



PCB Magazines

Safety through Precision

Edition 5.1

Made in Germany

Development and Production



For more than 15 years cab has been developing and manufacturing production tools for the electronic industry. We react to the constantly growing market requirements with a policy of continual product development.

Competent advice and excellent service has made us one of the leading specialists and that shall continue in the future!

We consider ourselves a fair, reliable and obliging partner to our customers and suppliers.

Due to our competence, flexibility and modern machinery, we can react fast to the market requirements and set directive standards in the industry.

Creativity and innovations are a absolute must.

PCB Magazines Series 600/700/800 for automated assembly lines

Automation Requires Precision

Precision, stability and flexible handling are important features for the use of the PCB Magazines in automated assembly lines.

The stable and robust frame construction guarantees a long lasting use of the PCB Magazine in your production. The sidewalls are manufactured from conductive material. For high mechanical or temperature use we offer the magazine with metal sidewalls.

We offer three different magazines:

Series 600 - Width adjustment by screw clamp

the low cost version for PCBs with the same width

Series 700 - Width adjustment by gear belt

the comfortable version with width adjustment in seconds

Series 800 - Full automatic width adjustment

the automatically adjustable version for unloaders

Choose the most efficient version for your application.



Key features:

- Locking knob for stacking purposes
- Transport safety to secure PCBs
- Consecutive numbering on the side panels for easy feeding
- Size compatible to existing systems
- Largest model selection
- The precision spindles ensure the parallelism of the sidewalls during adjustment (series 700 & 800)
- The gear belt allows for quick adjustments in seconds (series 700 & 800)
- Customized designs

Three models for different use



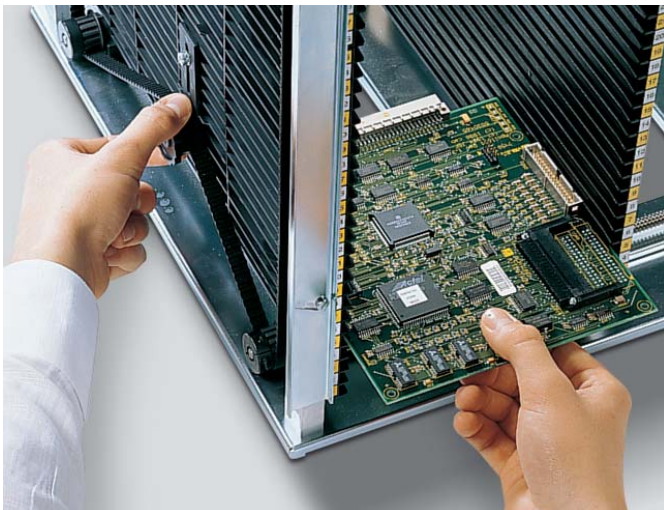
Series 600

Width adjustment by screw clamp

Manufacturing mainly with one PCB size the magazine doesn't have to be adjusted to a new PCB width so often. The series 600 is cost effective alternative with a simple width adjustment.

By backing off the four screw clamps the movable side panel can be pushed to the necessary PCB width.

The side panel will be secured again by tightening the four screw clamps.



Series 700

Width adjustment by gear belt

Handling different PCB sizes the magazines have to be adjusted to the PCB width quite often.

The PCB Magazines of the series 700 are adjusted to the necessary PCB width within seconds.

The spacing between the side panels is adjusted by pulling the gear belt.

To secure the movable side panel, tighten the locking bar to the belt using only one knurled-head screw.

The movement free from play spindles guarantee the parallelity of the side walls so no deviations are possible.

