

Fire damper ETPS-E



ETPS-E is a rectangular fire damper equipped with an actuator and CE marked based on product standard EN 15650:2010. The damper fulfils the requirements of fire class E 60 / E 90 / E 120. The damper is installed in the ventilation duct between fire compartments to stop the spread of flue gases.

If the fire damper is installed in a construction element with fire class EI, the ductwork must be equipped with fire insulation and safety distances must be observed. In this way, also the spread of fire can be prevented. If the fire damper is installed in a construction element with fire class E, no fire insulation is required in the duct, and no safety distances need to be preserved.

When the fire damper is used to prevent the spread of fire and flue gases, it has to close after it has received a signal from the smoke detector which is located in the duct or other suitable location.

- The fire damper is open during normal ventilation.
- When the smoke detector detects smoke, the power supply to the actuator is interrupted and the damper closes automatically.
- The fire damper is equipped with electrical switches for indicating the end positions of the damper (open/closed).
- The air flow direction has no effect on the functioning of the fire damper.

The motorized dampers are tested 10000 times (open/close) and therefore dampers can be used also for daily ventilation purposes. The standard delivery of the fire damper includes a built-in electrical actuator 24 V or 230 V, spring-return and switches for indicating the end positions of the damper. The damper spring is normally tensioned but in case of a power cut it closes the damper automatically.

Product description

Sizes 200 x 200 ... 1200 x 1200 mm

CE marking ETPS-E

SP No. 0402-CPD-SC1557-12

Fire class according to EN 13501-3

E 120 ($h_o i \leftrightarrow o$)

E 120 ($v_e i \leftrightarrow o$) S *

E 60 ($h_o i \leftrightarrow o$) S

*) max size 800x800 mm

Fire damper fulfils the requirements of tightness class 2 according to EN 1751

The damper casing fulfils the requirements of tightness class B according to EN 1751.

Pressure drop across a closed damper is allowed to be 2500 Pa

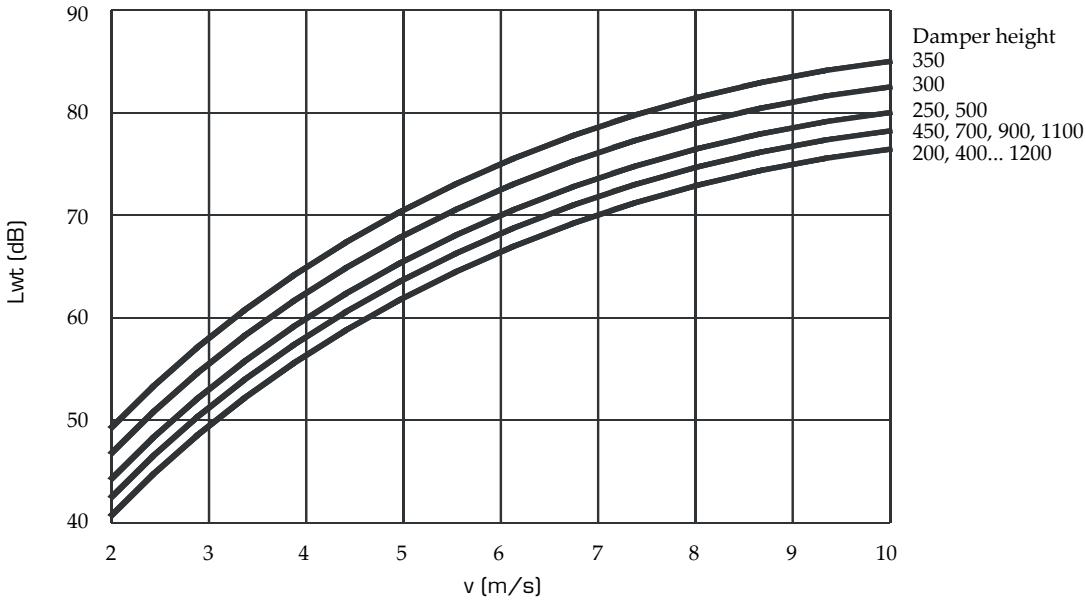
Product code example:

