BAUMPRINT 18 SPECS

Preface

1.1 Notes for the reader

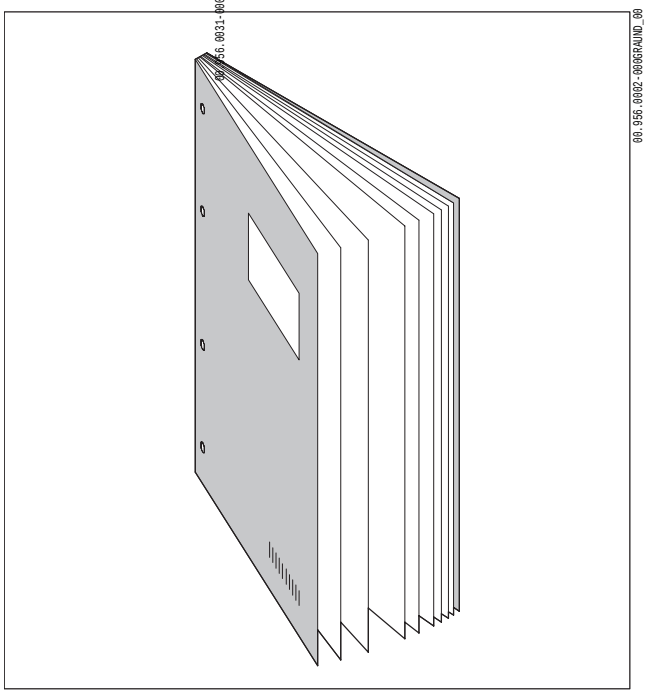

Fig. 1

Contents

This documentation provides you with information on the versions, specifications and technical characteristics of the printing press and the associated peripheral equipment.

Target group

This document is addressed to you if you

- think about purchasing a printing press;
- plan the installation and location of a printing press.

> **Note**
>
> Always observe all applicable safety rules whenever you use this information for planning and installation. The safety requirements in the operating manual must always be observed when the printing press is in operation.

Abbreviations used

Fig. = figure

D.S. = drive side

O.S. = operator's side

PU = printing unit

Relevance

The specifications in these instructions correspond to the series version of the printing press at the time of the publication of this document. We reserve the right of making modifications that serve the technical progress.

Please contact your Baum Dealer if there are any questions.

Protective note

Major parts, equipment and arrangements, as well as the software and control and measuring devices of our printing press are protected
by copyright, or by patent applications, patents, or utility patents.

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Baumfolder Corp Sidney Ohio 45365

Preface

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BaumPrint BP18

1 Specifications and floor plans

1.1 Print-related specifications

Print-related specifications for BaumPrint BP18			
Printing materials	Largest sheet size		460 × 340 mm *(18.11 × 13.39 in)*
	Smallest sheet size	Standard version	89 × 140 mm *(3.50 × 5.51 in)*
		When using the accessory for smaller formats	100 × 100 mm *(3.94 × 3.94 in)*
	Largest print format	Standard version	453 × 330 mm *(17.84 × 13.00 in)*
		Plus version ([1])	452 × 330 mm *(17.80 × 13.00 in)*
	Gripper bite	Standard version	7 mm *(0.28 in)*
		Plus version ([1])	8 mm *(0.32 in)*
	Printing material thickness	Standard version	0.04...0.3 mm *(0.0016...0.012 in)*
		When using the accessory for smaller formats	0.06...0.3 mm *(0.0024...0.012 in)*
Press speed	Maximum ([2])		10000 sheets/h
	Minimum		3500 sheets/h
	Crawl speed		500 rph
Plate cylinder	Printing plate format	Maximum	505 × 340 mm *(19.88 × 13.39 in)*
		Minimum	505 × 240 mm *(19.88 × 9.45 in)*
	Printing plate base material		Metal/polyester (paper to a limited extent ([3]))
	Printing plate thickness		0.1...0.2 mm *(0.004...0.008 in)*
	Plate cylinder undercut		No undercut
	Distance between lead edge of plate and print start		30 mm *(1.18 in)*
Blanket cylinder	Format	Blanket, metal-edged	555 × 337 mm *(21.85 × 13.27 in)*
		Underlay sheets	485 × 340 mm *(19.10 × 13.39 in)*
	Blanket cylinder undercut		2.3 mm *(0.091 in)*
Inking unit	Total number of rollers	Printing unit 1	12
		Printing unit 2	13
	Inking form rollers		3
	Inking form rollers diameter		54.7 mm *(2.15 in)*, 45 mm *(1.77 in)*, 50 mm *(1.97 in)*
	Ink zones		15
Dampening system	Type		Alcohol-free, direct continuous dampening system
	Total number of rollers		4
	Dampening form roller		1

