500	600	700	800	900	1000
400	22	24	26	27	29	31	33	36	39	43	46	49
450	24	26	28	29	31	33	35	38	42	46	49	52
500	27	28	30	32	34	36	38	41	45	49	52	56
600	29	31	33	34	37	39	41	45	49	54	58	62
700	32	34	36	38	41	43	45	49	54	58	63	67
800	35	37	39	41	44	46	49	54	58	63	68	72

Width (W) and Height (H) in mm.

IRBB

Inert gas damper

SIZING

The free opening area in a room is extremely important when sizing a gas extinguisher 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 extinguisher 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.

FREE OPENING AREA IN DM²

IRBB fire class EI 60

W H	200	250	300	350	400	450	500	600	700	800	900	1000
200	2,48	3,13	3,79	4,44	5,10	5,75	6,41	7,72	9,03	10,34	11,65	12,96
250	3,40	4,30	5,21	6,11	7,02	7,92	8,83	10,64	12,45	14,26	16,07	17,88
300	4,32	5,47	6,63	7,78	8,92	10,09	11,25	13,56	15,87	18,18	20,49	22,80
350	5,24	6,64	8,05	9,45	10,86	12,26	13,67	16,48	19,29	22,10	24,91	27,72
400	6,16	7,81	9,47	11,12	12,78	14,43	16,09	19,40	22,71	26,02	29,33	32,64
450	7,08	8,98	10,89	12,79	14,70	16,60	18,51	22,32	26,13	29,94	33,75	37,56
500	8,00	10,15	12,31	14,46	16,62	18,77	20,93	25,24	29,55	33,86	38,17	42,48
600	9,84	12,49	15,15	17,81	20,46	23,11	25,77	31,08	36,39	41,70	47,01	53,32
700	11,68	14,83	17,99	21,14	24,30	27,45	30,61	36,92	43,23	49,54	55,85	62,16
800	13,52	17,17	20,83	24,48	28,14	31,79	35,45	42,76	50,07	57,38	64,69	72,00

Width (W) and Height (H) in mm.

FREE OPENING AREA IN DM²

IRBB fire class EI 120

W H	200	250	300	350	400	450	500	600	700	800	900	1000
400	5,82	7,37	8,93	10,48	12,04	13,59	15,15	18,26	21,37	24,48	27,59	30,70
450	6,74	8,54	10,35	12,15	13,96	15,76	17,57	21,18	24,79	28,40	32,01	35,62
500	7,66	9,71	11,77	13,82	15,88	17,93	19,99	24,10	28,21	32,32	36,43	40,54
600	9,50	12,05	14,61	17,16	19,72	22,27	24,83	29,94	35,05	40,16	45,27	50,38
700	11,34	14,39	17,45	20,50	23,56	26,61	29,67	35,78	41,89	48,00	54,11	60,22
800	13,18	16,73	20,29	23,84	27,40	30,95	34,52	41,62	48,73	55,84	62,95	70,06

Width (W) and Height (H) in mm.

IRBB

Inert gas damper

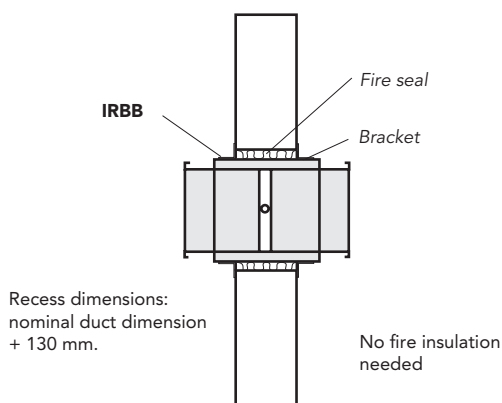
INSTALLATION

The dampers may be installed in walls separating fire cells with a maximum fire resistance class of EI 120. As the damper forms part of the local fire prevention system, it is important that installation is carried out properly in accordance with the installation instructions. Dampers that cannot be connected must be fitted with a safety grille or security grille.

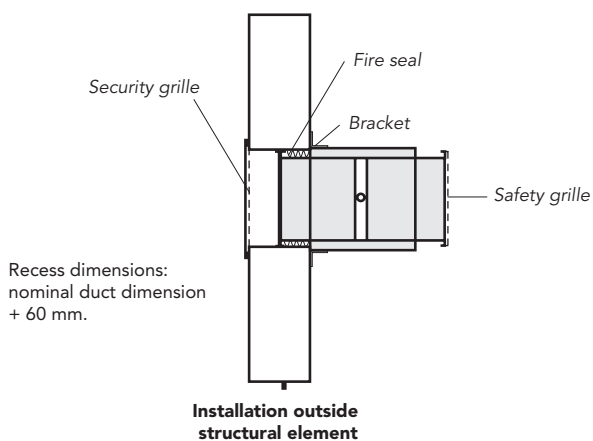
For installation in exterior walls, dampers can be supplemented with weather protection equipment, such as exterior wall grilles, hoods etc. The free area must always be taken into account.

IRBB INSTALLATION OPTIONS

The images below show installation options. For complete installation manual see **Hagab installation, operation and maintenance IRBB**.



**Installation in
structural element**



**Installation outside
structural element**

EXAMPLE DESCRIPTION

QJC (enl AMA VVS & Kyla 25)

Inert gas damper, HAGAB type IRBB in size 500 x 300 made of galvanized steel plate for walls with a fire resistance class of EI 60.

The code for IRBB EI 120 is IRBB120.

Accessories:

Damper is fitted with limit switches, a security grille on the installation side, and a safety grille on the operating side. Installation plates included.

SPECIFICATION

Code example IRBB060-500-300-1

Inert gas damper IRBB060-aaaa-bbb-c

Size, width x height, mm (aaaa-bbb)

aaaa-bbb = See dimension table

Material (c)

c = 1 Galvanized steel plate

ACCESSORIES

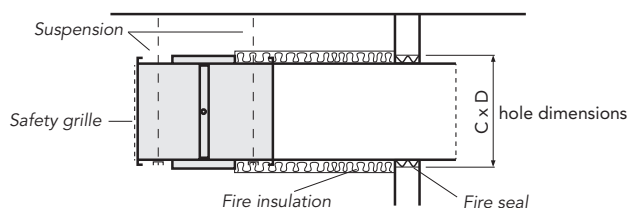
Installation plates

Spiro connection

Safety grille

Security grille

Connection kit, hose with connection ¼ UF and ½ UF



Installation away from structural element