

## Upgrading devices of the VLM 200 series <sup>1)</sup>

**Due to the strict modular design and general compatibility of the devices, it is possible to upgrade older VLM 200 models to the latest standard of the VLM 250 series. Owners can thus make use of the latest features of the current device series without having to purchase a new product.**

**The following upgrading options and updates are available and in many cases can be combined:**

- 1. High-power LED light source**
- 2. Firmware update**
- 3. Signal processing FB2 filter board**
- 4. New controller**



VLM 250 - Measuring device for velocity and length

### 1. High-power LED light source <sup>1)</sup>



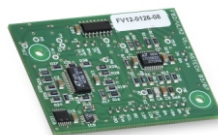
The LED has a much longer service life than the halogen light source, and thus needs to be replaced less frequently. LED light sources are known to last for several years. The LED is brighter than a halogen lamp and thus provides better measuring conditions. There are no special safety instructions that need to be observed. Unprompted failure of the light source is not typical for LEDs. Ageing results in reduced brightness of the light source. This can however be monitored through a status output and signalled to the control system before the measuring function begins to fail. Any malfunction of the LED light source triggers an error message and a switching signal. Changing the LED unit is easy and can be performed by the customer on site within a few minutes without any further assistance. There is no need to recalibrate the device after an LED unit change.

### 2. Firmware update <sup>1)</sup>

The firmware of the VLM series is being continuously improved and further developed, taking the experiences and wishes of customers into account. The latest firmware versions support the new functions of the latest hardware. The software of devices equipped with the latest controller can be easily updated by downloads without changing the EPROM. The latest software equipment is automatically loaded onto the device during repairs or servicing.



### 3. Signal processing FB2 filter board



In conjunction with the latest firmware version, the FB2 filter board caters for significantly improved signal processing. This allows for measurements on virtually all object surfaces, from high gloss to matte black. Signal processing is automatically adjusted to changes in speed or in the object surface. Even

surfaces that could up to now not be accurately assessed with optical measuring equipment can now be measured. The reproducibility of the measurements is improved. The maximum speed values are now parameterised in the software (parameter VMAX). There is no need to replace the filter assembly.

### 4. New controller with AB3 connection board



As there are no circuit encasements, contact reliability has been significantly improved. As a result, trouble-free operation over time spans of more than 20 years are being achieved. The firmware can now be downloaded via the PC without changing the EPROM. The device temperature is constantly measured and monitored and can be read out. The unit can be set to standby mode through a switching input. The maximum frequency of the standard pulse output has been increased from 7 to 25 kHz (AB3 connection board).

Due to the long service life of the VLM models, upgrading to the latest version is an interesting and economical alternative to replacing the unit or purchasing a new device. Certain measuring problems might even be eliminated by upgrading. There are no changes required that affect the installation of the device, and compatibility to the previous state are maintained. Upgrading can be completed within a few days. If required a compatible replacement device can be made available for the upgrading period. Please contact us for an offer to upgrade your VLM 200 device. ■

<sup>1)</sup> Also applies to VLM250 models up to SN 0250/0059/07