

# Standard-Incubators



**Avantgarde.Line**  
BD | BF series

**Classic.Line**  
B | BD | BF series

**Solid.Line**  
BD-S series



# PRODUCT SELECTION INCUBATORS

|  | Classic.Line          | Classic.Line           | Avantgarde.Line       | Solid.Line               | Classic.Line           | Avantgarde.Line       |
|--|-----------------------|------------------------|-----------------------|--------------------------|------------------------|-----------------------|
| Series   | <b>B</b><br>› Page 18 | <b>BD</b><br>› Page 20 | <b>BD</b><br>› Page 6 | <b>BD-S</b><br>› Page 30 | <b>BF</b><br>› Page 22 | <b>BF</b><br>› Page 9 |
| <b>Model</b>   |                       |                        |                       |                          |                        |                       |
| Model 23   | -                     | ●                      | -                     | -                        | -                      | -                     |
| Model 28   | ●                     | -                      | -                     | -                        | -                      | -                     |
| Model 53   | -                     | -                      | -                     | -                        | -                      | -                     |
| Model 56   | -                     | -                      | ●                     | ●                        | -                      | ●                     |
| Model 115  | -                     | -                      | ●                     | ●                        | -                      | ●                     |
| Model 260  | -                     | -                      | ●                     | -                        | -                      | ●                     |
| Model 400  | -                     | ●                      | -                     | -                        | ●                      | -                     |
| Model 720  | -                     | -                      | ●                     | -                        | -                      | ●                     |
| <b>General data</b>  |                       |                        |                       |                          |                        |                       |
| Temperature range [°C]                                     | 30...70               | -                      | -                     | -                        | -                      | -                     |
| Temperature range 5 °C above ambient temperature to [°C]   | -                     | 100                    | 100                   | 70                       | 100                    | -                     |
| Temperature range 7-8 °C above ambient temperature to [°C] | -                     | -                      | -                     | -                        | -                      | 100                   |
| Temperature range 10 °C above ambient temperature to [°C]  | -                     | -                      | -                     | -                        | -                      | 100                   |
| Interface  | -                     | RS 422                 | USB                   | -                        | RS 422                 | USB                   |
| Natural convection   | ●                     | ●                      | ●                     | ●                        | -                      | -                     |
| Forced convection  | -                     | -                      | -                     | -                        | ●                      | ●                     |
| <b>Controller and timer functions</b>                      |                       |                        |                       |                          |                        |                       |
| Controller display   | analog                | LED                    | LCD                   | LED                      | LED                    | LCD                   |
| Ramp function  | -                     | ●                      | ●                     | ●                        | ●                      | ●                     |
| Time delayed OFF   | -                     | ●                      | ●                     | ●                        | ●                      | ●                     |
| Time delayed ON  | -                     | -                      | ●                     | -                        | ●                      | ●                     |
| Temperature dependent delayed OFF                          | -                     | -                      | ●                     | -                        | ●                      | ●                     |
| Adjustable fan speed                                       | -                     | -                      | -                     | -                        | ●                      | ●                     |
| Real-time clock  | -                     | -                      | ○                     | -                        | -                      | ○                     |
| Class 3.1 independent temperature safety device            | -                     | ●                      | ●                     | ●                        | ●                      | ●                     |
| Temperature alarm, acoustic                                | -                     | ○                      | ○                     | -                        | ○                      | ○                     |
| Temperature alarm, visual                                  | -                     | ●                      | ●                     | ●                        | ●                      | ●                     |
| ● Standard equipment   ○ Option                            |                       |                        |                       |                          |                        |                       |

# Incubators

# Avantgarde.Line

|                           |        |
|---------------------------|--------|
| Series BD Avantgarde.Line | Page 6 |
|---------------------------|--------|

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|                           |        |
|---------------------------|--------|
| Series BF Avantgarde.Line | Page 9 |
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|                         |         |
|-------------------------|---------|
| Options and Accessories | Page 12 |
|-------------------------|---------|

The completely redesigned Avantgarde.Line incubators with natural convection or forced convection are now the perfect solution when it comes to meeting growth and incubation requirements. With their exceptional efficiency and perfect temperature accuracy thanks to the very latest APT.line™ technology, this new generation of incubators has real appeal.

## PRODUCT SELECTION INCUBATORS AVANTGARDE.LINE

| Features   | Series BD Avantgarde.Line<br><small>› Page 6</small> | Series BF Avantgarde.Line<br><small>› Page 9</small> |
|--|--|--|
| <b>Model</b>   |  |  |
| Model 56   | •  | •  |
| Model 115  | •  | •  |
| Model 260  | •  | •  |
| Model 720  | •  | •  |
| <b>General data</b>  |  |  |
| Temperature range 5 °C above ambient temperature to [°C]   | 100  | –  |
| Temperature range 7-8 °C above ambient temperature to [°C] | –  | 100  |
| Temperature range 10 °C above ambient temperature to [°C]  | –  | 100  |
| USB interface  | •  | •  |
| Natural convection   | •  | –  |
| Forced convection  | –  | •  |
| <b>Controller and timer functions</b>                      |  |  |
| Controller display   |  | LCD  |
| Ramp function  | •  | •  |
| Time delayed OFF   | •  | •  |
| Time delayed ON  | •  | •  |
| Temperature dependent delayed OFF                          | •  | •  |
| Adjustable fan speed                                       | –  | •  |
| Class 3.1 independent temperature safety device            | •  | •  |
| Temperature alarm, visual                                  | •  | •  |

