



## TYP VMRK

### FOR THE MEASUREMENT OF VOLUME FLOW RATES IN DUCTS WITH CONTAMINATED AIR

Plastic circular volume flow rate measuring units for the recording or monitoring of volume flow rates

- Manual volume flow rate measuring
- Permanent volume flow rate measuring
- Recording of measured values and use for slave controllers
- Pressure transducer for the automatic recording of measured values, factory-assembled and complete with wiring and tubing
- Casing made of flame-resistant polypropylene (PPs)
- Casing air leakage to EN 15727, class C

Optional equipment and accessories

- With flanges on both ends

## Application



Application

- Plastic circular volume flow rate measuring units Type VMRK for the manual or automatic measuring of volume flow rates
- Suitable for contaminated air
- Simplified commissioning, approval and maintenance
- Suitable for permanent installation because of low differential pressure

Special features

- Measurement accuracy  $\pm 5\%$  even with unfavourable upstream conditions
- Effective pressure range: approx. 5 - 250 Pa
- Low differential pressure of only about 15 - 24 % of the measured effective pressure

## Description



### Variants

- VMRK: Volume flow rate measuring unit
- VMRK-FL: Volume flow rate measuring unit with flanges on both ends

### Parts and characteristics

- Ready-to-commission unit which consists of the mechanical parts and an optional pressure transducer
- Averaging differential pressure sensor for volume flow rate measurement; can be removed for cleaning
- Optional factory-assembled pressure transducers complete with wiring and tubing
- High measurement accuracy (even with upstream bend  $R = 1D$ ).

### Anbauteile

- Statischer Differenzdrucktransmitter
- TMO Statischer Differenzdrucktransmitter mit LON BUS Kommunikation, Einbindung über Ionworks technologie
- ELAB - EC/SC Statischer Differenzdrucktransmitter mit intergartionsmöglichkeit ins EASYLAB System, Einbindung über 0 - 10 V DC Signale oder über Erweiterungskarten (LON, BACNET MS/TP, MODBUS-RTU)

### Accessories

- Matching flanges for both ends

### Construction features

- Circular casing
- Spigot suitable for ducts according to DIN 8077
- Connecting nipple for tubes with 6 mm inside diameter

### Materials and surfaces

- Casing made of flame-resistant polypropylene (PPs)
- Differential pressure sensor made of polypropylene (PP)

## INFORMACJE TECHNICZNE

### Functional description

The measuring unit is fitted with an effective pressure sensor for measuring the volume flow rate.

The effective pressure is either measured and evaluated manually, or transformed into an electric signal by a pressure transducer.

Nominal sizes	125 – 400 mm
Volume flow rate range	25 – 1680 l/s
Volume flow rate range	90 – 6048 m <sup>3</sup> /h
Measurement accuracy	± 5 % of the measured value
Effective pressure range	approx. 5 – 250 Pa
Differential pressure	15 – 24 % of the measured effective pressure
Operating temperature	10 – 50 °C

Plastic (PPs) circular volume flow rate measuring unit for the measurement of volume flow rates in air conditioning systems, available in 6 nominal sizes.

For the manual volume flow rate measuring or for the permanent monitoring of the actual value signal.

Ready-to-commission unit which consists of the casing with an averaging differential pressure sensor.

Spigot, suitable for ducts according to DIN 8077.

Casing air leakage to EN 15727, class C.

Special features

- Measurement accuracy  $\pm 5\%$  even with unfavourable upstream conditions
- Effective pressure range: approx. 5 – 250 Pa
- Low differential pressure of only about 15 – 24 % of the measured effective pressure

Materials and surfaces

- Casing made of flame-resistant polypropylene (PPs)
- Differential pressure sensor made of polypropylene (PP)

Technical data

- Nominal sizes: 125 – 400 mm
- Volume flow rate range: 25 to 1680 l/s or 90 to 6048 m<sup>3</sup>/h
- Effective pressure range: approx. 5 – 250 Pa

Anbauteile

Volumenstrommessung mit statischem Differenzdrucktransmitter mit Istwertsignal zur Einbindung in die Gebäudeleittechnik.

- Versorgungsspannung 24 V AC/DC
- Signalspannungen 0 – 10 V DC oder 2 – 10 V DC
- TM0 Einbindung über Lonworks Technologie
- ELAB über 0 – 10 V DC Signale oder über Erweiterungskarten (LON, BACNET MS/TP, MODBUS-RTU)

**VMRK**



**1 Type**

**VMRK** Volume flow rate measuring unit, plastic

**2 Flange**

No entry: none

**FL** Flanges on both ends

**3 Nominal size [mm]**

125  
160  
200  
250  
315  
400

**4 Accessories**

No entry: none

**GK** Matching flanges for both ends

**5 Differential pressure transducer**

No entry: none

**BBO** Static differential pressure transducer