



Flow meters for sprinkler systems

Stationary water-based extinguishing systems benefit from orifice and magnetic-inductive flow meters with global approvals



MECON - SAFETY CONTROL

More than 88 years of experience in development of flow measurement and level indication technology

MECON GmbH is a leading provider of solutions in industrial flow metering and level indication technology.

As a certified manufacturer, we feel very responsible for the environmental safety aspects.

Our day-to-day work also focuses on reliable recording of physical variables. MECON operates its own development department to achieve this goal. In addition, the entire product range is produced exclusively in Germany – engineering expertise made by MECON.

Our advantages

- » More than 88 years of experience
- » Global sales network
- » Outstanding product quality
- » Made in Germany
- » Implementation of customer-specific solutions
- » Custom production for renowned OEMs worldwide



Metering devices made to measure from a single source



Production

All of our measurement technology is manufactured with utmost precision and assembled by hand – product innovation made in Germany.



All-round service

We calibrate and maintain all products regularly, and repair them expertly if necessary – product safety on schedule.



Industry solutions

Implementation of customer-specific solutions for flow measurement and level indication technology – engineering expertise for individual requirements.



Development

Behind MECON's innovative products is a high-performance development department – the foundation for efficient solutions.

Flow meters for sprinkler systems

Stationary water-based extinguishing systems benefit from orifice and magnetic-inductive flow meters with global approvals

With MECON, you are choosing maximum reliability – in particular in stationary fire safety. Comprehensive fire safety systems are one of the fundamental requirements for saving as many lives as possible in an emergency. The reliability and safety of the technical components is more critical than almost any other industry. Especially under extreme conditions, minor inaccuracies in the fire safety system can have major consequences. With the Turbo-Lux® series, MECON has already been producing leading measurement technology for stationary fire safety since 1977. We have already been selling the Turbo-Lux® family products and the mag-flux® series with VdS approval for over 40 years.

In 2016, we introduced the innovation for global fire safety requirements. For the first time, the Turbo-Lux® 3 fulfills all parameters of the three certification and test institutions (FM, LPCB and VdS) – unique on the market for flow meters. The requirements and specification parameters were the decisive factors when developing the product. The high technical demands also boosted the motivation of our development department. “Saving lives” – at least indirectly – is a particularly motivating day’s work for our engineers and technicians. With the mag-flux® T4 magnetic-inductive flow meter and the Turbo-Lux®-series orifice flow meters, MECON offers a globally unique solution for flow metering technology in stationary fire extinguishing systems.



Global leaders and unique: Flow meters for sprinkler systems by MECON

- » Reliability and durability
- » High reading accuracy
- » Robust and low-maintenance construction
- » Steady flow indication
- » Easy installation and handling
- » Quality “Made in Germany”



Orifice flow meters:

Turbo-Lux®



VdS

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Turbo-Lux® 2



VdS

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A simple structure ensures smooth and rapid installation of our flow meters as well as maintenance by a company approved by FM, LPCB or VdS.

Magnetic-inductive flow meter:

Turbo-Lux® 3



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mag-flux® T4



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Orifice flow meter

Turbo-Lux®

VdS

Orifice flow meter with VdS approval for stationary sprinkler systems in fire safety applications

The Turbo-Lux® device family is primarily used in stationary fire extinguishing systems and sampling lines for water supply. Even in its first generation, the Turbo-Lux® already held an advanced position in its main applications and has been used thousands of times since then in industry and the fire safety sector. In addition to this, the installation location and position and the flow direction in the various system types can vary greatly – as an intermediate flange version, the direction of the arrow is the only determining factor for the water flow. The device also offers minimal susceptibility to vibrations and a steady flow display. Together with the practical case for the bypass flow meter, the Turbo-Lux® series products are the devices of choice for inspection companies. The required approval from VdS Schadenverhütung GmbH has been secured.



Special features:

- » Nominal sizes from DN 80 to DN 250
- » Measuring ranges from 420 to 18,000 l/min
- » Measurement accuracy ± 2.5 % of full-scale value
- » Any installation location, installation position and flow direction possible
- » Strong vibration resistance
- » Display in %
- » VdS approval G4770010
- » Centering assembly (optional)
- » Calibration certificate (optional)
- » Case for bypass flow meter (optional)
- » Available at short notice

Technical data

5 flow ranges	420 – 18,000 lpm
Measuring accuracy	± 2.5 % of full-scale value
Pressure limit	max. 12 bar
Temperature range	+4 °C to +50 °C
Mounting direction	Any
Process connection	DN 80 – DN 250 between flange
Options	Centering assembly
Approvals	VdS-Approval G4770010

Turbo-Lux® 2

Orifice flow meter with VdS approval, intermediate flange version for stationary fire extinguishing systems

The Turbo-Lux® 2 with VdS approval is the second generation of the Turbo-Lux® device family and is also available as an intermediate flange version. In addition to the familiar easy installation and extremely precise measurement accuracy, the VdS-certified Turbo-Lux® 2 impresses with lower purchasing costs compared with its predecessor.



