

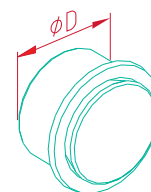


Fire Valve

BX-1H

in libraries of
Fluid Desk
Building Information Modeling

EI 60 (v_e-o→i) S
EN 13501-3+A1:2010
EN 15650:2010
Certificate of Constasy
of Performance
CE 1488-CPD-0282/W



air handling intelligence



open in
PartShelf24



FUNCTION

The BX-1H fire valves are designed for buildings where in the event of a fire the affected zone should be isolated from the other zones, by among others, closing fire valves, while the ventilation and air conditioning systems should operate normally in the other non-affected zones of the building. The performance criteria are satisfied in case of fire from inside to outside of valve.

APPLICATION

BX-1H fire valves are designed for terminations of ventilation ducts in vertical partition walls. In case of fire fire valves enable the fire zone to be cut off. Closing the valve head enables the partition wall with the valve to retain its fire resistance. Therefore the other zones are not only protected from hot smoke and gas but also ventilation and air conditioning systems in the rest of a building are able to work normally.

In the normal working of ventilation system the valve is still open (in the stand-by position). The zone where fire has been detected will be separated by closure of the valve head (turning from the stand-by into safety position) resulting from:

- rise in temperature in ventilation duct above 72°C and automatic activation of fusible link,
- activation of electromagnet controlled remotely by impulse or current interruption.

DESCRIPTION

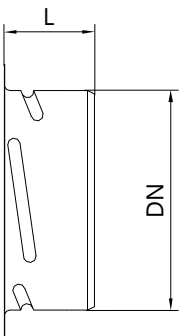
BX-1H fire valve consists of:

- casing with circular section made of galvanized and powder painted sheet steel and fire-resistant material
- movable valve head made of galvanized and painted sheet steel and fire-resistant material
- heat-expansion seals to provide fire tightness and smoke tightness
- mounting collar made of galvanized sheet steel
- control mechanism



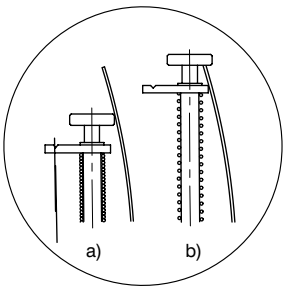
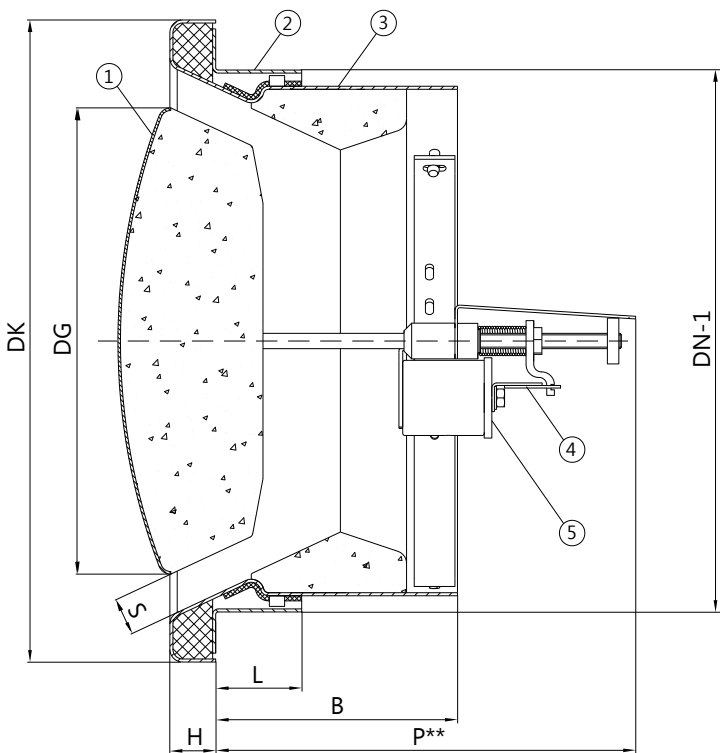
ACCESSORIES

- Electrical microswitch indicating "open" position - 1WKP
- Electrical microswitch indicating "closed" position - 1WKK
- Electrical microswitches indicating "open" and "closed" position - 1WKKP
- Electrto-magnet controlled by impulse 24V DC - EI24V
- Electrto-magnet controlled by de-energized 24V DC - EP24V
- Electrto-magnet controlled by impulse 230V AC - EI230V
- Electrto-magnet controlled by de-energized 230V AC - EP230V
- Mounting collar L=35 mm long - KM35



