

ROUND VERSION IS FOLLOWED BY SQUARE - THE NEW TVE-Q

THE PROVEN COMPACT CONTROLLERS OF THE ROUND TVE SERIES ENTER THE NEXT STAGE OF DEVELOPMENT WITH THE RECTANGULAR VARIANT TVE-Q



WHY TVE-Q?

The TVE volume flow controller for round ducts, which has been in use successfully for several years, has now been extended by its rectangular sister model, the TVE-Q. Both devices offer the same advantages and serve a wide range of applications with their different designs.

WHAT THE TVE-Q CAN DO!

The volume flow controllers of the TVE series from TROX create a new dimension in volume control technology. Thanks to their unique and innovative measuring technology, up- and downstream lengths are a thing of the past while the installation position is arbitrary. On top of that, it offers unimaginably accurate volume flow control ranges with a factor of up to 1:25.

LEARN MORE!

Looking for all the benefits at a glance? In the following short video you'll learn everything you need to know about the new TVE-Q.

CONVINCING PERFORMANCE EVEN IN THE SMALLEST OF SPACES

YOUR BENEFITS AT A GLANCE

COMPACT SOLUTION FOR LOW AIR VELOCITIES

- ✓ Space-saving installation, as no up- or downstream lengths are required
- ✓ Wide flow rate control range for air velocities from 0.5 to 13 m/s
- ✓ Reliable measurement over the entire differential pressure range due to mapping measurement with variable C-value
- ✓ Large selection of controller variants and interfaces, as well as connection to X-AIRCONTROL
- ✓ Considerable cost savings due to terminal strip on the controller for electrical connection
- ✓ Prevention of installation errors due to flow direction on both sides (with dynamic transmitter)
- ✓ Easy maintenance as there are no interfering measuring components in and on the duct
- ✓ Easy mounting and dismounting of the actuator including integrated sensors
- ✓ Available nominal widths: up to 700 mm width, further sizes under development

SMART. COMPACT. MODULAR.



PRECISE MEASUREMENT



COMPACT DESIGN

The differential pressure is measured directly via the control damper, which is connected to the measuring unit on both sides by a patented system.

By eliminating the need for measuring probes and external connecting hoses, not only the size of the device but also the maintenance effort could be reduced.



PLUG & PLAY

In conjunction with the X-AIRCONTROL room control system, a direct integration into the central control system is possible - simply plug it in and you're done.

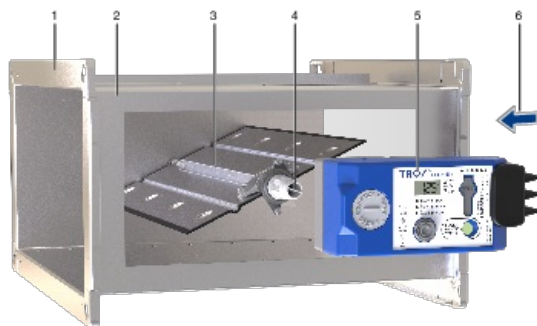
SMALL CONTROL UNIT - BIG ON PERFORMANCE

The **damper blade** functions both as an actuator and as a **differential pressure sensor**.

Depending on the version, the pressure is detected statically or dynamically by the transmitter through the differential pressure channel in the axis and converted into an electrical signal.

This is constantly compared with the setpoint. In the event of a deviation, the integrated actuator adjusts the position of the damper blade. By this means, the volume flow is precisely measured and kept constant over the entire differential pressure range.

- 1 Flange for air duct profiles
- 2 Housing
- 3 Damper blade including differential pressure sensor
- 4 Axis with differential pressure duct
- 5 Electronic volume flow controller
- 6 Preferred air direction



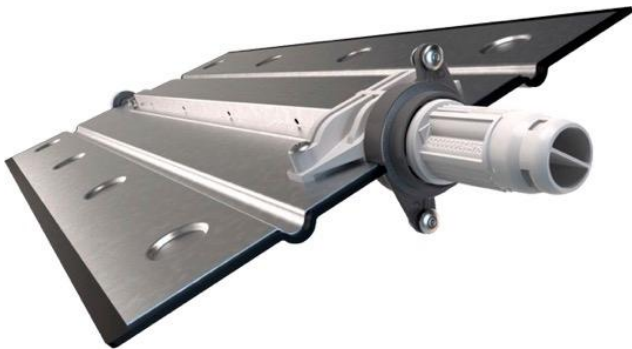
- 1 Flansch für Luftleitungsprofile
- 2 Gehäuse
- 3 Regelklappe inklusive Wirkdrucksensor
- 4 Achse mit Wirkdruckkanal
- 5 Elektronischer Volumenstromregler
- 6 Bevorzugte Luftrichtung

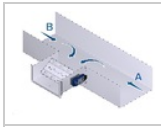
VOLUME FLOW MEASUREMENT WITH SMART DAMPER BLADE

The unique patented measuring principle is based on **hose-free differential pressure measurement** directly via the control damper. This allows **accurate measurement** values to be reliably determined even at **low air velocities** of less than 1 m/s.

