

Assembly Instructions M8098-EN

Spare part heat sensor (O/ID T25603)

Purpose

Replacement of heat sensor (BT 1, BT 2.x)

Precondition



WARNING!

Danger for unauthorized persons!

Conversion work may only be carried out by specialist staff who have been trained accordingly.

Therefore:

- Keep unauthorized persons away from the work area.



NOTE!

Knowledge of the Instruction Manual is a precondition for carrying out conversion work on the unit.

Procedure



DANGER!

Danger to life caused by electric current!

Touching conductive parts causes a direct danger to life.

Therefore:

- For all work on the electrical system, for maintenance, cleaning or repair work, disconnect from the mains or disconnect all phases of the external power supply and secure them against being switched on again. Check unit is isolated from power supply.



WARNING!

Danger of crushing due to rolling away or tipping

With an uneven floor or when the castors are not locked, there is a danger that the unit tips over or rolls away causing crushing.

Therefore:

- Only install the unit on an even floor.
- Ensure that the castors are locked.

1. Proceed as follows in order to cool down the unit and empty the mould (mould evacuation)
 - Display menu page **Functions**.
 - Select the function **Cooling** and activate with the **OK** key.
 - Select the function **Mould evacuation** and activate with the **OK** key.

→ The activated function is indicated with the **✓** symbol.

2. Main switch off, remove the plug from the mains and empty the unit.
3. Remove control cable to ext. flow rate meter Flow-5.
4. Detach the hexagon screw and remove ext. flow rate meter Flow-5.
5. Proceed as follows in order to remove the cover of the evaluation unit:

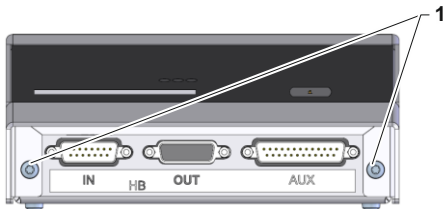


Fig. 1: Front side of the evaluation unit

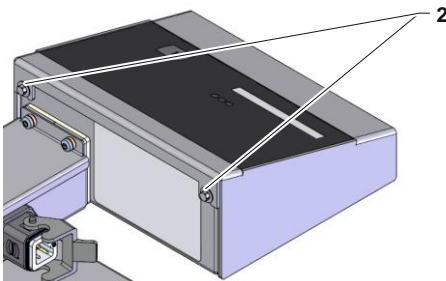


Fig. 2: Rear side of the evaluation unit

- Remove screws (Label 1 → Fig. 1).
- Detach screws (Label 2 → Fig. 2).
- Lift the cover with the keyboard and pull out the ribbon cable.
- Remove the cover with the keyboard.

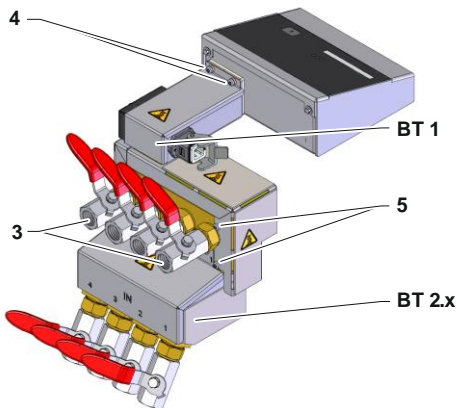


Fig. 3: Flow-5 with ball valve

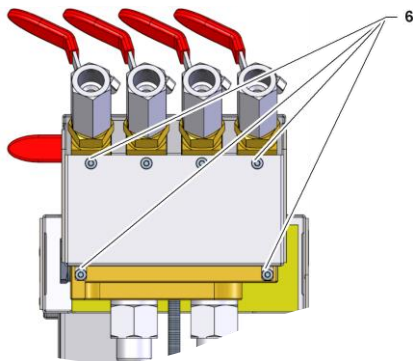


Fig. 4: Flow-5 view from below

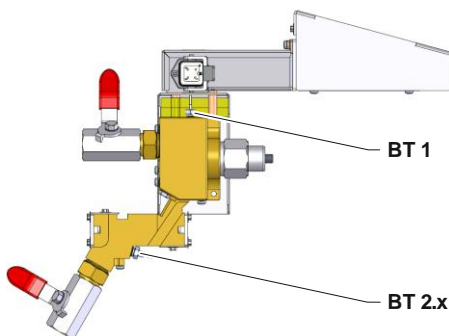


Fig. 5: Flow-5 side view from the right

6. Proceed as follows in order to remove the covers:

- If present disassemble shut-off valve OUT 1 and 4 (Label 3 → Fig. 3).
- Disassemble screws (Label 4 → Fig. 3), remove cover and insulation.
- Disassemble screws (Label 5 → Fig. 3), remove cover and insulation.

Only in the event of a replacement temperature sensor return line (BT 2 x):

- Disassemble screws (Label 6 → Fig. 4) and remove cover.

7. Replace temperature sensor main line (BT 1) or return line (BT 2.x) while proceeding as follows:

- Disconnect temperature sensor (BT 1, BT 2.x) at the flow rate measuring board DFM-51 (A 9.x).
- Disassemble temperature sensor (BT 1, BT 2.x) (→ Fig. 5).
- Transfer label of temperature sensor to new temperature sensor (BT 1, BT 2.x) and install(→ Fig. 5).
- Connect temperature sensor (BT 1, BT 2.x) at the flow rate measuring board DFM-51 (A 9.x).

