

## Thermo Shaker TS-DW for Deep Well Plates

### Description

TS-DW Thermo Shaker is designed for shaking and incubating deep well plates. A multisystem principle, used in the design of the Thermo-Shaker, allows operating it as 3 independent devices:

- Incubator
- Plate Shaker
- Thermo Shaker

TS-DW provides excellent temperature uniformity across the plate due to patented **two-sided heating** of the block and the lid, contour heating of the block and close proximity of heating elements to plate walls.

A range of interchangeable blocks allow the use of a wide variety of plates (see pages 3-4).

### Specifications

- Soft or intensive sample shaking
- Rotation speed regulation, stabilization and indication
- Uniform rotation amplitude due to the thermal shaker platform
- Exceptional temperature uniformity across the plate
- Required operation time setting and indication
- Automatic stop of platform movement after the set time has expired
- Setting and indication of the required temperature on the platform
- A variety of changeable blocks that can accommodate most popular deepwell plates
- Automatic fault diagnostics (temperature sensor, platform heating, lid heating etc.)

### Applications

- Cytochemistry - for in situ reactions
- Immunochemistry - for immunofluorescent reactions
- Biochemistry - for enzyme and protein analysis
- Molecular biology - for nucleic acid extraction



Thermo shaker TS-DW with opened lid



Thermo shaker TS-DW with closed lid

### Available Blocks

Eppendorf® 96/1000 µl, Eppendorf 96/500 µl, Axygen® 96/2200 µl, Axygen® 96/600 µl, Riplate® 96/1000 µl, Sarstedt® Megablock 96/2200 µl, Abgene™ Storage Plate 96/800 µl, Abgene™ 96/1200 µl, Porvair® 96/2000 µl, Nunc® 96/2000 µl, Riplate® 96/2000 µl, Axygen® 96/2200 µl, PlateOne® 96/2000 µl, Starlab® 96/1200 µl, KingFisher™ Deepwell 96 Plate, Slicprep™ 96, PowerMag® Glass Bead Plate 96, cluster SSI Bio, Vector-Best® 96/1000 µl.

# Thermo Shaker TS-DW for Deep Well Plates

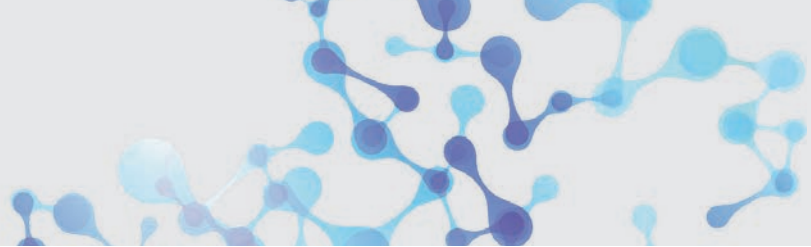


## Technical Data

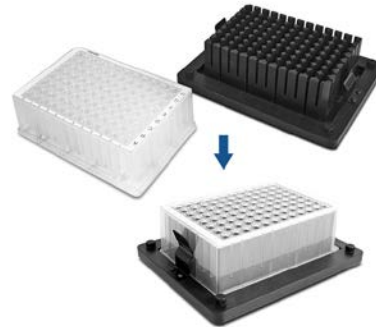
Model	TS-DW Thermo Shaker
<b>Order No.</b> <b>Basic unit without blocks</b>	<b>105.2300</b>
Temperature setting range	+25°C ... +100°C
Temperature control range	5°C above ambient up to +100°C
Temperature setting resolution	0.1°C
Temperature uniformity at +37°C	±0.1°C*
Temperature accuracy at +37°C	±0.5°C*
Time of platform heating from +25°C to +37°C	6 min*
* for B-2E thermoblock	–
Temperature calibration coefficient range	0.936 ... 1.063 (± 0,063)
Speed control range	250 – 1.400 rpm
Digital time setting	1 min – 96 hrs (1 min increment)
Timer sound signal	Yes
Orbit	2 mm
Display	LCD, 16 × 2 signs
Overall dimensions (W×D×H)	240 x 260 x 160 mm
Weight	5.1 kg
Input current/power consumption	12 V, 4.8 A / 58 W
External power supply	Input AC 100 – 240 V 50/60 Hz; Output DC 12 V

### \*Temperature Calibration Function

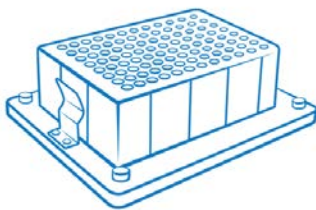
With the help of the temperature calibration function the user can calibrate the unit approx. ±6% of the selected temperature to compensate differences in the thermal behaviour of plates from different manufacturers.



