



# INSTALLATION AND USAGE MANUAL

Manufacturer: GRYFIT TECHNIK Sp. z o.o. – ul. Łąkowa 11 – 95-050 Konstantynów Łódzki

## GRYFIT CX-4S FIRE DAMPER EI 120 (v<sub>e</sub> – i ↔ o) S

CERTIFICATE OF CONSTANCY OF PERFORMANCE no 1488-CPR-0279/W

### SCOPE OF THE MANUAL

This manual applies to the CX-4S fire dampers equipped with 72°C or 95°C fusible link.

### 1- INSTALLATION

Installation should be carried out by specialists who have been trained in GRYFIT TECHNIK Sp. z o.o. devices installation.

#### 1.2- MOUNTING HOLE

To install the damper properly, the minimum size of a mounting hole is D+30 mm, both if the damper is installed in the brick or concrete walls and in the plaster-cardboard walls.

#### 1.3- FIXING AND INSTALLATION

Place the damper axially in a mounting hole. In case of installation in the brick or concrete walls, facing should be made of masonry mortar or non-shrink grout. In case of installation in the plaster-cardboard walls, the guidelines of this instruction should be followed.

**Note: While installing it is impermissible to smear a control mechanism of the damper with mortar, glue or paints. The control mechanism of the damper has to be absolutely protected until the masonry and completion work is finished.**

**The damper blade has to be closed during installation and until mortar or glue is hardened. The damper casing cannot be burdened during installation in partition wall. It can result in deformation of the casing and damage of the damper blade.**

##### 1.3.1- INSTALLATION METHOD

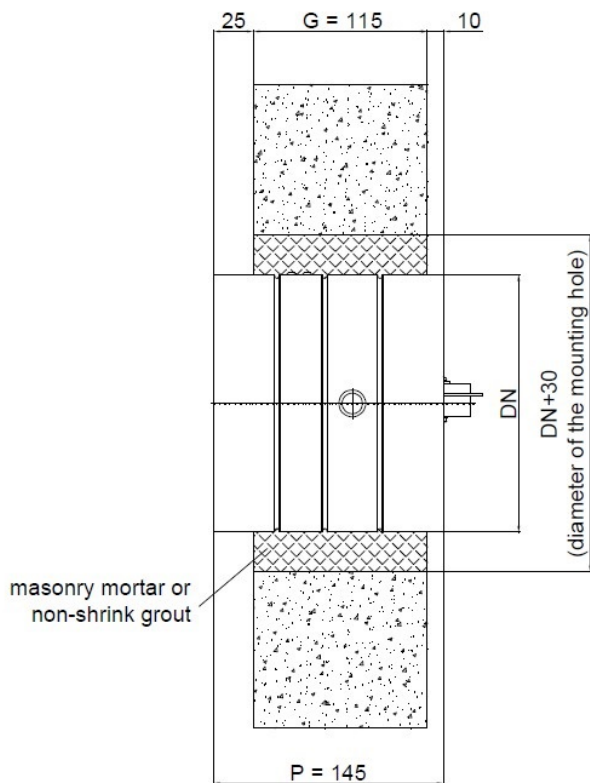
The dampers can be installed both with their blade axis positioned horizontally and vertically.