•Standard equipment

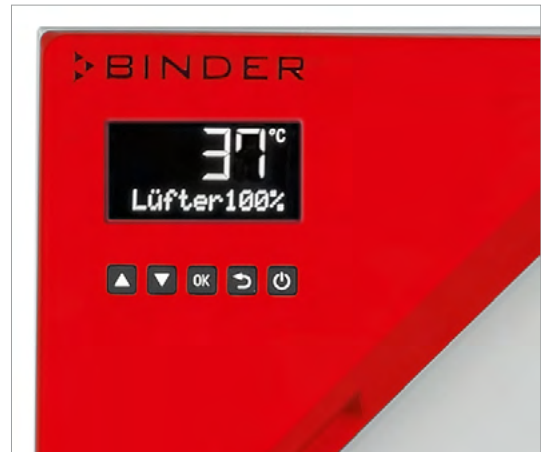
## ADVANTAGES AT A GLANCE



### **EASY DATA LOGGING**

Series BD, BF

A USB connector comes standard.



### **EASY, INTUITIVE HANDLING**

Series BD, BF

The state-of-the-art controller is equipped with an easy-to-read alphanumeric display with various functions facilitating dialog with the unit and the readability of data.



### **BEST ENERGY EFFICIENCY ON THE MARKET AND LOW INSTALLATION REQUIREMENTS**

Series BD, BF

thanks to low heat dissipation and an optimized heating system.



### **COMPLETELY HOMOGENEOUS TEMPERATURE DISTRIBUTION**

Series BF

This feature provides excellent spatial and temporal temperature accuracy with the all-new generation of APT.line™ technology.

## Series BD Avantgarde.Line | with natural convection

The BD Avantgarde.Line series is specially designed for gentle incubation of organisms, as well as conditioning of heat-sensitive media. The new design of the units and the homogeneous temperature distribution ensure the very best results.



BD 56 model

### MAIN FEATURES

- Temperature range: ambient temperature plus 5 °C to 100 °C
- High temperature accuracy thanks to APT.line™ technology
- Natural convection
- Controller with LCD display
- Electromechanical control of the exhaust air flap
- Inner door made of tempered safety glass
- 2 chrome-plated racks
- Units up to 115 L are stackable
- Class 3.1 integrated independent temperature safety device (DIN 12880) with visual alarm
- Ergonomic handle design

### AVAILABLE SIZES

| Model  | Interior volume [L] | Online data sheets  |
|--------|---------------------|---|
| BD 56  | 57                  | › <a href="https://go2binder.com/en-BD56">go2binder.com/en-BD56</a>   |
| BD 115 | 112                 | › <a href="https://go2binder.com/en-BD115">go2binder.com/en-BD115</a> |
| BD 260 | 253                 | › <a href="https://go2binder.com/en-BD260">go2binder.com/en-BD260</a> |
| BD 720 | 737                 | › <a href="https://go2binder.com/en-BD720">go2binder.com/en-BD720</a> |



### TIPS & TRICKS

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Find all details online  
[go2binder.com/en-BD-a](https://go2binder.com/en-BD-a)

## TECHNICAL DATA

| Description  | BD 56 | BD 115 | BD 260 | BD 720 |
|--|-------|--------|--------|--------|
| <b>Outer dimensions</b>                                  |       |        |        |        |
| Width net [mm]   | 560   | 710    | 810    | 1165   |
| Height net [mm]  | 625   | 735    | 965    | 1590   |
| Depth net [mm]   | 565   | 605    | 760    | 870    |
| <b>Internal Dimensions</b>                               |       |        |        |        |
| Width [mm]   | 360   | 510    | 610    | 960    |
| Height [mm]  | 420   | 530    | 760    | 1280   |
| Depth [mm]   | 380   | 420    | 545    | 600    |
| <b>Measures</b>  |       |        |        |        |
| Interior volume [L]                                      | 57    | 112    | 253    | 737    |
| Net weight of the unit (empty) [kg]                      | 39    | 54     | 85     | 169    |
| permitted load [kg]                                      | 70    | 150    | 270    | 315    |
| Load per rack [kg]                                       | 30    | 30     | 40     | 45     |
| <b>Performance Data Temperature</b>                      |       |        |        |        |
| Temperature range 5 °C above ambient temperature to [°C] | 100   | 100    | 100    | 100    |
| Temperature variation at 37 °C [± K]                     | 0.3   | 0.3    | 0.3    | 0.7    |
| Temperature fluctuation at 37 °C [± K]                   | 0.1   | 0.1    | 0.2    | 0.1    |
| Heating-up time to 37 °C [min]                           | 42    | 55     | 60     | 70     |
| Recovery time after 30 seconds door open at 37 °C [min]  | 15    | 15     | 16     | 23     |
| <b>Electrical data</b>                                   |       |        |        |        |
| Nominal power (version 120 V) [kW]                       | 0.3   | 0.35   | 0.95   | –      |
| Nominal power (version 230 V) [kW]                       | 0.3   | 0.35   | 0.85   | 1.65   |
| Nominal power (version 240 V) [kW]                       | –     | –      | –      | 1.75   |
| <b>Fixtures</b>  |       |        |        |        |
| Number of shelves (std./max.)                            | 2/4   | 2/5    | 2/8    | 2/16   |

