

## **Installation Quick Guide**

Flosense 3.0

#### Introduction

This Quick Guide serves as an easy-to-use guide to help make your installation of the Flosense flow regulator system as simple as possible. However, beware that the Quick Guide is a supplement to the installation user guides and for that reason cannot stand alone. So please ensure that you have read all relevant User guides (Manifold Installation and Software guides) thoroughly before installing your new Flosense.

During start-up and purge, always follow the Quick Guide.

### Warning

Please ensure that flow never exceeds the sensors' maximum.

If pressurized air flow exceeds 0.5 bar, the flow sensors may be damaged due to extreme purge speed.

#### **Disclaimer**

Costs connected to any damages to the products caused by lack of following the Instruction Manuals, will be at the customers' own expense.

## PRIOR TO STARTUP:



Check the label on the sensors to identify the flow or pressure sensor type:



Flow must never exceed the maximum capacity; failure to comply with this precaution may damage the sensor.

#### Flow sensors are called:

VFS8 1-18 E (1-20 I/min standard)

VFS8 2-40 E (2-40 I/min standard)

VFS8 1-18 K (1-20 l/min high temperature)

VFS8 2-40 K (2-40 l/min high temperature)

#### Pressure sensors are called:

RPS6 0-10 E (0-10 bar standard)

RPS6 0-10 K (0-10 bar high temperature)

## STARTUP PROCEDURE:



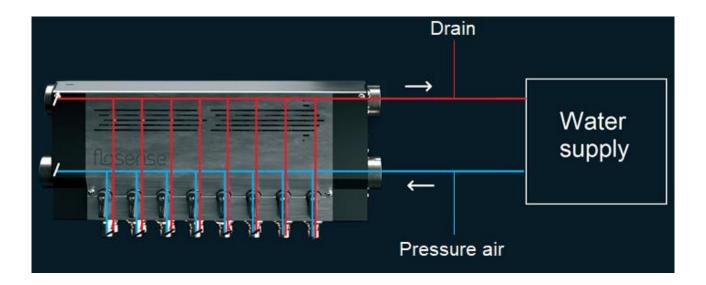
A 3-way ball valve is recommended to be installed either on, or before the main inlet, to enable purging of the manifold and mould with pressurized air. If needed for draining, also add a 3-way ball valve after the main outlet of the manifold. Pressurized air inlet must be adjustable (pressure reducer)

#### **During startup (empty mould and manifold)**

- 1. Fully open all ball valves to/from the mould
- 2. Open the main return outlet valve on the manifold
- 3. Slowly open the main inlet valves on the manifold and start filling the system
- 4. Adjust the inlet flow to match the needed flow only.
- 5. Let it run until all air is out of the system before fully opening the main valve.

#### Purging (emptying mould with pressurized air)

- 1. Turn the main inlet valve in blocked/closed position.
- 2. Turn the main outlet valve in "drain" position
- 3. Turn the main inlet valve in "pressure air in position"
- 4. Open the adjustable air without exceeding 0.5 bar and ensure slow purge of water.
- 5. When the system has been emptied, you can fully open the air supply to blow the circuits dry.



# INSTALLATION GUIDE:

# fosense

Step 1	Installation package includes		
Οιορ Ι	Check that the following elements are included in your package:		
Check that all elements are included	<ul> <li>1 Flosense manifold with mounted display</li> <li>2 brackets for manifold</li> <li>1 Power supply 12V</li> </ul>		
Step 2	Prepare the manifold		
Connect the fittings for the main water (in and out) and mount the blinding fittings at the other end	Water in Circulation Water out		
Mount the fittings of your choice for each cooling channel			

#### Step 3

#### Mount the flow regulator

The flow regulator is designed to be able to replace the standard water flow regulator which is installed in most injection moulding machines per default.

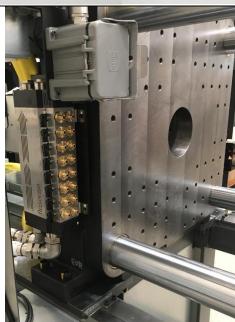


Mount the brackets on the back plate of the flow regulator.