##### 1.3.2- APPROVED BUILDING PARTIONS IN WHICH THE GRYFIT CX-4S DAMPERS CAN BE INSTALLED

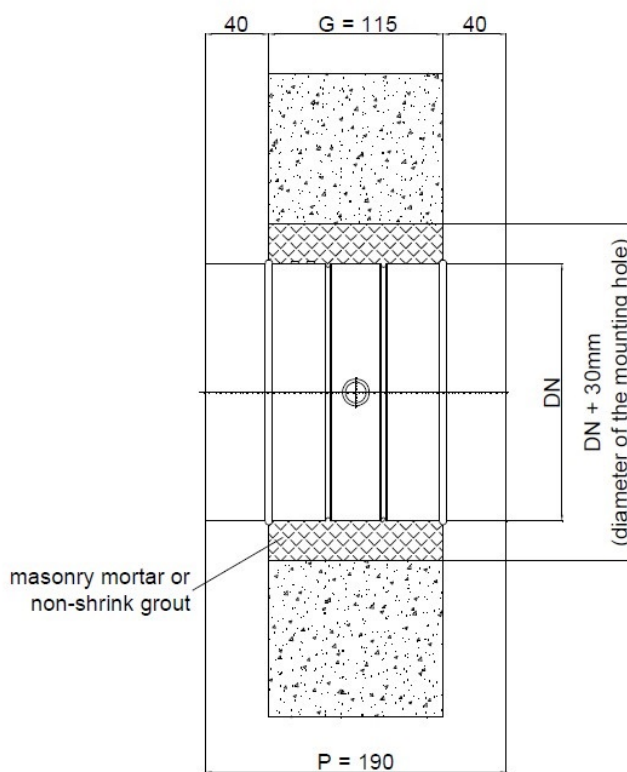
The dampers can be installed in the following vertical building partitions:

- Concrete wall with a thickness not smaller than 115 mm,
- Hollow brick walls with a thickness not smaller than 115 mm,
- Concrete masonry walls with a thickness not smaller than 115 mm,
- Plasterboard walls installed with metal studs framing approved to fire resistance class not less than EI 120 with a thickness not smaller than 125 mm,

1.3.3- BRICK OR CONCRETE WALL

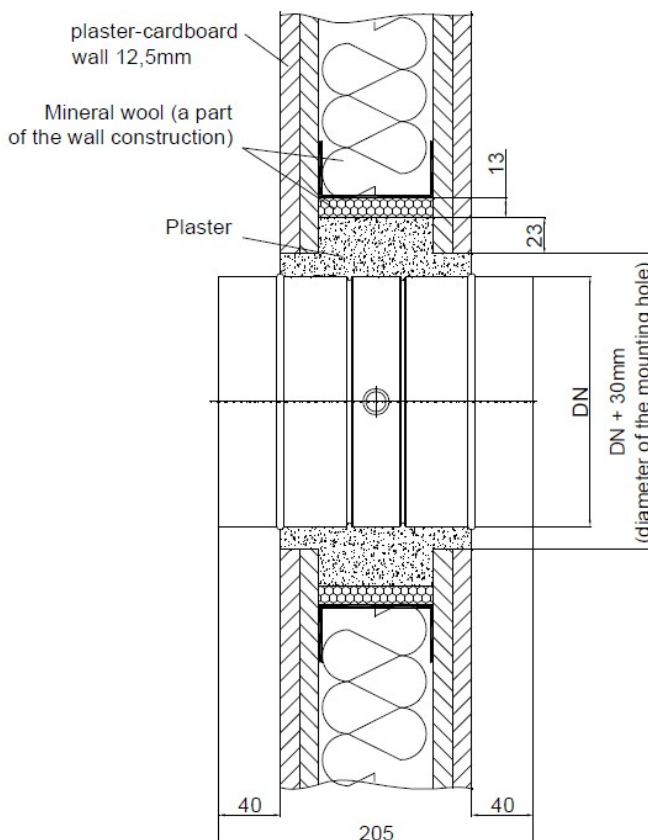
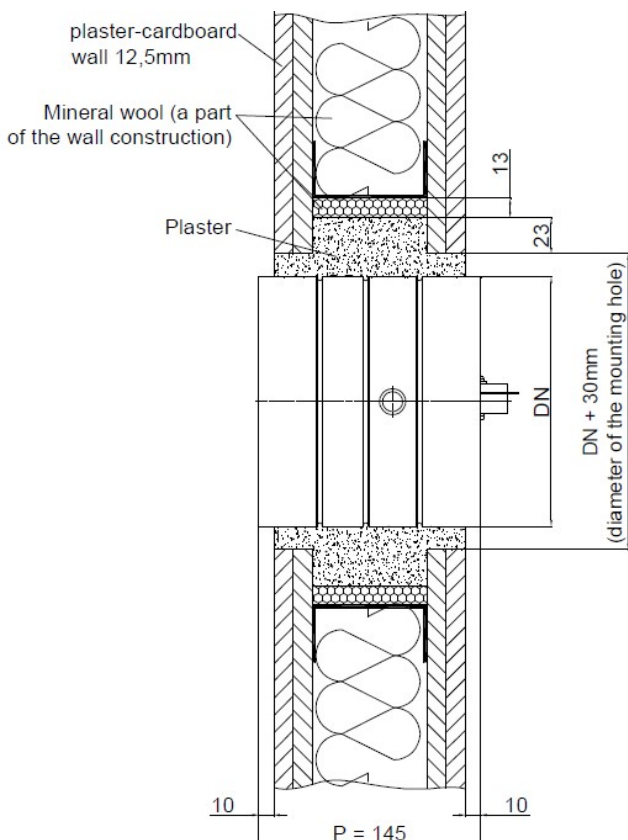