Fire damper ETPS-E-04000300A31

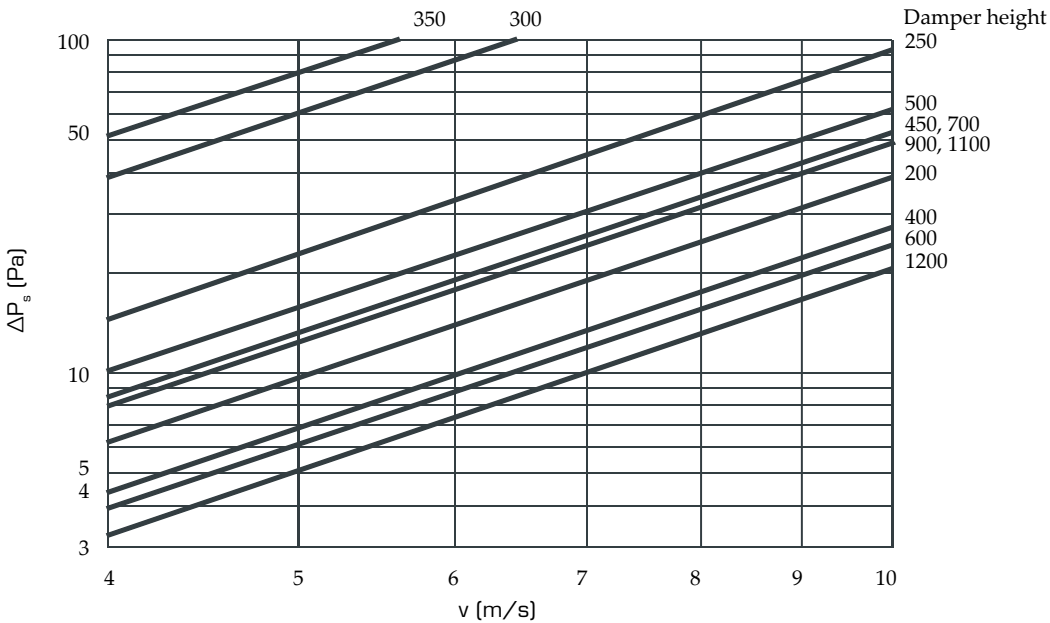
Technical data

Selection diagrams

Noise level in the duct



Pressure drop



Correction of sound power level by octave bands = K_{oct}

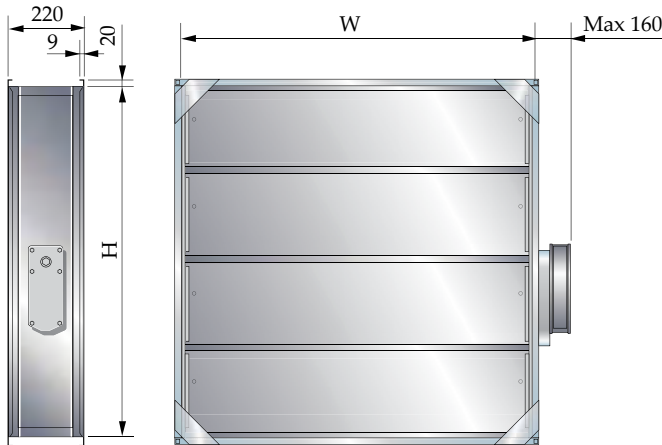
Frequency band	125	250	500	1000	2000	4000	8000
Correction K_{oct}	-3	-5	-11	-15	-18	-21	-33

$$L_{woct} = L_{wt} + K_{oct}$$

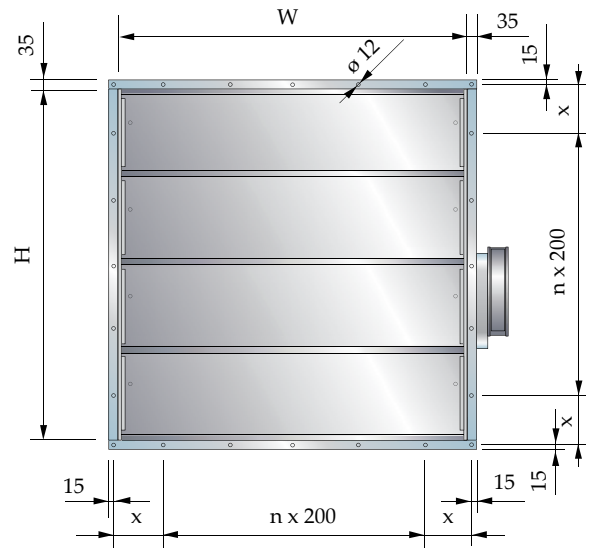
Dimensions and weights

Dimensions

Slip joint



Flange joint



W	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
H	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
x	120	145	170	195	120	145	170	120	170	120	170	120	170	120
n (spacing)	0	0	0	0	1	1	1	2	2	3	3	4	4	5

