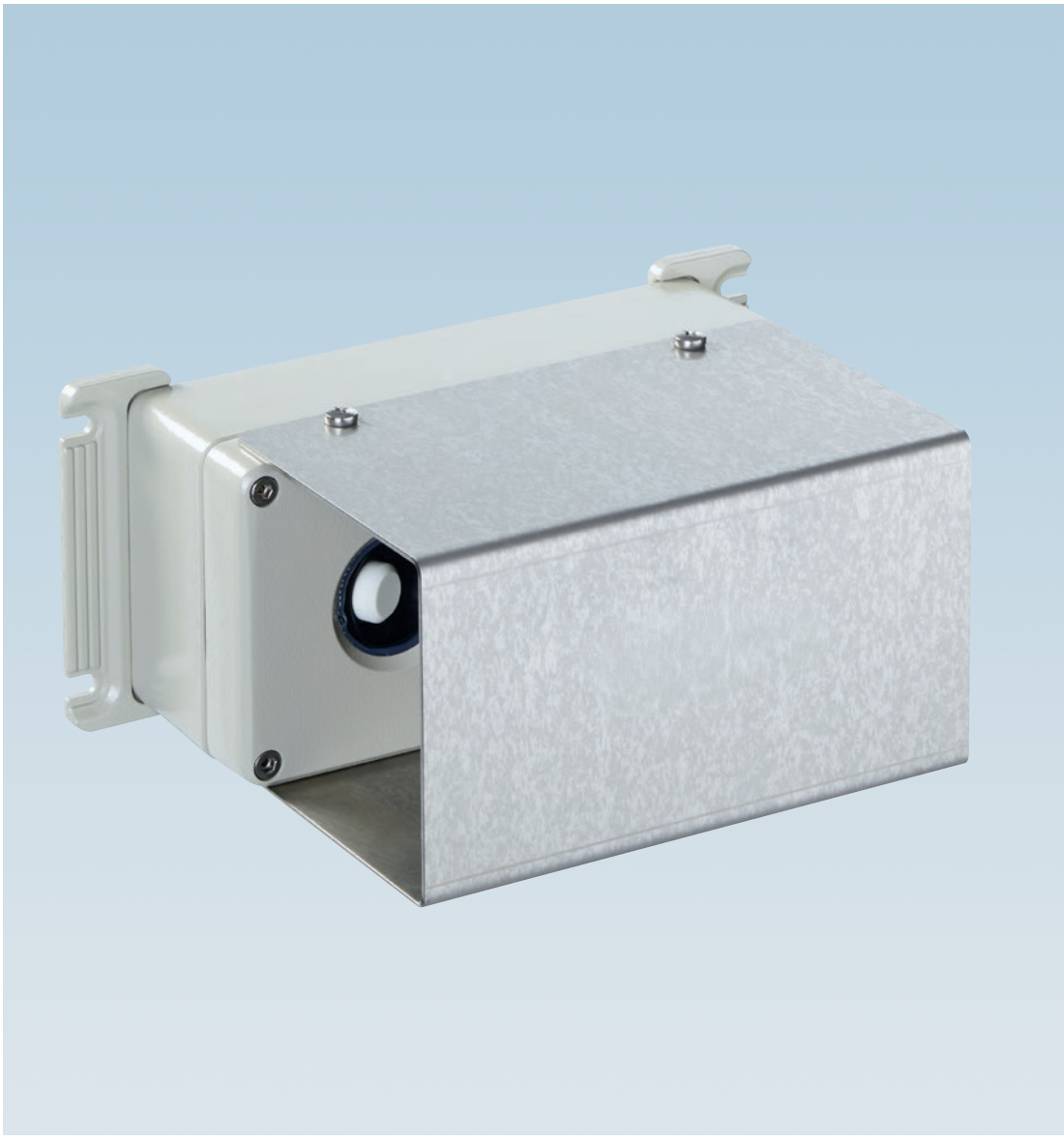
VM400

Flow measurement instruments

The compact device solution for non-contact flow measurement in tunnels

- Minimal wear and long maintenance intervals
- Reliable measurement even at low air velocity
- Low investment costs
- Minimum installation costs
- Easy integration into monitoring systems



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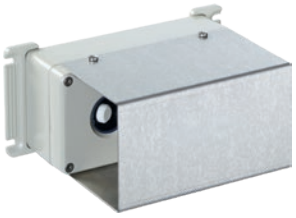
People for Process Automation

VM400:
The compact device solution for non-contact flow measurement in tunnels



Product Description

The VM400 flow velocity measuring device is a compact and space-saving device solution for continuous point-to-point measurement of the air velocity in road and railway tunnels or comparable traffic infrastructure constructions. The VM400 can be assembled easily at nearly any point on tunnel walls. The measured values and status information are transmitted to a monitoring system via the integrated analog or digital interface, as wells as via an Ethernet interface in the VM400E variant.