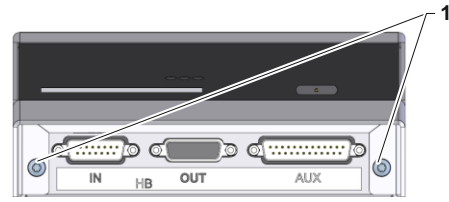


Fig. 6: Front side of the evaluation unit

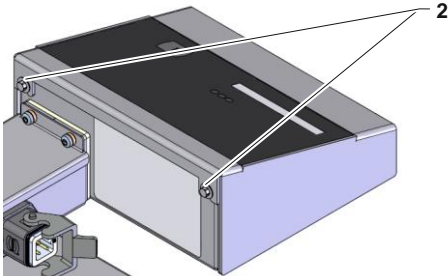


Fig. 7: Rear side of the evaluation unit

8. Proceed as follows in order to attach the cover of the evaluation unit:
 - Connect the ribbon cable to the keyboard and attach the cover.
 - Attach screws (Label 1 → Fig. 6).
 - Tighten screws (Label 2 → Fig. 7).

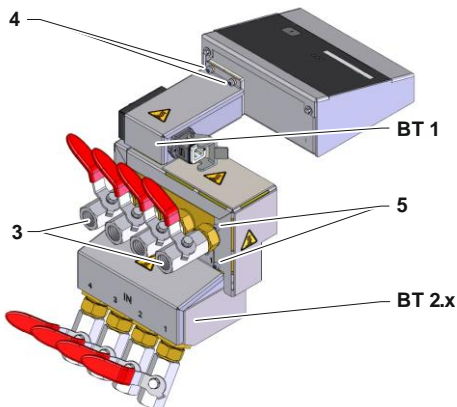


Fig. 8: Flow-5 with ball valve

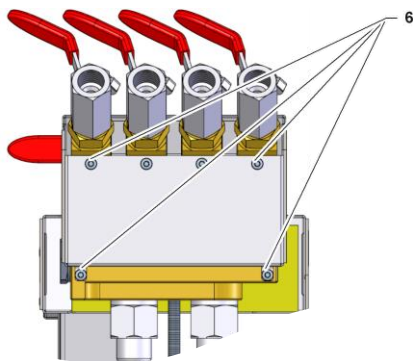



Fig. 9: Flow-5 view from below

9. Proceed as follows in order to attach the covers:
 - Attach insulation and cover plate, mount screws (Label 5 → Fig. 8).
 - Attach insulation and cover plate, mount screws (Label 4 → Fig. 8).
 - If present install shut-off valve OUT 1 and 4 (Label 3 → Fig. 8).

Only in the event of a replacement temperature sensor return line (BT 2 x):

- Attach cover plate and mount screws (Label 6 → Fig. 9).

10. Connect control cable to ext. flow rate meter Flow-5.
11. Connect ext. flow meter to temperature control unit and secure with hexagon head screw.

12. Reconnect mains plug and switch on main switch.
13. Press the  key to switch on the unit and check it for leaks.
14. Proceed as follows in order to calibrate the temperature sensor:
 - When setting parameters set **DFM recognition** to the "integrated" value (in **Settings / Various**), continue with Step 15.
 - When setting parameters set **DFM recognition** to the "modular" value (in **Settings / Various**), continue with Step 16.

Integrated operation

Service ▶ Calibrating ▶ Temperature			
Sensor external offset		0.0 K	
Sensor external ascent corr.		0.0 %	
Sensor external filter		15 s	
Sensor main l. ext.1 offset		0.0 K	
Sensor return l. ext.1 offset		0.0 K	
Sensor return l. ext.1 asc.cor.		0.0 %	
Sensor return l. ext.2 offset		0.0 K	
Sensor return l. ext.2 asc.cor.		0.0 %	
1	Main line	40.2 °C	Normal operation
	Flow rate	5.0 l/min	

Fig. 10: Sensor calibration during integrated operation

15. Temperature sensor main line ext 1..8 and temperature sensor return line ext. Proceed as follows in order to calibrate 1..8 , if necessary, the temperature sensor:
 - With a constant deviation set parameter **Sensor... offset** under **Service / Calibration / Temperature**.
 - With a linear deviation, set parameter **Sensor... asc.cor.** under **Service / Calibration / Temperature**.

Operation Modular






Service ▶ Calibrating ▶ Temperature			
No.	1 A..Z	A A1 A2 A3 A4 A5 ...	 
Sensor main line offset		0.0 K	
Sensor main line ascent corr.		0 %	
Sensor main line filter		20 s	
Sensor return line offset		0.0 K	
Sensor return line ascent corr.		0 %	
Sensor return line filter		20 s	
A	Return line	26.9 °C	Normal operation
7	Flow rate	0.6 l/min	

Fig. 11: Sensor calibration during modular operation

16. Proceed as follows, if necessary calibrate the temperature sensor for the main line and temperature sensor of the return line:
 - Select the module affected e.g. "A1" with the  or  buttons.
 - With a constant deviation set parameter **Sensor... offset** under **Service / Calibration / Temperature**.
 - With a linear deviation, set parameter **Sensor... asc.cor.** under **Service / Calibration / Temperature**.

17. Switch the unit off by press the  key.
18. Main switch off.

Parts list

Pos	Description	O/ID	Pcs
01	Heat sensor Pt 1000, 0,53 m	T24888	1
02	Assembly instructions German	M8099-DE	1
03	Assembly instructions English	M8099-EN	1
04	Assembly instructions French	M8099-FR	1