GRYFIT CX-4S with sleeve connection



GRYFIT CX-4S with nipple connection

1.3.4- PLASTER-CARDBOARD WALL

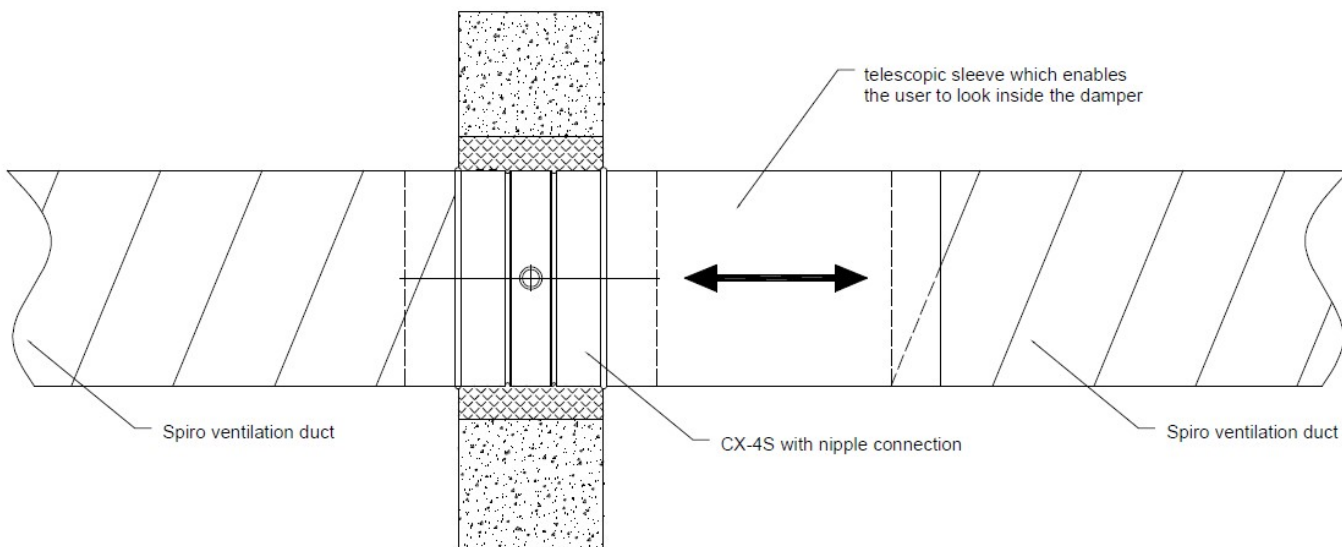


Note: The diagram of the plaster-cardboard wall shown in the drawing is only an example