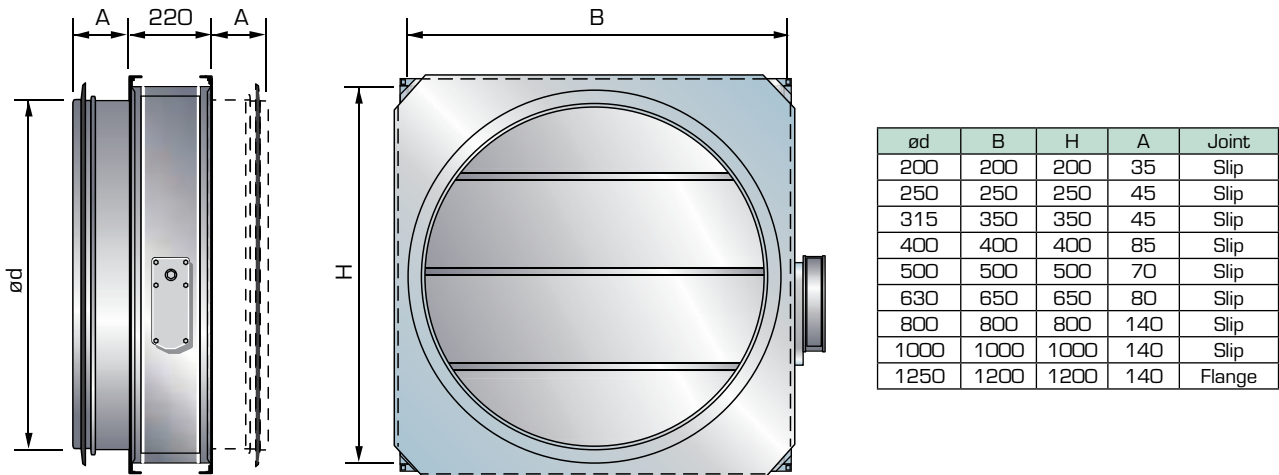
Weights (kg)

H \ W	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200
200	7.2	7.7	8.2	8.7	9.2	9.7	10.2	12.2	12.2	13.2	14.2	15.2	16.2	17.2
250	7.9	8.5	9.2	9.8	10.5	14.1	11.8	13.1	14.4	15.7	17.1	18.4	19.7	21.0
300	8.1	8.8	9.5	10.2	11.0	11.7	12.4	13.8	15.2	16.7	18.1	19.5	20.9	22.4
350	8.3	9.1	9.9	10.6	11.4	12.2	12.9	14.5	16.0	17.6	19.1	20.6	22.2	23.7
400	10.3	10.9	11.5	12.2	12.8	13.5	14.1	15.4	16.7	18.0	19.3	20.5	21.8	23.5
450	10.9	11.7	12.5	13.3	14.1	14.9	15.7	17.3	18.9	20.5	22.1	23.7	25.3	27.3
500	11.1	12.0	12.8	13.7	14.5	15.4	16.3	18.0	19.7	21.4	23.1	24.8	26.5	28.7
600	13.3	14.1	14.9	15.7	16.4	17.2	18.0	19.6	21.2	22.7	24.3	26.3	27.9	29.4
700	14.2	15.2	16.2	17.2	18.2	19.2	20.2	22.2	24.2	26.2	28.2	30.6	32.6	34.6
800	16.3	17.3	18.2	19.1	20.0	21.0	21.9	23.8	25.6	27.9	29.8	31.6	33.5	35.3
900	17.2	18.3	19.5	20.6	21.8	22.9	24.1	26.3	28.6	31.3	33.6	35.9	38.2	40.5
1000	19.3	20.4	21.4	22.5	23.6	24.7	25.7	28.3	30.4	32.6	34.7	36.9	39.4	41.6
1100	21.1	21.4	22.7	24.0	25.3	26.6	27.9	30.9	33.4	36.0	38.6	41.2	44.2	46.7
1200	22.2	23.5	24.7	25.9	27.5	28.7	30.0	32.4	34.8	37.3	40.1	42.5	45.0	47.4

Weights include actuator.

