TYP VMR

FOR THE MEASUREMENT OF VOLUME FLOW RATES IN DUCTS

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 air leakage to EN 15727, class C

Optional equipment and accessories

- With flanges on both ends
- Lip seal
- Dynamic or static differential pressure transducers

Application

Application

- Circular volume flow rate measuring units Type VMR for the manual recording or automatic measuring of volume flow rates
- Simplified commissioning, approval and maintenance
- Suitable for permanent installation because of low differential pressure
- Optional static differential pressure transducer for systems with polluted air

Besondere Merkmale

- Messgenauigkeit ± 5 %
- Geringe Druckdifferenz von ca. 10 – 25 % vom gemessenen Wirkdruck

Description

Variants

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

Construction

- Galvanised sheet steel
- P1: Powder-coated, silver grey (RAL 7001)
- A2: Stainless steel

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
- Optional factory-assembled pressure transducers complete with wiring and tubing
- High measurement accuracy (even with upstream bend R = 1D).

Anbauteile

- Dynamischer Differenzdrucktransmitter
- Statischer Differenzdrucktransmitter
- Optional LON BUS oder EASYLAB Plug & Play System
- TM0 Statischer Differenzdrucktransmitter mit LON BUS Komunikation, Einbindung über Lonworks 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)

Zubehör

- Beidseitig mit Lippendichtung (werkseitig aufgebracht)
- Beidseitig mit Gegenflansch

Construction features

- Circular casing
- Spigot suitable for circular ducts to EN 1506 or EN 13180
- Spigot with groove for lip seal
- Connecting nipple for tubes with 6 mm inside diameter
- VMR-FL: Circular flanges to EN 12220

Materials and surfaces

- Casing made of galvanised sheet steel
- Aluminium sensor tubes

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	100 – 400 mm
Volume flow rate range	10 – 1680 l/s
Volume flow rate range	36 – 6048 m^3/h
Measurement accuracy	± 5 % of the measured value
Effective pressure range	approx. 5 – 250 Pa
Differential pressure	Approx. 10 – 25 % of the measured effective pressure
Operating temperature	10 – 50 °C

Circular volume flow rate measuring unit for the measurement of volume flow rates in air conditioning systems, available in 7 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.

Differential pressure sensor with 3 mm measuring holes, thus resistant to dust and pollution.

Both ends spigot with groove for lip seal, suitable for connecting ducts to EN 1506 or EN 13180.

Casing air leakage to EN 1751, class C.

Besondere Merkmale

- Messgenauigkeit ± 5 %
- Geringe Druckdifferenz von ca. 10 – 25 % vom gemessenen Wirkdruck

Materials and surfaces

- Casing made of galvanised sheet steel
- Aluminium sensor tubes

Construction

- Galvanised sheet steel
- P1: Powder-coated, silver grey (RAL 7001)
- A2: Stainless steel

Technical data

- Nominal sizes: 100 – 400 mm
- Volume flow rate range: 10 to 1680 l/s or 36 to 6048 m³/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)

VMR

VMR – P1 – FL / 160 / G2 / BB0

1 2 3 4 5 6

1 Type
VMR Circular volume flow rate measuring unit

2 Material
No entry: galvanised sheet steel
P1 Powder-coated, silver grey (RAL 7001)
A2 Stainless steel

3 Flange
No entry: none
FL Flanges on both ends

4 Nominal size [mm]
100
125
160
200
250
315
400

5 Accessories
No entry: none
D2 Lip seals on both ends
G2 Matching flanges for both ends

6 Differential pressure transducer
No entry: none
B10 Dynamic differential pressure transducer
BB0 Static differential pressure transducer