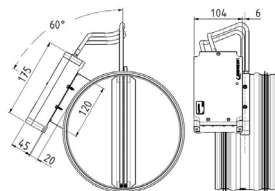
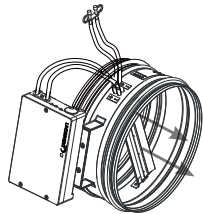


DELIVERY UNIT

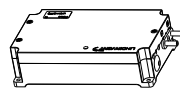


DCV-MFb

DCV-MFb – Circular

- Delivered factory-mounted on SMED measuring flange, Ø100 - Ø630 mm.
- Regulator FBLb mounted on SMED via mounting plate MPLb.
- Hoses for flow measurement connected.
- K-factor and flow direction are indicated on the label on the measuring flange.

Circular Ø630 can only be delivered as a kit with a rectangular damper 700x700 with a circular 630 connection and a circular measuring flange.



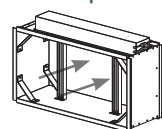
Flow regulator FBLb

+



Hose 8x5 (0,8 m)

+



Measuring flange SMRD

DCV-MFb – Rectangular

Delivered as a kit: Regulator, hose, and measuring flange are connected on site. For guidance, see assembly steps 2 - 4 under FBLb with SMED.

- A hose for connecting the measuring device to the sensor, + to + and - to -, is included with the regulator.
- The current K-factor is indicated on the label on the SMRD measuring flange.
- Mounting of FBLb is typically done without a mounting plate, directly on the end of the SMRD using sheet metal screws.
- The SMRD must be custom-ordered. Guide connections must be equipped with sealing strips.

1. PLACEMENT AND ORIENTATION IN THE DUCT

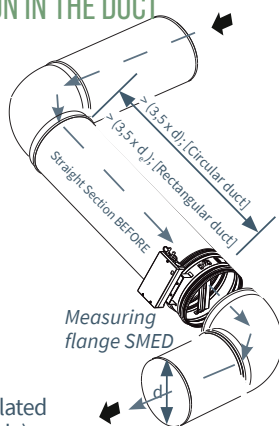
Straight Section BEFORE Measuring Flange

DCV-FMb must be correctly oriented and preceded by a disturbance-free straight duct section equivalent to >3.5 times the duct diameter (d). After a silencer with a different cross-sectional area, a straight section of >2.0 times the duct diameter (d) is required.

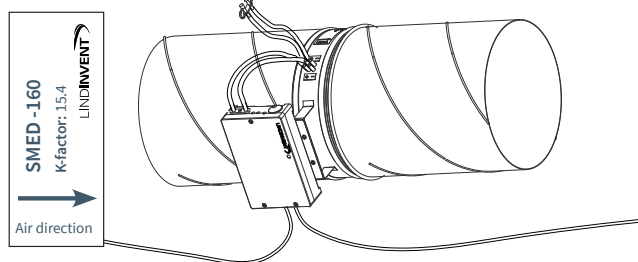
For rectangular ducts:

Straight sections as above are calculated based on the equivalent diameter (d_e); $d_e \approx 1.15 \times \sqrt{A}$ (where $A = B \times H$).

Note: Immediately after the measuring flange, no minimum distance is required to a subsequent bend or other disturbance.



Orientation of measuring flange



- DCV-MFb is oriented in the duct with the flow arrow on the measuring flange in the direction of the airflow.
- The regulator is positioned according to the illustration above for easiest access.

2. CONNECT 24 VAC, NETWORK, AND OTHER DEVICES

Refer to installation step 4, Wiring, on the opposite page.

LINDINSIDE

Procedure for Connecting to FBLb for Node ID Assignment

1. Scan for Nearby Devices:

Pull down to scan for nearby devices.

Select the intended controller (FBLb) from the list of devices.

By calling a device via the clock symbol, a beep sound and blue blinking light will guide you to identify the device.

