

# ECODryBlock

## Dry block heater

Modular and digital dry block heater designed for accurate sample heating, supporting a wide range of applications in Life Science and Environmental laboratories.



Driven by curiosity



# ECODryBlock

ECODryBlock is a modular, digital, and precise dry block heater designed for sample preparation, incubation, DNA denaturation, enzymatic reactions, culture media tests, and COD analysis.

## One Modular System

- A single ControlPad manages up to two heating Modules, each with space for up to 2 aluminum blocks (95x76x51 mm)
- Set independent timers and temperatures (up to 165 °C) on each Module
- A wide range of interchangeable aluminum blocks, designed to accommodate different types of vials, tubes, and cuvette

## Uniform, Stable, and Controlled Conditions

- The transparent cover creates a warm air jacket that minimizes heat loss and ensures uniform temperature distribution
- External probes (Pt100 and Pt1000) enable precise monitoring and control directly within the block or the sample vessel
- Possibility to set different temperatures on each Module, effectively working as two dry baths in one

## Advanced User Experience

- Equipped with a 7" capacitive touch screen with chemical-resistant glass surface
- Modern, user-friendly interface for quick parameter setting and intuitive operation
- Engineered for durability, with a 3-year warranty



## Configurations



ECODryBlock  
System



ECODryBlock  
System COD 24



ECODryBlock  
System COD 4



ECODryBlock  
No ControlPad

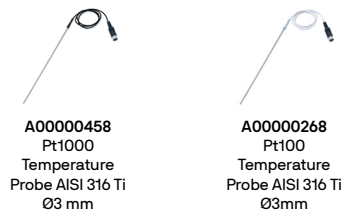
# Optional Accessories

|                                          |           |
|------------------------------------------|-----------|
| Clamp with probe support                 | A00000280 |
| Handle for block removal                 | A00000351 |
| Support rod                              | A00001069 |
| Air condenser with ground cone*          | A00001041 |
| Antisplash bell*                         | A00001045 |
| PTFE sheaths for 29/32 cones*            | A00001042 |
| Test tube COD Ø42x200mm 200ml, 3pcs/box* | A00000145 |
| Condenser 200 mm, type KS*               | CA0091667 |
| Holder for 12 round glass cells*         | CA0091636 |
| Set of 20 glass test tube Ø 16 mm*       | CM0091680 |
| Tube for sample decomposition Ø22 mm*    | CA0091666 |
| Absorption attachment for condenser*     | 10000002  |

\*for COD analysis only

# External Temperature Sensors

Temperature probes ensure precise temperature control for accurate and reproducible results.



# Instrument - Codes

| ECODryBlock                |               |            |
|----------------------------|---------------|------------|
| ECODryBlock System         | 115 V - 230 V | SA101A0700 |
| ECODryBlock System COD 24  | 115 V - 230 V | SB101A0700 |
| ECODryBlock System COD 4   | 115 V - 230 V | SC101A0700 |
| ECODryBlock no ControlPad* | 115 V - 230 V | F101A0700  |

\*addition to the system



# Blocks for Standard Test Tubes

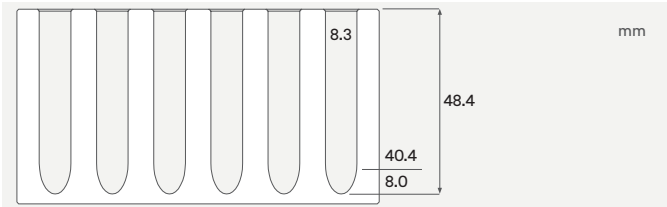
Commonly used for general laboratory heating tasks, such as preparing solutions, dissolving substances, or incubating samples in routine chemical and biological analyses.

| Velp code | Description          | Suitable for                  | Well Size (mm) | No. of Wells | Well Depth (mm) |
|-----------|----------------------|-------------------------------|----------------|--------------|-----------------|
| A00000495 | STT-W30-D060-A Block | Round bottom tubes (6mm)      | Ø 8.3          | 30           | 48.4            |
| A00000496 | STT-W24-D100-A Block | Round bottom tubes (10mm)     | Ø 10.7         | 24           | 48.4            |
| A00000497 | STT-W16-D130-A Block | Round bottom tubes (12/13 mm) | Ø 13.9         | 16           | 48.4            |
| A00000498 | STT-W20-D130-A Block | Round bottom tubes (12/13 mm) | Ø 13.9         | 20           | 48.4            |
| A00000499 | STT-W12-D160-A Block | Round bottom tubes (15/16 mm) | Ø 17.5         | 12           | 48.4            |
| A00000500 | STT-W12-D180-A Block | Round bottom tubes (17/18 mm) | Ø 19.1         | 12           | 48.4            |
| A00000501 | STT-W08-D200-A Block | Round bottom tubes (20 mm)    | Ø 21           | 8            | 48.4            |
| A00000502 | STT-W06-D250-A Block | Round bottom tubes (25 mm)    | Ø 26.2         | 6            | 48.4            |
| A00000503 | STT-W04-D350-A Block | Round bottom tubes (35 mm)    | Ø 35           | 4            | 47.6            |