## ORDERING INFORMATION [Art. No.]

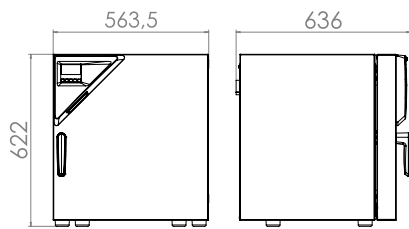
**Further details:** Go to [www.binder-world.com](http://www.binder-world.com) > Search > Enter Article Number

| Voltage          | Option model | BD 56     | BD 115    | BD 260    | BD 720    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| 240 V 1 50/60 Hz | Standard     | –         | –         | –         | 9010-0332 |
| 230 V 1 50/60 Hz | Standard     | 9010-0323 | 9010-0325 | 9010-0329 | 9010-0331 |
| 120 V 1 50/60 Hz | Standard     | 9010-0324 | 9010-0326 | 9010-0330 | –         |

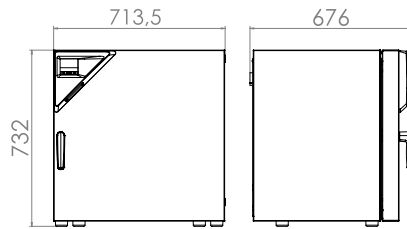
► You will find a selection of options, accessories and services suitable for each product on page 12

DIMENSIONS incl. fittings and connections [mm]

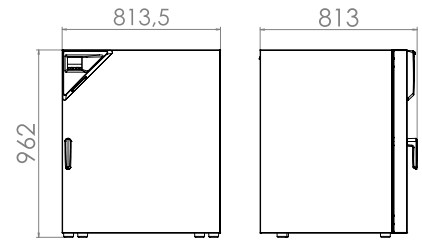
BD 56



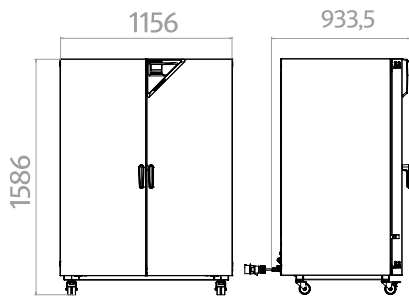
BD 115



BD 260



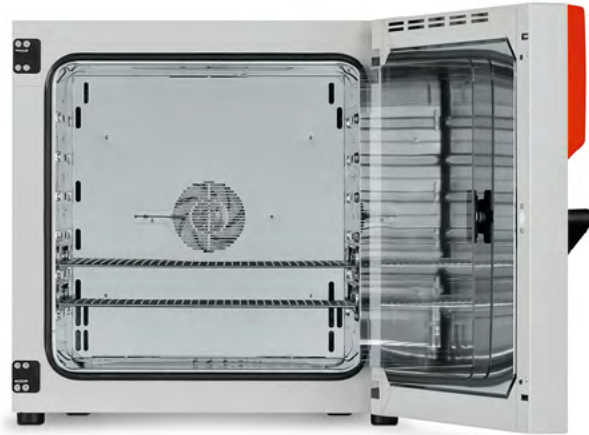
BD 720





## Series BF Avantgarde.Line | with forced convection

The BINDER incubator of the BF Avantgarde.Line series with forced convection is suitable for all gentle incubation applications, particularly under a full load and large batch throughputs. This incubator is extremely homogeneous and has quick recovery times.



BF 115 model

### MAIN FEATURES

- Temperature range (model 56 | 260): ambient temperature plus 7 °C to 100 °C
- Temperature range (model 115): ambient temperature plus 8 °C to 100 °C
- High temperature accuracy thanks to APT.line™ technology
- Forced convection
- Controller with LCD display
- Electromechanical control of the exhaust air flap
- Inner door made of tempered safety glass
- 2 chrome-plated racks
- Units up to 115 L are stackable
- Class 3.1 integrated independent temperature safety device (DIN 12880) with visual alarm

### AVAILABLE SIZES

| Model  | Interior volume [L] | Online data sheets  |
|--------|---------------------|---|
| BF 56  | 59                  | › <a href="https://go2binder.com/en-BF56">go2binder.com/en-BF56</a>   |
| BF 115 | 114                 | › <a href="https://go2binder.com/en-BF115">go2binder.com/en-BF115</a> |
| BF 260 | 257                 | › <a href="https://go2binder.com/en-BF260">go2binder.com/en-BF260</a> |
| BF 720 | 734                 | › <a href="https://go2binder.com/en-BF720">go2binder.com/en-BF720</a> |



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Find all details online  
[go2binder.com/en-BF-a](https://go2binder.com/en-BF-a)

## TECHNICAL DATA

| Description  | BF 56 | BF 115 | BF 260 | BF 720 |
|--|-------|--------|--------|--------|
| <b>Outer dimensions</b>                                    |       |        |        |        |
| Width net [mm]   | 560   | 710    | 810    | 1165   |
| Height net [mm]  | 625   | 735    | 965    | 1590   |
| Depth net [mm]   | 565   | 605    | 760    | 870    |
| <b>Internal Dimensions</b>                                 |       |        |        |        |
| Width [mm]   | 400   | 550    | 650    | 1000   |
| Height [mm]  | 440   | 550    | 780    | 1300   |
| Depth [mm]   | 340   | 380    | 510    | 565    |
| <b>Measures</b>  |       |        |        |        |
| Interior volume [L]  | 59    | 114    | 257    | 734    |
| Net weight of the unit (empty) [kg]                        | 39    | 54     | 85     | 166    |
| permitted load [kg]  | 70    | 150    | 270    | 315    |
| Load per rack [kg]   | 30    | 30     | 40     | 45     |
| <b>Performance Data Temperature</b>                        |       |        |        |        |
| Temperature range 7-8 °C above ambient temperature to [°C] | 100   | 100    | 100    | –      |
| Temperature range 10 °C above ambient temperature to [°C]  | –     | –      | –      | 100    |
| Temperature variation at 37 °C [± K]                       | 0.2   | 0.3    | –      | 0.3    |
| Temperature fluctuation at 37 °C [± K]                     | 0.1   | 0.1    | 0.1    | 0.1    |
| Heating-up time to 37 °C [min]                             | 6     | 8      | 7      | 15     |
| Recovery time after 30 seconds door open at 37 °C [min]    | 3     | 3      | 3      | 4      |
| <b>Electrical data</b>                                     |       |        |        |        |
| Nominal power (version 120 V) [kW]                         | 0.4   | 0.4    | 1      | –      |
| Nominal power (version 230 V) [kW]                         | 0.4   | 0.4    | 0.9    | 1.75   |
| Nominal power (version 240 V) [kW]                         | –     | –      | –      | 1.85   |
| <b>Fixtures</b>  |       |        |        |        |
| Number of shelves (std./max.)                              | 2/4   | 2/5    | 2/8    | 2/16   |