KM mounting collar

DIMENSIONS AND INSTALLATION METHOD



Details of the locking mechanism:
a) open valve
b) closed valve

- 1. Fire valve head
- 2. Mounting collar
- 3. Valve casing
- 4. Fusible link
- 5. Electromagnet

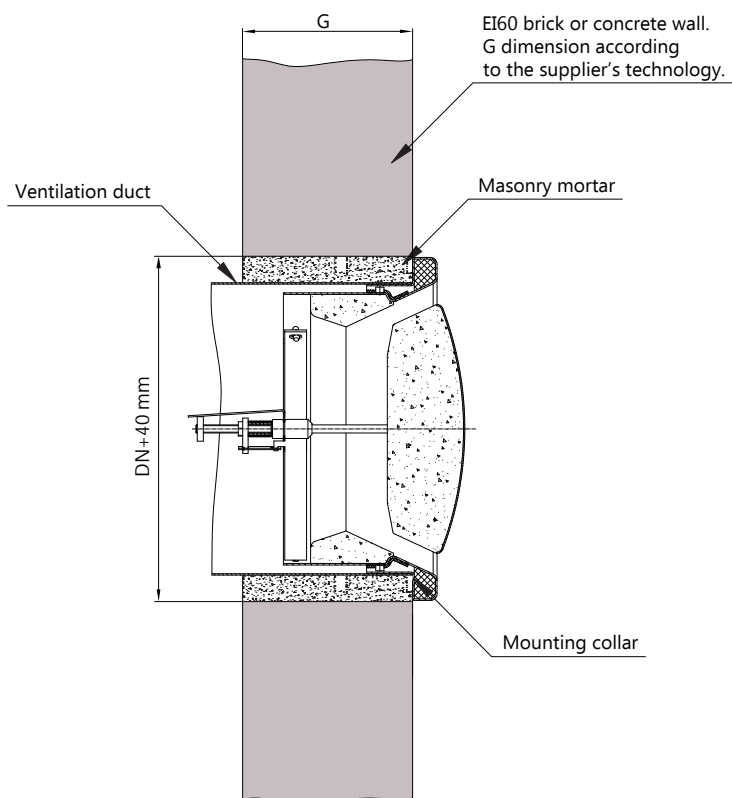
Nominal diameter DN	100	125	160	200
Diameter of the casing flange DK	124	150	212	252
Diameter of the head DG	88	111	145	183
Height of the casing flange H	12	12	17	20
Length of the valve casing B	84	84	93	93
Length of mounting collar L	35*, 67, 120, 150			
Opening size S	0 - 12			
Valve length P**	150			
Valve weight w kg	1,1	1,6	2,1	3,0

* standart mounting collar
** after turning into the safety position (closed)

