**Objective**
This case study tests the heating and cooling power of JULABO Presto A30 with a 2 litre glass reactor. The A30 is connected to the reactor with two 1.0 m metal tubings. The A30 is programmed to cycle between +20 °C and +100 °C.

**Test Conditions**
- **JULABO unit**: JULABO Presto A30
- **Cooling power**:
  - +20 °C: 0.5 kW
  - 0 °C: 0.4 kW
  - -20 °C: 0.2 kW
- **Heating capacity**: 2.7 kW
- **Band limit**: no
- **Flow pressure**: 0.35 bar
- **Bath fluid**: JULABO Thermal HL45
- **Reactor**: 2 liters glass reactor (Schott Duran) filled with 1.8 liters Thermal HL45
- **Control**: External (ICC)

**Environment**
- **Room temperature**: 20 °C
- **Humidity**: 45 %
- **Voltage**: 230 V / 50 Hz

**Test Results**
See chart on back page: The A30 heating process from +20 °C to +100 °C in 27 min. Hitting exactly +100 °C without overshoot. The cooling process from +100 °C to +20 °C in 32 min. Hitting exactly +20 °C without overshoot.

**Tip**
You can also use the robust Pt100 with Teflon coating.

More tips on back page >>
Cool-down time 32 min

Heat-up time 27 min

Tip
Elbow fittings 90° help relieving the connectors of the glass reactor.