Print-related specifications for BaumPrint BP18		
	Dampening form roller diameter	63 mm *(2.48 in)*
Pile heights, net	Feeder	490 mm *(19.29 in)*
	Delivery	460 mm *(18.11 in)*
Pile heights, gross ([4])	Feeder	-
	Delivery	540 mm *(21.26 in)*
Maximum pile weight	Feeder	80 kg *(175 lbs)*
	Delivery	80 kg *(175 lbs)*
Noise emission	Noise emission values according to EN 13023:	
	Sound level at the feeder control console	73 dB(A)
	Sound level at the delivery	78 dB(A)
Dissipated heat		According to power requirement

Tab. 1

([1]): Prepared for numbering and perforating.

([2]): Maximum press-related performance. This value depends on the local conditions and the materials being used.

([3]): When processing large run lengths it may become necessary to change plates.

([4]): Including pile carriage.

1.2 Dimensions of the printing press

Dimensions of the printing press			
Printing press	**Length [m] *([ft])***	**Width [m] *([ft])***	**Height [m] *([ft])***
BP18-2	1.50 *(4.92)*	1.27 *(4.17)*	1.53 *(5.02)*

Tab. 2

Overall height with open plate cylinder guard: 1.85 m *(6.07 ft)*.

For further information, please refer to the section *Area and working space required*.

1.3 Floor and working space required

Floor space required

Floor space required by the printing press			
Printing press	**Length [m] *([ft])***	**Width [m] *([ft])***	**Floor space [m²] *([sq ft])***
BP18-2	1.50 *(4.92)*	1.27 *(4.17)*	1.91 *(20.6)*

Tab. 3

Calculation:

- *Floor space required for the printing press*:
  Contour of the printing press in longitudinal and transversal direction.

Minimum working space required

Minimum working space required by the printing press			
Printing press	Length [m] *([ft])*	Width [m] *([ft])*	Floor space [m^2] *([sq ft])*
BP18-2	2.50 *(8.20)*	2.30 *(7.55)*	5.75 *(61.9)*

Tab. 4

Calculation:

- *Minimum working space required by the printing press*:
  Floor space required by the printing press plus additional space for loading and removing piles and for good accessibility to all machine components.

1.4 Press weight and floor load

Printing press	Press weight		Average static floor load	Maximum static surface pressure
	Without pile [kg] *([lbs])*	Including two piles [kg] *([lbs])*	[N/m^2] *([lbf/sq ft])*	[N/cm^2] *([lbf/sq in])*
BP18-2	945 *(2085)*	1105 *(2440)*	5800 *(121.16)*	93 *(13*
BP18-2 with numbering box	1030 *(2270)*	1190 *(2625)*	6385 *(133.38)*	

Tab. 5

- Calculation of the paper pile weight at a paper density of 1 kg/dm^3 *(0.036 lbs/cu in)*.
  This corresponds to coarse paper of a grammage of 90 g/m^2 *(198 gr/sq ft)*.

Average static floor load

Average static floor load: see Table 5.

Calculation of the average static floor load:

Relation between the press weight including two piles and the space required by the printing press.

Maximum static surface pressure

Maximum static surface pressure: see Table 5.

The maximum static surface pressure is the maximum static surface pressure that occurs below the adjustable bases of the printing press.

The area of an adjustable base is 32 cm^2 *(4.96 sq in)*.

Dynamic behavior

The sum of the dynamic forces the printing press applies on the foundation is a maximum of 3 % of the weight force.