## ORDERING INFORMATION [Art. No.]

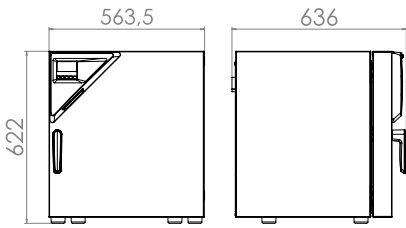
**Further details:** Go to [www.binder-world.com](http://www.binder-world.com) > Search > Enter Article Number

| Voltage          | Option model | BF 56     | BF 115    | BF 260    | BF 720    |
|------------------|--------------|-----------|-----------|-----------|-----------|
| 240 V 1 60 Hz    | Standard     | –         | –         | –         | 9010-0322 |
| 230 V 1 50/60 Hz | Standard     | 9010-0313 | 9010-0315 | 9010-0319 | 9010-0321 |
| 120 V 1 60 Hz    | Standard     | 9010-0314 | 9010-0316 | 9010-0320 | –         |

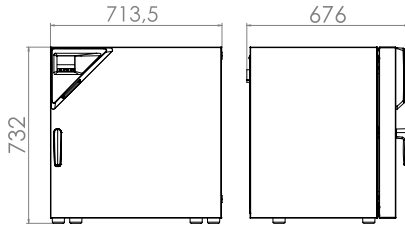
► You will find a selection of options, accessories and services suitable for each product on page 12

DIMENSIONS incl. fittings and connections [mm]

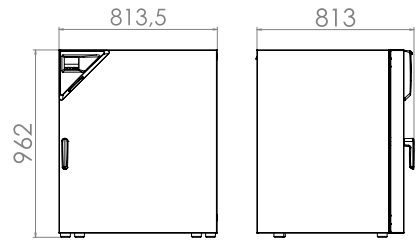
BF 56



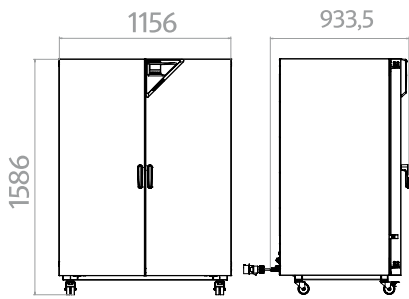
BF 115



BF 260



BF 720



## EXCERPT FROM OPTIONS AND ACCESSORIES

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### Access port with silicone plug

For introducing external measuring instruments. Large selection of different diameters and positions (left, right, or top)

Series BD, BF

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### Interior socket

Waterproof, switched flush-mounting box (CA3GD) for nominal voltage in unit interior, with cover and corresponding plug (nominal voltage; max. 500 W; max. 90 °C; protection class IP67)

Series BD, BF

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### Door lock

Lockable door handle prevents unauthorized access.

Series BD, BF

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### Shelf racks

Perforated shelves or shelf racks, chrome-plated or made from stainless steel.

Series BD, BF

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### Data Logger Kit T

Independent temperature data logging. The tailored product solution contains helpful accessories: From the magnetic mounting of the data logger to the BINDER unit and securing sensor cable for accurate readings.

Series BD, BF

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### Services

You can access our installation, maintenance, calibration, validation, or warranty services by taking out a Maintenance Service Agreement or by simply getting in touch when you need us.

More information is available in the accessories and services chapter.

Series BD, BF

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### BINDER INDIVIDUAL

Using a BINDER series production product as a basis, we develop individual solutions as a single unit or in small batches. All products are tested, certified, and supplied with a full functional guarantee and warranty. More information is available in the accessories and services chapter.

Series BD, BF

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► All extras online [go2binder.com/en-options](http://go2binder.com/en-options)

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Access port with silicone plug



Shaker operation in the chamber



Shelf



Data Logger for temperature





# Incubators Classic.Line

|                         |         |
|-------------------------|---------|
| Series B Classic.Line   | Page 18 |
| Series BD Classic.Line  | Page 20 |
| Series BF Classic.Line  | Page 22 |
| Options and Accessories | Page 24 |

An incubator from BINDER is the perfect solution for stable incubation processes. With their excellent technical profiles, a BINDER incubator produces reliable incubation of microbiological cultures and guarantee reproducible results in every routine test in the laboratory – even under high batch throughputs in long-term operation.

A BD Series incubator functions with natural convection; in a BF Series incubator, convection ensures rapid temperature equalization after the door is opened and quick recovery times.