## STT-W30-D060-A

Block for Standard test tubes  
Code A00000495

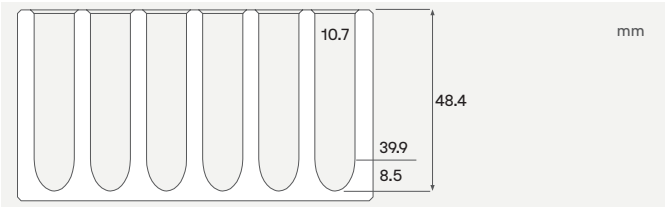
- Tube type: 6 mm round-bottom tubes
- Number of wells: 30
- Well depth: 48.4 mm
- Well size (mm): Ø 8.3



## STT-W24-D100-A

Block for Standard test tubes  
Code A00000496

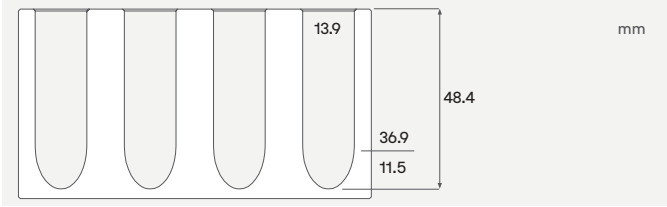
- Tube type: 10 mm round-bottom tubes
- Number of wells: 24
- Well depth: 48.4 mm
- Well size (mm): Ø 10.7



## STT-W16-D130-A

Block for Standard test tubes  
Code A00000497

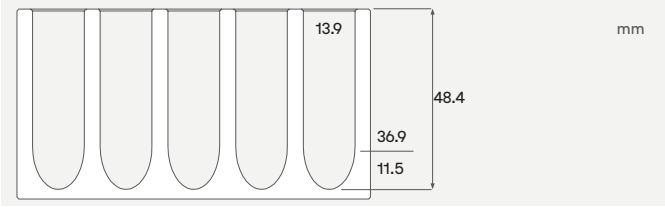
- Tube type: 12/13 mm round-bottom tubes
- Number of wells: 16
- Well depth: 48.4 mm
- Well size (mm): Ø 13.9



## STT-W20-D130-A

Block for Standard test tubes  
Code A00000498

- Tube type: 12/13 mm round-bottom tubes
- Number of wells: 20
- Well depth: 48.4 mm
- Well size (mm): Ø 13.9



## STT-W12-D160-A

Block for Standard test tubes

Code **A00000499**

- Tube type: 15/16 mm round-bottom tubes
- Number of wells: 12
- Well depth: 48.4 mm
- Well size (mm): Ø 17.5

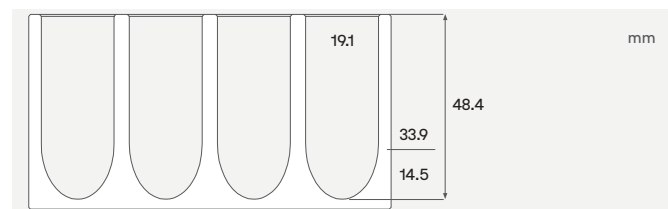
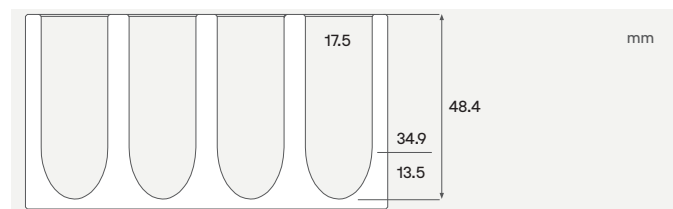


## STT-W12-D180-A

Block for Standard test tubes

Code **A00000500**

- Tube type: 17/18 mm round-bottom tubes
- Number of wells: 12
- Well depth: 48.4 mm
- Well size (mm): Ø 19.1



## STT-W08-D200-A

Block for Standard test tubes

Code **A00000501**

- Tube type: 20 mm round-bottom tubes
- Number of wells: 8
- Well depth: 48.4 mm
- Well size (mm): Ø 21

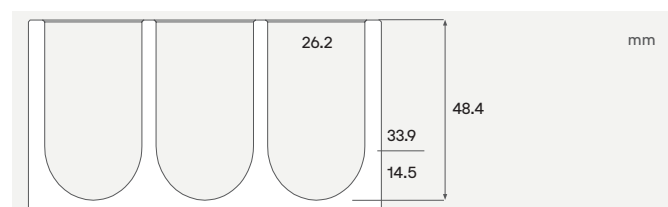


## STT-W06-D250-A

Block for Standard test tubes

Code **A00000502**

- Tube type: 25 mm round-bottom tubes
- Number of wells: 6
- Well depth: 48.4 mm
- Well size (mm): Ø 26.2

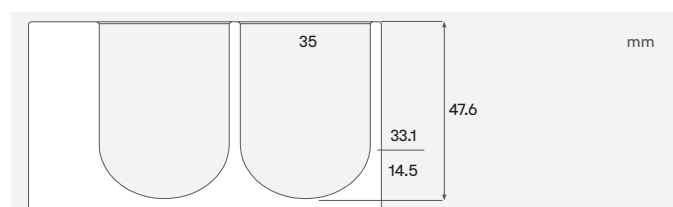


## STT-W04-D350-A

Block for Standard test tubes

Code **A00000503**

- Tube type: 35 mm round-bottom tubes
- Number of wells: 4
- Well depth: 47.6 mm
- Well size (mm): Ø 35



