



**PAVUS, a.s.**  
Notified Body No. 1391  
Prosecká 412/74, 190 00 Praha 9 - Prosek  
Decision No. 27/2013-CPR of 13. 12. 2013

## **CERTIFICATE OF CONSTANCY OF PERFORMANCE**

**No. 1391-CPR-2016/0158**

In compliance with Regulation 305/2011/EU of European Parliament and of the Council of 9 March 2011 (the Construction Product regulation or CPR), this certificates applies to the construction product:

### **Fire damper FDMA-R and FDMA-S**

**Technical parametres of the product:**  
are stated in the Annex No. 1 of this Certificate of constancy of performance

**Intended use of the product in buildings:**

Fire dampers are used in conjunction with partitions to maintain fire compartments and protect means of escape in case of fire in heating, ventilation and air conditioning (HVAC) systems in buildings, under methods of use and installation conditions stated in Certification report and related documentation. All fire dampers close automatically in response to raised temperatures indicating fire.

**produced by or for:**

**MANDÍK, a.s.**  
**Dobříšská 550, 267 24 Hostomice, Czech republic, ID 26718405**

**and produced in the manufacturing plant:**

**MANDÍK, a.s.**  
**Dobříšská 550, 267 24 Hostomice, Czech republic**

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard:

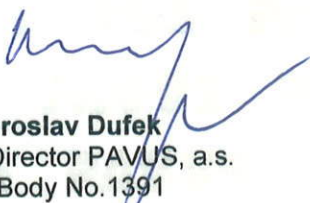
### **EN 15650:2010**

**under system 1 for the performances set out in this certificate are applied and that  
the construction product fulfils all the prescribed requirements for these  
performances**

This certificate was first issued on 29<sup>th</sup> August 2012 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performances of the declared essential characteristics, do not change, and the construction product, and the manufacturing conditions in the plant are not modified significantly, unless suspended or withdrawn by the product certification body. This Certificate replaces and cancels Certificate of constancy of performance No. 1391-CPR-2015/0175 of 8<sup>th</sup> October 2015 issued by NB 1391.

In Prague 9<sup>th</sup> November 2016



  
**Ing. Jaroslav Dufek**  
Managing Director PAVUS, a.s.  
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**Technical parametres of the product \*)**

External dimension of the element: - circular (R) from min. diameter 180 mm to max. diameter 1 000 mm,  
- square (S) (w x h) from min. (180 x 180) mm  
to max. (1 500 x 800) mm - type with control out of axis of blade,  
or to max. (1 600 x 1 000) mm - type with control in axis of blade.

Construction length: min. 375 mm, max. 500 mm

Starting devices and drives: - fuse safety lock 72°C/95°C/104°C/147°C with closing spring  
- pulse magnetic drive  
- Bellimo - spring drive with starting device 72°C/95°C  
- Gruner - spring drive with starting device 72°C/95°C  
- Schischek - spring drive with starting device 72°C/95°C  
All used marks of drives fulfil 10 000 cycles according to EN 15650.

Material versions: - galvanized sheet metal,  
- stainless sheet metal,  
- painted sheet metal.

Leak tightness of the damper according to EN 1751:  
- over blade min. class 2 (square) and class 3 (circular)  
- over case min. class C

The classification according to EN 13501-3:2005+A1:2009:

**EI 90 (ve ho i↔o) S**  
**EI 120 (ve ho i↔o) S**

**Assessed properties of the product**

Essential characteristics	Requirement clauses in EN 15650	Requirement	Conformity Assessment
Nominal activation conditions/sensitivity:	4.2.1.2	EN 15650, 4.2.1.2	conforms
- sensing element load bearing capacity	4.2.1.2.2	EN 15650, 5.2.5	conforms
- sensing element response temperature	4.2.1.2.3	EN 15650, 5.2.5	conforms
Response delay (response time):	4.2.1.3	EN 1366-2, 10.4.6	conforms
- closure time			
Operational reliability:	4.3.1, a)	The fire damper conforms to cycle test if 50 cycles are done prior to the fire test	conforms
- cycling			
Fire resistance			
- integrity	4.1.1, a)	E	conforms
- insulation	4.1.1, b)	EI	conforms
- smoke leakage	4.1.1, c)	ES/EIS	conforms
- mechanical stability (under E)	4.1.1, a)	-	conforms
- maintenance of the cross section (under E)	4.1.1, a)	-	conforms
Durability of response delay:	4.2.1.2.2	EN 15650, 4.2.1.2	conforms
- sensing element response to temperature and load bearing capacity	4.2.1.2.3		
Durability of operational reliability:	4.3.3.2	EN 15650, Annex C.3.2	conforms
- open and closing cycle tests			
Resistance against corrosion	4.2.2 Annex B	Increased resistance against corrosion - Salt spray exposure test (EN 60068-2-52)	conforms

\*) Detailed technical parametres and conditions of final classification according to EN 13501-3:2005+A1:2009 are stated in the Assessment Report of the construction product No. P-1391-CPR-2016/0158 of 9<sup>th</sup> November 2016.

The fire damper FDMA-R/S fulfils also all the prescribed requirements of the standard ÖNORM H 6025, see the Assessment Report of the construction product No. P-1391-CPR-2016/0158 of 9<sup>th</sup> November 2016.

Fire damper FDMA-R may be produced and placed on the market also with trade name PKTM 90-K or BSK-A-90-R, and FDMA-S also with trade name PKTM 90-C or BSK-A-90-E.

<b>CE</b>
1391 MANDIK a.s., Dobříšská 550, 267 24 Hostomice, Czech rep. 16 1391 - CPR - 2016/0158
EN 15650 Fire damper type/model: Fire damper FDMA-R and FDMA-S
Classification EI 90 (ve ho i↔o) S EI 120 (ve ho i↔o) S



*[Signature]*  
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