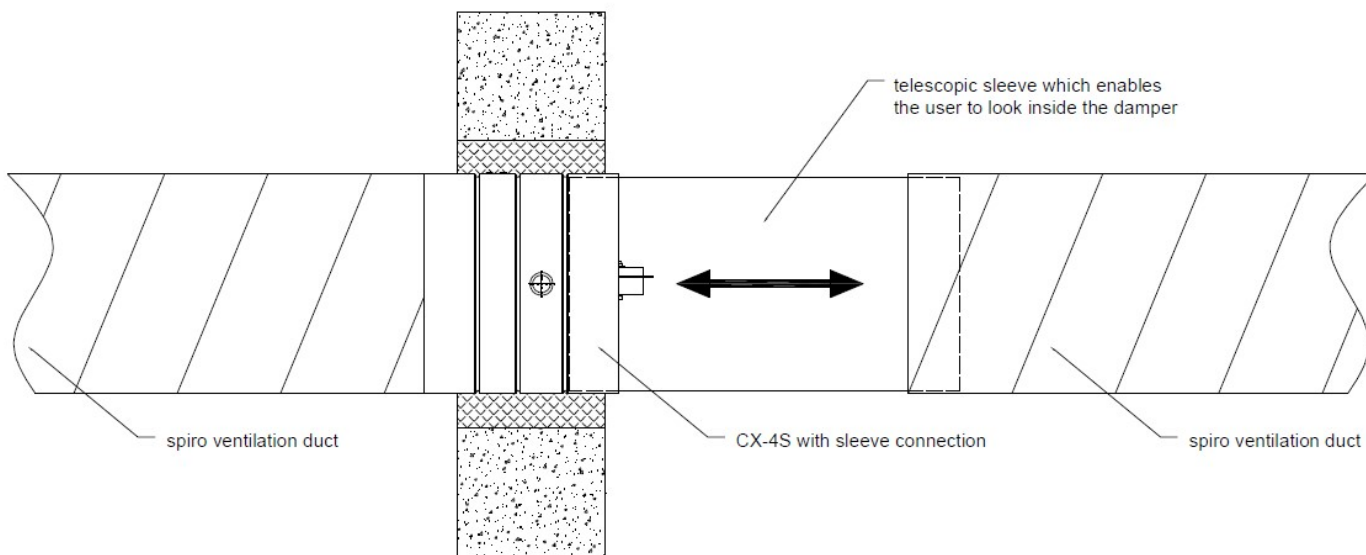
#### 1.4- CONNECTION TO VENTILATION DUCT

Connection of GRYFIT CX-4S fire damper to ventilation or air-conditioning duct has to be done coaxially. It should enable the user to control the damper condition (in the drawings below there are some examples of connections which enable the user to control technical condition of the damper).

NOTE: While installing the damper in the partition, the damper casing cannot be damaged and in particular tightening cannot occur. When the damper is connected to ventilation duct, the operation test should be carried out. The damper should be installed firmly, because mechanical tightening and free vibration of ventilation system cannot be transferred onto the damper casing.



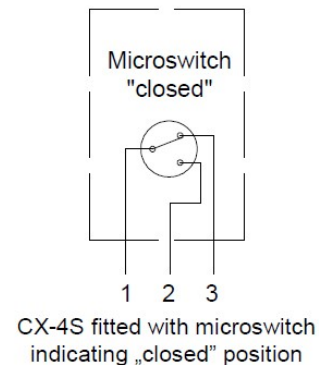
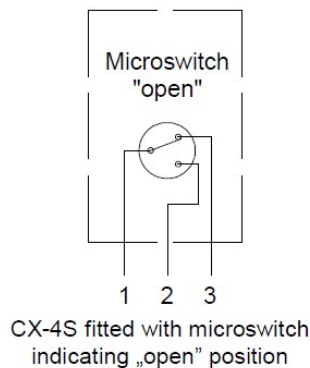
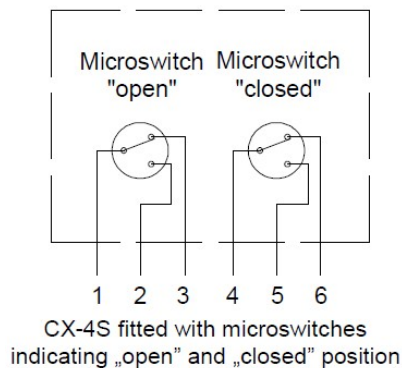
Installation of CX-4S fire damper with nipple connection in spiro ventilation ducts, with optional telescopic sleeve which enables the user to control technical condition of the damper



Installation of CX-4S fire damper with sleeve connection in spiro ventilation duct, with optional telescopic sleeve which enables the user to control technical condition of the damper

## 1.5- CONNECTION OF MICROSWITCHES

Electrical connection should be carried out according to the damper equipment:.