# Blocks for Micro Centrifuge Tubes

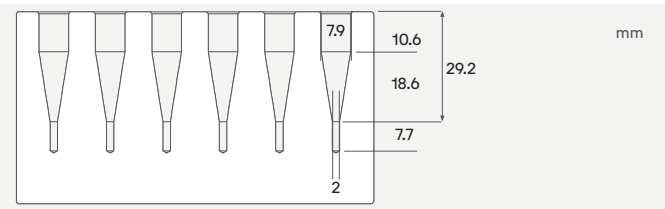
Designed for small-volume samples, typically employed in molecular biology and biochemistry for DNA, RNA, or protein preparation and analysis.

| Velp code | Description          | Suitable for                   | Well Size (mm) | No. of Wells | Well Depth (mm) |
|-----------|----------------------|--------------------------------|----------------|--------------|-----------------|
| A00000504 | MCT-W30-V005-A Block | PCR tubes (0.5 ml)             | Ø 7.9          | 30           | 27.6            |
| A00000505 | MCT-W20-V015-A Block | Microcentrifuge tubes (1.5 ml) | Ø 11.5         | 20           | 36.9            |
| A00000506 | MCT-W20-V015-B Block | Microcentrifuge tubes (1.5 ml) | Ø 10.9         | 20           | 39.1            |
| A00000507 | MCT-W20-V020-A Block | Microcentrifuge tubes (2.0 ml) | Ø 10.9         | 20           | 38.1            |
| A00000508 | MCT-W20-V020-B Block | Microcentrifuge tubes (2.0 ml) | Ø 10.9         | 20           | 38.1            |

## MCT-W30-V005-A

Block for Micro centrifuge tubes  
Code **A00000504**

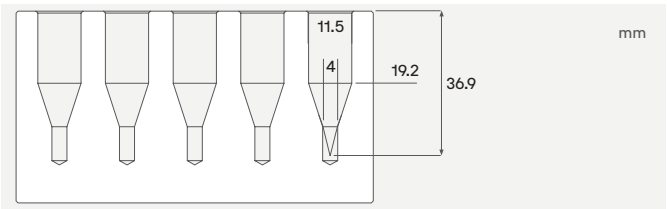
- Tube type: PCR tubes (0.5 ml)
- Number of wells: 30
- Well depth: 27.6 mm
- Well size (mm): Ø 7.9



## MCT-W20-V015-A

Block for Micro centrifuge tubes  
Code **A00000505**

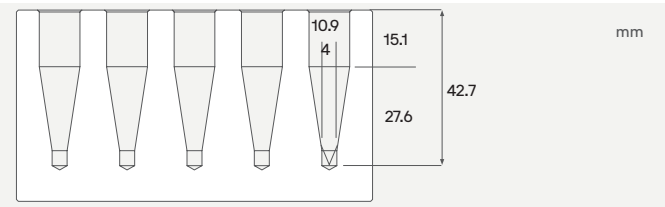
- Tube type: Microcentrifuge tubes (1.5 ml)
- Number of wells: 20
- Well depth: 36.9 mm
- Well size (mm): Ø 11.5



## MCT-W20-V015-B

Block for Micro centrifuge tubes  
Code **A00000506**

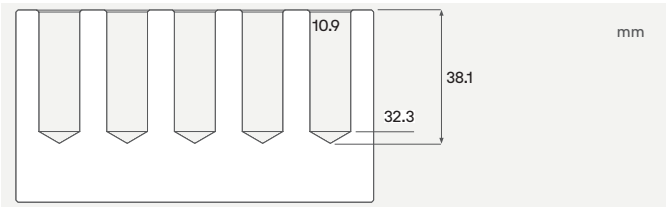
- Tube type: Microcentrifuge tubes (1.5 ml)
- Number of wells: 20
- Well depth: 39.1 mm
- Well size (mm): Ø 10.9



## MCT-W20-V020-A

Block for Micro centrifuge tubes  
Code **A00000507**

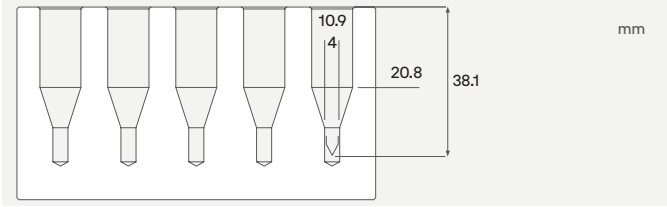
- Tube type: Microcentrifuge tubes (1.5 ml)
- Number of wells: 20
- Well depth: 38.1 mm
- Well size (mm): Ø 10.9



# MCT-W20-V020-B

Block for Micro centrifuge tubes  
Code **A00000508**

- Tube type: Microcentrifuge tubes (2.0 ml)
- Number of wells: 20
- Well depth: 38.1 mm
- Well size (mm): Ø 10.9



