TROX® TECHNIK
The art of handling air

VAV TERMINAL UNIT TVLK WITH NOZZLE AND FLANGE

EASY CLEANING OF SENSOR TUBES

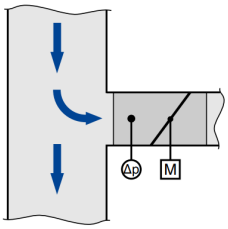
Easy cleaning of sensor tubes

VARIANT WITH NOZZLE AND CONNECTING CIRCULAR SPIGOT

Variant with nozzle and connecting circular spigot

VARIANT WITH BLUFF BODY AND FLANGE

Variant with bluff body and flange



FOR ALL UPSTREAM CONDITIONS

For all upstream conditions

TESTED TO VDI 6022

Conforms to VDI 6022

TVLK

OPTIMISED FOR USE IN LABORATORIES AND ON FUME CUPBOARDS

Plastic circular VAV terminal units for aggressive extract air in laboratories and production facilities

- Casing and damper blade made of flame-resistant polypropylene
- Compact construction, only 400 mm long
- High control accuracy even in case of unfavourable upstream conditions
- Combination with fast-running actuators (air management systems)
- Volume flow rate measurement with bluff body or nozzle
- Slide-out sensor tubes allow for easy cleaning
- Closed blade air leakage to EN 1751, class 4
- Casing air leakage to EN 1751, class C

Optional equipment and accessories

- With flanges on both ends
- Plastic secondary silencer Type CAK for the reduction of air-regenerated noise

General information

Application

- Circular VAV terminal units for use in ventilation and air conditioning systems
- Terminal unit made of plastic for controlling the volume flow rate of fume cupboards and fume hoods in labs
- Suitable for contaminated air
- Closed-loop volume flow control using an external power supply
- For variable and constant volume flows
- Shut-off by means of switching (equipment supplied by others)

Special features

- High control accuracy even in case of unfavourable upstream conditions
- Integral effective pressure sensor with 3 mm measuring holes (resistant to dust and pollution)
- Construction with bluff body: Slide-out sensor tubes allow for easy inspection and cleaning
- No metal parts come into contact with the airflow
- Factory set-up or programming and aerodynamic function testing
- Configuration and subsequent parameter setting for the control component can be done with the EasyConnect configuration software

Nominal sizes
- Bluff body: 250 – 100, 250 – 160
- Nozzle: 250 – D08, 250 – D10, 250 – D16
- Bluff body available in 2 sizes and nozzle available in 3 sizes for various volume flow rate ranges

Variants
- TVLK: VAV terminal unit
- TVLK-FL: VAV terminal unit with flanges on both ends

Parts and characteristics
- Ready-to-commission unit which consists of mechanical parts and control components (attachments)
- Averaging effective pressure sensor for volume flow rate measurement,
  the construction with bluff body has a slide-out sensor that can be removed for cleaning
- Damper blade
- Factory assembled control components (attachments) complete with wiring and tubing
- Aerodynamic functional testing on a special test rig before shipping of each unit
- Set-up data is given on a label affixed to the unit

Attachments
- LABCONTROL: Control components (attachments) for air management systems

Accessories
- Matching flanges for both ends, including seals

Useful additions
- Plastic secondary silencer Type CAK for demanding acoustic requirements

Construction features
- Circular casing
- Short casing: 392 mm without flange, 400 mm with flange
- Spigot suitable for ducts according to DIN 8077
- Both spigots with the same diameter (250 mm)
- Position of the damper blade indicated externally at shaft extension

Materials and surfaces
- Casing and damper blade made of flame-resistant polypropylene (PP), flammability to UL 94, V-0
- Effective pressure sensor (bluff body or Venturi nozzle) and plain bearings made of polypropylene (PP)
- Damper blade seal made of thermoplastic elastomers (TPE)

Standards and guidelines

Fulfils the hygiene requirements of
- EN 16798, Part 3
- VDI 6022, Sheet 1
- DIN 1946, Part 4
- For other applicable standards and guidelines refer to the hygiene certificate

Casing leakage
- EN 1751, Class C

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Closed blade air leakage

- EN 1751, class 4
- Meets the increased requirements of DIN 1946, Part 4, with regard to the acceptable closed blade air leakage

Maintenance

- Maintenance-free as construction and materials are not subject to wear
- We recommend zero point correction once a year; alternatively you can use the EASYLAB control component with the EM-AUTOZERO expansion module for automatic zero point correction