



**100% self-sufficient**

**Mains-independent with only 1m<sup>2</sup> panel area**



**STEBATEC**<sup>®</sup>

*driven by water*

**Permanent connection to the control system**



# LDMdrive

## Low-power drain regulator with partly filled flow measurement

The robust flow measurement for partly filled pipes in combination with the slide gate valve with powerful low-power drive is characterised by its extremely low electrical energy requirement, which can also be operated with a battery for several days without sun or mains supply. The slide gate valve is controlled directly by the transmitter, which saves components and space. The measurement and control data is transmitted directly to your process control system via the most common interfaces. The compact system impres-

ses with its compact properties and the harmonised components used. The system is available in a shortened design with guaranteed accuracy, which is ensured by calibration in STEBATEC's hydraulic laboratory. The maintenance opening makes it easy to clean the system. Factory commissioning, intuitive operation and operating instructions ensure efficient installation and implementation.

### Advantages of the LDMdrive

- Up to nominal size DN250 with 1m<sup>2</sup>, larger up to DN500 with 2m<sup>2</sup> panel area completely self-sufficient
- One week of self-sufficient operation with storage battery (LxWxH 33x69x22cm); also suitable for mains and UPS operation
- Thanks to the LDM flow measurement, the flow is measured even in dry weather and at the lowest fill levels
- The gate valve control is integrated in the transmitter
- Full control at the control system thanks to permanent connection via 4G mobile network
- Complete data recording integrated in the transmitter and accessible via web interface
- Reports contamination before measurement errors occur

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## Flexible in every operating situation

The LDMdrive is suitable for mains-independent operation as well as for UPS operation with a mains connection. Self-sufficient operation is guaranteed by a storage 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.



### Runtime per full battery charge

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

### Storage battery charging time with active flow measurement and data transmission

Nominal size	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	1m <sup>2</sup> / 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
	2m <sup>2</sup> / 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
	3m <sup>2</sup> / 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

<sup>1</sup> Calculation basis: While flow measurement and data transmission are active.

<sup>2</sup> Calculation basis: While flow measurement, data transmission and regulation (12/24h) are active.

The calculation for your LDMdrive is customised after surveying the installation site.

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

## Technical specifications

Designation	LDM partly filled flow measurement	LDMdrive
Nominal size tube	DN150 to DN1200	DN150 to DN500
Power supply	24VDC	
Nominal power flow measurement, data transmission and actuator in idle position	Nominal size DN150 13W to DN500 25W	
Nominal power in regulating operation	Nominal size DN150 64W to DN500 120W	
Self-sufficiency	With photovoltaics and 24VDC storage battery	
Connection	Via mobile network ≤ 4G to any process control system	
Installation and maintenance	Easy to install and clean via the maintenance opening	



**Do you have a question about the product?**

I am happy to be there for you.

**Lukas Meuter**

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