Series 800

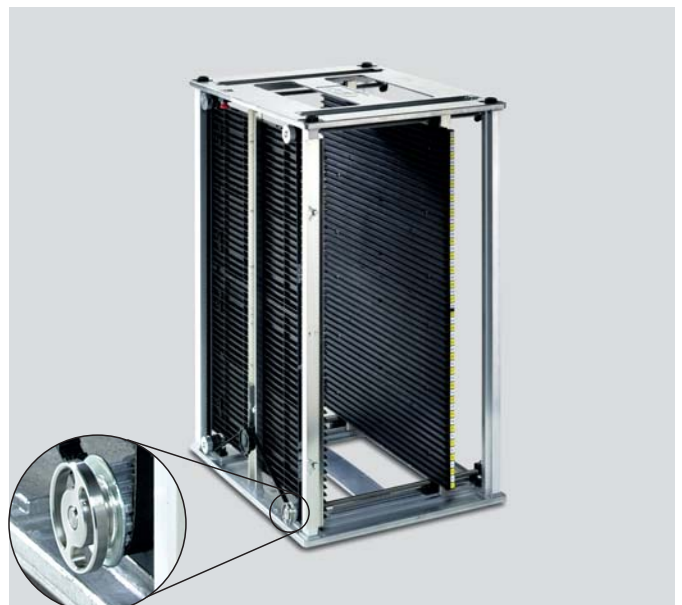
Full automatic width adjustment

Increase process safety and optimize your production process by the automatic width adjustment of the cab magazines in unloaders.

During the placement of the magazine into the unloader, it is automatically adjusted to the width of the PCB. All of the 800 series are capable of being used at once.

No more need for pre-adjusted magazines.

The coupler connects the motor with the spindle for the adjustment.



Our experience is your advantage



Stackable

The magazines can be stacked and secured space saving by four support guides on the top of the plate.



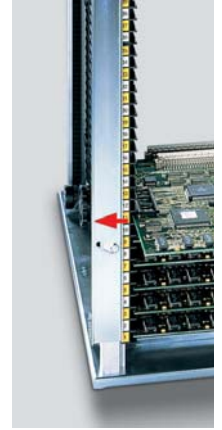
Reversible

Through to the vertical symmetry all magazines can be placed upside down to work on double sided PCBs. The stacking locator knobs must be replaced.

Magazine locked



Magazine unlocked



Transport safety

To secure the PCBs while transporting the magazine, a safety bar is mounted on the front and back side of the side panel.

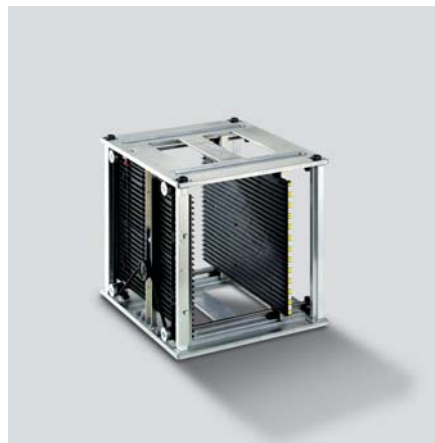
1. The inclined guides allow the bar to move automatically into the locked position using its own weight.
2. To open the transport safety, move the bar outward until it is locked.

Special Models



Largest model selection

cab offers a variety of standard sizes for your selection. Our variety of Magazines are compatible with all other magazines on the market.