At a glance

- odern ultrasonic technology for non-contact measurement
- Large measuring range
- Compact device design
- Very easy mounting and commissioning
- Immune to contamination

Your benefits

- Minimal wear and long maintenance intervals
- Reliable measurement even at low air velocity
- Low investment costs
- Minimum installation costs
- Easy integration into monitoring systems

Fields of application

- Flow measurement in road and rail tunnels
- Measured value recording for tunnel ventilation control

CE

More Information online
For more information, enter the link or scan the QR code to get direct access to technical data, operating instructions, software, application examples, and much more.
www.endress.com/vm400

Technical data

The exact device specifications and performance data of the product may deviate from the information provided here, and depend on the application in which the product is being used and the relevant customer specifications.

VM400

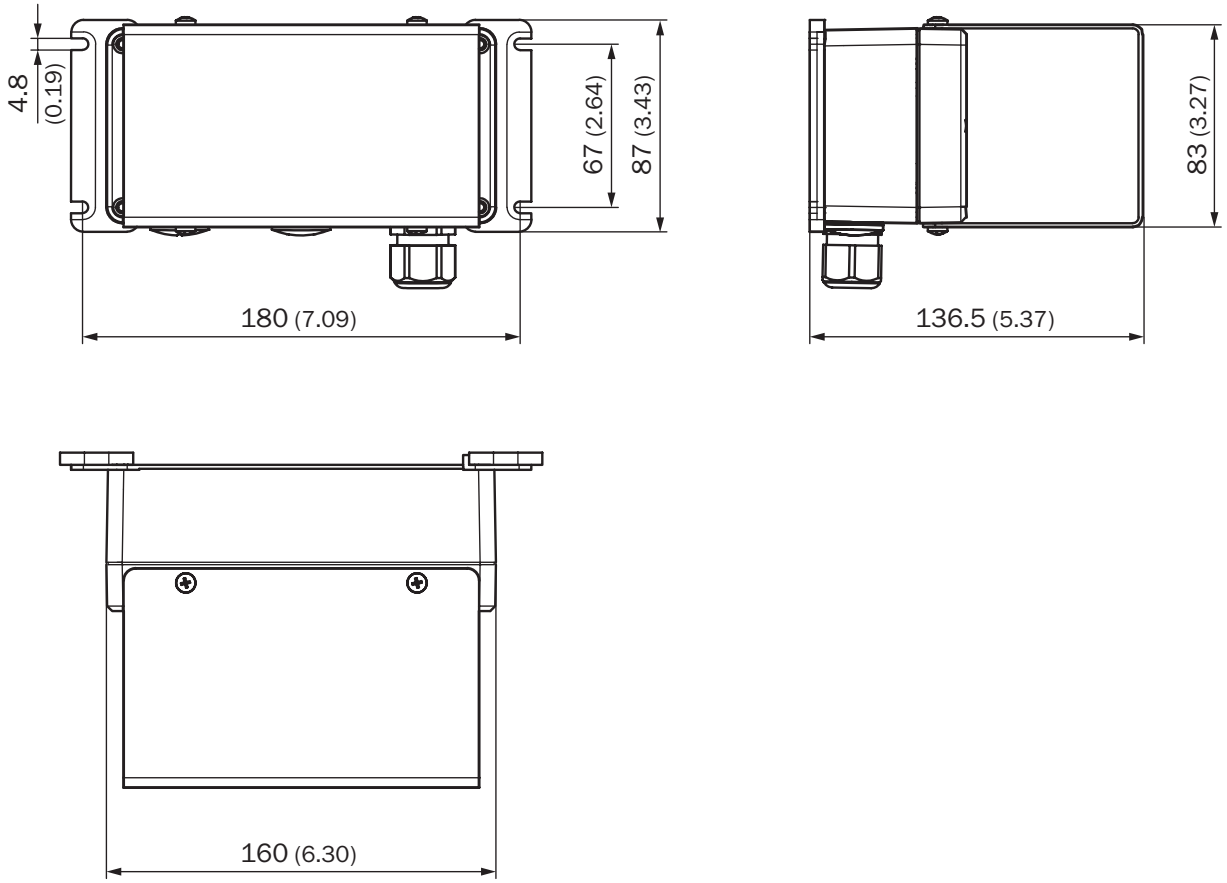
Measured values	Air velocity, Direction of flow, temperature
Measurement principle	Ultrasonic transit time difference measurement
Measuring ranges	
Air velocity	–20 ... 20 m/s (–66 ft/s ... 66 ft/s)
Accuracy	
< 5 m/s	± 0.1 m/s (0.33 ft/s)
> 5 m/s	± 2 %
Ambient temperature	–30 °C ... +60 °C (–22 °F ... 140 °F)
Storage temperature	–30 °C ... +60 °C (–22 °F ... 140 °F)
Ambient humidity	≤ 95 %, relative humidity
Conformities	RABT 2006 RVS 09.02.22
Electrical safety	CE
Enclosure rating	IP66 / IP67
Analog outputs	1 output: 4 ... 20 mA, + 750 Ω, electrically isolated
Digital outputs	2 outputs: 48 V, 500 mA, normally open contacts
Serial interfaces	✔
Type of fieldbus integration	RS-232
Function	Proprietary service interface
Ethernet	✔
Function	Connection to SOPAS ET software
Dimensions (W x H x D)	For details see dimensional drawings
Weight	1.4 kg (3 lb)
Material	Aluminum
Power supply	
Voltage	24 V DC
Power consumption	≤ 3 W

