

INNOVATION

# Temperature Control Unit

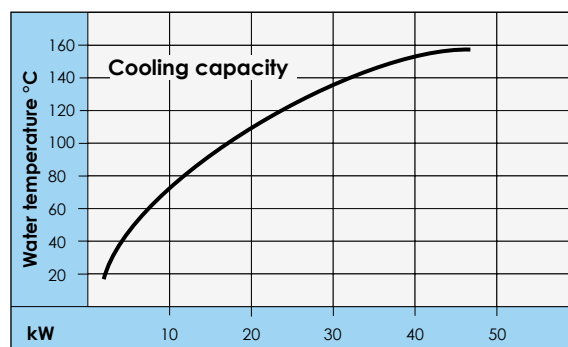
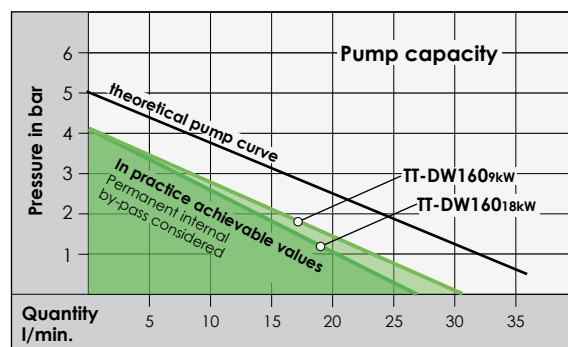
# TT-DW160

Compact, powerful pressurised water unit for injection moulds

Operational use: with water up to 160°C

## Features included

- Self-optimizing temperature controller with digital display of the set and actual temperature. With high precision regulation in  $1/10^\circ$  range; can be adjusted to read °C or °F.
- Automatic temperature control - difference between set and actual temperature activates an alarm.
- Digital flow indication with control of the minimum flow.
- Indication of the pressure to the mould.
- Pressure discharge, aeration and water filling.
- New developed pump with well proved magnetic coupling.
- All components in contact with water are made of stainless steel or bronze.
- Fast reacting heating system.
- High cooling capacity (plate heat exchanger).
- Safety devices:
  - Level control for dry run protection.
  - Electronic temperature limiter in the controller and separate mechanical safety thermostat.
  - Main switch, transformer and motor protection switch.
  - Horn as failure indication.
- All failures are also indicated visually.
- Unit on castors.



## Optional

Equipped with the controller MP-988 allows over 30 different digital interfaces: RS-232, RS-485, Current Loop 20mA, CAN-bus, Profibus etc.

## HEADQUARTERS & MANUFACTURER

**TOOL-TEMP AG**  
Industriestrasse 30

CH-8583 Sulgen  
Schweiz - Suisse - Switzerland

Tel.: +41 (0)71 644 77 77  
Fax: +41 (0)71 644 77 00

E-Mail: info@tool-temp.ch  
Internet: www.tool-temp.ch



TOOL-TEMP®

## Technical data

### TT-DW160<sub>9kW</sub>

### TT-DW160<sub>18kW</sub>

#### Temperature range

water

up to 160°C

up to 160°C

#### Temperature control

self-optimizing, electronic microprocessor controller MP-888 with digital display of the set and actual value.  
Automatic temperature monitoring.

#### Flow control

electronically, with digital display and automatic monitoring of the minimal flow.

#### Heating capacity

9 kW

18 kW

#### Cooling capacity

approx. 40 kW at 150°C

#### Pump capacity

motor 1,1 kW  
max. 5 bar / max. 36 l/min.

#### Refill pump

yes

yes

#### Temperature measurement at the mould

no

no

#### Pressure discharge and mould drain

yes

yes

#### Leakstopper

no

no

#### Filling

automatic

automatic

#### Connections

Medium

Cooling water

½" BSP female thread

inlet with water filter

½" BSP female thread

outlet with non-return valve ½" BSP female thread

#### Dimensions (L×W×H)

750 × 180 × 550 mm, incl. castors

750 × 285 × 550 mm, incl. castors

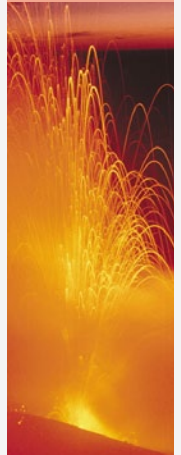
#### Weight

approx. 55 kg empty

approx. 67 kg empty

#### Colour

silvergrey RAL 7001, front RAL 7016



## Electronic temperature controllers

The electronic controllers MP-888 and MP-988 can be operated to read °C or °F. The analog interfaces 0-5 V, 0-10 V and 4-20 mA are standard included in the controllers - **without additional costs**.

The self-optimizing feature on these controllers allows a very high regulating accuracy even at high temperatures and adheres to the set temperatures independently of the consumer size.

#### Flow control:

The indication of the flow rate is possible in litres or gallons per minute. As soon as the flow falls below a minimum, the alarm is activated.

#### Standard controller MP-888



Set temperature  
(required temperature)

Actual temperature  
(effective temperature)

Indication of the flow

#### Analog interfaces

- 0 - 5 V, 0 - 10 V, 4 - 20 mA

#### Digital interface controller MP-988 (Optional)



#### Digital interface

- RS-485, RS-232, Current Loop 20 mA, CAN-bus, Profibus
- Incl. all existing machine protocols

#### Temperature difference monitoring

Indication of up to three temperatures

#### Analog interfaces

- 0 - 5 V, 0 - 10 V, 4 - 20 mA