Special sizes

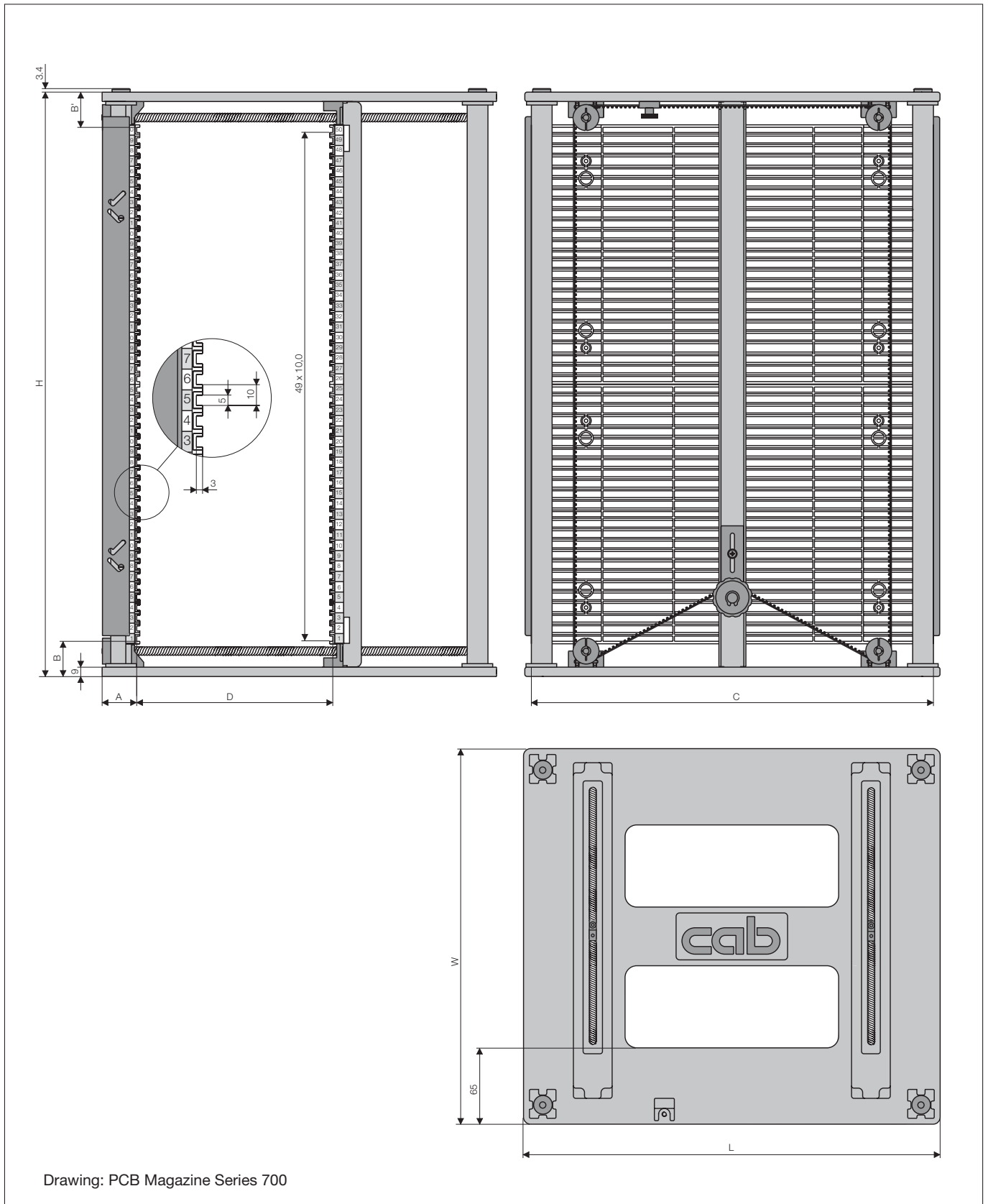
If the standard sizes don't fit your requirement, we offer customize sizes in small quantities.



Metal Magazine

For high temperature or mechanical use we also offer magazines with metal sidewalls.

Technical Data



Drawing: PCB Magazine Series 700

		601	602	603	713	704	705	715	706	716	707	717	708	718	
		701	702	703	813	804	805	815	806	816	807	817	808	818	
Dimensions in mm															
D = PCB width	min	10	10	10	10	10	10	10	10	10	10	10	10	10	
	max	250	250	310	390	330	310	310	390	390	460	460	400	400	
C = max. PCB length		342	387	387	387	447	522	522	522	522	522	522	522	522	
L = Depth of magazine		355	400	400	400	460	535	535	535	535	535	535	535	535	
W = Width of magazine		320	320	380	460	400	380	380	460	460	530	530	470	470	
H = Height of magazine		563	563	563	563	563	570	563	570	563	570	563	570	563	
A = Magazine outside edge to PCB slot		34	34	34	34	34	34	34	34	34	34	34	34	34	
B = Magazine lower edge to PCB slot		34	34	34	34	34	41	34	41	34	34	34	41	34	
B' = Magazine upper edge to PCB slot		34	34	34	34	34	34	34	34	34	41	34	34	34	
Weight in kg		5.3	5.4	6.0	7.5	7.8	8.3	8.3	9.1	9.1	9.3	9.3	9.2	9.2	
Version															
Stackable		■	■	■	■	■	■	■	■	■	■	■	■	■	
Reversible		■	■	■	■	■	■	■	■	■	■	■	■	■	
Width adjustment															
Screws	Series 600	■	■	■	■	■	■	■	■	■	■	■	■	■	
Gear belt	Series 700	■	■	■	■	■	■	■	■	■	■	■	■	■	
Driving spindle for motor	Series 800	■	■	■	■	■	■	■	■	■	■	■	■	■	
Material top and bottom plate															
Aluminum		■	■	■	■	■	■	■	■	■	■	■	■	■	
Sheet steel						■	■	■	■	■	■	■	■	■	
Material side wall															
Polystyrol black		■	■	■	■	■	■	■	■	■	■	■	■	■	
Permanent working temperature	50°C	■	■	■	■	■	■	■	■	■	■	■	■	■	
Surface resistance	10 ⁸ - 10 ⁹ Ohm	■	■	■	■	■	■	■	■	■	■	■	■	■	

