

HAGAB®

## INTACT-R Fire/Fire Gas Damper



### According to EN1366-2

Circular damper to prevent the spread of fire and fire gas. For installation on fire-rated structural elements. The damper has a fire resistance rating of EI 60 (ve i ↔ o)S, EI 60 (ho i ← o)S. See EC certificate 0402-CPR-SC1119-11.

Tested according to a harmonised product standard, which means that the product is CE marked. RISE Certification also provides increased safety and quality.

## Fire Class EI 60S

## Size 100 - 630 mm

## Low pressure drop - option to regulate flow

### THE PRODUCT

INTACT has been approved for installation on structural elements with a fire resistance rating of **EI 60**. The casing and connecting ducts need to be insulated according to insulation manufacturer.

The damper has a factory-assembled actuator with a spring return and thermal sensor.

INTACT is supplied in sizes **Ø 100 to 630** with a Swedish Standard nipple connection.

The thin damper blade provides low pressure drop and allows good regulation of air flow.

INTACT meets **leakage class 3\*** and **pressure class B** acc. to **AMA VVS & Kyl 16** (Swedish reference material for HVAC&R).

\* Leakage over closed damperblade.

### ACTUATORS

The dampers are supplied with factory-assembled, function-tested safety actuators. The actuators have a spring return and close the dampers in the event of power failure. Two alternating switches in the actuator indicate when the damper is open or closed.

The thermal sensor cuts the power when the temperature in the ventilation duct exceeds **72 °C**.

The dampers are supplied with spring return adjustable actuators 0 - 10 V for 24 V supply voltage (INTACT-R).

# INTACT-R

## Fire/Fire Gas Damper

### PERFORMANCE

Declaration of performance , certificate 0402-CPD-SC1119-11

Characteristics	Performance/Classification	Standard
Fire resistance	EI 60 (ve i<->o) S mounted against building construction [1] EI 60 (ve i<->o) S mounted remote from building construction [1] EI 60 (ho i<->o) S mounted against building construction [2] E 60 (ve i<->o) S mounted remote from building construction [1] E 60 (ve i<->o) S mounted against building construction [1] E 60 (ho i<->o) S mounted against building construction [2] E 120 (ve i<->o) S Damper size ≤ Ø 315 mm mounted against building construction [1] E 120 (ve i<->o) S Damper size ≥ Ø 400 mm mounted against building construction [1] E 120 (ho i<->o) S mounted against building construction [2]  <b>Building construction:</b> [1] Rigid wall, aerated concrete, aerated concrete blocks or concrete corresponding fire classification or more than the firedamper. Flexible wall >=95 mm, two 12,5 gypsum plasterboard on each side.. [2] Rigid wall, aerated concrete, aerated concrete blocks or concrete corresponding fire classification or more than the firedamper. Flexible wall >=95 mm, two 12,5 gypsum plasterboard on each side.	EN 1366-2 EN 13501-3

### TECHNICAL DATA – ELECTRICAL ACTUATORS

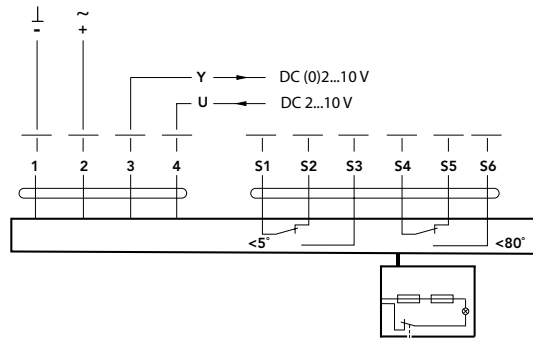
Damper size	Power consumption 24 V (adjustable)			Type
	Operation	Standby	Rating	
100 – 315	6,5 W	2,0 W	7,5 VA	Spring return actuator in event of power failure, adjustable (0)2 – 10 V, (0)4 – 20 mA
400 – 500	5,0 W	2,0 W	7,0 VA	Spring return actuator in event of power failure, adjustable (0)2 – 10 V, (0)4 – 20 mA
630	10,5 W	2,5 W	14,0 VA	Spring return actuator in event of power failure, adjustable (0)2 – 10 V, (0)4 – 20 mA

HAGAB®

# INTACT-R

## Fire/Fire Gas Damper

### WIRING DIAGRAM (ADJUSTABLE)



### CONTROL AND MONITORING

BBR (building regulations of the Swedish National Board of Housing, Building and Planning) stipulate the use of smoke detectors to indicate the presence of smoke and the implementation of fire precautions i.e. close all fire dampers and open pressure relief dampers etc.