2. Set (Change) Node ID:

Select the Node ID field for the intended device in the list of scanned devices.

Enter the unique Node ID between 1–239 assigned to the regulator according to Lindinvent's recommended assignment.

After assignment: Perform a new scan to verify that the device's Node ID has been updated correctly. For assigning Node IDs to a larger number of devices, the "Set node-IDs" function can be used.

3. Connect to the Device:

Connect by pressing the field for the device's product name in the list of scanned devices.

4. Set the Desired Regulator Function:

Flow measurement (Setting for DCV-MFb)

5. Complete Commissioning via Quick Setup Screen:

• Perform damper motor test (Manual motor control):

- Check that the damper has fully opened. Confirm the position.
- Check that the damper has fully closed. Confirm the position.

• Assign flow zone:

Often the same as the Node ID.

• Enter duct size or K-factor (G1 Duct dimension or G1 K-factor)

For circular ducts, select the duct size from a list. For rectangular ducts, enter the current K-factor.

• Specify placement for supply or exhaust air (G1 placement)

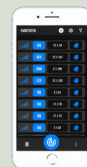
Choose sensor placement depending on whether the sensor is connected to measure exhaust air or supply air.

• Enter setpoint (Balance offset SP or Flow SP)

Balance offset (l/s) or Flow setpoint (l/s) depending on the function selected in step 3.



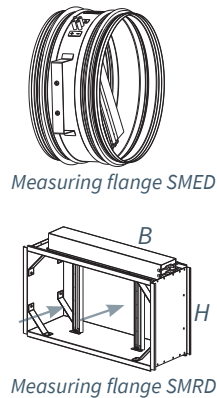
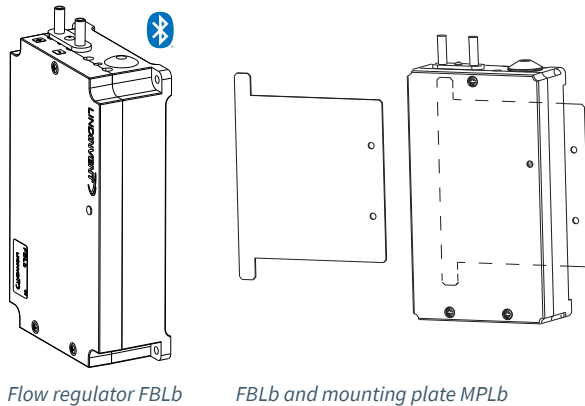
Information
about
LINDINSIDE



Smartphone with the
LINDINSIDE app.

The FLLb regulator is pre-calibrated upon delivery: Duct size or K-factor is required during commissioning. Verification of test flow measurement is recommended.

REGULATOR FBLb AND MOUNTING PLATE MPLb



INSTALLATION IN CIRCULAR DUCT:

- Measuring flange SMED (circular Ø100-630)
- Mounting plate MPLb is used to attach FBLb to the mounting bracket.
- Installation with FBLb on SMED corresponds to DCV-MFb Circular.

INSTALLATION IN RECTANGULAR DUCT:

- Rectangular measuring flange SMRD must be custom-ordered.
- FBLb is normally mounted on the end of the SMRD using sheet metal screws.
- Installation with FBLb on SMRD corresponds to DCV-MFb Rectangular.

1. PLACEMENT AND ORIENTATION OF MEASURING FLANGE

- Ensure a sufficient straight section before the measuring flange.
- Mount it correctly relative to the marking with the arrow indicating the air direction.
- For circular measuring flanges: Orient the mounting bracket on SMED for the easiest possible access to the regulator with the mounting plate. If possible, ensure a clear line of sight to the RGB LED.
- Ensure sufficient installation space for both the mounting bracket on the circular measuring flange and the regulator: > 95 mm.

2. INSTALLATION OF REGULATOR FBLb ON MEASURING FLANGE

- Rectangular: FBLb is screwed directly onto the end of SMRD.
- Circular: Mounting plate MPLb slides onto the back of FBLb (A). FBLb with mounting plate is screwed onto the mounting bracket SMED (B).