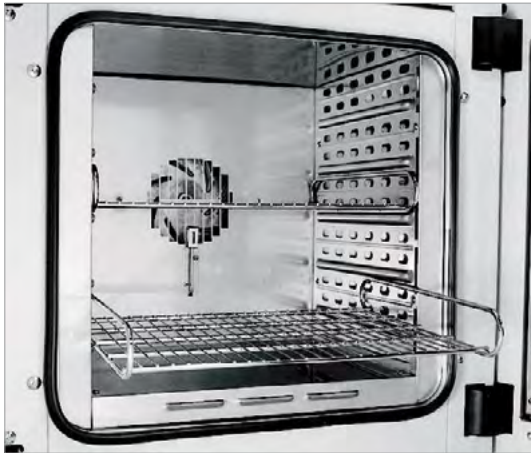
## PRODUCT SELECTION INCUBATORS CLASSIC.LINE

| Features   | Series B Classic.Line<br><small>› Page 18</small> | Series BD Classic.Line<br><small>› Page 20</small> | Series BF Classic.Line<br><small>› Page 22</small> |
|--|---|--|--|
| <b>Model</b>   |   |  |  |
| Model 23   | –   | •  | –  |
| Model 28   | •   | –  | –  |
| Model 400  | –   | •  | •  |
| <b>General data</b>                                      |   |  |  |
| Temperature range [°C]                                   | 30...70   | –  | –  |
| Temperature range 5 °C above ambient temperature to [°C] | –   | 100  | 100  |
| RS 422 interface   | –   | •  | •  |
| Natural convection                                       | •   | •  | –  |
| Forced convection  | –   | –  | •  |
| <b>Controller and timer functions</b>                    |   |  |  |
| Controller display                                       | Analog  | LED  | LED  |
| Ramp function  | –   | •  | •  |
| Time delayed OFF   | –   | •  | •  |
| Time delayed ON  | –   | –  | •  |
| Temperature dependent delayed OFF                        | –   | –  | •  |
| Adjustable fan speed                                     | –   | –  | •  |
| Class 3.1 independent temperature safety device          | –   | •  | •  |
| Temperature alarm, visual                                | –   | •  | •  |

•Standard equipment



## ADVANTAGES AT A GLANCE



### CONVENIENT WORK ENVIRONMENT

Series B, BD, BF

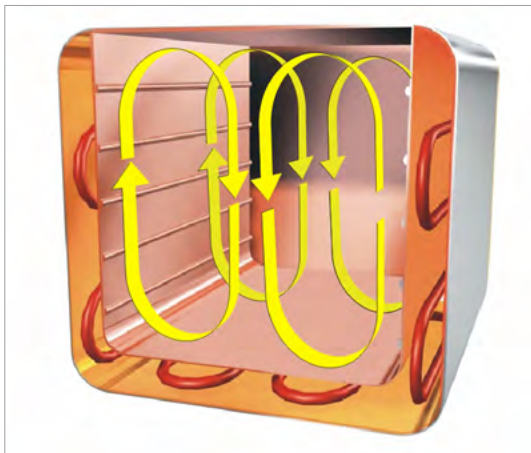
BINDER interior concept: highlights rack with tilt protection, no permanent fixtures and stainless-steel inner chamber.



### RELIABLE DECONTAMINATION

Series BD, BF

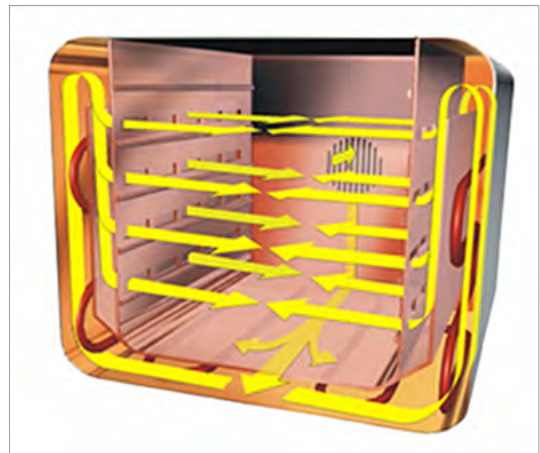
Decontamination is provided by our disinfection routine at 100°C.



### HOMOGENEOUS TEMPERATURE CONDITIONS WITH NATURAL CONVECTION

Series BD

Gentle temperature distribution provided by the APT.line™ preheating chamber technology.



### HOMOGENEOUS TEMPERATURE CONDITIONS WITH FORCED CONVECTION

Series BF

Long-term operational stability even under full load from the APT.line™ preheating chamber technology.

## Series B Classic.Line | with mechanical adjustment

With the B series incubator, you get a reliable and powerful unit in a solid configuration at a very attractive price.




B 28 model

### MAIN FEATURES

- Temperature range: 30 °C to 70 °C
- Hydro-mechanical thermostat
- Inner door made of tempered safety glass
- 2 chrome-plated racks

### AVAILABLE SIZES

| Model | Interior volume [L] | Online data sheets  |
|-------|---------------------|---|
| B 28  | 28                  | <a href="https://go2binder.com/en-B28">› go2binder.com/en-B28</a> |

 Find all details online  
[go2binder.com/en-B-c](https://go2binder.com/en-B-c)

