

Model FP 3.1 | Drying and heating chambers with forced convection and enhanced timer functions

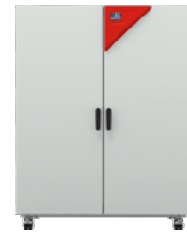

FP 56



FP 115



FP 260



FP 720

Product features	
FP 1.1 (Classic.Line) - old	FP 3.1 (Avantgarde.Line) - new
<ul style="list-style-type: none"> • APT.line™ preheating chamber technology • Adjustable fan speed • Temperature range: +5°C above ambient temperature to +300 °C • Adjustable exhaust air flap • Controller with time-segment and real-time programming • 2 chrome-plated racks • Class 2 independent adjustable temperature safety device (DIN 12880) with visual alarm • Computer interface: RS 422 	<ul style="list-style-type: none"> • High temperature accuracy thanks to APT.line™ technology • Adjustable fan speed • Temperature range: +10°C above ambient temperature to +300 °C • User-friendly controller with large display • Controller with time-segment and real-time programming • Electromechanical control of the exhaust air flap • 2 chrome-plated racks • Stackable • class 2 and 3.1 independent adjustable temperature safety device (DIN 12880) with visual and acoustic alarm selectable on controller • Ergonomic handle design • Ethernet interface • USB port for recording data

TECHNICAL DATA				
Designation	FP 056	FP 115	FP 260	FP 720
Article Number	9010-0363	9010-0364	9010-0365	9010-0366
Designation	FP 056-UL	FP 115-UL	FP 260-UL	FP 720-UL
Article Number	9010-0367	9010-0368	9010-0369	9010-0370
Performance Data Temperature				
Temperature range +10 °C above ambient temperature to [°C]	300	300	300	
Temperature range +12 °C above ambient temperature to [°C]	-	-	-	300
Housing dimensions not incl. fittings and connections				
Width net [mm]	560	710	810	1160
Height net [mm]	622	732	962	1590
Depth net [mm]	596	636	786	816
Internal Dimensions				
Width [mm]	400	550	650	1000
Height [mm]	400	550	780	1300
Depth [mm]	342	383	512	574
Measures				
Interior volume [L]	60	116	259	741
Permitted load [kg]	70	150	270	315
Load per rack [kg]	30	30	40	45
Wall clearance back [mm]	160	160	160	160
Wall clearance sidewise [mm]	100	100	100	100
Electrical data				
Rated Voltage [V]	230 [120]	230 [120]	230 [240]	400 [208]
Power frequency [Hz]	50/60 [60]	50/60 [60]	50/60 [60]	50/60 [60]
Phase (Nominal voltage)	1~	1~	1~	3~
Doors				
Unit doors	1	1	1	2
Fixtures				
Number of shelves (std./max.)	2/4	2/5	2/8	2/16

All technical data is specified for unloaded units with standard equipment at an ambient temperature of +22 °C ±3 °C and a power supply voltage fluctuation of ±10 %. The temperature data is determined in accordance to BINDER factory standard following DIN 12880, observing the recommended wall clearances of 10 % of the height, width, and depth of the inner chamber. Technical data refers to 100 % fan speed. All indications are average values, typical for units produced in series. We reserve the right to change technical specifications at any time

OPTIONS				
Designation	Description	Art. -No.	Size	
Analog output 4-20 mA	for temperature values (output not adjustable)	8012-2188	all	
Access port with silicone plug	left			
		10 mm	8012-2198	all
		30 mm	8012-2210	all
		50 mm	8012-2213	all
		100 mm	8012-2207	115/260/720
	top			
		10 mm	8012-2199	all
		30 mm	8012-2211	all
		50 mm	8012-2214	all
		100 mm	8012-2208	115/260/720

