

Assembly Instructions M8104-EN

Conversion set for pressure sensor R-1 instead MCTH1 (O/ID T25304-X)

Purpose

Conversion pressure sensor (BP 1,2)

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  key.
 - Select the function **Mould evacuation** and activate with the  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 the cover from the unit (see Instruction Manual Chapter Maintenance).
4. Loosen the screws in the front panel and hinge it down.
5. Proceed as follows in order to remove the pressure sensor (BP 1):
 - Remove the solenoid coil from the air relief valve (YV 1) entfernen (Only with Z-unit).
 - Unplug the cable of the pressure sensor.
 - Remove the Torx screws, mounting plate and pressure sensor (use Torx screws again).
 - Unplug cable at GIF-51 (A 4), open velcro cable fastener, remove plastic cable fastener and completely remove the cable.
6. **Additional with ZU**

Proceed as follows in order to remove the pressure sensor (BP2):

 - Remove the flexible tube from the pressure sensor BP2 towards the pump fitting.
 - Unplug the cable at GIF-51 (A 4) and entirely remove the cable.
 - Remove the 2 Torx screws on the brass block and entirely remove the block with the pressure sensor.

7. Proceed as follows in order to mount the pressure sensor R-1 (BP1):

- Mount the pressure sensor adapter incl. O-ring with Torx screws from step 5 to the cooling water module (2).



NOTICE!

Pay attention to the assembly angle (→ Drawing 25304-X)

- Mount with the 2 hexagon bolts the angle holder incl. pressure sensor on the cooling water module.
- Fix the flexible tube DN4 (red) on the adapter of the pressure sensor (threaded elbow joint).
- Pass the cable from the pressure sensor through the cable channel and plug in on GIF-51 at slot X31.1.

8. Additional with ZU

Proceed as follows in order to mount the pressure sensor R-1 (BP 2):

- Fix the flexible tube DN3 to the pump fitting (threaded elbow joint) anschrauben.
- Pass the cable from the pressure sensor through the cable channel and plug in on GIF-51 at slot X31.2.

9. Replace removed cable ties or replace with new ones.

10. Remount hook-and-loop fastener.

11. Close and secure the front panel.

12. Only with Z-unit

Mount solenoid coil from air relief valve (YV 1).



ATTENTION!

Do not switch on the unit

Burning of the solenoid coil

Therefore:

- Do not switch on the unit when the solenoid coil is demounted.

13. Reconnect mains plug and switch on main switch.

14. Check that the unit is free of pressure (→ Pressure gauge rear of unit).

Service ▶ Calibrating ▶ Pressure			
Type of pressure sensor		0-20	
Pressure sensor 1 offset		0.0 bar	
Pressure sensor 1 ascent c.		0.0 %	
Pressure sensor 2 offset		0.0 bar	
Pressure sensor 2 ascent c.		0.0 %	
Pressure sensor filter		2 s	
<hr/>			
1	Main line	28.0 °C	Ready to operate
	Pressure	0.0 bar	

Fig. 1: Calibrate the pressure sensor 1

Service ▶ Calibrating ▶ Pressure			
Type of pressure sensor		0-20	
Pressure sensor 1 offset		0.0 bar	
Pressure sensor 1 ascent c.		0.0 %	
Pressure sensor 2 offset		0.0 bar	
Pressure sensor 2 ascent c.		0.0 %	
Pressure sensor filter		2 s	
<hr/>			
1	Main line	28.2 °C	Ready to operate
	Pressure	0.0 bar	

Fig. 2: Calibrate the pressure sensor 2

- Read off the current **System pressure actual value** under **Display \ Actual value**.
- Set the parameter **Pressure sensor 1 offset** under **Service \ Calibrating \ Pressure** according to the following calculation:
 → $\text{Pressure sensor 1 offset new} = \text{Pressure sensor 1 offset current} - \text{System pressure actual value current}$

with pressure sensor main line (BP 2)

- Read off the current **Main line pressure** under **Display \ Actual value**
- Set the parameter **Pressure sensor 2 offset** under **Service \ Calibrating \ Pressure** according to the following calculation:
 → $\text{Pressure Sensor 2 offset new} = \text{Pressure Sensor 2 offset current} - \text{Main line pressure current}$

15. Check calibration pressure sensor

- Parameter **System pressure actual value** resp. **Main line pressure** under **Display \ Actual value** must be $0 \text{ bar} \pm 0,1$.
- If this is not the case, item calibration pressure sensor must be repeated.




ATTENTION!


Risk of incorrect calibration!

False calibrations can lead to faults with the unit.

Therefore:

- Check the calibrations.

16. Press the  key to switch on the unit and check it for leaks.

17. Switch the unit off by press the  key.

18. Main switch off.

19. Close the unit correctly again.

Parts list

Pos	Description	O/ID	Spare part O/ID			
			T25304	T25304-1	T25304-2	T25304-3
			Pcs	Pcs	Pcs	Pcs
01	Pressure sensor INOX, 0-20 bar; 1,0 m (mounted)	T25305	1	2	-	-
02	Pressure sensor INOX, 0-20 bar; 1,2 m (mounted)	T25305-1	-	-	1	2
03	Plate X31.1 (mounted)	T24472-311	1	1	1	1
04	Plate X31.2 (mounted)	T24472-312	-	1	-	1
05	Adapter Pressure sensor	T25257	1	1	1	1
06	O-Ring 6,07x1,78 (mounted)	T20685	1	1	1	1
07	Elbow fitting (mounted)	T18275	1	1	1	1
08	Hose DN4x9 Silikon 0,19 m	T21385	1	1	1	1
09	Hose nipple (mounted)	T21520	2	2	2	2
10	Hose clamber (mounted)	T21909	2	2	2	2
11	Terminal nut (mounted)	T21207	1	2	1	2
12	Clamping ring (mounted)	T25332	1	2	1	2
13	Clamping ring and nut (mounted)	T21203	-	1	-	1
14	Hose DN3x265	T24799	-	1	-	-
15	Hose DN3x330	T24894	-	-	-	1
16	Holding angle 58x28 (mounted)	T25256	1	1	-	-
17	Holding angle 77x28 (mounted)	T25381	-	-	1	1
18	Hexagon nut (mounted)	T17865	1	2	1	2
19	Hexagon screw M4x6	B1208357	2	2	2	2
20	Cable Ties with plug-in anchor	T23297	1	1	1	1
21	Cable Ties	T14121	1	1	1	1
22	Drawing 25304-X	T25304-X	1	1	1	1
23	Assembly instructions German	M8104-DE	1	1	1	1
24	Assembly instructions English	M8104-EN	1	1	1	1
25	Assembly instructions French	M8104-FR	1	1	1	1