

## Dosing system

for liquid colours and additives

# DS-LP

- Peristaltic pump
- Volumetric or gravimetric mode
- Stepper motor drive for precise dosage
- Injection moulding mode or extrusion mode
- Fast colour change
- Automatic signal synchronisation
- Automatic calibration
- Industry standard
- 7 inch color touch display
- Independent from color suppliers
- RFID option

The dosing system developed by the company OPM Mechatronic GmbH allows a clean and precise dosing process of liquid colors and additives in plastics processing.

Thanks to the exchangeable tube set, the dosing station can be quickly converted to a new color. Thanks to different types of containers, the system can be operated with a wide range of color containers and guarantees a safe production process in any combination.

With a convenient recipe management system, various dosing programs can be created and managed.

The dispensing system consists of industrial components so that long-term availability can be guaranteed even in 3-shift operation.

### Technical specifications:

Operating voltage:	230V/AC/1A
Pump Type:	peristaltic pump
Pump speed:	0,5-200 rpm*
Scale (option):	50 kg
Temperature range:	10-40 °C

\* depending on the viscosity of the medium



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V 1.0.3

## Option RFID (with costs)



With the RFID option, the tube sets are equipped with an RFID label. The system recognises directly what type of hose has been inserted. After calibration, the calibration data is stored on the sensor. This means that calibration is only necessary once. The flow rate is stored and a limit value prevents the flexible tube from being damaged by fatigue.

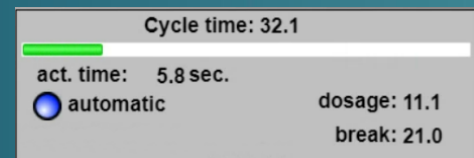


Tube set with RFID label

## Automatic synchronisation

(Included in the basic unit)

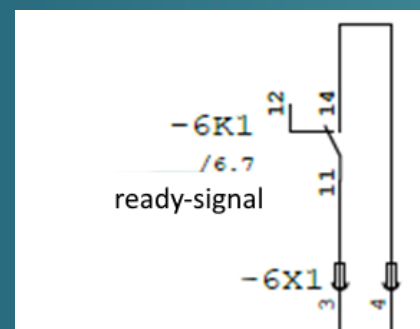
With automatic synchronisation, the dosing signal is taken over from the injection moulding machine. Depending on the length of the dosing signal, the speed at which the set amount of color is introduced into the machine is then defined. A bar display signals the time course of a complete injection moulding cycle.



Automatic synchronisation

## Ready signal (Included in the basic unit)

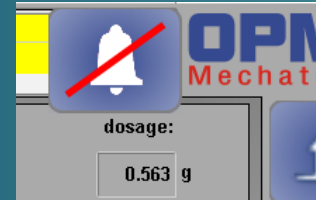
With the ready signal contained in the basic unit, the dosing station can be linked to the injection moulding machine in such a way that the injection moulding machine does not produce rejects if the dosing system is not ready for any reason. This could be, for example, an empty color container which has not been replaced. The ready signal can also be reconfigured as a fault signal and used accordingly.



Ready signal

## Acoustic signal (Included in the basic unit)

The acoustic signal indicates a warning or empty signal. The acoustic signal can be switched off on the panel with a button and the cause can then be eliminated. In this way, the need for action is pointed out even in the case of unclear systems.



Acoustic signal

## Input of the production parameters

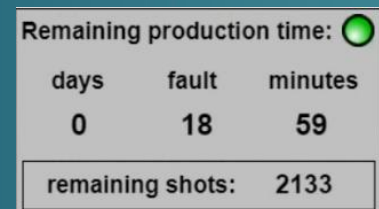
To be able to produce only 3 parameters are required. The shot weight, the dosage in % and the density of the color are needed. No calibration is necessary!



Enter the production parameters

## Remaining production time (Included in the basic unit)

The remaining production time is determined by the known parameters and visualized on the start page of the operating panel. Hereby it can be determined at a glance how long it is still possible to produce. Furthermore, the remaining quantity which can still be produced with the applied color is displayed.



Rest production time

## Language selection (Included in the basic unit)

With the integrated language switch, the operating concept can easily be changed to many languages.



Language selection

## User management (Included in the basic unit)

The user management protects the system against unauthorized access. Different user levels are used to assign authorizations for various settings.



User management

## Recycling adding (Included in the basic unit)

With the recycling addition, the dosing quantity of the liquid color can be reduced when adding already colored recycle. This function can be simply switched on or off during the running process.



Recycling adding

## Container bracket (chargeable)

The container bracket serves to hold the container. There are different versions to hold different containers in a space-saving way.