# Blocks for Cuvette

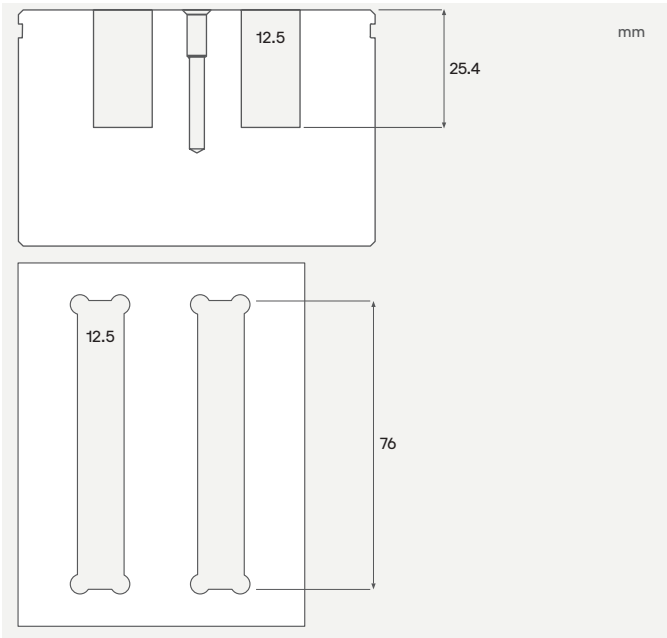
Allow controlled heating of cuvettes for spectrophotometric analysis, supporting kinetic studies, enzyme reactions, or temperature-dependent absorbance measurements.

| Velp code | Description          | Suitable for             | Well Size (mm) | No. of Wells | Well Depth (mm) |
|-----------|----------------------|--------------------------|----------------|--------------|-----------------|
| A00000526 | CUV-W12-D125-A Block | 2 x 6 cuvettes (12.5 mm) | -              | 2            | 25.4            |

# CUV-W12-D125-A

Block for Cuvette  
Code **A00000526**

- 2 x 6 cuvettes (12.5 mm)
- Number of wells: 2
- Well depth: 25.4 mm



# Blocks for Conical Bottom Centrifuge Tubes

Used for medium to large capacity centrifugations, ideal for separating cells, particles, or biological components, as well as for preparing and collecting pellets.

| Velp code | Description          | Suitable for                     | Well Size (mm) | No. of Wells | Well Depth (mm) |
|-----------|----------------------|----------------------------------|----------------|--------------|-----------------|
| A00000509 | CCT-W12-V150-A Block | Conical centrifuges tube (15 ml) | Ø 17.1         | 12           | 44.5            |
| A00000510 | CCT-W05-V500-A Block | Conical centrifuges tube (50 ml) | Ø 29           | 5            | 47.6            |

## CCT-W12-V150-A

Block for conical centrifuges tube

Code **A00000509**

- Conical centrifuges tube (15 ml)
- Number of wells: 12
- Well depth: 44.5 mm
- Well size (mm): Ø 17.1

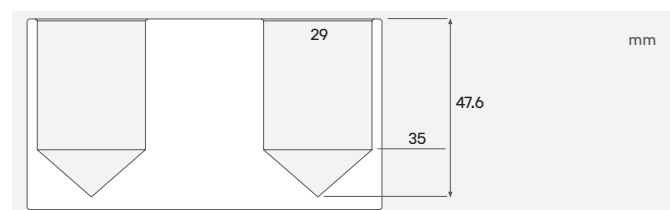
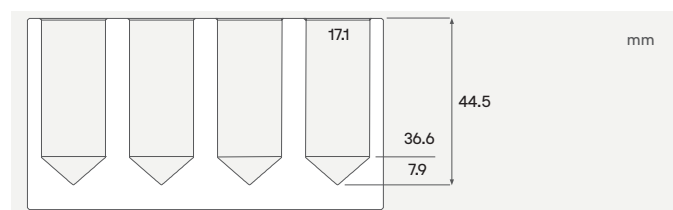


## CCT-W05-V500-A

Block for conical centrifuges tube

Code **A00000510**

- Conical centrifuge tubes (50 ml)
- Number of wells: 5
- Well depth: 47.6 mm
- Well size (mm): Ø 29



# Combination Blocks

Provide maximum flexibility, allowing simultaneous heating of different tube formats, ideal for multipurpose laboratories handling diverse workflows.

| Velp code | Description         | Suitable for                                         | Well Size (mm)            | No. of Wells | Well Depth (mm)      |
|-----------|---------------------|------------------------------------------------------|---------------------------|--------------|----------------------|
| A00000511 | STT-W14-COMBO Block | Test tube combination, 6 / 12 / 13 / 25 mm           | Ø 8.3<br>Ø 13.9<br>Ø 26.2 | 6<br>5<br>3  | 48.4<br>48.4<br>48.4 |
| A00000512 | CCT-W09-COMBO Block | Centrifuge tube combination, 1.5 / 15 / 50 ml        | Ø 11.1<br>Ø 17.1<br>Ø 29  | 4<br>3<br>2  | 39.1<br>44.5<br>47.6 |
| A00000513 | MCT-W21-COMBO Block | Microcentrifuge tube combination, 0.5 / 1.5 / 2.0 ml | Ø 7.9<br>Ø 11.1<br>Ø 11.5 | 6<br>10<br>5 | 27.6<br>39.1<br>38.1 |

## STT-W14-COMBO Block

Block for Standard test tubes

Code **A00000511**

- Test tube combination, 6/12/13/25 mm
- Number of wells: 6/5/3
- Well depth: 48.4/ 48.4/ 48.4 mm
- Well size (mm): Ø 8.3/13.9/26.2