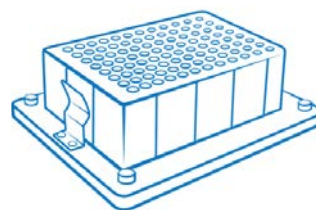
# Thermo Shaker TS-DW for Deep Well Plates



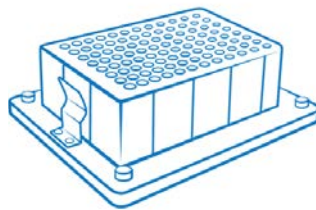
## Optional Accessories / Blocks



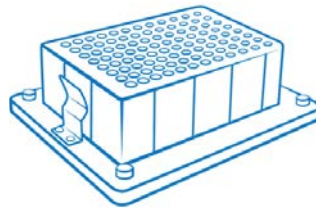
**Block B-2E**  
Block for one  
deep-well plate  
**Eppendorf® 96/1000 µl**  
Order No.: 105.2310



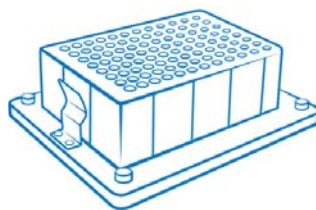
**Block B-2S**  
Block for one  
deep-well plate  
**Sarstedt® Megablock  
96/2200 µl**  
Order No.: 105.2311



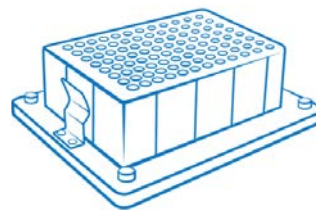
**Block B-05E**  
Block for one  
deep-well plate  
**Eppendorf 96/500 µl**  
Order No.: 105.2312



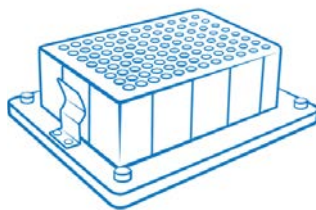
**Block B-08AB**  
Block for one  
deep-well plate  
**Abgene™ Storage Plate  
96/800 µl**



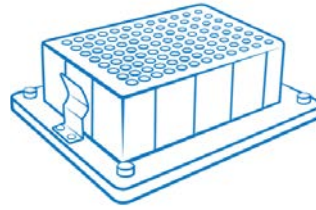
**Block B-2A**  
Block for one  
deep-well plate  
**Axygen® 96/2200 µl**  
Order No.: 105.2314



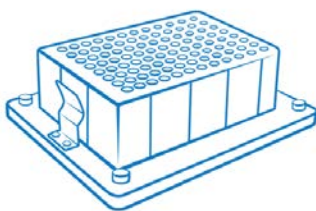
**Block B-12AB**  
Block for one  
deep-well plate  
**Abgene™ 96/1200 µl**



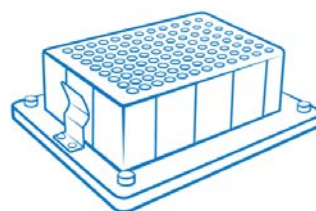
**Block B-06A**  
Block for one  
deep-well plate  
**Axygen® 96/600 µl**



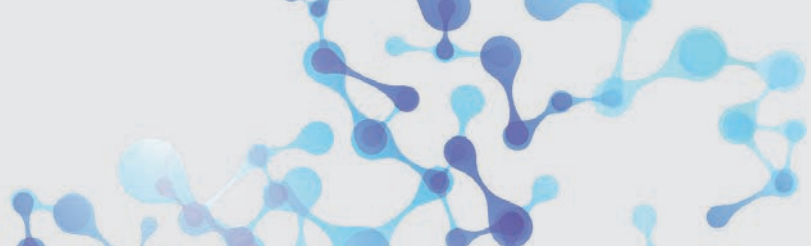
**Block B-2P**  
Block for one  
deep-well plate  
**Porvair® 96/2000 µl**  
Order No.: 105.2313