## TECHNICAL DATA

| Description                            | B 28    |
|--|---------|
| <b>Outer dimensions</b>                |         |
| Width net [mm]                         | 580     |
| Height net [mm]                        | 405     |
| Depth net [mm]                         | 425     |
| <b>Internal Dimensions</b>             |         |
| Width [mm]                             | 400     |
| Height [mm]                            | 280     |
| Depth [mm]                             | 250     |
| <b>Measures</b>                        |         |
| Interior volume [L]                    | 28      |
| Net weight of the unit (empty) [kg]    | 23      |
| permitted load [kg]                    | 25      |
| Load per rack [kg]                     | 10      |
| <b>Performance Data Temperature</b>    |         |
| Temperature range [°C]                 | 30...70 |
| Temperature variation at 37 °C [± K]   | 1.5     |
| Temperature fluctuation at 37 °C [± K] | 1       |
| Heating-up time to 37 °C [min]         | 95      |
| <b>Electrical data</b>                 |         |
| Nominal power (version 120 V) [kW]     | 0.25    |
| Nominal power (version 230 V) [kW]     | 0.25    |
| <b>Fixtures</b>                        |         |
| Number of shelves (std./max.)          | 2/4     |

## ORDERING INFORMATION [Art. No.]

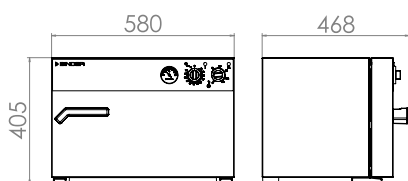
**Further details:** Go to [www.binder-world.com](http://www.binder-world.com) > Search > Enter Article Number

| Voltage          | Option model    | B 28      |
|------------------|-----------------|-----------|
| 230 V 1 50/60 Hz | Standard        | 9010-0002 |
|                  | with TB class 1 | 9010-0004 |
| 120 V 1 60 Hz    | Standard        | 9010-0067 |

► You will find a selection of options, accessories and services suitable for each product on page 24

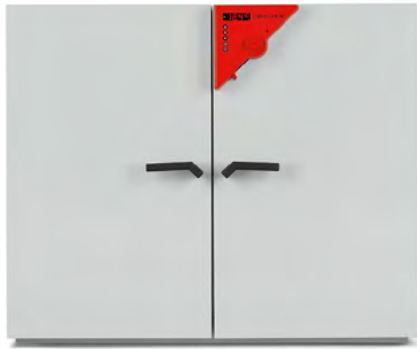
## DIMENSIONS incl. fittings and connections [mm]

B 28



## Series BD Classic.Line | with natural convection

The BINDER incubator of the BD series with natural convection is the specialist in long-term and stable continuous operation. This incubator is specially designed for gentle incubation of organisms, as well as conditioning of heat-sensitive media or microbiological heating.



BD 400 model

### MAIN FEATURES

- Temperature range: room temperature plus 5 °C to 100 °C
- APT.line™ preheating chamber technology
- natural convection
- Adjustable exhaust air flap
- Controller with timer functions
- Inner door made of tempered safety glass
- 2 chrome-plated racks
- Units up to 115 liters are stackable
- Class 3.1 independent temperature safety device (DIN 12880) with visual temperature alarm
- Computer interface: RS 422

### AVAILABLE SIZES

| Model  | Interior volume [L] | Online data sheets  |
|--------|---------------------|---|
| BD 23  | 20                  | <a href="https://go2binder.com/en-BD23">› go2binder.com/en-BD23</a>   |
| BD 400 | 400                 | <a href="https://go2binder.com/en-BD400">› go2binder.com/en-BD400</a> |

## TECHNICAL DATA

| Description  | BD 23 | BD 400 |
|--|-------|--------|
| <b>Outer dimensions</b>                                  |       |        |
| Width net [mm]   | 435   | 1235   |
| Height net [mm]  | 495   | 1025   |
| Depth net [mm]   | 520   | 765    |
| <b>Internal Dimensions</b>                               |       |        |
| Width [mm]   | 222   | 1000   |
| Height [mm]  | 330   | 800    |
| Depth [mm]   | 277   | 500    |
| <b>Measures</b>  |       |        |
| Interior volume [L]                                      | 20    | 400    |
| Net weight of the unit (empty) [kg]                      | 27    | 135    |
| permitted load [kg]                                      | 25    | 90     |
| Load per rack [kg]                                       | 12    | 35     |
| <b>Performance Data Temperature</b>                      |       |        |
| Temperature range 5 °C above ambient temperature to [°C] | 100   | 100    |
| Temperature variation at 37 °C [± K]                     | 0.5   | 0.5    |
| Temperature fluctuation at 37 °C [± K]                   | 0.2   | 0.1    |
| Heating-up time to 37 °C [min]                           | 59    | 120    |
| Recovery time after 30 seconds door open at 37 °C [min]  | 20    | 10     |
| <b>Electrical data</b>                                   |       |        |
| Nominal power (version 120 V) [kW]                       | 0.2   | 0.85   |
| Nominal power (version 230 V) [kW]                       | 0.2   | 0.85   |
| <b>Fixtures</b>  |       |        |
| Number of shelves (std./max.)                            | 2/4   | 2/9    |

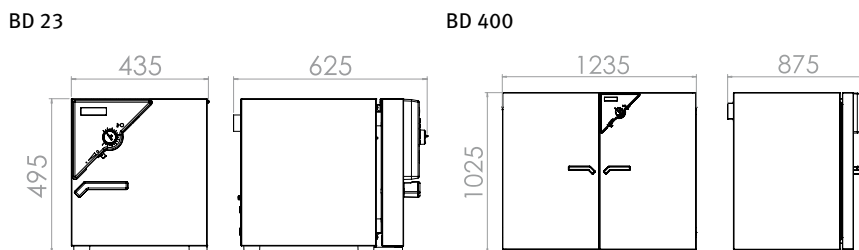
## ORDERING INFORMATION [Art. No.]