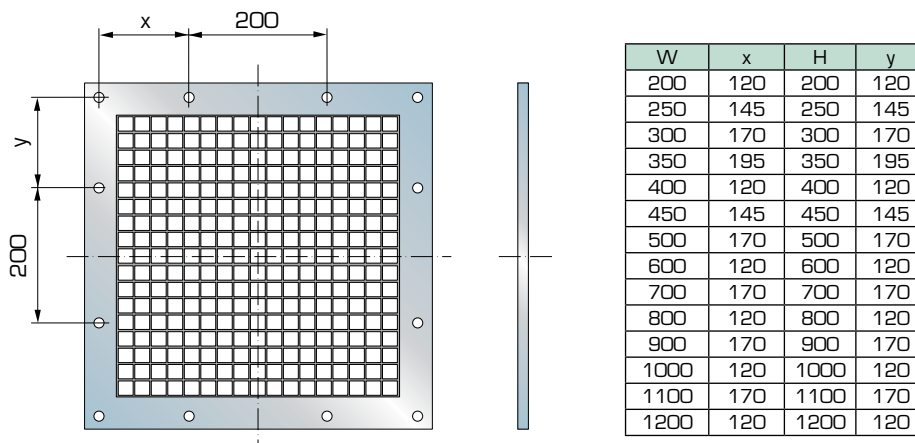
Fire damper ETPS-E with round connection pieces, accessories

Fire damper ETPS-E with round connection pieces



Accessories

Grille FNR



Product code

Description

Fläkt Woods CE marked fire damper ETPS-E which is suitable for installation into building elements of fire class EI 60 / EI 90 / EI 120. The damper is installed according to the mounting instructions provided by the manufacturer.

Product code

Fire damper **ETPS-E - aaaabbbbCde**

Size (aaaabbbb) _____
 Width (aaaa) × Height (bbbb)
 200x200 - 1200x1200 mm

Joint (C) _____
 A = Slip
 B = Flange

Actuator (d) _____
 3 = 24 V AC/DC and thermal trip
 5 = 230V AC and thermal trip

Actuator model (e) _____
 1 = Standard

Fire damper with round connection pieces **ETPS-E- aaaabc-Dd**

Connection diameter, mm (aaaa) _____
 0200, 0250, 0315, 0400, 0500, 0630, 0800,
 1000, 1250

Actuator (b) _____
 3 = 24 V AC/DC and thermal trip
 5 = 230V AC and thermal trip

Actuator model (c) _____
 1 = Standard

Round connection piece (Dd) _____
 D1 = on one side
 D2 = on both sides

Accessories

Grille **FNR - aaaa - bbbb -c - d**

Size (BxH , mm) _____
 Width (aaaa)
 0200, 0250, 0300, 0350, 0400, 0450, 0500,
 0600, 0700, 0800, 0900, 1000, 1100, 1200
 Height (bbbb)
 0200, 0250, 0300, 0350, 0400, 0450, 0500,
 0600, 0700, 0800, 0900, 1000, 1100, 1200

Joint (c) _____
 1 = Slip
 2 = Flange

Material (d) _____
 1 = Hot-galvanized steel

Control system **FICO-128 / FICO-2**

See the separate catalogue.

Definitions

v	Air flow rate	(m/s)
$L_{w_{oct}}$	Sound power level in the duct	(dB)
$L_{w_{t}}$	Sound power level	(dB)
K_{oct}	Correction	(dB)
Δp_s	Static pressure drop	(Pa)

Installation

- The fire damper is installed in the ventilation duct to stop flue gases from spreading from one fire compartment to another. In a horizontal or vertical duct, the fire damper may be installed in the penetration of a construction element, the fire class of which is not higher than EI 120 or E 120. Maximum size in gypsum wall installation is 800 x 800. If the fire damper is installed in a construction element with fire class EI, the duct must be equipped with fire insulation and safety distances must be observed. In this way, also the spread of fire can be prevented. If the fire damper is installed in a construction element with fire class E, no fire insulation is required in the duct, and no safety distances need to be preserved.
- The fastening of the duct and fire damper is of great importance. The fire class of the fastening must be the same as the fire class of the fire-separating construction element, for example R 60, if the construction element fire class is EI 60.
- The duct between the penetrated construction element and the fire damper with insulated duct may contain no holes or air terminal devices.
- The damper axle must always be installed in horizontal position.