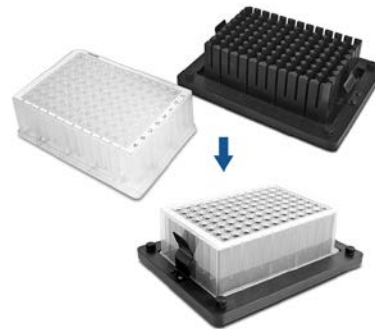
**Block B-1R**  
Block for one  
deep-well plate  
**Riplate® 96/1000 µl**



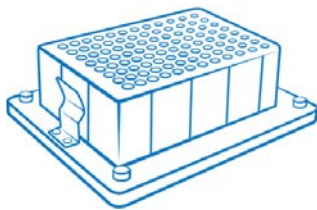
**Block B-2N**  
Block for one  
deep-well plate  
**Nunc® 96/2000 µl**



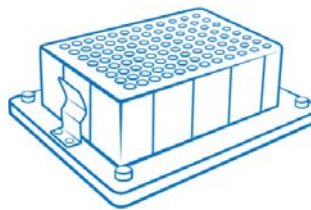
# Thermo Shaker TS-DW for Deep Well Plates



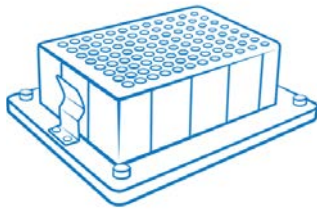
## Optional Accessories / Blocks



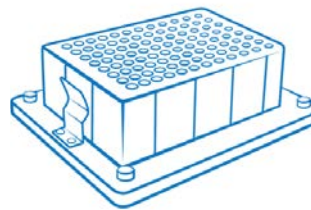
**Block B-2R**  
Block for one  
deep-well plate  
**Riplate® 96/2000 µl**



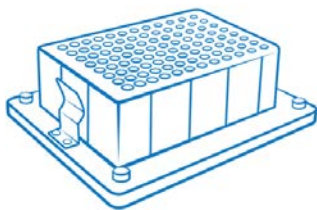
**Block B-2SD**  
Block for one  
deep-well plate  
**Slicprep™ 96**



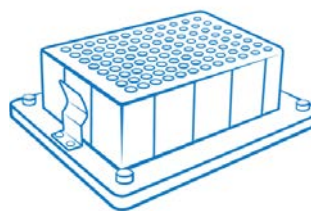
**Block B-05PO**  
Block for one  
deep-well plate  
**Axygen® 96/2200 µl**  
Order No.: 105.2314



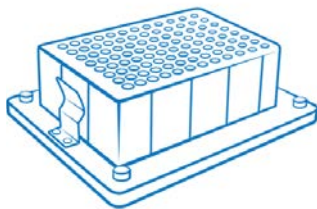
**Block B-2KF**  
Block for one  
deep-well plate  
**PowerMag® Glass Bead  
Plate 96**



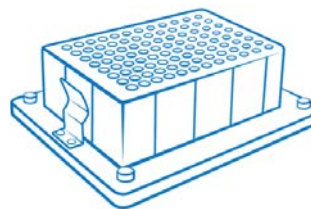
**Block B-2PO**  
Block für eine  
Deep-Well-Platte  
**PlateOne® 96/2000 µl**



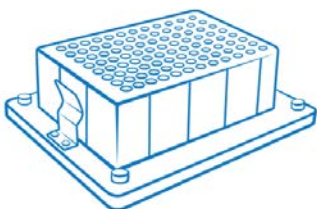
**Block B-2BBI**  
Block for one  
deep-well plate  
**cluster SSI Bio**



**Block B-2SL**  
Block for one  
deep-well plate  
**Starlab® 96/1200 µl**



**Block B-2V**  
Block for one  
deep-well plate  
**Vector-Best® 96/1000 µl**  
Order No.: 105.2310



**Block B-2M**  
Block for one  
deep-well plate  
**KingFisher™ Deepwell  
96 Plate**