The standard stipulates that the dampers **must be function tested regularly**. For quality reasons, this should be performed automatically by an intelligent control device.

HAGAB's control and monitoring devices, SEHA, receive a signal from one or more smoke detectors and/or a central fire alarm system. If fire gas is detected, the damper switches to alarm mode.

A function check is performed every **48 hours**. This is recommended for P-marked dampers. Other intervals can be selected for most HAGAB devices.

### MATERIAL

INTACT has been reviewed and **approved by RISE Research Institutes of Sweden AB** with regard to dangerous substances. The product is recyclable and registered in Byggarubedömningen (Swedish Building Material Assessment) and SundaHus Miljödata (Healthy Home Material Database).

### EXAMPLE DESCRIPTION

#### QJC.2 (acc. to AMA VVS & Kyl 19)

Fire/fire gas damper, HAGAB's INTACT size 315 with adjustable actuator 24V with thermal sensor.

### SPECIFICATION

Code example **INTACT-315-3**  
Fire/fire gas damper **INTACT-aaa-b**

#### Size (aaa)

aaa nominal diameter mm (100 – 630)

#### Actuator (b)

- b = 1 24V with thermal sensor
- b = 2 230V with thermal sensor
- b = 3 24V adjustable 0-10 V signal
- b = 4 24V with Dectus (5m)

### ACCESSORIES

Terminal box **KBHA-a**  
Installation joint for light stud walls **INTSTOS-bbb**

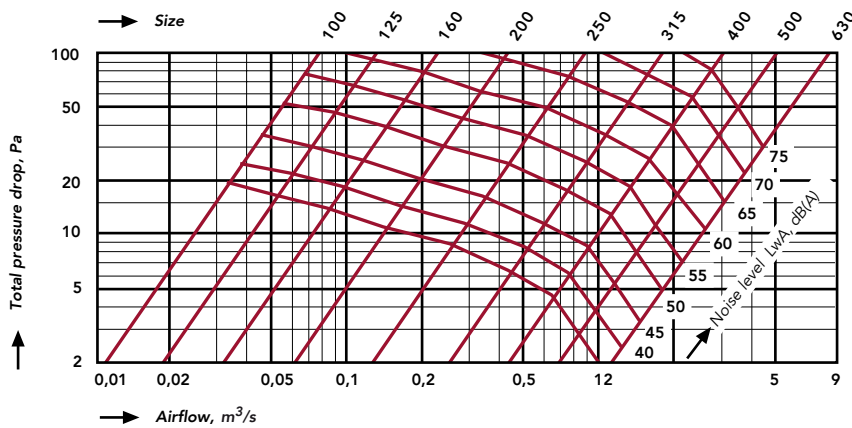
### CONTROL AND MONITORING DEVICE

For max 4 dampers **SEHA-M2**  
Expansion device for max 16 dampers **SEHA-SLQ**  
Smoke detector, duct **RDHA**  
Smoke detector, room (ceiling installation) **RDHB**

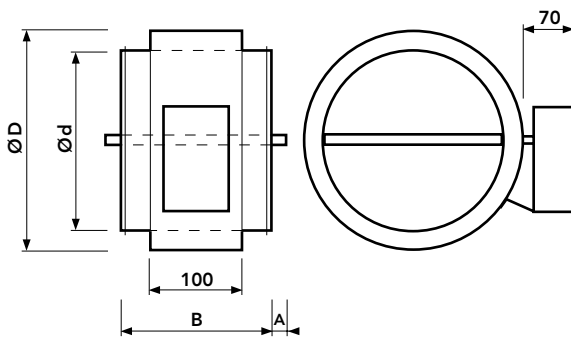
# INTACT-R

## Fire/Fire Gas Damper

### SIZING



### DIMENSIONS AND WEIGHTS



Size $\varnothing d$	$\varnothing D$	A	B	Weight kg
100	160	-	170	3.5
125	185	-	170	4.5
160	220	-	170	5.5
200	260	15	170	6.5
250	310	25	204	8
315	375	60	204	9
400	460	90	220	13.5
500	560	135	230	17
630	690	200	230	24

Dimensions in mm.

### NOISE DATA

$$L_{wOk} = L_{wA} + K_{Ok}$$

	Octave band Hz							
	63	125	250	500	1k	2k	4k	8k
$K_{Ok}$ Size 100-315	-12	-1	1	-1	-6	-12	-16	-23
$K_{Ok}$ Size 400-630	5	6	0	-2	-7	-13	-15	-16
Tolerance +/-	6	3	2	2	2	2	2	3