Metall side walls with permanent working temperature 130°C in preparation.

Red = recommended types with reversible possibility

Delivery program

				Partial assembled	Assembled with support guides	Assembled without support guides
PCB Magazines		Version		Standard version	Stackable	Reversible
Type	Part No.	Stackable	Reversible	Support guides enclosed unmounted	Order additional Part No. DL31001	Order additional Part No. DL31002
601	8913131	■	■			
602	8913132	■	■			
603	8913133	■	■			
701	8913071	■	■			
702	8913072	■	■			
703	8913073	■	■			
713	8914393	■	■			
704	8913274	■	■			
705	8913075	■	■			
715	8913545	■	■			
706	8913076	■	■			
716	8913546	■	■			
707	8913077	■	■			
717	8913547	■	■			
708	8913266	■	■			
718	8913548	■	■			
800	On request	■	■			

Red = recommended types with reversible possibility

8 days right to return

Single assembled magazines can be tested 8 days without the need to buy them. Just add to your order of the stackable or reversible version you intend to return the magazine.

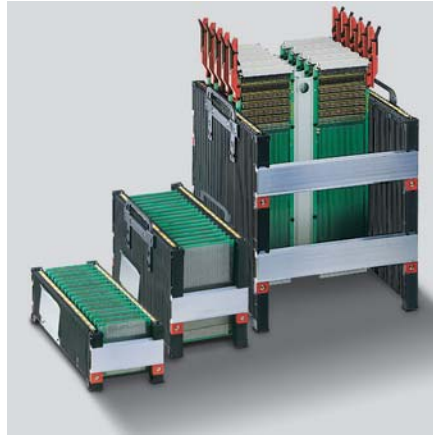
researched, flexible and complete

The cab PCB magazines can be filled when standing vertical or laying horizontal.

The system is totally adjustable for width and can be assembled according to your individual requirements.

For different size PCBs we offer PCB magazines with a height of 100, 180 and 300 mm.

All magazines have 32 slots, each with a 10 mm clearance between them, thereby providing maximum use of available space.