WARNING! The bolts are also used to hold the internal piping in place. Please only remove the bolts needed for the bracket you are currently mounting.



Mount the flow regulator on the machine or the mould



Step 6	Connect Power
Connect the power supply to the M8 connector next to the grounding, and connect the other side to a power outlet with a voltage of 100-240V	
Step 7	Startup

When the power has been connected, the screen will startup automatically



#### Step 8

Once the screen has been connected and has started up, you will see the manifold displayed on the home screen.

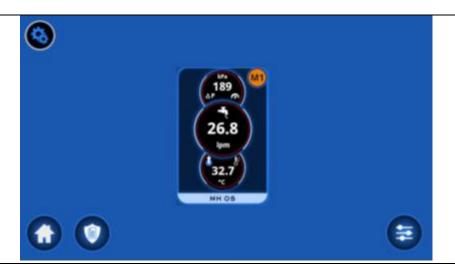
If the number of manifold or sensors are wrong, find the sensors 1 menu by pressing the settings button in the bottom right corner. You will be have to enter a PIN, which by default is **36963.** 

You can write any initials, but it needs at least 1 letter.





After logging in you will enter the settings menu, which is similar to the home screen. Select the manifold you wish to examine.



Press the scan button at the bottom to search for sensors. Do this for all manifold which are not displayed correctly, and then return to the settings menu by pressing the exit button in the bottom right corner.



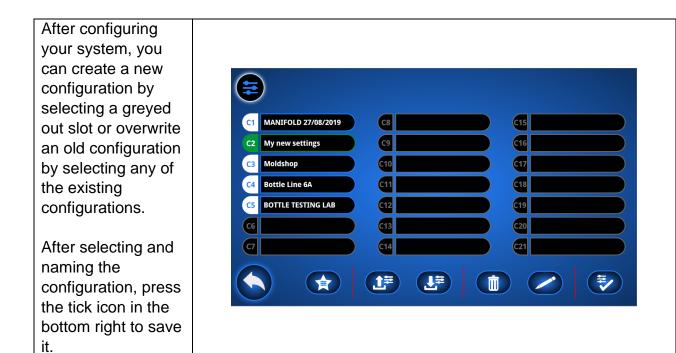
From the settings menu you can enter the configurations menu by pressing the checkmark button in the bottom right corner.<sup>1</sup>

If you have a USB with saved configurations, the configurations can be uploaded by connecting the USB and pressing the upload button. If



<sup>&</sup>lt;sup>1</sup> See Known Issue on page 13

you do not have a USB to upload the configurations, please follow the next 4 steps. 2 MANIFOLD SENSORS | SENSORS 2 ALARMS 1 ALARMS 2 LANGUAGE DATA LOGGING RATE Set the global SEC settings, such as language, MEASUREMENTS measurement units and logging rate KPA -GLOBAL MANIFOLD SENSORS | SENSORS 2 ALARMS | ALARMS 2 Set the cooling MANIFOLD NAME GLYCOL % CIRCUIT DIAMETER circuit diameters OS MH **30**% and the percentage amount of glycol used in the coolant -Finally set the alarms for each sensor. MANIFOLD SENSORS | SENSORS 2 ALARMS | ALARMS 2 It is also possible to use auto-alarm **513 123.4 -12.3 123.4 -12.3** during operation to set the alarms to be **511 123.4 -12.3 123.4 -12.3** 514 **123.4 245 123.4 -12.3** 10% higher and lower than the 123.4 -12.3 123.4 -12.3 current operating + flow, temperature and pressure



You are now ready to use your new Flosense system!

#### **Known Issues**

Below is a list of known issues that will be fixed with the next software version.

16-06-2020

Software version: 4.0.2.4064 Firmware version: 5.0.0.175

1. The buttons on the bottom of the screen have been rearranged, so the checkmark button is now the leftmost button instead of rightmost. The figure in the manual needs to be updated.

## Change log

Date of change	Change	Version
29-04-2020	Product release	001
16-06-2020	Quick guide updated for Flosense 3.0	002