

(i) NEW IN OFFER

dry installation with mineral wool



# mcr FID PRO

low-resistance round single-blade cut-off fire dampers for comfort ventilation systems

#### **APPLICATION**

Our mcr FID PRO low-resistance fire dampers are designed for comfort ventilation systems where those systems pass through vertical and horizontal building partitions.

Their function is to maintain the fire-resistance rating of building partitions where ventilation and air conditioning ducts are routed through. Moreover, fire dampers prevent spreading of fire, smoke and combustion gasses to the remaining part of the building which is not on fire.

- ► Certificate of constancy of performance 2434-CPR-0009.
- Certified for compliance with EN 15650.
- ▶ Classified according to EN 13501-3 and tested according to EN 1366-2.

#### **ADVANTAGES**

- ▶ certified installation, also in mineral wool installation made quick and easy
- ▶ possibility of assembling trigger and control mechanism perpendicularly or in parallel to the air flow axis
- horizontal or vertical blade orientation
- reduced sound and air flow resistance thanks to reduced blade thickness
- ▶ damper blade tightness in a closed position min. class 2
- > casing tightness when fitted in the building partition class C as per EN 1751
- ▶ suitable for installation in vertical or horizontal building partitions
- ▶ male, female and flange connection options available
- as an option male connection type dampers can be fitted with external perimeter seals increasing tightness
  of connection with ductwork

#### FIRE-RESISTANCE RATING

The mcr FID PRO round dampers are EI120(ve ho  $i\leftrightarrow o$ )S and EI60(ve ho  $i\leftrightarrow o$ )S-rated if installed in vertical concrete partitions, partitions made of full bricks or cellular blocks with a thickness of at least 125 mm, lightweight walls made of gypsum board panels on a steel framework with a thickness of min. 125 mm and a fire rating corresponding with the rating of the damper, and concrete ceilings with a thickness of min. 150 mm. Additionally dampers mcr FID PRO with diameter 201-315 mm installed in concrete ceilings are EI180(ho  $i\leftrightarrow o$ )S.

The dampers can also be installed away from vertical building partitions, provided that the section of a ventilation duct between the damper and the wall meets the criteria of **EIS120** fire rating.

#### **DIMENSIONS**

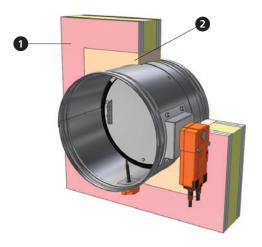
The dampers are available in 100-315 mm nominal diameter range. Besides the standard dimensions dampers of any size (at 1 mm increments) in the above range can be ordered.

Casing lengths: 170 and 295 mm for male connections and 140 and 270 mm for female connections.

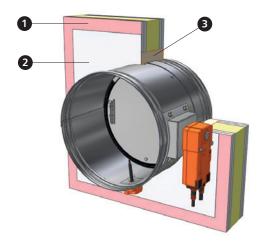
## **INSTALLATION EXAMPLES**

For details see the mcr FID PRO operation and maintenance manual.

Figure 1. Example installation in lightweight walls of plaster-cardboard panels with mortar or mineral wool

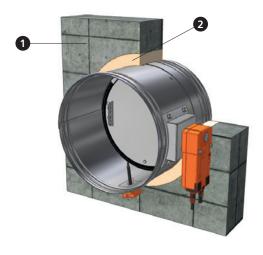


- 1. lightweight partition
- 2. mortar ensuring the required fire-resistance rating

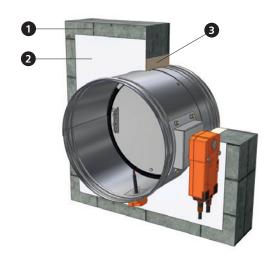


- 1. lightweight partition
- 2. fireproof intumescent elastic paint (mcr Polylack Elastic)
- 3. mineral wool

Figure 2. Example installation in a concrete or masonry walls with mortar or mineral wool



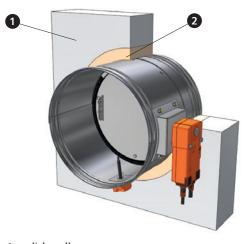
- 1. rigid wall
- 2. mortar ensuring the required fire-resistance rating



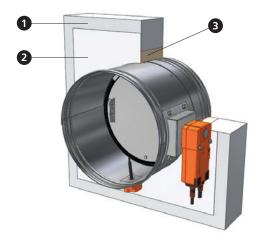
- 1. rigid wall
- 2. fireproof intumescent elastic paint (mcr Polylack Elastic)
- 3. mineral wool

## **INSTALLATION EXAMPLES**

Figure 3. Example installation in a solid walls with mortar or mineral wool



- 1. solid wall
- 2. mortar ensuring the required fire-resistance rating



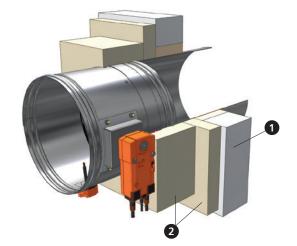
- 1. solid wall
- 2. fireproof intumescent elastic paint (mcr Polylack Elastic)
- 3. mineral wool

Figure 4. Example installation in a solid ceiling with mortar



- 1. solid ceiling
- 2. mortar ensuring the required fire-resistance rating

Figure 5. Example installation outside the building partition using fireproof boards ensuring fire-resistance rating of building partition or higher



- 1. building partition
- 2. fireproof boards ensuring the required fire-resistance rating

### TRIGGER CONTROL MECHANISMS

The mcr FID PRO fire dampers can be equipped with the following trigger control mechanisms:

> 24 V or 230 V actuator (standard or EX-rated) with a return spring



▶ **spring drive and an integral thermal trigger** and optional electromagnetic trigger with limit switches (RST-KW1 trigger control mechanisms)



spring drive and a thermal trigger (RST trigger control mechanisms)



For the product technical data, flow parameters and marking of mcr FID PRO fire dampers see the Mercor S.A. technical catalogue "Fire dampers and cut-off fire valves".

## MERCOR GROUP IN THE WORLD



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