

PRESSURISED MOULD TEMPERATURE CONTROLLERS TB-P SERIES



- Working temperature up to 140°C
- Temperature accuracy of $\pm 0.5^\circ\text{C}$, thanks to PID algorithms on the heating and cooling phase
- Automatic self-tuning of the PID parameters at every mould change
- High pressure, high flow centrifugal pump. The pump has back to back impellers with axial thrust balancing
- 80 kW cooling capacity for process water at 130°C and cooling water at 10°C
- Noise level lower than 70 dB(A)
- Safety thermostat
- Thermal insulation on heating and cooling chambers
- Automatic operation at reduced heating power near the set point (TB/2-P Models)
- Automatic water filling
- Three phase heaters
- Connection for controlling the temperature directly at the mould
- Central acoustic alarm
- Quick cooling Key
- Mechanical filters in the process and cooling circuits
- 24 V auxiliary circuit

ON REQUEST:

- High flow and high pressure pump
- Version with reversible pump (when running in reverse, the maximum working temperature is 80°C)
- Larger cooling capacity (TB-P single heater only)
- Daily/weekly timer
- Two, three or four-way manifolds
- Serial outlet
- Bigger power models
- Working temperature up to 150°C

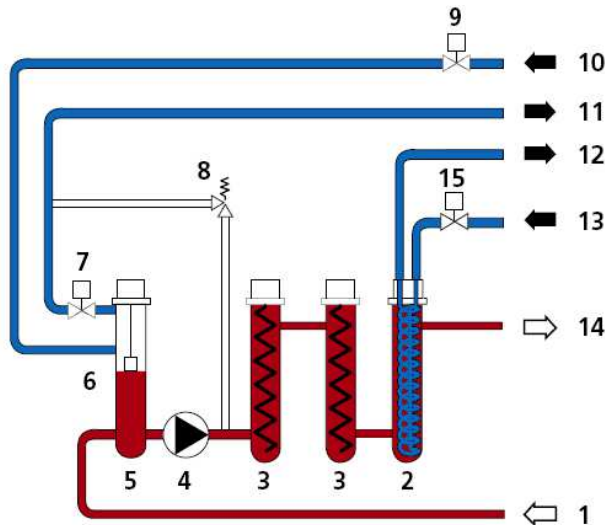


TECHNICAL DATA

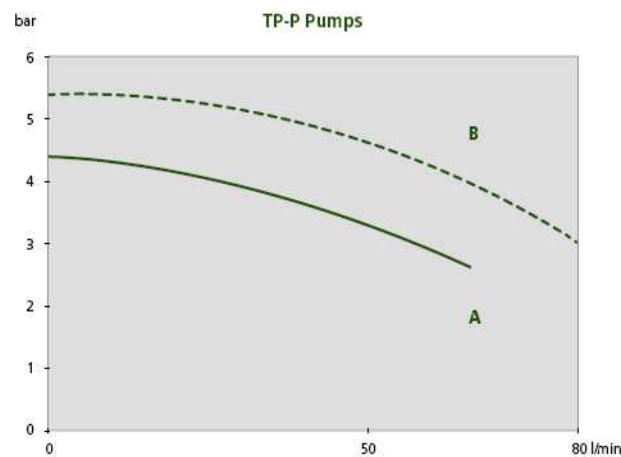
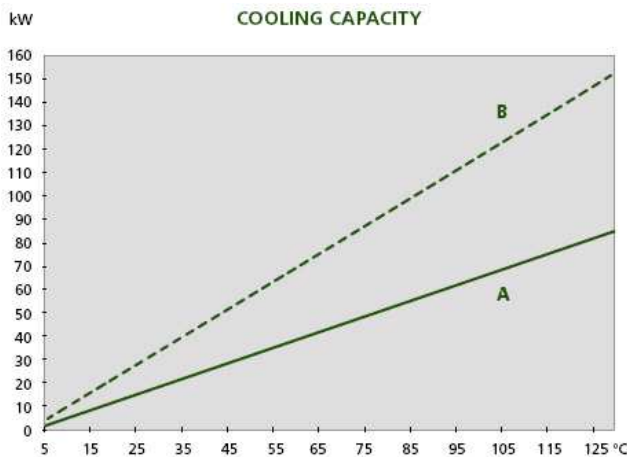
| MODELS | TB 3-P | TB 4,5-P | TB 6-P | TB 9-P | TB 12-P |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|
| Maximum working temperature (°C) | 140 | 140 | 140 | 140 | 140 |
| Heating capacity (kW) | 3 | 4,5 | 6 | 9 | 12 |
| Pump motor (kW) | 0,75 * | 0,75 * | 0,75 * | 0,75 * | 0,75 * |
| Water flow (litres/minute) | 16 / 70 * | 16 / 70 * | 16 / 70 * | 16 / 70 * | 16 / 70 * |
| Pressure (bar) | 4,3 / 2,5 * | 4,3 / 2,5 * | 4,3 / 2,5 * | 4,3 / 2,5 * | 4,3 / 2,5 * |
| Maximum cooling capacity (kW) | 80 ** | 80 ** | 80 ** | 80 ** | 80 ** |
| Dimensions (mm) | 700x300x650 | 700x300x650 | 700x300x650 | 700x300x650 | 700x300x650 |
| Weight (kg) | 66 | 66 | 66 | 66 | 66 |

| MODELS | TB 6/2-P | TB 9/2-P | TB 12/2-P | TB 15/2-P | TB 18/2-P | TBH 24/2-P |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Maximum working temperature (°C) | 140 | 140 | 140 | 140 | 140 | 140 |
| Heating capacity (kW) | 6 (3+3) | 9 (4,5+4,5) | 12 (6+6) | 15 (9+6) | 18 (9+9) | 24 (12+12) |
| Pump motor (kW) | 0,75 * | 0,75 * | 0,75 * | 0,75 * | 0,75 * | 1,5 |
| Water flow (litres/minute) | 16 / 70 * | 16 / 70 * | 16 / 70 * | 16 / 70 * | 16 / 70 * | 50 / 200 |
| Pressure (bar) | 4,3 / 2,5 * | 4,3 / 2,5 * | 4,3 / 2,5 * | 4,3 / 2,5 * | 4,3 / 2,5 * | 3,6 / 2,6 |
| Maximum cooling capacity (kW) | 80 | 80 | 80 | 80 | 80 | 80 |
| Dimensions (mm) | 700x300x650 | 700x300x650 | 700x300x650 | 700x300x650 | 700x300x650 | 920x400x890 |
| Weight (kg) | 74 | 74 | 74 | 74 | 74 | 95 |

* on request bigger pump: pump motor kW 1,1; water flow (l/min) 16/80; pressure (bar) 5,3/4,0
 ** on request additional heat exchanger: 150 kW



1. From process
2. Finned heat exchanger
3. Heater
4. Pump
5. Tank
6. Magnetic float
7. Solenoid valve
8. Safety valve
9. Automatic filling valve
10. Automatic filling
11. Drain
12. Cooling water outlet
13. Cooling water inlet
14. To process
15. Cooling inlet solenoid valve



Temperature difference between process and cooling water
 A: diagram with one only heat exchanger
 B: diagram with additional heat exchanger
 Colling water pressure: 2 bar
 Process water flow: 35 l/min

Pump A: standard version
 Pump B: on request