In both devices, both a **dynamic and a static measuring principle** can be used - for example, in the case of particularly polluted air. The symmetrical measuring probes are integrated directly into the damper blade on both sides. This makes the TVE and TVE-Q the only controllers that can be **installed in either air direction** when using a **dynamic transmitter**.

Another highlight: the sandwich-mounted sealing lip is as **quiet as a whisper**. Thanks to its uniquely designed tear-off edge, there is virtually **no flow noise** at the damper blade.





FITS IN THE SMALLEST CORNER

By eliminating the need for measuring probes or additional sensors, an extremely **compact design** is realized that allows easy and trouble-free installation even in tight spaces - in the case of dynamic measurement, even independent of the flow direction.

Even with static measurement, the installation position is arbitrary. Since **no upstream or downstream lengths** are required either, it is possible to mount the controller directly on a branch or on curves, for example.

The new TVE-Q also extends the range of possible applications to rectangular ducts. The **sizes available range from 200-700 mm** duct width.

SMART OPTIONS THANKS TO MODULAR DESIGN

The controllers of the TVE series have been designed on **amodular** basis using the concept of the tried-and-tested Easy design. The Compact variant, for instance, features the option of a Modbus interface, enabling a **smart plug&play connection** to the X-AIRCONTROL room control system.

Both the TVE and the TVE-Q are available with either a **static or dynamic transmitter**. An optional LCD display on the compact controller allows precise presetting directly on the device. The integrated terminal strips allow daisy chain connection without the need for extra junction boxes.

The **one-piece housing design** ensures reduced leakage and high efficiency. It also makes cleaning easier.

The TVE series is hygienically conformant to VDI 6022. For easy revision, the **compact controller is removable** and can be **plugged back in again without any misalignment** - all without tools.

DON'T SEARCH ANY LONGER

Erhalten Sie hier alle Informationen und Dokumente zu Ihrem TROX-Produkt.

DOKUMENTE Dokumentensprache: DE

- Betriebs- und Montageanleitungen (18)
- Ersatzteile (1)
- Technische Daten (3)
- Zertifikate (2)

**FINDING
INSTEAD
OF SEARCHING**

NEW QR CODES ON TYPE LABEL OF VOLUME FLOW CONTROLLERS

Each volume flow controller features an individual QR code on the type plate upon delivery, that provides you with additional information at no extra effort, besides the information of the commission and order key.

That way you'll have the following information at a glance :

- Product data sheets on the device series and the installed components
- Installation and commissioning instructions
- Declaration of Conformity
- Hygiene certificates
- Adjustment certificate (access via personalized myTROX account)



GET IN TOUCH WITH US!

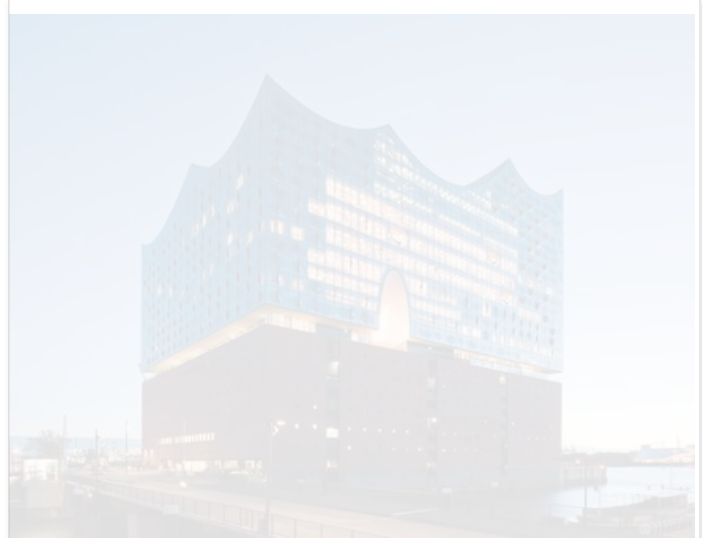
TAKE A LOOK AT OUR SUCCESS STORIES!



ENGELBERT STRAUSS - BIEBERGEMÜND

With the construction of the new corporate campus at the Biebergemünd site in the Main-Kinzig district, engelbert strauss has created a place of the future, precisely geared to employees and customers.

[▶ Click here for the project report! ▶▶](#)



ELBPHILHARMONIE - HAMBURG

The Elbphilharmonie was opened on January 11, 2017. The facade consists of over a thousand double glass elements, many of which are curved and arched in different ways, making the Elbphilharmonie look like a giant crystal. The air-conditioning equipment for the concert halls had to meet the highest requirements in terms of air quality, thermal comfort and, above all, acoustics. The audience should not feel, not see, and above all not hear the ventilation technology.

[▶ Click here for the project report! ▶▶](#)



OTHER REFERENCE PROJECTS

TROX control units Made in Germany stand for highest quality and efficiency. In-house research and development, manufacturing and test laboratories ensure maximum processing quality and functional reliability. Added to this are a wide range of services such as our digital 24/7 customer portal myTROX with comprehensive product information and knowledge databases.

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