The CT-200 container bracket can be used to hold "Bag in Box" containers. There is sufficient space at the bottom for the drip-free coupling systems. This allows containers up to 10l (base area 200mm x 250mm) to be placed on the dosing station.

### Ordering Information:

Container bracket for „Bag in Box“ systems: **CT-200**



Container bracket CT-200

## Signal lamp (chargeable)

The signal lamp can visualise system messages. Strikingly signalled are e.g. empty messages and cannot be overlooked. The LED traffic lamp can be easily adjusted with a magnetic base and connect it directly to the dosing station via a plug system.

### Ordering Information:

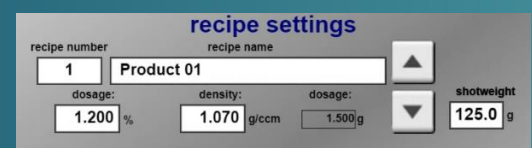
Signal lamp: **SL-3**



Signal lamp SL-3

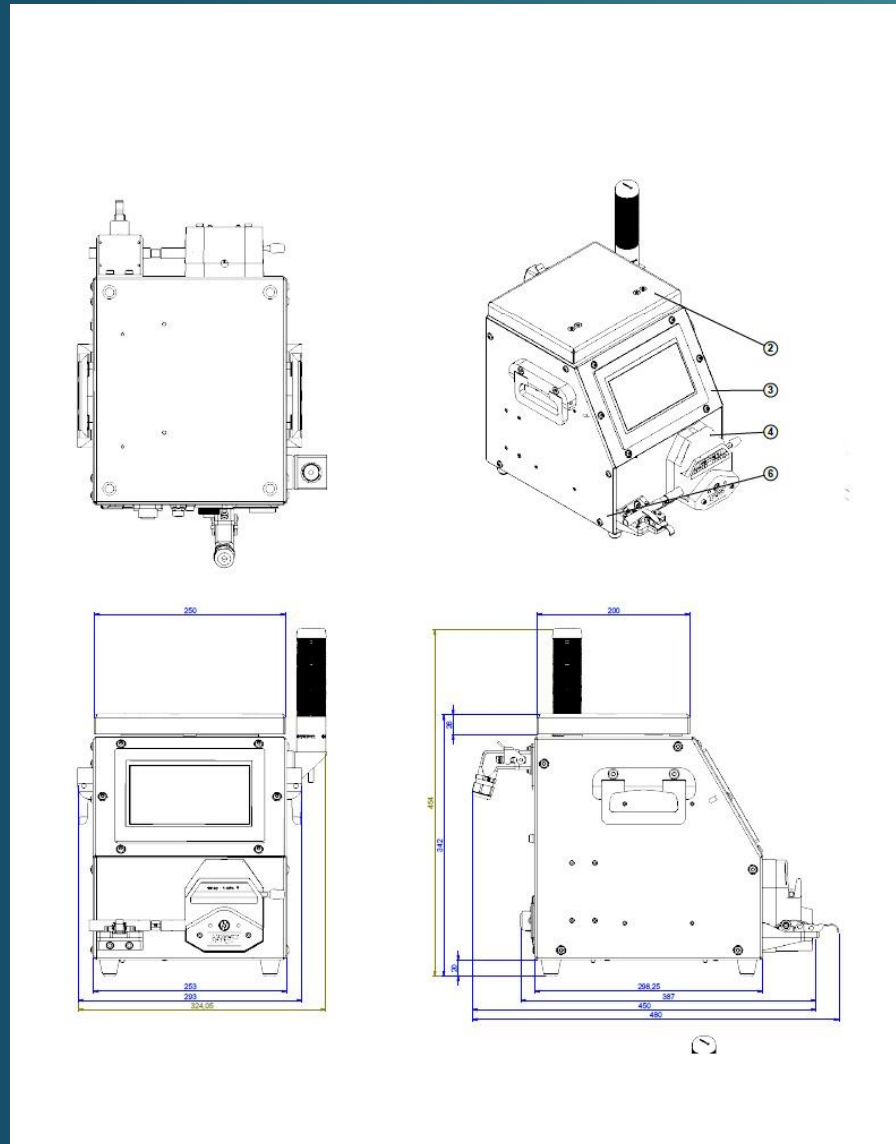
## Recipe management (Included in the basic unit)

With the option "Recipe management" different product parameters can be stored. Up to 100 recipes can be managed here. The production program can then be easily identified and called up using a recipe name. Recipe management helps to avoid errors in production, e.g. due to incorrect parameter input.



Recipe management

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