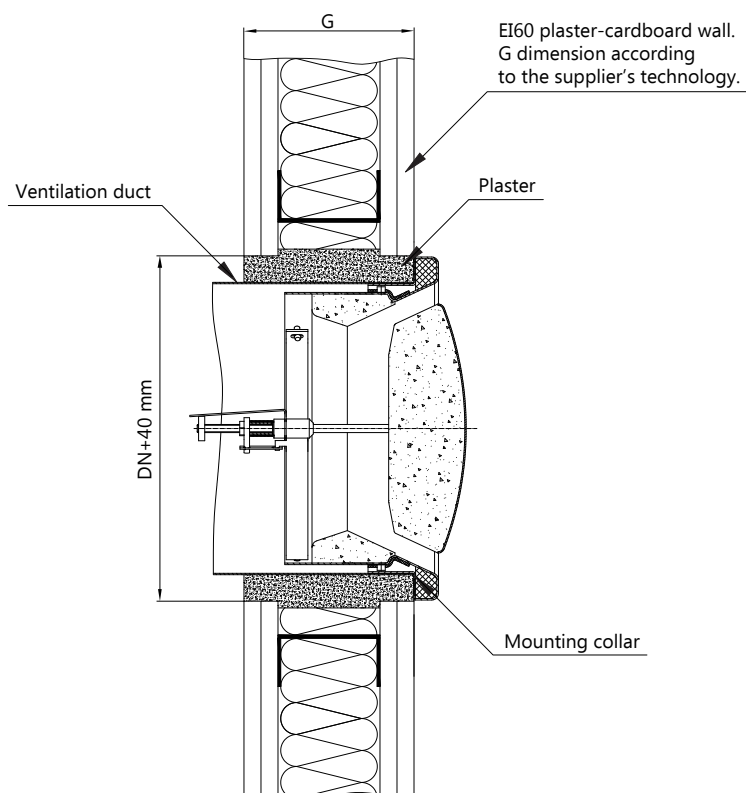


DIMENSIONS AND INSTALLATION

INSTALLATION IN A CONCRETE OR BRICK PARTITION



INSTALLATION IN A PLASTER-CARDBOARD PARTITION

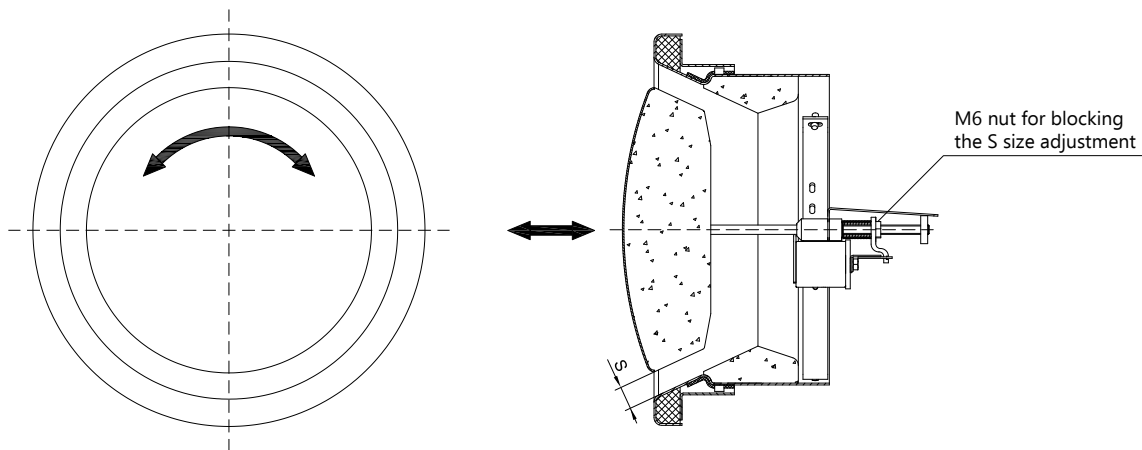




DIMENSIONS AND INSTALLATION METHOD

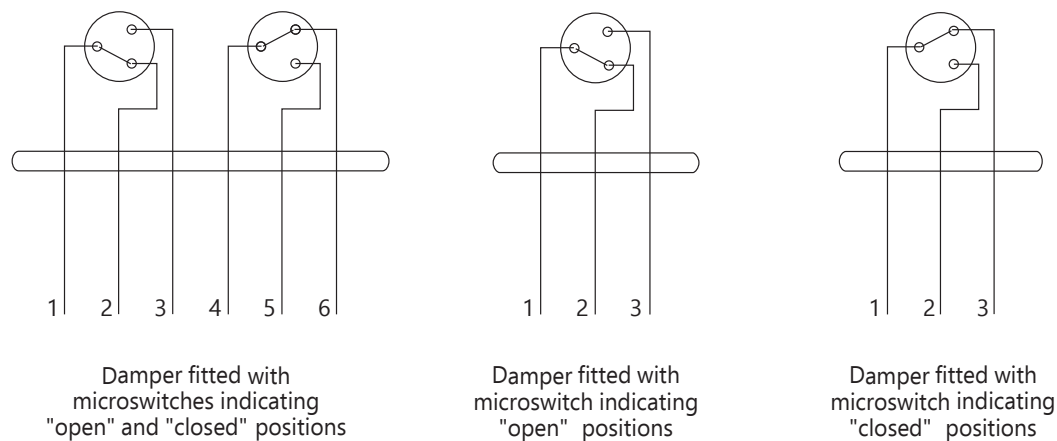
ADJUSTMENT OF THE VALVE HEAD POSTITION

In order to get the required airflow through the valve it is necessary to adjust right S size of the valve opening. Adjustment of the S size is carried out with the valve open, turning the valve head (see the picture below). Depending on the turning direction the S size becomes wider or narrower. After adjustment the S size can be blocked by tightening the M6 nut on the pilot bar of the valve head.