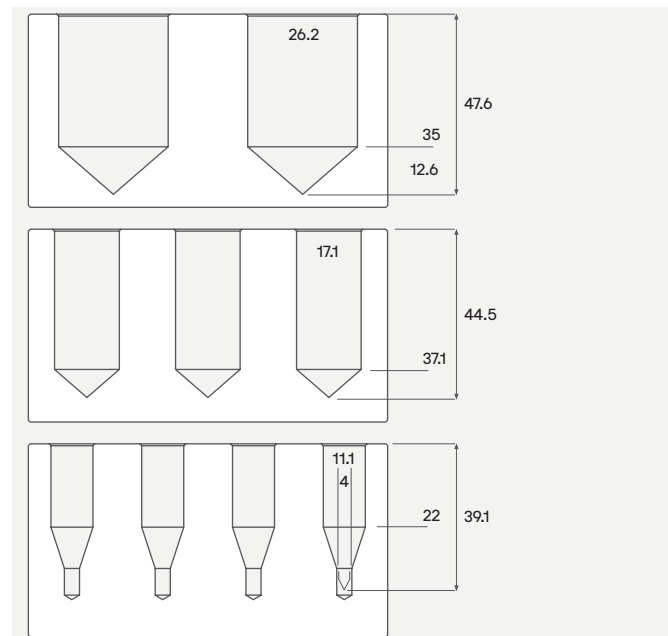
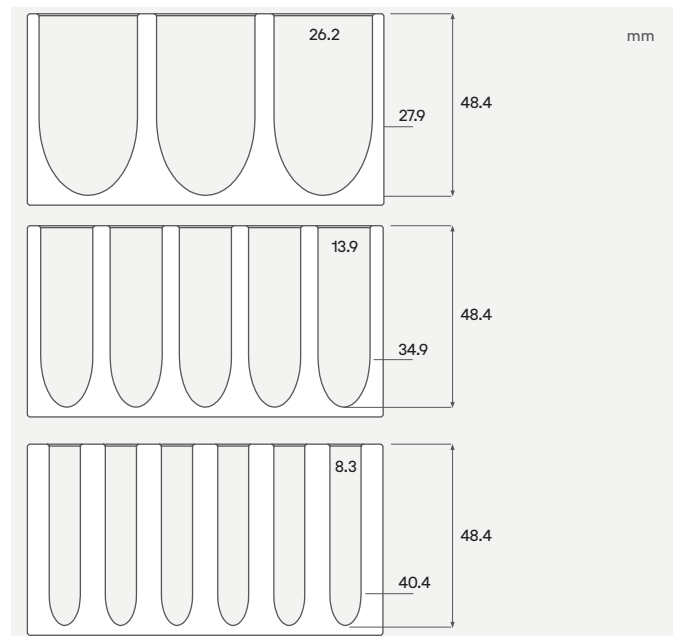


## CCT-W09-COMBO Block

Block for Conical centrifuges tubes

Code **A00000512**

- Centrifuge tube combination 1.5/15/50 ml
- Number of wells: 4/3/2
- Well depth: 39.1/44.5/47.6 mm
- Well size (mm): Ø 11.1/17.1/29

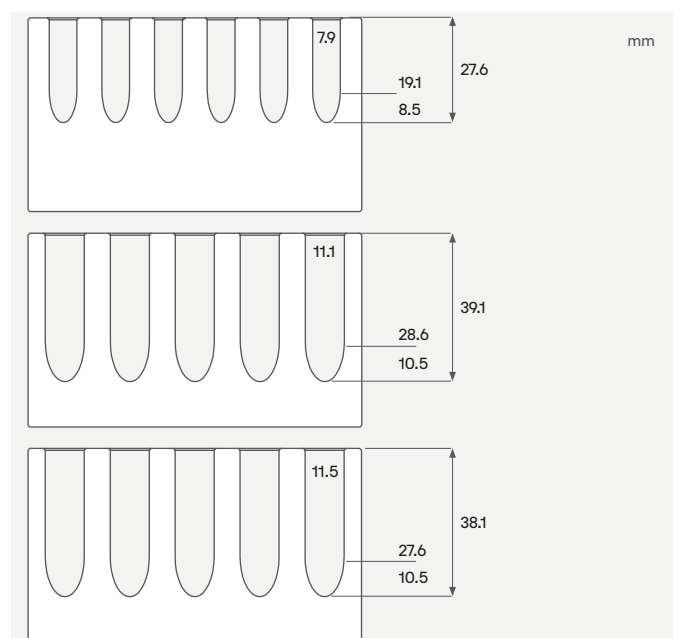


## MCT-W21-COMBO

Block for microcentrifuge tube

Code **A00000513**

- Centrifuge tube combination  
7.9/11.1/11.5 ml
- Number of wells: 6/10/5
- Well depth: 27.6/39.1/38.1 mm
- Well size (mm): Ø 7.9/11.1/11.5



# Blocks for Vials

Suitable for reaction vials, often used in chemistry and pharmaceutical applications for compound synthesis, extraction, or sample preparation.

