



LDMdrive

Low-power flow controller with partly filled flow measurement

This robust flow measurement system for partly filled pipes, combined with a gate valve featuring a powerful low-power actuator, is characterised by its extremely low power consumption, enabling it to operate for several days on battery power alone, even without sunlight or mains supply. The slide gate valve is driven directly by the transmitter, saving on components and space. The measurement and control data are transmitted directly to your process control system via the most common interfaces.

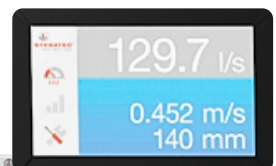
The compact system impresses with its compact design and the coordinated components used. The system is available in a compact version with guaranteed accuracy, which is ensured by calibration in STEBATEC's hydraulics laboratory. The maintenance access panel allows for easy cleaning of the system. Factory commissioning, intuitive operation and commissioning instructions ensure efficient installation and commissioning.

Advantages of an LDMdrive

- Can operate on mains power or off-grid – up to nominal diameter DN250 with 1m² of panel area; larger sizes up to DN500 with 2m² of panel area are fully off-grid
- One week of off-grid operation; also suitable for mains and UPS operation, e.g. with a storage battery (LxWxH 33x69x22cm)
- Thanks to LDM flow measurement, flow is measured even in dry weather and at the lowest fill levels
- Full control via the control system thanks to a permanent connection via the 4G mobile network
- Complete data logging integrated into the transmitter and accessible via a web interface
- Alerts you in the event of contamination before measurement errors occur

Everything at a Glance & Under Control

The intuitive cockpit. Visualization, configuration, and simulation.



4.3" Touch-Display

Online Access Solution

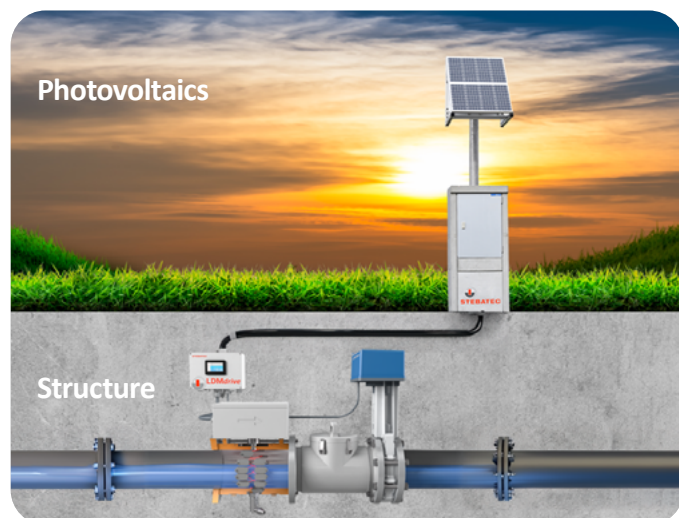
Secure remote access – enabled at the push of a button. Your controller is accessible at any time via the web interface.



Flexible in any operating situation

The LDMdrive is suitable for both off-grid operation and UPS operation with a mains connection. Off-grid operation is ensured by a battery and the simultaneous installation of a solar panel. This combination guarantees long operating times without interruption.

The corresponding operating times, depending on the size of the LDMdrive, can be found in the tables.



Technical specifications

Nominal pipe diameter	- LDM partly filled flow measurement: DN150 to DN1200 - LDMdrive: DN150 to DN500
Power supply	24V DC
Rated power	Flow measurement, data transmission and actuator in the rest position: Nominal diameter DN150 13W to DN500 25W In control mode: Nominal diameter DN150 64W to DN500 120W
Self-sufficiency	Via photovoltaics and 24V DC Storage battery
Connection	Directly or via mobile network ($\leq 4G$) to any process control system
Interfaces	Modbus TCP, optional I/O interface (analogue and digital signals), via mobile network ($\leq 4G$)
Installation and maintenance	Easy installation with an intermediate flange; cleaning via an optional access opening



Find out more
about LDMdrive

Running time per full battery charge

Nom. diameter	DN150	DN150	DN200	DN200	DN250	DN250	DN300	DN300	DN350	DN350	DN400	DN400	DN500	DN500
Operating mode	M/D ¹	M/D/R ²	M/D ¹	M/D/R ²	M/D ¹	M/D/R ²	M/D ¹	M/D/R ²	M/D ¹	M/D/R ²	M/D ¹	M/D/R ²	M/D ¹	M/D/R ²
Battery 120Ah	216h	90h	192h	80h	171.5h	72h	158h	65.5h	144.5h	60h	133.5h	55.5h	115.5h	48h
Battery 240Ah	432h	180h	384h	160h	343h	144h	316h	131h	289h	120h	267h	111h	231h	96h

Battery charging time with active flow measurement and data transmission

Nom. diameter	DN150	DN150	DN200	DN200	DN250	DN250	DN300	DN300	DN350	DN350	DN400	DN400	DN500	DN500	
Battery	120Ah	240Ah	120Ah	240Ah	120Ah	240Ah	120Ah	240Ah	120Ah	240Ah	120Ah	240Ah	120Ah	240Ah	
Solar panel	1m² / 200Wp	24.3h	48.6h	24.6h	49.3h	25h	50h	25.3h	50.7h	25.8h	51.5h	26.1h	52.3h	27h	53.9h
	2m² / 400Wp	11.5h	23h	11.6h	23.2h	11.7h	23.3h	11.8h	23.5h	11.9h	23.7h	11.9h	23.8h	12h	24.1h
	3m² / 600Wp	7.5h	15.1h	7.6h	15.2h	7.6h	15.2h	7.7h	15.3h	7.7h	15.4h	7.7h	15.4h	7.8h	15.6h

¹ Calculation basis: Whilst flow measurement and data transmission are active.

² Calculation basis: Whilst flow measurement, data transmission and control (12/24h) are active.

The calculation for your LDMdrive will be carried out on a customer-specific basis following a site survey.

M = Measurement / D = Data transmission / R = Control mode / Battery dimensions LxHxW 120Ah 33x34x22cm / 240Ah 33x69x22cm

Want to Learn More?

Contact us for a personal consultation.
We'll be happy to assist you!