Special features:

- » Nominal sizes from DN 80 to DN 250
- » Measuring ranges from 420 to 18,000 l/min
- » Measurement accuracy ± 2.5 % of full-scale value
- » Any installation location, installation position and flow direction possible
- » Strong vibration resistance
- » Display in %
- » VdS approval G4060003
- » Centering assembly (optional)
- » Calibration certificate (optional)
- » Available at short notice

Technical data

5 flow ranges	420 – 18,000 lpm
Measuring accuracy	± 2.5 % of full-scale value
Pressure limit	max. 16 bar
Temperature range	+4 °C to +50 °C
Mounting direction	Any
Process connection	DN 80 – DN 250 between flange
Options	Centering assembly
Approvals	VdS-Approval G4060003

Orifice flow meter

Turbo-Lux® 3

Orifice flow meter for sprinkler systems with three approvals: FM, LPCB and VdS

The Turbo-Lux® 3 is the world's first and only flow meter approved by all three test institutes (FM, LPCB and VdS). Large corporations and global companies in particular can benefit accordingly from a uniform international solution for their fire safety systems.

In addition to the standard version, we also offer a special version for shorter inlet and outlet sections.



Special features:

- » Safety certified by three independent certification companies in just one device (FM, LPCB and VdS)
- » Nominal sizes from DN 50 (2") to DN 300 (12")
- » Covers measuring ranges from 75 to 38,000 lpm (20 – 10,000 USgpm)
- » Easy to install with grooved connection to the pipe network
- » Thanks to the sophisticated design, the device is ready for operation after connection to the pipe network with just one threaded connection, guaranteeing rapid and simple installation
- » The only manufacturer with a VdS approval offering grooved connections
- » High and constant read precision
- » Flexible installation location, installation position and direction of flow
- » Not susceptible to vibrations
- » Robust and low maintenance design
- » Reliable and long service life
- » Calibration certificate (optional)
- » Available at short notice



Technical data

Pump rating	50 - 5,000 USgpm
20 nominal sizes	20 - 10,000 USgpm 75 - 38,000 lpm
Measuring accuracy	±2.0 % of full-scale value (FM) ±5.0 % of measured value (LPCB) ±2.5 % of full-scale value (VdS)
Pressure limit	max. 16 bar
Temperature range	+4 °C to +50 °C
Mounting direction	Any
Process connection	DN 50/2" - DN 300/12" grooved ends
Approvals	FM-Approval: 0003044464 LPCB-Approval: 1385a VdS-Approval: G415006

Magnetic-inductive flow meter

mag-flux® T4

VdS

Magnetic-inductive flow meter specifically for use in stationary fire safety applications – Sprinkler systems

With the mag-flux® T4, MECON has advanced flow meters for water sprinkler systems consistently and presents a solution with a fast 16-bit micro-controller and an electrical 4 - 20 mA output. As a result, the mag-flux® T4 is easy to integrate in existing remote monitoring systems, and the measurements can be evaluated in a control centre. For installation, the device offers an impressive range of connection options – e.g. flange, threaded or grooved connections. In fact, the mag-flux® T4 is the only product with a VdS-approved grooved connection. The measurement accuracy is always $\pm 0.5\%$.



Special features:

- » Fully welded steel fitting
- » Fast signal processing with a 16 bit micro-controller
- » Fixed measurement ranges
- » Compact or separate design
- » Easy installation thanks to coupling connection
- » Short inlet and outlet sections
- » Simple electrical connection via M12 connector
- » 4-20 mA output
- » Short lead times

Technical data

Error of measurement	$\pm 0.5\%$ of the measured value from 1 m/s to 10 m/s $\pm 0.4\%$ of the measured value from + 1 mm/s to < 1 m/s
Repeat accuracy	$\pm 0.15\%$ of the measured value from 0.5 m/s to 10 m/s
Requirements on the media	Minimum conductivity: > 50 $\mu\text{S}/\text{cm}$; Minimum flow rate 0.1 m/s; Maximum flow rate: 10 m/s
Pressure limit	max. 16 bar
Temperature range	+4 °C to +50 °C
Medium-affected parts	Stainless steel
Electrodes material	Stainless steel
Mounting direction	Any
Protection class	IP 67
Process connection	Grooved end: DN 50/2" to DN 250/10" Thread connection G ½ to G 2 Flange connection EN 1092-1 DN 15 to DN 250 Flange connection ANSI B16.5 150 RF ½" to 10"
Approvals	VdS-Approval: G414033



Customer orientation as a core competence

MECON focuses on your requirements. From development and production to sales, our employees ensure maximum reliable functionality, user-friendly operation and sustainable service.



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