| Velp code | Description          | Suitable for | Well Size (mm) | No. of Wells | Well Depth (mm) |
|-----------|----------------------|--------------|----------------|--------------|-----------------|
| A00000514 | VLS-W20-D120-A Block | 12 mm vials  | Ø 12.7         | 20           | 30              |
| A00000515 | VLS-W20-D150-A Block | 15 mm vials  | Ø 15.8         | 20           | 35              |
| A00000516 | VLS-W15-D160-A Block | 16 mm vials  | Ø 16.4         | 15           | 45              |
| A00000517 | VLS-W12-D170-A Block | 17 mm vials  | Ø 17.8         | 12           | 45              |
| A00000518 | VLS-W12-D190-A Block | 19 mm vials  | Ø 19.7         | 12           | 45              |
| A00000519 | VLS-W09-D210-A Block | 21 mm vials  | Ø 21.7         | 9            | 45              |
| A00000520 | VLS-W08-D230-A Block | 23 mm vials  | Ø 23.8         | 8            | 45              |
| A00000521 | VLS-W08-D250-A Block | 25 mm vials  | Ø 25.8         | 8            | 45              |
| A00000522 | VLS-W06-D280-A Block | 28 mm vials  | Ø 28.8         | 6            | 45              |

## VLS-W20-D120-A

Block for Vials

Code A00000514

- Tube type: 12 mm vials
- Number of wells: 20
- Well depth: 30 mm
- Well size (mm): Ø 12.7

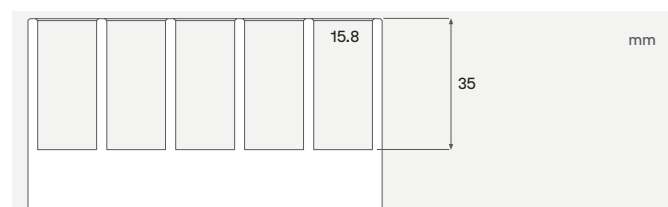
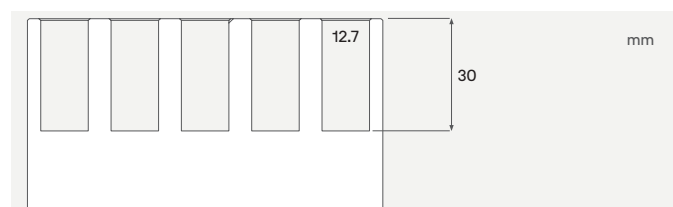


## VLS-W20-D150-A

Block for Vials

Code A00000515

- Tube type: 15 mm vials
- Number of wells: 20
- Well depth: 35 mm
- Well size (mm): Ø 15.8



## VLS-W15-D160-A

Block for Vials

Code A00000516

- Tube type: 16 mm vials
- Number of wells: 15
- Well depth: 45 mm
- Well size (mm): Ø 16.4

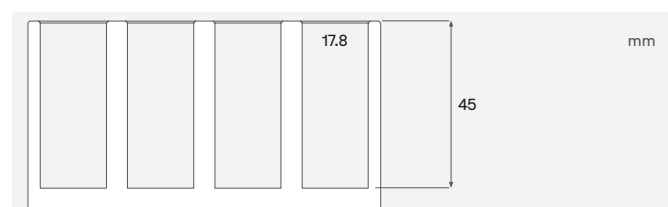
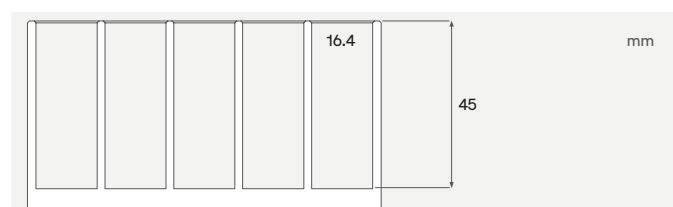


## VLS-W12-D170-A

Block for Vials

Code A00000517

- Tube type: 17 mm vials
- Number of wells: 12
- Well depth: 45 mm
- Well size (mm): Ø 17.8

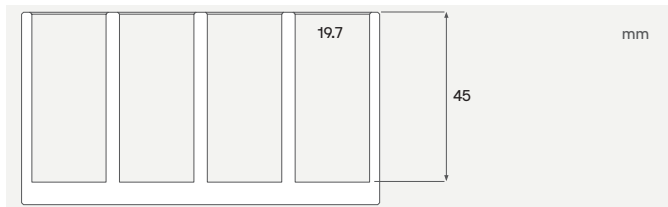


## VLS-W12-D190-A

Block for Vials

Code A00000518

- Tube type: 19 mm vials
- Number of wells: 12
- Well depth: 45 mm
- Well size (mm): Ø 19.7

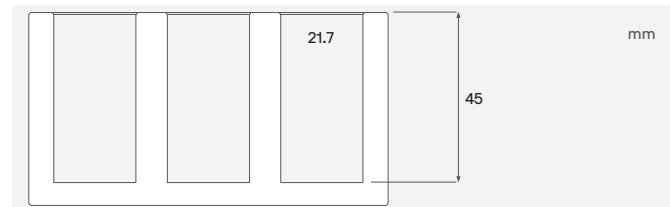


## VLS-W09-D210-A

Block for Vials

Code A00000519

- Tube type: 21 mm vials
- Number of wells: 9
- Well depth: 45 mm
- Well size (mm): Ø 21.7