## 2- USAGE INSTRUCTION

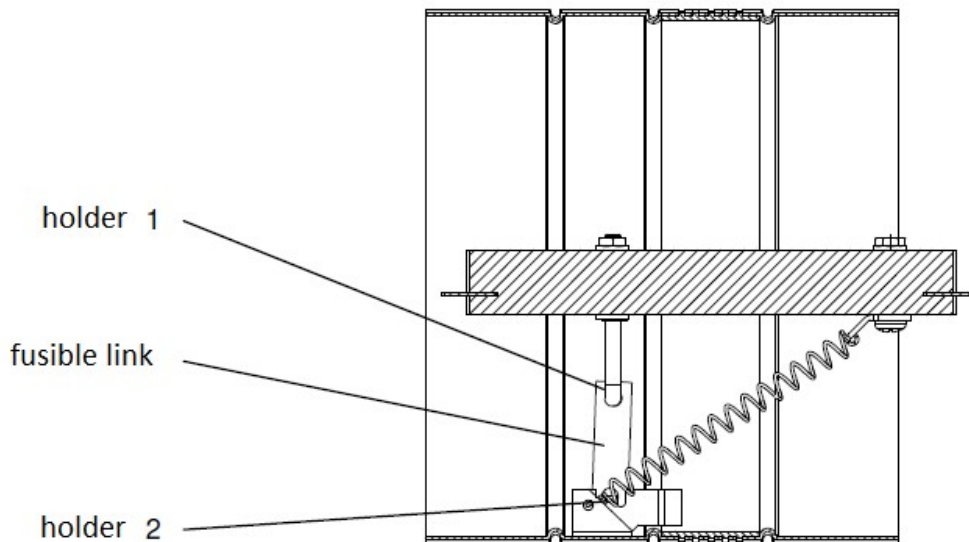
In the stand-by position the damper blade is open.

### 2.1- CLOSURE OF THE DAMPER – TURNING INTO THE SAFETY POSITION

Closure of the blade – turning from the stand-by into the safety position results from activation of the fusible link when the temperature inside the damper casing rises above 72°C or 95°C (depends of fusible link version).

### 2.2- OPENING OF THE DAMPER – RETURN TO THE STAND-BY POSITION

Opening of the damper – return from the safety to the stand-by position is done manually by turning the damper blade into the stand-by position (open) and then blocking it by installation of the fusible link in the holders.



#### NOTE:

1. If the damper has been exposed to fire, it should be replaced with a new one.
2. In case of damage or activation of the fusible link it has to be replaced with a new one before re-opening of the damper.

### **3- MAINTENANCE AND SERVICE**

The damper does not require special maintenance. However, it is advisable to control the proper working of the damper and make a written report once a year.

Maintenance and service should be carried out by the service staff of GRYFIT TECHNIK Sp. z o.o. company or by specialists who have been trained in maintenance of GRYFIT TECHNIK devices.

### **4- STORAGE**

The damper is delivered in the closed (safety) position, with the complete control mechanism installed. While installing the damper on the building site, the industrial safety regulations should be observed and this instruction should be followed in order to avoid damage of the damper.

The dampers should be protected from moisture and mechanical shock or impact. It is forbidden to store more than two dampers one on top of the other. In case of storage on the ground, the dampers should be put on protective pads in order to avoid damage or deformation of the casing.

### **5- GUARANTEE**

The device comes with a three-year guarantee, provided that annual services are carried out by authorized GRYFIT TECHNIK Sp. z o.o. service centre and are certified by the written report. If this condition was not met, a guarantee period would last one year. The guarantee contract does not include complaints about damages resulting from disobedience of the rules of this instruction. Manufacturer does not take responsibility for the dampers which are installed outside the building and exposed to weather conditions.