	right			
		10 mm		8012-2206
		30 mm		8012-2212
		50 mm		8012-2215
		100 mm		8012-2209
				115/260/720
Gas-tight option model	Incl. additional measures for the greatest possible impermeability to gas; not in conjunction with access port or interior			8012-2216
	Incl. additional measures for the greatest possible impermeability to gas; not in conjunction with access port or interior			8012-2217
	Incl. additional measures for the greatest possible impermeability to gas; not in conjunction with access port or interior			8012-2218
HEPA air filter	On fresh air supply for unit; filter classification H14 (acc. to. EN 1822-1:2009, > 99.995% at 0.3 µm)			8012-2219
	On fresh air supply for unit; filter classification H14 (acc. to. EN 1822-1:2009, > 99.995% at 0.3 µm)			8012-2220
	On fresh air supply for unit; filter classification H14 (acc. to. EN 1822-1:2009, > 99.995% at 0.3 µm)			8012-2221
	On fresh air supply for unit; filter classification H14 (acc. to. EN 1822-1:2009, > 99.995% at 0.3 µm)			8012-2222
Inert gas connection	with gas inlet and outlet, Ø 10 mm, incl. additional measures to			8012-2195
	with gas inlet and outlet, Ø 10 mm, incl. additional measures to			8012-2196
	with gas inlet and outlet, Ø 10 mm, incl. additional measures to			8012-2197
Interior lighting	1x 15 W interior lighting (230V)			8012-2190
	2x 15 W interior lighting (400V)			8012-2191
Inner chamber, reinforced	max. total load 85 kg			8012-2223
	max. total load 170 kg			8012-2224
	max. total load 300 kg			8012-2225
	max. total load 350 kg			8012-2226
Calibration certificate, temperature	for temperature, measurement in center of chamber at specified temperature			8012-2227
	temperature measurement incl. certificate and 27 measuring points at specified temperature			8012-2228
	temperature measurement incl. certificate, 15- 18 measuring points at specified temperature			8012-2229
	temperature measurement incl. certificate, 9 measuring points at specified temperature			8012-2230
Calibration certificate, expanded	for temperature; for extending the measurement in center of			8012-2231
Measurement of air exchange rate	in accordance with ASTM D5374, definition and protocol according			8012-2232
Pt 100 temperature sensor	additional flexible Pt 100, interior, for displaying the temperature on			8012-2193
Door gasket	made of FKM, silicone-free			8012-2233
	made of FKM, silicone-free			8012-2234
	made of FKM, silicone-free			8012-2235
	made of FKM, silicone-free			8012-2236

ACCESSORIES			
Designation	Description	Art. -No.	Size
APT-COM™ 4 BASIC Edition	for simple logging and documentation requirements with up to 5	9053-0039	all
APT-COM™ 4 GLP Edition	for working under GLP-compliant conditions. Measured values are	9053-0042	all
APT-COM™ 4 PROFESSIONAL-Edition	convenient unit and user management built on the BASIC edition. Suitable for networking up to 100 units.	9053-0040	all
Shelf, perforated	stainless steel	6004-0182	56
	stainless steel	6004-0183	115
	stainless steel	6004-0185	260
	stainless steel	6004-0187	720
Rack	stainless steel	8012-2085	56
	stainless steel	6004-0151	115
	stainless steel	6004-0153	260
	stainless steel	6004-0155	720
	chrome plated	8012-2038	56
	chrome plated	8012-2040	115
	chrome plated	8012-2042	260
Rack, heavy load	Stainless steel, max. load per rack 70 kg	6004-0200	260
	Stainless steel, max. load per rack 70 kg	6004-0204	720
Rubber pads	set anti-slip feet	8012-2030	all

pH-neutral detergent	concentrated, for gentle remove of residual contaminants; 1 kg	1002-0016	all
Qualifizierungsunterlagen	Digital in PDF format IQ/OQ documents – supporting documents for validation performed by customers, consisting of: IQ/OQ checklists incl. calibration guide and comprehensive unit documentation; parameters: temperature, CO ₂ , O ₂ , pressure, depending on unit	7057-0001	all
	Digital in PDF format, IQ/OQ/PQ documents – supporting documents for validation performed by customers, according to	7057-0005	all
	Hard copy inside folder, IQ/OQ documents – supporting documents for validation performed by customers, consisting of: IQ/OQ	7007-0001	all
	Hard copy inside folder, IQ/OQ/PQ documents – supporting	7007-0005	all
Table on castors	stable cart, casters with locking brakes, dimensions: W 1000 x D 800	9051-0018	56/115
	stable cart, casters with locking brakes, dimensions: W 1300 x D 800	9051-0019	260