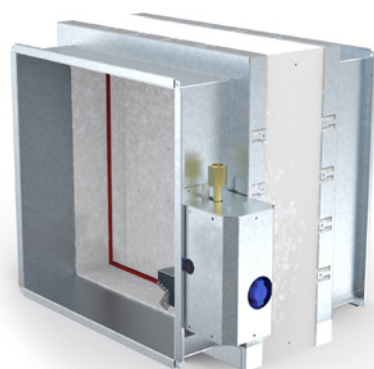


HAGAB®

Drawing description:

## IRBB Inert gas damper



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.

## Type approved

### THE PRODUCT

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 product is type approved: SP Certifiering SC0001-13

### MATERIAL

Sheet metal parts made in Galvanized steel plate.

### TECHNICAL DATA

<b>Fire class:</b>	EI 60/EI 120
<b>Dimensions:</b>	200 x 200 - 1000 x 800
<b>Leakage class acc. to AMA VVS &amp; Kyla 19:</b>	2*
<b>Pressure class acc. to AMA VVS &amp; Kyla 19:</b>	B
<b>Max pressure gas extinguisher conn. :</b>	220 bar
<b>Dimensions gas extinguisher conn. :</b>	Wittford 21,8 x 14/1 inv.gänga

\*Leakage over closed damper blade.

Drawing description:

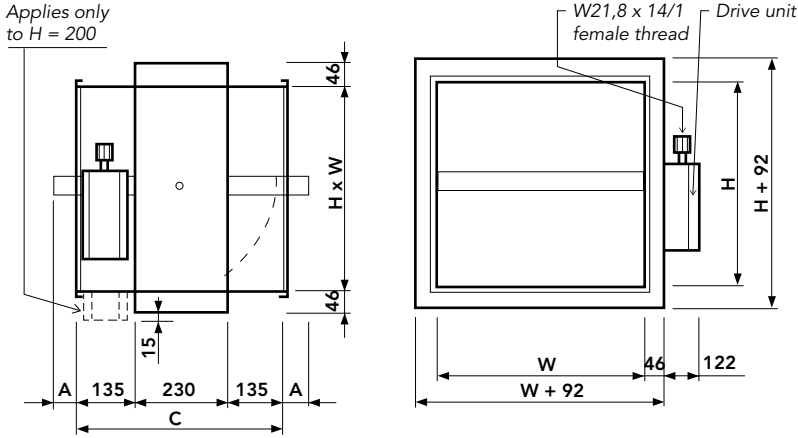


# IRBB

Inert gas damper

**DIMENSIONS AND WEIGHTS**

**GUIDE DESIGN.**

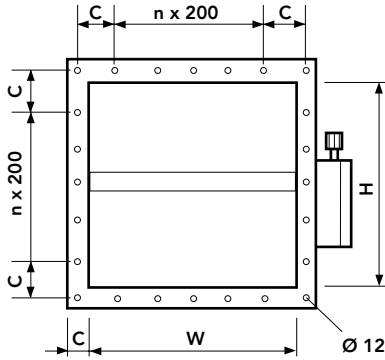


**Hole spacing flange**

W/H	C	n
200	120	-
250	145	-
300	170	-
350	195	-
400	120	1
450	145	1

Dimensions in mm.

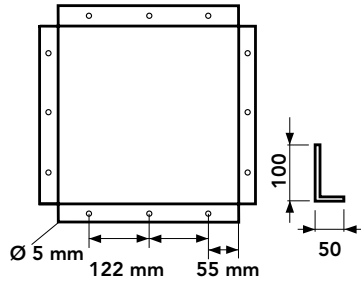
**FLANGE DESIGN.**



W/H	C	n
500	170	1
600	120	2
700	170	2
800	120	3
900	170	3
1000	120	4

Dimensions in mm.

**ACCESSORY INSTALLATION PLATES.**



H	A
200 - 500	-
600	40
700	90
800	140

Dimensions in mm.



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# IRBB

## Inert gas damper

### WEIGHT IN KG

IRBB fire class EI 60

W/H	200	250	300	350	400	450	500	600	700	800
200	17	18	19	20	22	23	25	28	30	33
250	18	19	20	21	23	25	27	29	32	35
300	19	20	22	23	25	27	29	31	34	37
350	20	21	23	24	26	28	30	33	36	39
400	22	23	25	26	28	30	32	35	38	41
450	23	24	26	27	29	31	33	36	40	43
500	24	25	27	29	31	33	35	38	42	45
600	27	28	30	32	34	36	38	42	45	49
700	29	31	33	35	37	39	42	45	49	53
800	32	34	36	38	40	42	45	49	53	57
900	34	36	39	41	43	45	48	52	57	61
1000	37	39	41	43	46	48	51	56	60	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
200	17	18	20	21	22	24	27	29	32	35
250	18	19	21	22	24	26	28	31	34	37
300	20	21	23	24	26	28	30	33	36	39
350	21	22	24	26	27	29	32	34	38	41
400	22	24	26	27	29	31	34	37	41	44
450	23	25	27	29	31	33	36	39	43	46
500	25	27	29	31	33	35	38	41	45	49
600	28	30	32	34	36	38	41	45	49	54
700	31	33	35	37	39	42	45	49	54	58
800	33	35	38	40	43	46	49	54	58	63
900	36	38	41	43	46	49	52	58	63	68
1000	39	41	44	46	49	52	56	62	67	72