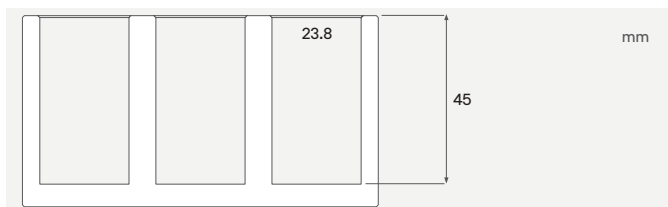


## VLS-W08-D230-A

Block for Vials

Code A00000520

- Tube type: 23 mm vials
- Number of wells: 8
- Well depth: 45 mm
- Well size (mm): Ø 23.8

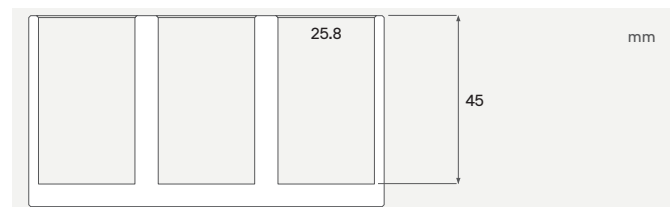


## VLS-W08-D250-A

Block for Vials

Code A00000521

- Tube type: 25 mm vials
- Number of wells: 8
- Well depth: 45 mm
- Well size (mm): Ø 25.8

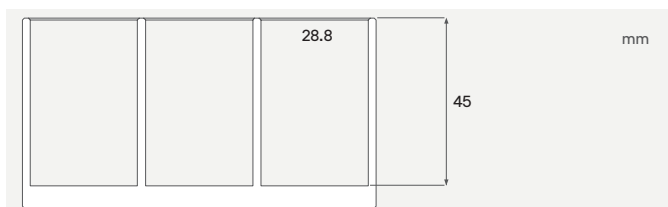


## VLS-W06-D280-A

Block for Vials

Code A00000522

- Tube type: 28 mm vials
- Number of wells: 6
- Well depth: 45 mm
- Well size (mm): Ø 28.8



# Blocks for PCR

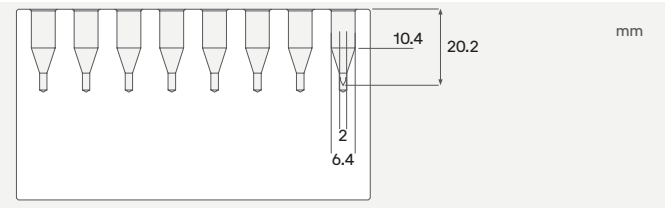
Specially designed for PCR (Polymerase Chain Reaction) applications, ensuring uniform heating and precise temperature control during DNA amplification and related molecular biology workflows, as well as diagnostics and genetic research.

| Velp code | Description          | Suitable for                                     | Well Size (mm) | No. of Wells | Well Depth (mm) |
|-----------|----------------------|--------------------------------------------------|----------------|--------------|-----------------|
| A00000523 | PCR-W64-V002-A Block | 64 × individual PCR tubes (0.2 ml tubes)         | Ø 6.6          | 64           | 20.2            |
| A00000524 | PCR-W80-V002-A Block | 10 × 8 individual PCR tube strips (0.2 ml tubes) | Ø 6.6          | 80           | 15.5            |
| A00000525 | PCR-W96-V002-A Block | 1 × 96 – well PCR plate (0.2 ml tubes)           | Ø 6.6          | 96           | 15.5            |

## PCR-W64-V002-A

Block for PCR  
Code **A00000523**

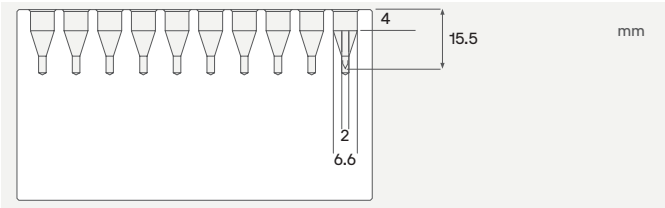
- Tube type: Individual PCR tubes (0.2 ml tubes)
- Number of wells: 64
- Well depth: 20.2 mm
- Well size (mm): Ø 6.4



## PCR-W80-V002-A

Block for PCR  
Code **A00000524**

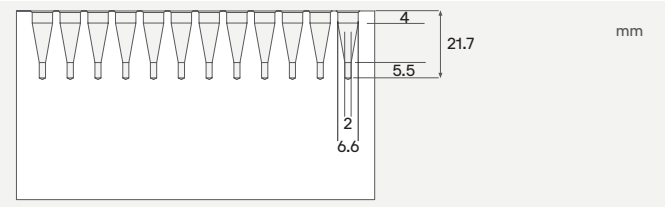
- Tube type: Individual PCR tube strips (0.2 ml tubes)
- Number of wells: 80
- Well depth: 15.5 mm
- Well size (mm): Ø 6.6



## PCR-W96-V002-A

Block for Vials  
Code **A00000525**

- Tube type: PCR plate (0.2 ml tubes)
- Number of wells: 96
- Well depth: 15.5 mm
- Well size (mm): Ø 6.6



