



## RM1-RHS-X Suspension Consistency Regulator



**RM1-RHS-A**



**RM1-RHS-M**

**Use:**

The RM1-RHS-X device is intended for continuous measuring of a suspension value, if a ferromagnetic heavy medium is being used, and for its further controlling. The following things can be used as heavy media: magnetite, ferrosilicon, tandem sludge, leach, light ash magnetic fractions from thermal power stations etc. The application range is given by the stability of the relation between the suspension density and its magnetic properties.

**Description:**

The RM1-RHS-X device consists of the following components:

- MHS-5 measuring probe
- RM1-RHS-M measuring box with the MHS-8 measuring electronics
- the RM1-RHS-A automation box

Up to 4 RM1-RHS-M boxes can be connected to the RM1-RHS-A box.

There is an evaluation unit MHS-8 in the RM1-RHS-M box. The unit evaluates the signal from the connected MHS-5 suspension consistency probe and the control relay of the suspension dilution valve. A display panel showing the measured density of the suspension and a potentiometer for the correction of measurement are placed on the front side of the box. The dilution of the suspension density through the electromagnetic valve which brings water into the suspension is carried out on the basis of the suspension density value. One can select the way of dilution of the suspension by the "Manual-Auto" change-over switch. In the manual mode, one can control the valve by the "Dilution" button. In the automatic mode, one can control the valve from the Automation box.

The programmable automatic machine, which carries out operation of the valve, is placed in the RM1-RHS-A automation box. The machine displays the current and the required value of the suspension. By means of the automatic machine, one can set the value of the required density and the range of the measured values of the suspension. Both the values are transferred via RS485 to PC. Their subsequent visualisation and archiving is carried out in the PC with the user's software.



**MHS-5**

**Technical parameters of RM1-RHS-M**

Supply voltage	230VAC
Power input	55VA
Max. switch U/I	250VAC / 6A
Output current loop	4-20mA
Density measuring range	1-4kg/dm <sup>3</sup>
Temperature range	0°C - +40°C
Relative humidity	95 % non-condensing
Protection	IP66
Dimensions	200 x 325 x 155 mm
Weight	5.5 kg

**Technical parameters of RM1-RHS-A**

Supply voltage	230VAC
Power input	23VA
Output	Serial line Rs485
Temperature range	0°C - +40°C
Relative humidity	95 % non-condensing
Protection	IP66
Dimensions	300 x 325 x 210 mm
Weight	8 kg

**The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.**

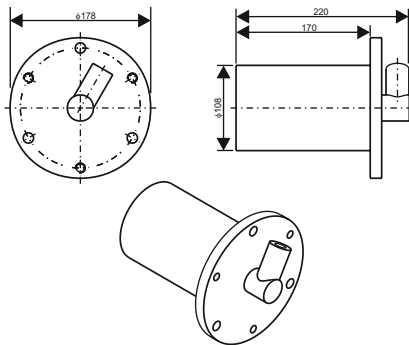


## RM1-RHS-X Suspension Consistency Regulator

Up to four RM1-RHS-M measuring boxes with the MHS-5 measuring probe can be connected to the RM1-RHS-A automation box.

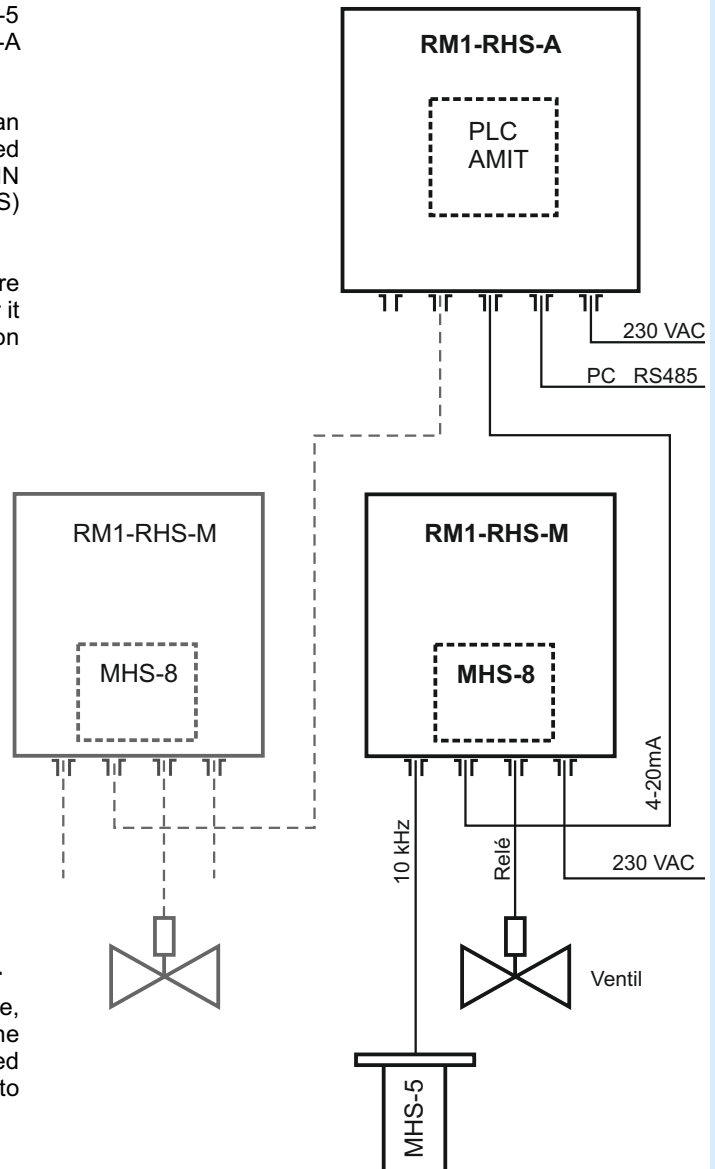
The MHS-8 measuring gauge of the suspension value can be designed in three versions. As standard, it is designed with evaluation electronics placed in the module on the DIN bar for installation into the RM1-RHS-M (version MHS-8-S) measuring box.

In the MHS-8-K version, the evaluation electronics are placed into a separate box with the protection of IP54 or it can be poured directly into the measuring probe, version MHS-8-Z.



### Dimensional sketch of the MHS-5 measuring probe.

On the rear side, the probe is equipped with a fixing flange, by means of which it is fixed on the welded-on flange in the reservoir or bath, in which density measurement is carried out. The probe is made of the material which is resistant to corrosion in the environment of density measurement.



Example of interconnection of the assembly of RM1-RHS-M and RM1-RHS-A for the measuring of the suspension value.

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