



Gearwheel Flowmeter

Compact and
versatile module for
controlling and adjusting

WGFM

Highlights/ Benefit

- Integrated control unit and local operation via display
- No additional installation of external electronic components required
- Digital IOs and fieldbus connection for superordinate control units
- Easy start of operation
- Direct process control of downstream application valves

Highly precise volume flow monitoring with 128X resolution and four operating modes

WGFM offers maximum process control with highest flexibility in use.

The Walther Gearwheel Flowmeter WGFM is used for measuring the flow quantity during a dosing process. For this purpose, two gearwheels are driven by the flowing medium inside the gearwheel flowmeter. The movement of the gearwheels is captured by magnetic sensors and converted into signals. With a 128X interpolation of the detected values, the WGFM has a very high resolution. It also comes with an integrated control unit for a direct evaluation of the raw data (flank signals): Therefore, you will not need any additional installation of external electronic components or other software/programs for the operation of the WGFM. This will guarantee an easy and fast start of operation which can be made either manually or locally via a display. Digital interfaces (4x DO and fieldbus connection) can be used alternatively for a full access via a superordinate control unit.

The Walther Gearwheel Flowmeter has the additional option of directly controlling process valves which will allow you to easily design fluid systems with a controlled application volume. Here, the WGFM will open the downstream process valve, measure the flow quantity and close it when the defined application quantity has been reached. As a whole, the WGFM serves multiple purposes and stands for increased process control and full flexibility with its four different modes: "meter", "active control", "passive control" and "pulsing" – this applies for decentralized systems as well as for large production lines.

The WGFM is available in two sizes which were designed for combining with the Walther Modular Series, or use it as a mobile component in automated systems close to the end effector on moving axes.

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additional
product info



Technische Daten

Operating pressure,
modular design
max. 315 [bar]

Operating temperature
-10 to +40 [°C]

Measuring range
0,01 to 10 [L/min]

Measuring precision
up to 0,3 % of value
for viscosities > 20 [mm²/s]

Repeatability
± 0,05 % under constant
operating conditions

Dimensions (L x W x H)
172 x 79 x 102 [mm]

Digital inlets and outlets
4 X 24 [VDC]

Fieldbus
RS485 Modbus RTU

Walther module length
2 [TE]