1.5 Air supply

When the air is supplied by customer equipment, proper and expert adaptation to the existing units is necessary. The following connections are necessary:

Air connection		
Blast air (feeder suction head)	Operating pressure ([1])	1.3 bar abs. *(18.86 psi)*
	Delivered quantity ([2])	18 m^3/h *(10.59 cu ft/min)*
Vacuum (feeder)	Operating pressure	0.5 bar abs. *(7.25 psi)*
	Delivered quantity	18 m^3/h *(10.59 cu ft/min)*
Compressed air ([3])	Operating pressure	8.0 bar abs. *(116 psi)*
	Delivered quantity	25 l/min *(1526 cu in/min)*

Tab. 6

([1]): Operating pressure, all specifications apply to 0 bar *(0 psi)* (absolute pressure).

([2]): Delivered quantity, all specifications apply to the atmospheric pressure (1013 mbars, 0°C *(32°F)*).

([3]): Conditioned compressed air: cool, dry, unoiled, dust-free and condensate-free according to Table 7

Guidance values for compressed air		
Temperature	Maximum	5°C *(41°F)* below ambient temperature
Water contents	Maximum, at 7 bar *(102 psi)*	5.95 g/m^3 *(2.60 gr/cu ft)*
Residual oil contents	Maximum	1 mg/m^3 *(0.0004 gr/cu ft)*
Particle size	Maximum	5 µm *(0.2 mil)*
Particle contents	Maximum	5 mg/m^3 *(0.0022 gr/cu ft)*

Tab. 7

1.6 Electrical connection specifications of the printing press

Mains connection of the printing press

The printing press is generally connected to the single-phase a.c. system via the control cabinet on O.S.

Printing press	Power demand 50/60 Hz [kW]	Power factor λ	Mains voltages 1 AC [V]	Current [A]	Electrical fusing [A]
BP18-2	3.0	0.95	115	27	32
			200	15	20
			220	14	20
			230	13	16
			240	13	16

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1.7 Peripheral equipment

Table plate punch

Table-top plate punch ([1])		
Dimensions	Width	700 mm *(27.56 in)*
	Depth	545 mm *(21.46 in)*
	Height, without lever	125 mm *(4.92 in)*

Tab. 9

([1]): Version/special accessory.

1.8 Shipping data

General information

- All crate dimensions and weights can vary slightly from those given in the table.
- Some dispatch units contain one press component and one additional standard spare parts set. The net weight therefore does not always correspond to the weight of the press component in question.
- For overseas shipments only case packaging is used.

Shipping data

Shipping unit	Dimensions			Weights	
	Length [m] *([ft])*	Width [m] *([ft])*	Height [m] *([ft])*	Net [kg] *([lbs])*	with case or box [kg] *([lbs])*
BP18-2					
Entire press	1.55 *(5.09)*	1.15 *(3.77)*	1.72 *(5.64)*	*935* (*2060)*	1075 (2370)
Numbering box	1.02 *(3.35)*	0.72 *(2.36)*	0.85 *(2 .79)*	80 *(175)*	90 *(200)*

Required installation opening in building

Required installation opening in building			
Installation unit		**Width [m] *([ft])***	**Height [m] *([ft])***
With pallet		1.17 *(3.84)*	1.74 *(5.71)*
Without pallet or tool deposit		1.09 *(3.58)*	1.55 *(5.09)*
Partially dismantled			
	BP18-2	0.85 *(2.79)*	1.48 *(4.86)*

