

INSTALLATION MANUAL OF

KWP-0-(E)S

TYPE FIRE DAMPERS



NOTE:

1. This manual does not replace the operation and maintenance documentation. 2. The company reserves the right to make changes and modifications in this document.

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1488

SMAY

L.L.C. 14 1488-CPR-0444/W

EN 15650:2010 Cut-off fire damper Type: KWP-0-E, KWP-0-S

Nominal activation conditions/sensitivity:

Closing/opening in appropriate moment and acceptable time - pass

Response time/closing time - pass

Operational reliability:

KWP-0-E 10 000 cycles – pass KWP-0-S 300 cycles – pass

Fire resistance:

Integrity – E

Insulation- I

Smoke leakage - S

Mechanical stability (under E):

- EI 120 (v_e h₀ i↔o) S

Maintenance of the cross-section (under E)

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Durability:
Of response delay - pass
Of operational reliability - pass

INSTALLATION MANUAL OF KWP-O-(E)S TYPE FIRE DAMPERS

- 1. Prior to the installation, fire dampers should be checked whether there has been no damage to the dampers during transportation or storage.
- 2. Check whether the damper blade could be opened and closed (fully open and closed position). To open fire dampers KWP-O-E use the actuator key. The full opening and closing must proceed smoothly (not stepwise).

The fire dampers, to maintain declared EIS120 fire resistance class, should be installed in walls which are verified and classified as EI120.

It is allowed to use KWP-O-(E)S fire dampers for different fire resistance class walls (EI30, EI60, EI90), however it must be understood that the fire resistance class EI of the whole finished installation is corresponding to the least classified element in the installation.

KWP-O-(E)S type fire dampers may be installed in different types of construction compartments (rigid compartments):

- concrete walls with thickness of not less than 115 [mm],
- brickwork or aerated concrete walls with thickness of not less than 115 [mm],
- concrete ceilings with thickness of not less than 150 [mm].
- aerated concrete ceilings with thickness of not less than 150mm].

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I - RIGID WALL COMPARTMENTS

INSTALLATION TECHNOLOGY

according to figure 1, 3 and 4

- 1. Make an opening in the wall with the dimensions 120 mm greater than the nominal dimensions of the fire damper =B+120 and H+120
- 2. Put the fire damper into the installation opening on depth marked by undercuts on the damper body (dimension 60 mm). From one side fix it with suspension Z1, and from other side, fix it to ventilation duct suspended on suspension Z2.
- After setting the fire damper in accordance to the guidelines, fill the gap between the fire damper and the wall with cement and lime mortar, concrete or PROMASTOP MG III made by PROMAT.
- 4. After 48h from the installation, the suspensions and supports used during installation of the fire damper, may be removed .

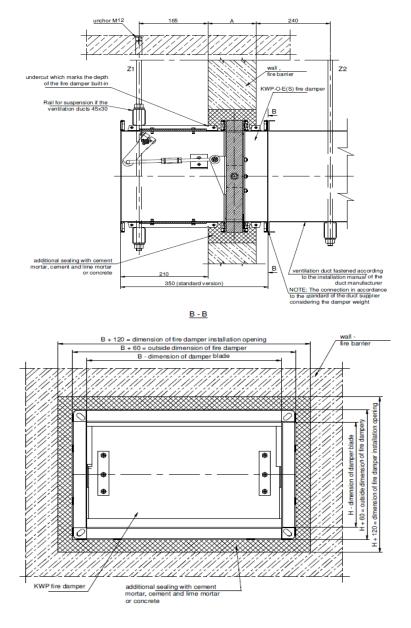


Figure 1. Installation method of fire damper KWP-0-(E)S in rigid compartment - wall

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REMARKS:

- 1. Install the fire damper in such way, that the damper blade would be in horizontal position.
- 2. Fire damper cannot be the support for the constructing wall
- 3. Ductwork cannot be the load for the fire damper, ductwork suspensions have to provide full load capacity.
- 4. Ductwork suspensions fixed to the fire damper have to be made in accordance with the ductwork manufacturer instructions.
- 5. In place of suspensions Z1, Z2 and cement mortar, mounting brackets may be applied (paying special attention for immobilization of the fire damper).

UWAGI DODATKOWE:

The KWP-O-(E)S fire dampers may be installed also in horizontal compartments, thicker than the length of the damper body. In such case, ventilation duct would be partially inbuilt in the fire compartment (fig. 2)

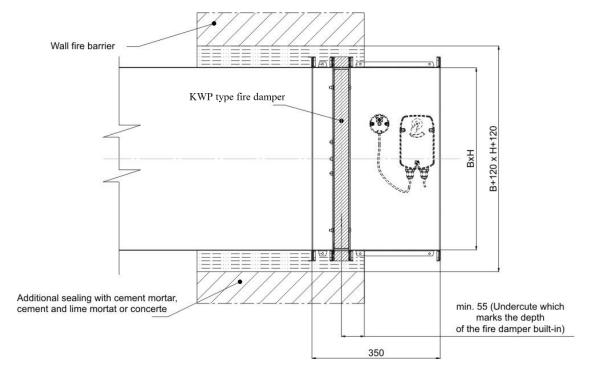


Figure 2. Diagram of the KWP-0-(E)S fire damper inbuilt in a compartment thicker than the length of the damper body