Order information

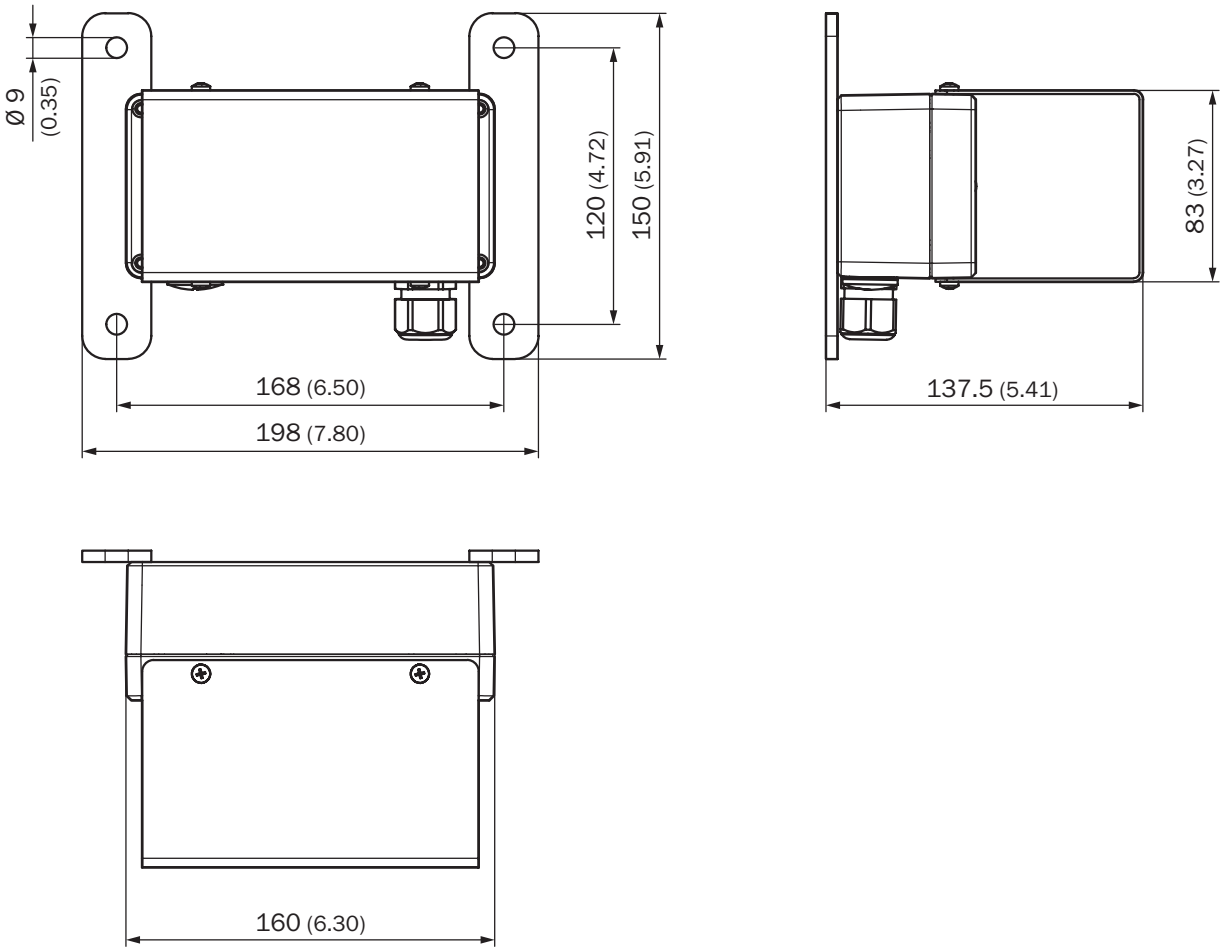
Our regional sales organization will be glad to advise you on which device configuration is best for you.

Dimensional drawings

VM400 with standard mounting brackets



VM400 with stainless steel mounting brackets



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