Tab. 10

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1.10 BP18-2 floor plan

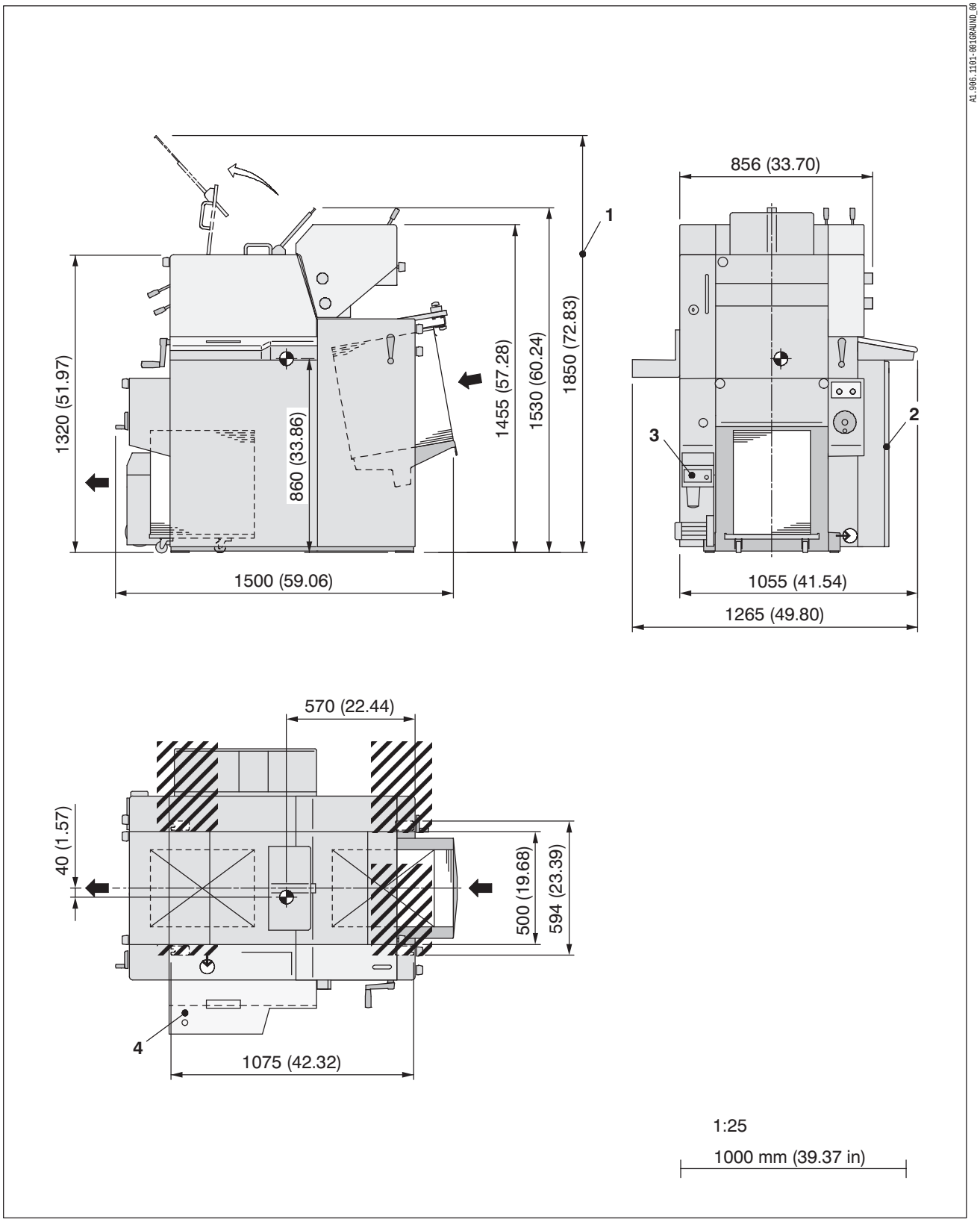

Fig. 2 BP18-2

1.11 Floor plan legend

General information

- All dimensions are in mm *(in)*.
- Scale of 1:25.
  True-to-scale representation is not ensured with own printouts.

Numbering

1 Overall height with open plate cylinder protection

2 Control cabinet

3 Powder spray device AS-30 ([1])

4 Control console

([1]): Version/special accessory.

Symbols

Pile loading and removal

Supply line for electrical energy,
Standard cable length: 4.5 m *(14.8 ft)*.

Center of gravity:
Printing press without numbering box.

Bearing areas:
Length × width: 80 × 40 mm *(3.15 × 1.58 in)*.

Baumfolder has authorized dealers located throughout the United States.

Call toll free, **1-800/543-6107** for parts or the number of your nearest authorized dealer.

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