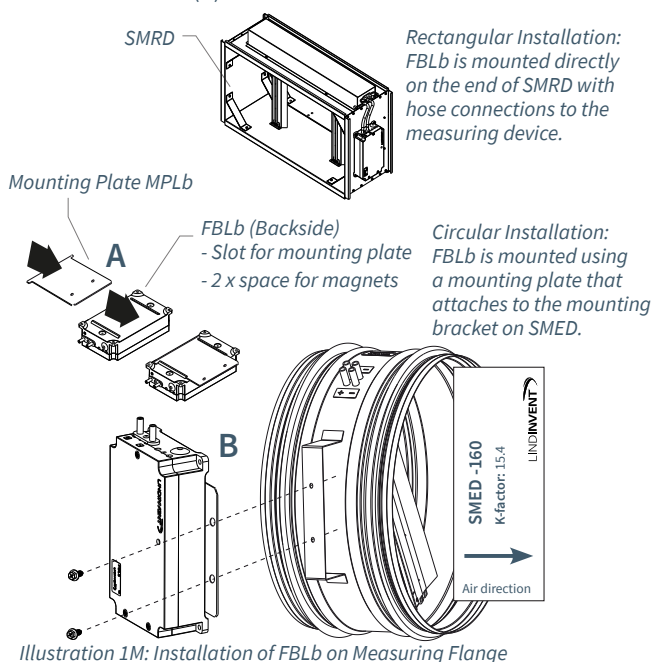


Illustration 1M: Installation of FBLb on Measuring Flange

3. CONNECT HOSES TO THE MEASURING FLANGE

Cut the hose (5x8) to the required lengths. Connect the measuring flange to the sensor: (+) to (+) and (-) to (-).

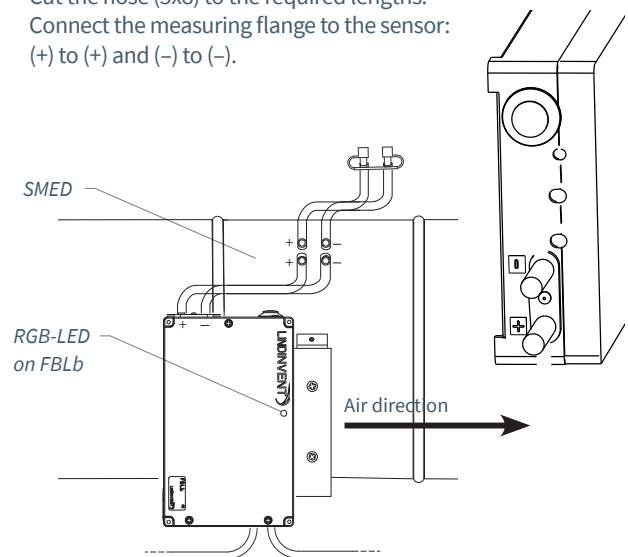


Illustration 2M: Connection of Hose to Measurement Port on FBLb and SMED

4. CONNECTIONS

Connections are made with guidance from the external connection diagram for FBLb: Refer to the inside of the regulator cover.

- The regulator is connected to the CAN loop via Lindinvent's standard cable with 2 conductors for power supply and 2 conductors for communication.
- Create openings/outlets for each cable: Use wire cutters to open the appropriate outlet for cables as shown in the illustration below.
- During connection: Use bi-conductor hose for shielding.
- After connections: Reattach the cover, ensuring it clamps the cables securely for a safe fastening.

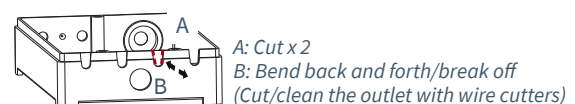


Illustration 1I: Outlets are made according to A and B for cabling.