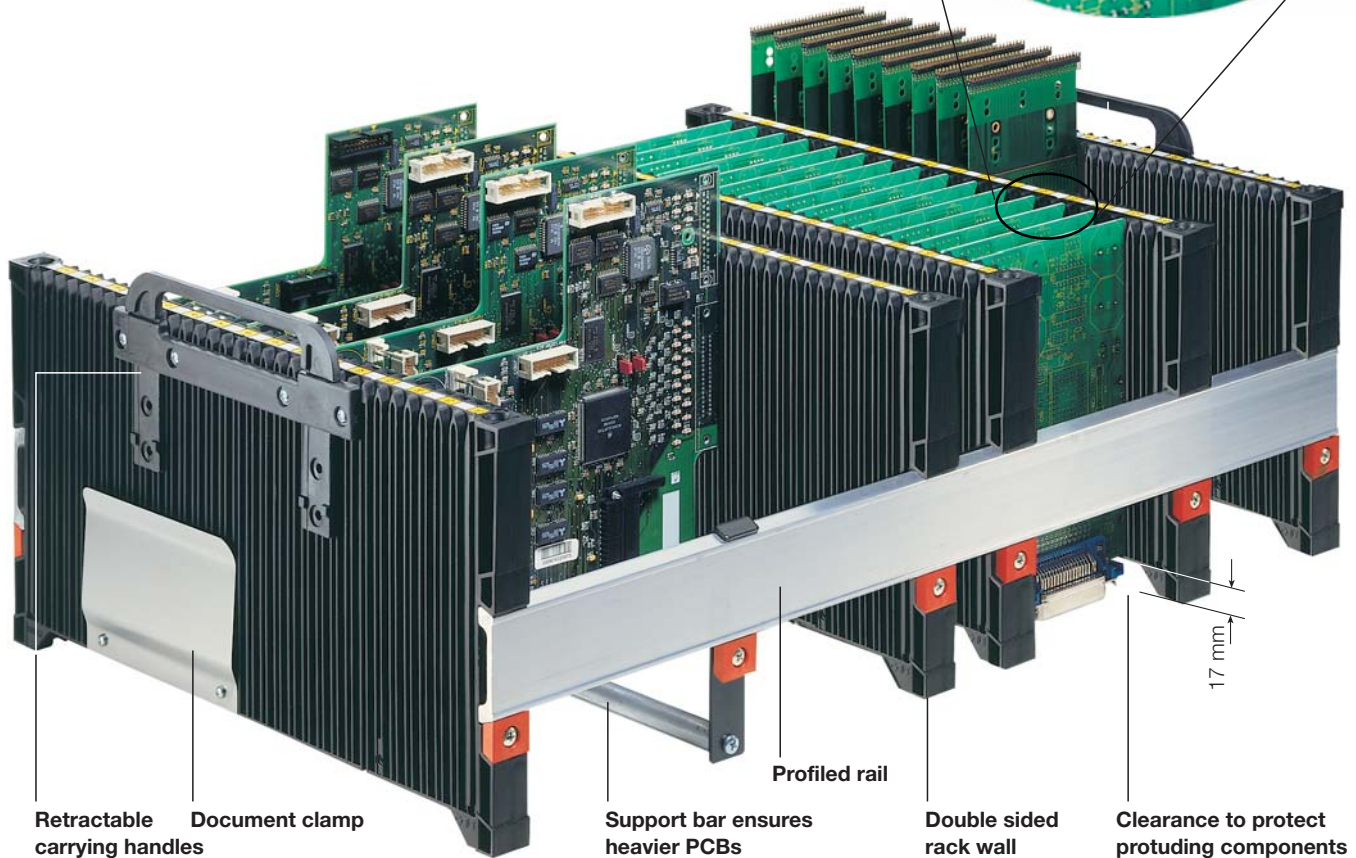
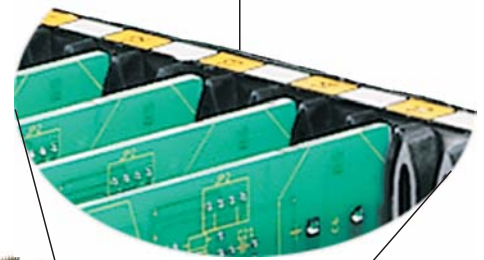


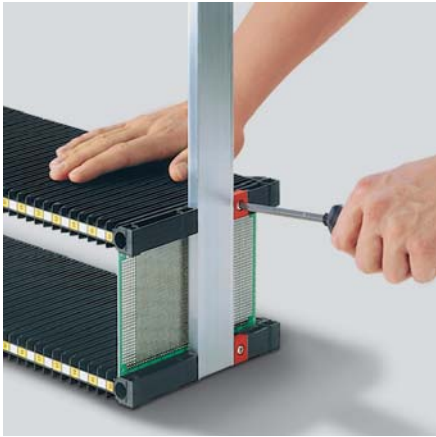
Secure

The precision molded slots are funnel shaped at each end to simplify the insertion of each circuit board.

The location of each mounting slot is shown by yellow and white positioning strips. These enable boards to be loaded while avoiding the risk of being loaded by hand in the wrong position.

Consecutive numbering and color coding





Fast and easy assembly

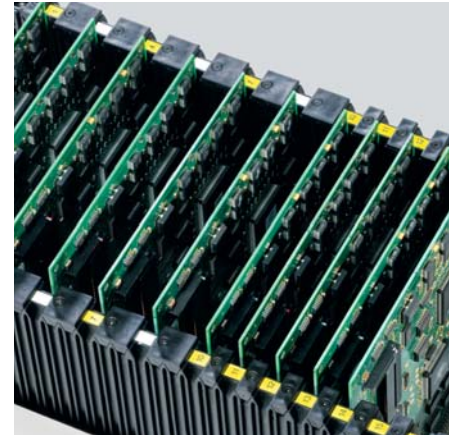
The magazine walls can be secured to the profiled rails in any position required. Two identically sized circuit boards are inserted between the walls, into the adjustment slots at the extreme ends of each wall. The second wall is then pressed firmly onto the boards and screwed tight.