**Further details:** Go to [www.binder-world.com](http://www.binder-world.com) > Search > Enter Article Number

| Voltage          | Option model | BD 23     | BD 400    |
|------------------|--------------|-----------|-----------|
| 230 V 1 50/60 Hz | Standard     | 9010-0187 | 9010-0073 |
| 120 V 1 60 Hz    | Standard     | 9010-0189 | 9010-0176 |

► You will find a selection of options, accessories and services suitable for each product on page 24

## DIMENSIONS incl. fittings and connections [mm]



## Series BF Classic.Line | with forced convection

The BINDER incubator of the BF series with mechanical convection is suitable for all gentle incubation applications, particularly under a full load and large batch throughputs. This incubator is extremely homogeneous and has quick recovery times.



BF 400 model

### MAIN FEATURES

- Temperature range: room temperature plus 5 °C to 100 °C
- APT.line™ preheating chamber technology
- Adjustable fan speed
- Adjustable exhaust air flap
- Controller with timer functions
- Inner door made of tempered safety glass
- 2 chrome-plated racks
- Units up to 115 liters are stackable
- Class 3.1 independent temperature safety device (DIN 12880) with visual temperature alarm
- Computer interface: RS 422

### AVAILABLE SIZES

| Model  | Interior volume [L] | Online data sheets  |
|--------|---------------------|---|
| BF 400 | 400                 | > <a href="https://go2binder.com/en-BF400">go2binder.com/en-BF400</a> |



Find all details online  
[go2binder.com/en-BF-c](https://go2binder.com/en-BF-c)

## TECHNICAL DATA

| Description  | BF 400 |
|--|--------|
| <b>Outer dimensions</b>                                  |        |
| Width net [mm]   | 1235   |
| Height net [mm]  | 1025   |
| Depth net [mm]   | 765    |
| <b>Internal Dimensions</b>                               |        |
| Width [mm]   | 1000   |
| Height [mm]  | 800    |
| Depth [mm]   | 500    |
| <b>Measures</b>  |        |
| Interior volume [L]                                      | 400    |
| Net weight of the unit (empty) [kg]                      | 145    |
| permitted load [kg]                                      | 90     |
| Load per rack [kg]                                       | 35     |
| <b>Performance Data Temperature</b>                      |        |
| Temperature range 5 °C above ambient temperature to [°C] | 100    |
| Temperature variation at 37 °C [± K]                     | 0.4    |
| Temperature fluctuation at 37 °C [± K]                   | 0.1    |
| Heating-up time to 37 °C [min]                           | 12     |
| Recovery time after 30 seconds door open at 37 °C [min]  | 5      |
| <b>Electrical data</b>                                   |        |
| Nominal power (version 120 V) [kW]                       | 0.85   |
| Nominal power (version 230 V) [kW]                       | 0.85   |
| <b>Fixtures</b>  |        |
| Number of shelves (std./max.)                            | 2/9    |

## ORDERING INFORMATION [Art. No.]

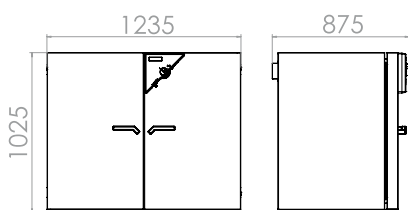
**Further details:** Go to [www.binder-world.com](http://www.binder-world.com) > Search > Enter Article Number

| Voltage          | Option model | BF 400    |
|------------------|--------------|-----------|
| 230 V 1 50/60 Hz | Standard     | 9010-0241 |
| 120 V 1 60 Hz    | Standard     | 9010-0242 |

► You will find a selection of options, accessories and services suitable for each product on page 24

## DIMENSIONS incl. fittings and connections [mm]

BF 400



## EXCERPT FROM OPTIONS AND ACCESSORIES

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### Access port with silicone plug

For introducing external measuring instruments. Large selection of different diameters and positions (left, right, or top)  
Series B, BD

---

### Interior socket

Waterproof, switched flush-mounting box (CA3GD) for nominal voltage in unit interior, with cover and corresponding plug (nominal voltage; max. 500 W; max. 90 °C; protection class IP67)  
Series B, BD

---

### Door lock

Lockable door handle prevents unauthorized access.  
Series B, BD

---

### Shelf racks

Perforated shelves or shelf racks, chrome-plated or made from stainless steel.  
Series B, BD, BF

---

### Data Logger Kit T

Independent temperature data logging. The tailored product solution contains helpful accessories: From the magnetic mounting of the data logger to the BINDER unit and securing sensor cable for accurate readings.  
Series B, BD

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### Services

You can access our installation, maintenance, calibration, validation, or warranty services by taking out a Maintenance Service Agreement or by simply getting in touch when you need us. More information is available in the accessories and services chapter.  
Series B, BD, BF

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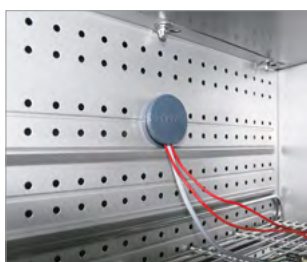
### BINDER INDIVIDUAL

Using a BINDER series production product as a basis, we develop individual solutions as a single unit or in small batches. All products are tested, certified, and supplied with a full functional guarantee and warranty. More information is available in the accessories and services chapter.  
Series B, BD, BF

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► All extras online [go2binder.com/en-options](http://go2binder.com/en-options)

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Access port with silicone plug



Shaker operation in the chamber



Shelf



Data Logger for temperature







# Incubators Solid.Line

BD-S Solid.Line series                      Page 30

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Options and Accessories                      Page 32

With its new Solid.Line range, BINDER is expanding its product portfolio. This new line embodies solid product design with great value for money. This is the ideal addition to BINDER's popular premium products, thus complementing the entire product range with BINDER's quality guarantee – Made in Germany.