# Blocks for COD

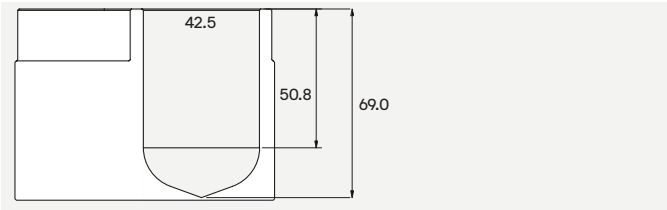
Dedicated to COD (Chemical Oxygen Demand) analysis in environmental testing, ensuring accurate digestion of water and wastewater samples under controlled conditions.

| Velp code | Description          | Suitable for                         | Well Size (mm) | No. of Wells | Well Depth (mm) |
|-----------|----------------------|--------------------------------------|----------------|--------------|-----------------|
| A00000529 | COD-W04-D420-A Block | Round bottom COD test tube (42mm)    | Ø 42           | 4            | 51              |
| A00000530 | COD-W20-COMBO Block  | Round bottom COD test tube (16/22mm) | Ø 16<br>Ø 22   | 18<br>2      | 47<br>45.5      |
| A00000494 | COD-W24-D160-A Block | Round bottom COD test tube (16mm)    | Ø 16           | 24           | 47              |

## COD-W04-D420-A

Block for COD  
Code **A00000529**

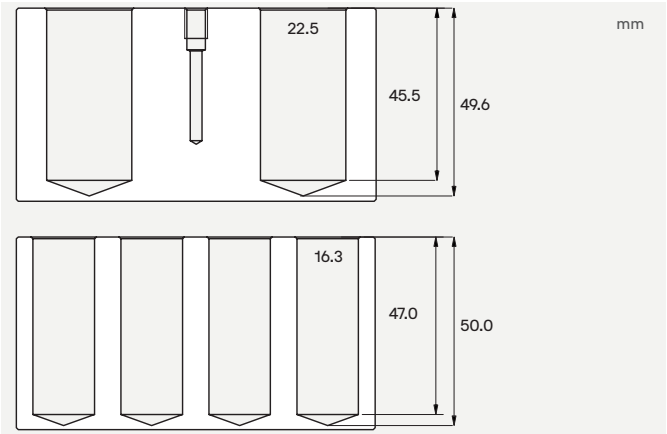
- Tube type: Round bottom COD test tube (42mm)
- Number of wells: 4
- Well depth: 42 mm
- Well size (mm): Ø 51



## COD-W20-COMBO

Block for COD  
Code **A00000530**

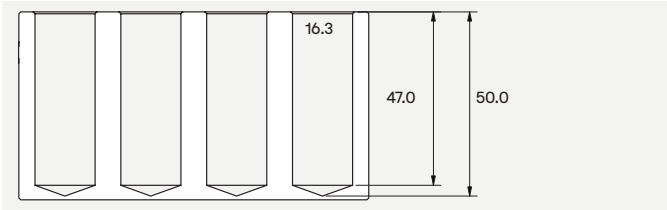
- Tube type: Round bottom COD test tube (6 / 22mm)
- Number of wells: 20
- Well depth: 47 / 45.5 mm
- Well size (mm): Ø 16 / 22



## COD-W24-D160-A

Block for COD  
Code **A00000494**

- Tube type: Round bottom COD test tube (16mm)
- Number of wells: 24
- Well depth: 47 mm
- Well size (mm): Ø 16



# Technical Data

|                                                  | ECODryBlock                                      |
|--------------------------------------------------|--------------------------------------------------|
| User interface                                   | Digital                                          |
| Set-up plate material                            | Aluminium alloy                                  |
| Temperature range                                | Room temp. +5°C - 165°C (0,5 °C steps)           |
| External temperature sensor connection           | Pt100, Pt1000 Probes                             |
| Temperature stability within the blocks at 37°C  | ±0.2 °C                                          |
| Temperature homogeneity at 37°C                  | ±0.2 °C                                          |
| Temperature stability within the blocks at 60°C  | ±0.4 °C                                          |
| Temperature homogeneity at 60°C                  | ±0.4 °C                                          |
| Temperature stability within the blocks at 165°C | ±0.5 °C                                          |
| Temperature homogeneity at 165°C                 | ±0.5 °C                                          |
| Timer                                            | Yes – 1 min - 99 h 59 min                        |
| Hot plate warning system                         | On Display (when the temperature is above 50 °C) |
| Weight                                           | 2.1 kg (4.6 lb)                                  |
| Weight no ControlPad                             | 1.3 kg (2.9 lb)                                  |
| Dimensions (WxHxD)                               | 228x92.5x350 mm<br>(8.97x3.64x13.77 in)          |
| Dimensions (WxHxD) no ControlPad                 | 207x92.5x195 mm<br>(8.15x3.64x7.68 in)           |

## Service & Support

Velp products are designed by our engineers to resist years of laboratory use.

Our products are manufactured with premium materials to guarantee the best performance with maximum safety.

According to our experience, a proper and regular maintenance is necessary to ensure the highest performance of analytical instrument. Velp Service Department and Velp Official Partners are always ready to offer you maintenance and service support tailored to your needs.

Get the support you need choosing the options:

- Help-desk and Remote support
- Technical Assistance
- Analytical Support

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