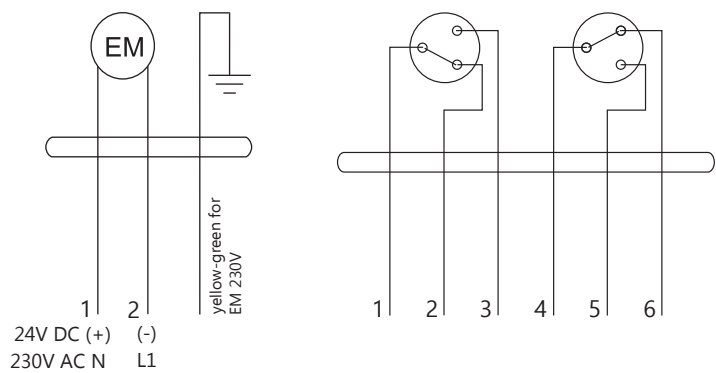


ELECTRICAL WIRING DIAGRAM

FIRE VALVE WITH MICROSWITCHES



FIRE VALVE WITH ELECTRO-MAGNET AND MICROSWITCHES

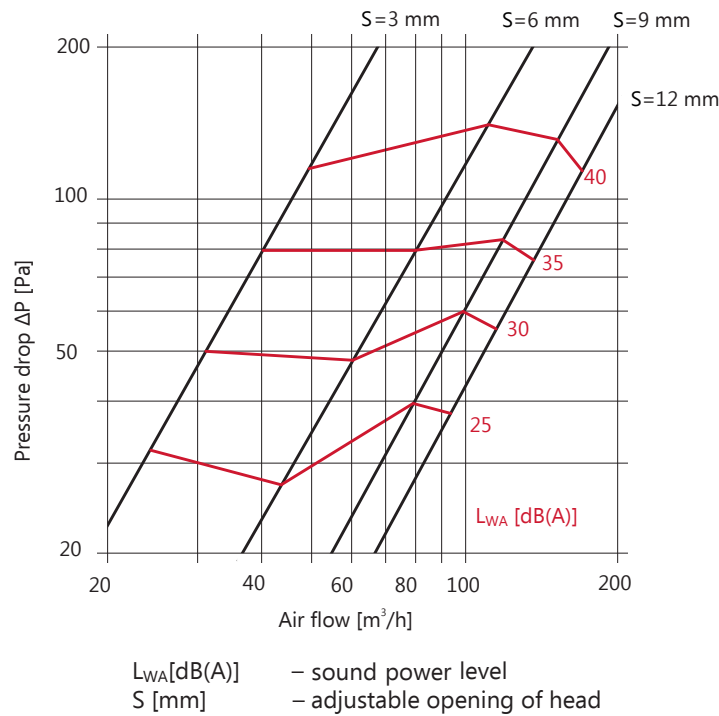




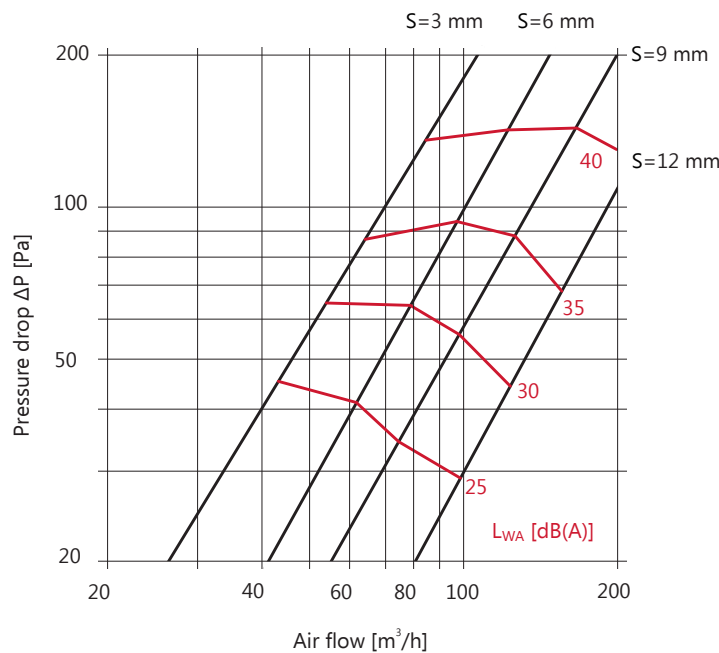
SELECTION & DIMENSION

PRESSURE DROP AND SOUND POWER LEVEL

BX-1H D=100



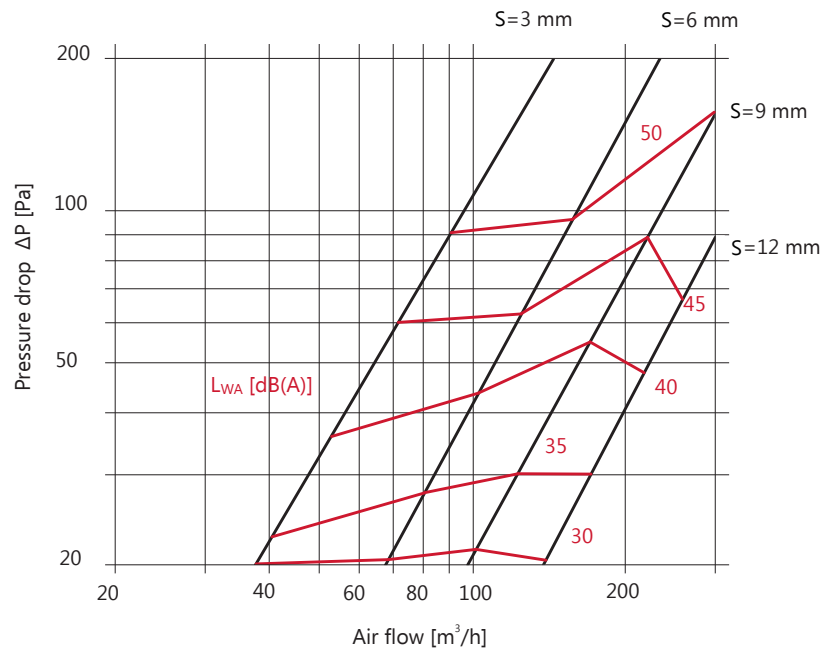
BX-1H D=125



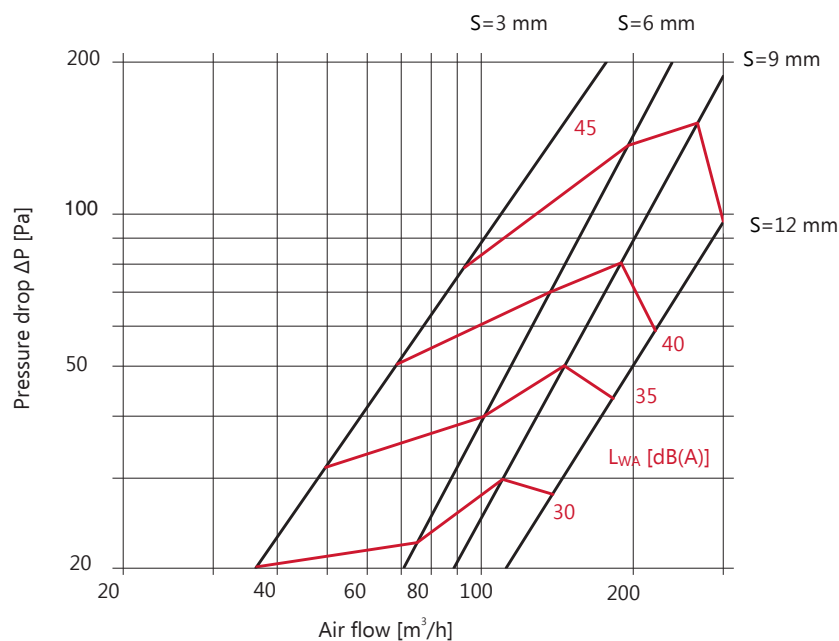


SELECTION & DIMENSION

BX-1H D=160



BX-1H D=200



EXAMPLE OF DESIGN SPECIFICATION AND PURCHASE ORDER



Enquiry:
Fire valve GRYFIT BX-1H, D=100 + Mounting collar KM L=35 + Fusible link WT72C + Electromagnet, controlled by activation of electrical impulse 24V DC EI24V + Single micro-switch to indicate position closed 1WKK

GRYFIT quotation:
GRYFIT BX-1H, EI 60 (v_e-o→i)S, D=100, L35+EI24V+1WKK