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II - RIGID CEILING COMPARTMENTS

INSTALLATION TECHNOLOGY

according to figure 3, 4, 5 i 6

- 1. Make an opening in the ceiling with the dimensions 120 [mm] greater than the nominal dimensions of the fire damper =B+120 and H+120.
- 2. Put the fire damper into the installation opening on depth marked by undercuts on the damper body (dimension 60 mm).
- 3. After setting the fire damper with use of mounting brackets, in accordance to the guidelines, fill the gap between the fire damper and the ceiling with cement mortar, cement and lime mortar or concrete. With the stringent requirements we recommend to use fire protective mortar PROMASTOP MG III produced by PROMAT in place of cement-lime mortar and concrete.

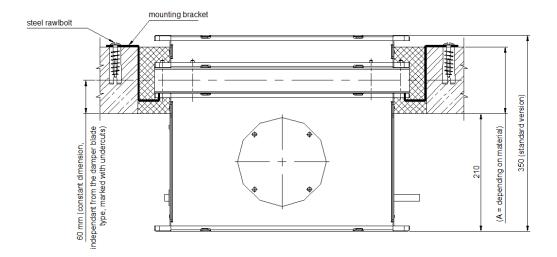


Figure 3. Installation method of fire damper KWP-0-(E)S in rigid compartment - ceiling

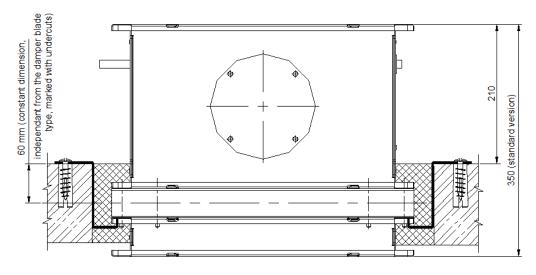


Figure 4. Installation method of fire damper KWP-0-(E)S in rigid compartment - ceiling

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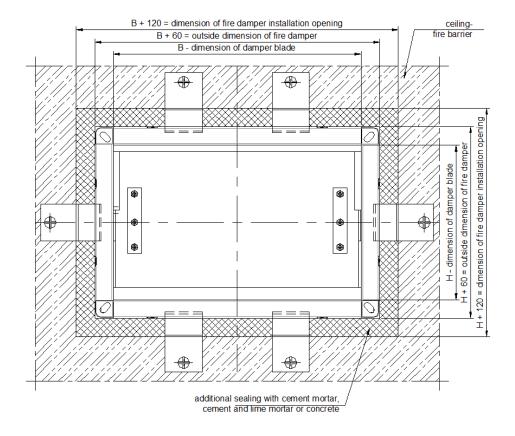


Figure 5. Installation method of fire damper KWP-0-(E)S in rigid compartment - ceiling

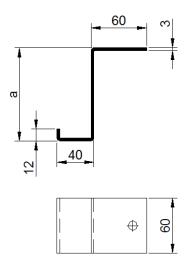


Figure 6. Mounting bracket

REMARKS:

- 1. Mounting brackets shall be mounted on each side.
- 2. Number of mounting brackets:
 - The side length up to 500mm 1 [pc.],
 - The side length 500-1500mm 2 [pcs.].
- 3. In place of exemplary mounting brackets and rawlbolts, other solutions may be used, e.g. suspensions.

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ADDITIONAL INFORMATIONS

Weight of KWP-0-(E)S fire damper

Weight of KWP-0-(E)S fire damper [kg]																
		B[mm] – inner width of the fire damper KWP														
H[mm] – inner height of the fire damper KWP		200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	
	200	11,0	13,1	15,2	17,5	19,6	21,8	23,9	26,1	28,2	30,4	32,6	34,7	36,9	39,0	
	300	13,1	15,5	17,8	20,3	22,7	25,0	27,6	30,0	32,4	34,8	37,2	39,6	42,0	44,4	
	400	15,2	17,8	20,4	23,2	25,9	30,0	31,1	33,7	36,5	39,2	41,7	44,6	47,2	49,9	
	500	17,5	20,3	23,2	26,0	28,9	31,8	34,7	37,6	40,4	43,5	46,4	49,3	52,3	55,2	
	600	19,6	22,7	25,9	28,9	32,0	35,2	38,3	41,5	44,6	47,7	50,9	54,1	57,2	60,3	
	700		25,0	30,0	31,8	35,2	38,4	41,8	47,6	51,2	52,1	55,4	59,3	63,5	66,8	
	800		27,6	31,1	34,7	38,3	41,8	45,5	49,0	52,8	56,4	60,0	63,7	67,4	70,6	
	900		30,0	33,7	37,6	41,5	47,6	49,0	52,9	56,9	60,8	64,6	68,5	72,5	76,4	
T	1000			36,5	40,4	44,6	51,2	52,8	56,9	60,9	65,1	69,2	73,4	77,6	81,7	

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