EKOVENT®

Self-actuating backflow protector EKO-BSV

Installation, operating and maintenance instructions 2022-05

Table of Contents

Owner of place of manufacture **EKOVENT AB, Vellinge**

Certification:	**RISE Certiffication 1002**
Product type description:	**EKO-BSV**
Type approval number:	**SC0800-14**

Product handling on the construction site

Transport

The Self-actuating backflow protectors are transported to the construction site with a forklift or crane with a lifting fork. To avoid damage, they must be lifted, not dragged and never lowered hard against the ground.

Reception and inspection of the delivery

The Self-actuating backflow protectors is inspected immediately when the delivery arrives at the workplace. The inspection is to check that the delivery corresponds to the order and the consignment note. The approved delivery is acknowledged on the consignment note. Products with defects or defects must not be installed. Contact the supplier immediately.

Storage

The storage of materials on the site should be planned so that you get the least possible internal transport. Self-actuating backflow protectors must be protected against water and always stored in a dry place. Furthermore, they must be handled so that no mechanical damage occurs to them.

Commissioning

The Self-actuating backflow protectors must not be put into use until the entire installation is in operational condition.

EKOVENT AB hereby disclaims all responsibility for:

- Damage due to incorrect transport, handling or storage.
- That the user has failed to inspect, maintain and to a reasonable extent take care of the equipment.
- Personal injury or property damage as a result of using the product in violation of the instructions and specifications in this manual.

EKOVENT:s liability shall be limited to repair or replacement of faulty equipment part.

General assembly

Self-actuating backflow protector EKO-BSV is installed in the supply air duct in a FT or FTX system to prevent the spread of smoke. The exhaust air system must be dimensioned to be able to evacuate smoke. Both the supply air and the exhaust air fan must be in operation throughout the entire fire. The protector closes quickly in the event of a fire that generates an overpressure in the fire cell. It is fully self-actuating and does not need to be connected to a monitoring system. Self-actuating backflow protector EKO-BSV is designed so that it can withstand high temperatures, which means that it can also be placed inside the fire cell itself. Mounting can be done horizontally or vertically in a fire cell, in a shaft or in a corridor in such a way that it can be inspected and cleaned.

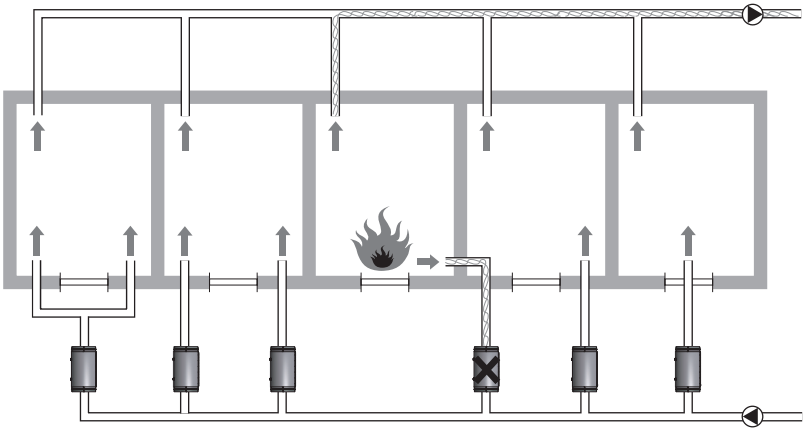
The fire properties are tested according to the same test standard as for CE marked Fire Damper. Fire properties corresponding to E90 applies provided that EKO-BSV is mounted in a duct outside the fire-exposed fire cell, applies to both wall and floor.

When EKO-BSV is placed outside the served fire cell it does not need to be depressurized.

Ventilation ducts and components are suspended, installed and insulated in accordance with current requirements in BBR. When insulating, the inspection requirement of the product must be taken into account.

Mounting in ventilation duct

EKO-BSV must be mounted in the supply air duct so that the arrow on the label points in the same direction as the air flow (supply air direction).



Assembly instruction EKO- BSV1, 2, 4 och 5

Type approval SC0800-14.

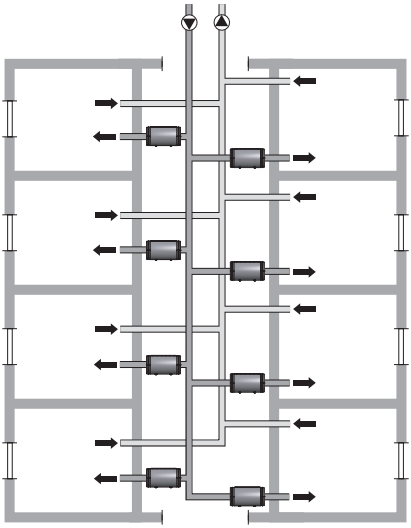


Fig. 2

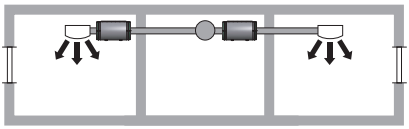
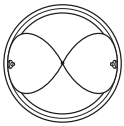