## PRODUCT SELECTION INCUBATORS SOLID.LINE

| Features   | BD-S Solid.Line series |
|--|------------------------|
| › Page 30  |                        |
| <b>Model</b>   |                        |
| Model 56   | •                      |
| Model 115  | •                      |
| <b>General data</b>                                      |                        |
| Temperature range 5 °C above ambient temperature to [°C] | 70                     |
| Natural convection                                       | •                      |
| <b>Controller and timer functions</b>                    |                        |
| Controller display                                       | LED                    |
| Ramp function  | •                      |
| Time delayed OFF   | •                      |
| Class 3.1 independent temperature safety device          | •                      |
| Temperature alarm, visual                                | •                      |
| •Standard equipment                                      |                        |

## ADVANTAGES AT A GLANCE



### **EASY OPERATION OF THE UNIT**

Series BD-S

Using controller with digital display in °C and °F.



### **ADJUSTABLE EXHAUST AIR FLAP ABOVE THE UNIT**

Series BD-S

For setting the air change rates.

## BD-S Solid.Line series | with natural convection

The new products in the Solid.Line impress with their tried-and-tested BINDER quality and reliability. They are suited to incubation. The attributes of the Solid.Line are geared towards the application in question and therefore used in research and quality assurance.



BD-S 56 model

### MAIN FEATURES

- Temperature range: ambient temperature +5 °C to 70 °C
- APT.line™ preheating chamber technology
- Natural convection
- Adjustable exhaust air flap
- Controller with timer function
- Inner door made of tempered safety glass
- 1 chrome-plated rack
- Class 3.1 integrated independent temperature safety device (DIN 12880) with visual alarm

### AVAILABLE SIZES

| Model    | Interior volume [L] | Online data sheets  |
|----------|---------------------|---|
| BD-S 56  | 62                  | › <a href="https://go2binder.com/en-BD-S56">go2binder.com/en-BD-S56</a>   |
| BD-S 115 | 118                 | › <a href="https://go2binder.com/en-BD-S115">go2binder.com/en-BD-S115</a> |



Find all details online  
[go2binder.com/en-BD-S](https://go2binder.com/en-BD-S)

**TECHNICAL DATA**

| Description  | BD-S 56 | BD-S 115 |
|--|---------|----------|
| <b>Outer dimensions</b>                                  |         |          |
| Width net [mm]   | 595     | 745      |
| Height net [mm]  | 625     | 735      |
| Depth net [mm]   | 525     | 565      |
| <b>Internal Dimensions</b>                               |         |          |
| Width [mm]   | 400     | 550      |
| Height [mm]  | 440     | 550      |
| Depth [mm]   | 350     | 390      |
| <b>Measures</b>  |         |          |
| Interior volume [L]                                      | 62      | 118      |
| Net weight of the unit (empty) [kg]                      | 38      | 54       |
| permitted load [kg]                                      | 30      | 75       |
| Load per rack [kg]                                       | 15      | 20       |
| <b>Performance Data Temperature</b>                      |         |          |
| Temperature range 5 °C above ambient temperature to [°C] | 70      | 70       |
| Temperature variation at 37 °C [± K]                     | 0.7     | 0.5      |
| Temperature fluctuation at 37 °C [± K]                   | 0.1     | 0.2      |
| Recovery time after 30 seconds door open at 37 °C [min]  | 15      | 15       |
| <b>Electrical data</b>                                   |         |          |
| Nominal power (version 120V) [kW]                        | 0.3     | 0.35     |
| Nominal power (version 230V) [kW]                        | 0.3     | 0.35     |
| <b>Environment-specific data</b>                         |         |          |
| Energy consumption at 37 °C [Wh/h]                       | 25      | 25       |
| <b>Fixtures</b>  |         |          |
| Number of shelves (std./max.)                            | 1/3     | 1/5      |

**ORDERING INFORMATION [Art. No.]**

**Further details:** Go to [www.binder-world.com](http://www.binder-world.com) > Search > Enter Article Number

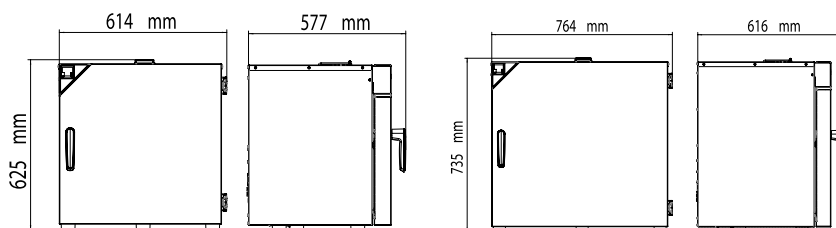
| Voltage          | Option model | BD-S 56   | BD-S 115  |
|------------------|--------------|-----------|-----------|
| 230 V 1 50/60 Hz | Standard     | 9090-0016 | 9090-0022 |
| 120 V 1 60 Hz    | Standard     | 9090-0017 | 9090-0023 |

► You will find a selection of options, accessories and services suitable for each product on page 32

**DIMENSIONS incl. fittings and connections [mm]**

BD-S 56

BD-S 115



# BINDER products

CO<sub>2</sub> incubators

Incubators

Cooling incubators

Growth chambers

Ultralow temperature freezers

Drying and heating chambers

Safety drying chambers

Vacuum drying chambers

Constant climate chambers

Dynamic climate chambers



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