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



HAGAB®

# 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 DM<sup>2</sup>

IRBB fire class EI 60 IRBB, Fire resistance class EI 60

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

### FREE OPENING AREA IN DM<sup>2</sup>

IRBB fire class EI 120 IRBB, Fire resistance class EI 120

W/H	200	250	300	350	400	450	500	600	700	800
200	2,14	3,06	3,98	4,90	5,82	6,74	7,66	9,50	11,34	13,18
250	2,69	3,86	5,03	6,20	7,37	8,54	9,71	12,05	14,39	16,73
300	3,25	4,67	6,09	7,51	8,93	10,35	11,77	14,61	17,45	20,29
350	3,80	5,47	7,14	8,81	10,48	12,15	13,82	17,16	20,50	23,84
400	4,36	6,28	8,20	10,12	12,04	13,96	15,88	19,72	23,56	27,40
450	4,91	7,08	9,25	11,42	13,59	15,76	17,93	22,27	26,61	30,95
500	5,47	7,89	10,31	12,73	15,15	17,57	19,99	24,83	29,67	34,51
600	6,58	9,50	12,42	15,34	18,26	21,18	24,10	29,94	35,78	41,62
700	7,69	11,11	14,53	17,95	21,37	24,79	28,21	35,05	41,89	48,73
800	8,80	12,72	16,64	20,56	24,48	28,40	32,32	40,16	48,00	55,84
900	9,91	14,33	18,75	23,17	27,59	32,01	36,43	45,27	54,11	62,95
1000	11,02	15,94	20,86	25,78	30,70	35,62	40,54	50,38	60,22	70,06





# IRBB

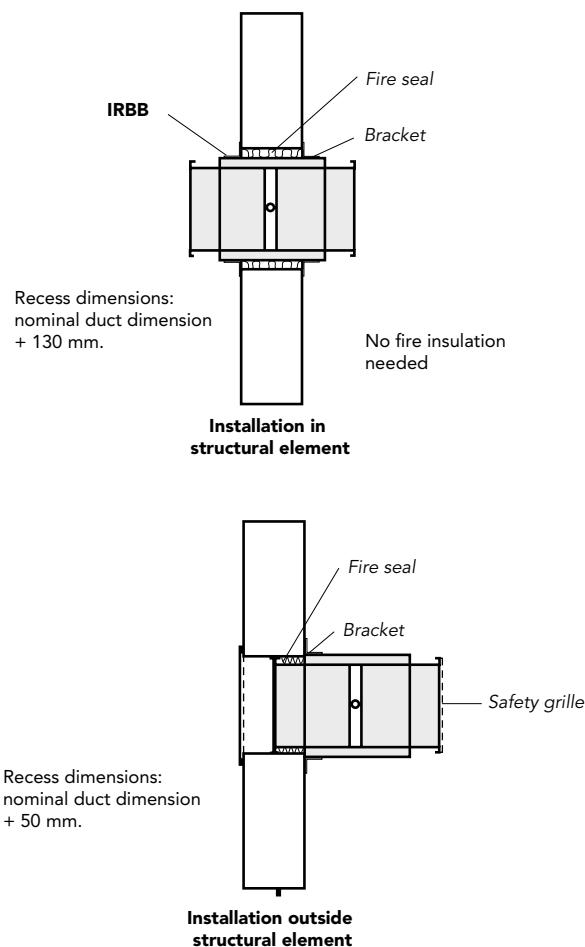
## Inert gas damper

### INSTALLATION

The dampers may be installed in structural elements 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.

Dampers must be connected to the gas extinguisher system via a fixed pipe joint. 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



### EXAMPLE DESCRIPTION

#### QJC (acc. to AMA VVS & Kyla 19)

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.

#### 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 IRBB-500-300-06-1-1  
Inert gas damper IRBB-aaaa-bbb-cc-d-e

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

aaaa-bbb = See dimension table

Fire resistance class (cc)

cc = 06 EI 60

cc = 12 EI 120

Material (d)

d = 1 Galvanized steel plate

d = 2 Aluzinc coated steel plate

d = 3 Stainless steel plate (SS2343)

Design (e)

e = 1 Guide connection (supplied unless stated otherwise)

e = 2 Flange connection

### ACCESSORIES

Installation plates

Spiro connection

Safety grille

Security grille

Electrical limit switch

Electrical limit switch EX-rated

Connection kit, hose with connection ¼ UF and ½ UF