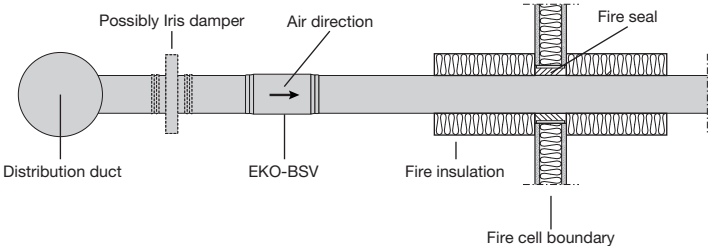
Fig. 1

Textile cone, position at 3 m/s



Diameter 100-125 mm

Diameter 160-200 mm

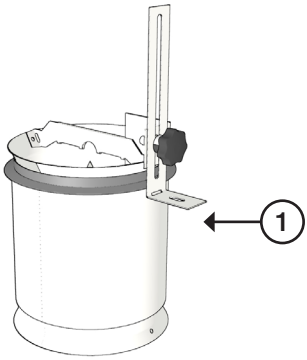


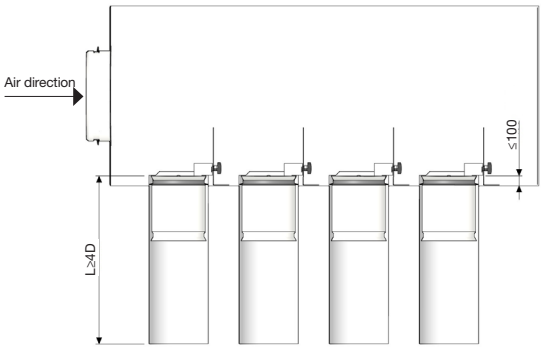
Installation of EKO-BSV1, 2, 4 och 5

1. Self-actuating backflow protector EKO-BSV can be mounted in a vertical or horizontal duct, in or outside a fire cell. Protection against the spread of fire between fire cells by transferring heat via the ventilation ducts is not reduced with this backflow protection, which is why special measures must be taken to solve this.
2. It is important to ensure that the Self-actuating backflow protector is mounted in the correct air direction according to the arrow on the protector.
3. Thermal device duct (T-branches) must not be installed directly opposite each other. Install according to Fig. 2.
4. **NOTE!** When adjusting, the system must be in operation.

Assembly instruction EKO-BSV3 in distribution box

Type approval SC0800-14.





Recommendations

Length of spiro duct from floor 0-100 mm. Spiro duct should be straight for at least the equivalent of 4 diameters. The inlet duct should open above the outgoing distribution pipe and, if possible, at a distance of at least 2 diameters. Give the distribution box the largest possible volume. Attach the mounting bracket to the side that creates the least risk of interfering with the air flow to the various spiro ducts.

Installation of EKO-BSV3

Mount EKO-BSV Insert in each spiro duct. Attach the mounting bracket to the adjacent building part with a suitable dressing.

Operation and maintenance

Operation

Self-actuating backflow protector EKO-BSV is a type-approved protection intended as protection against the spread of smoke in ventilation systems of the fan type in operation. EKO-BSV closes when a fire occurs in a room and the pressure rises. The product is self-acting and contains no electrical or mechanical details.

Cleaning

We advocate preventive maintenance of the protector according to the facilities needs caused by wear and dirt. Cleaning should also take place in conjunction with rebuilding as this can create large amounts of contaminants in the ventilation system.

If necessary, clean with a brush, vacuuming or wiping. **NOTE! water or other liquid must not be used. NOTE! always remove the insert when cleaning ducts.**

Maintenance EKO-BSV1, 2, 4 och 5

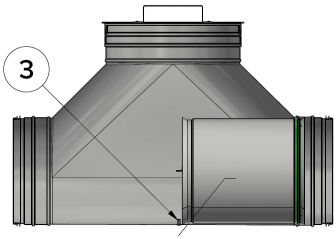
External and internal control

When cleaning or at least every three years, check the protective cover and insert. Also check that the corrosion protection is intact.

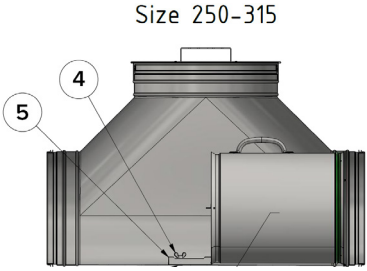
- Check the outer casing of the cover so that it is not damaged.
- Open the 2 locking latches (BSV1 and 4) or remove the hatch (BSV2 and 5) and then remove the insert.
- Check that the Sealings, the insert and the cone are undamaged.
- Check that no objects prevent the cone of textile from closing/opening.
- Clean if necessary.
- Put back the insert and lock the two locking latches (BSV1 and 4) or put back the hatch (BSV2 and 5).

⚠ **Note! After checking and cleaning, the insert must be mounted so that the arrow points in the air direction and that the stop pin (3) or the locking device (4, 5) is according to pictures.**

Size 100-200



Size 250-315

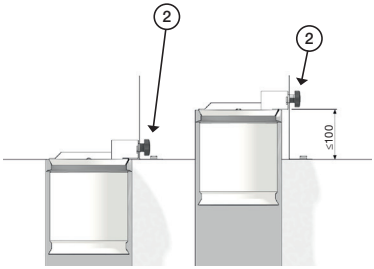


Maintenance EKO-BSV3

External and internal control

When cleaning or at least every three years, check the protective cover and insert. Also check that the corrosion protection is intact.

- Unscrew the star handle (2) and remove the insert from the spiro duct.
- Check that the sealing strip, the insert and the cone are undamaged.
- Check that no objects prevent the cone of textile from closing/opening.



- Clean if necessary.
- Reassemble the insert in the spiro duct and screw back the star handle (2).

EKOVENT®

HEAD OFFICE
Mejselgatan 7, 235 32 Vellinge
Tel 040-42 16 00

www.ekovent.se info@ekovent.se

REGIONAL OFFICE GÖTEBORG
Boråsvägen 5, 435 31 Mölnlycke
Tel 031-23 07 40

REGIONAL OFFICE STOCKHOLM
Vallgatan 9, 170 67 Solna
Tel 08-508 613 00