The boards can now be inserted into the normal slots are 0.4 mm. deeper than the adjustment slots.



Rigid and stable

The magazine walls are constructed in sandwich form, and are therefore particularly rigid. For heavy mechanical and thermal force the magazine walls can additionally be reinforced by the use of a steel rod.



Slot lock

To prevent damage to the PCB board during insertion, we offer slot locks which cover slots not in use.



Stackable

At the corners of each magazine are male and female connectors which allow the racks to be stacked upon one another.

The lower edge of each magazine-side has a molded recess which allows the magazine to be gripped and lifted without problem.



Vertical mounting

Before soldering, the circuit boards must be stored horizontally. The magazine can therefore stand vertically.



Transport containers

For transport purposes, the PCB magazines can be loaded into containers. These containers have norm sizes of 600 x 400 mm and 400 x 300 mm.

Retractable handles enable the magazines to be removed with ease.

with 32 slots

Flexing of the magazine walls under loading

When the PCB Magazine is correctly assembled, each side wall may flex less than 1.0 mm, to ensure a secure mounting of the PCB. The measurements were using 16 circuit boards, with a clearance of 20 mm between each other, and a weight per board of 500 g. Upon request, a copy of the test report is available.

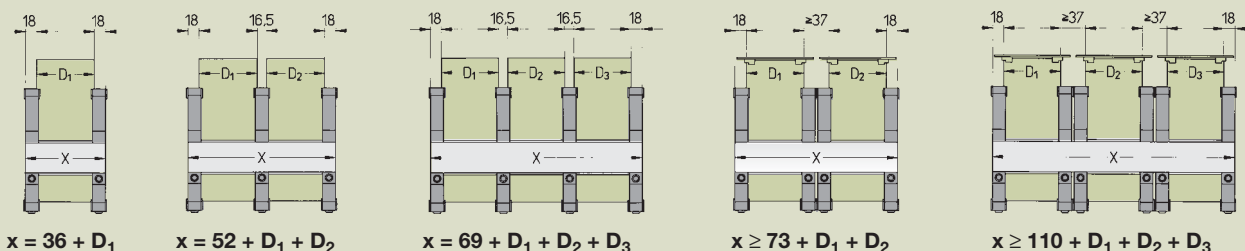
Critical loading can occur as follows:

1. When the magazine is laid on its side on a flat surface, and then lifted.
2. When being transported in the vertical position, and the position is changed to the horizontal.

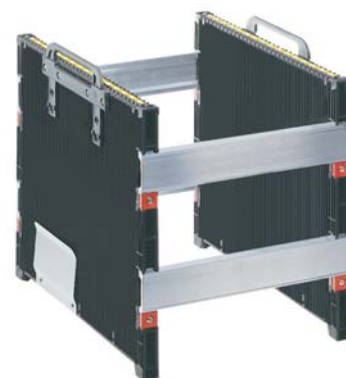
Technical Data	100	180	300
Material	Polypropylene		
Color	black		
Permanent working temperature	70°C		
Surface resistance	10 ⁴ - 10 ⁸ Ohm		
Dimensions			
Slot width mm	2.8	4.0	3.5
Slot depth mm	2.0	2.5	2.5
Amount	32	32	32
Distance of PCBs mm	10	10	10
Flexing with a total load of 8 kg			
Temperature 23°C not reinforced	1.0	0.8	0.4
Temperature 23°C reinforced	0.5	0.4	-
Temperature 70°C not reinforced	-	-	0.8
Temperature 70°C reinforced	0.9	0.7	-

The length of profiled rail (Dimension X) is calculated based upon the dimensions as shown below.

Dimension D = PCB Width
Dimension X = Length of Profiled Rail



8 days right to return for Testsets



Part No.	Description
8910063	PCB Magazine Testset 100

e.g. for 100 mm wide PCBs
Contents: 4 Side Walls 100
2 Profiled Rails 369 mm long
1 Document Clamp

Weight: 1.4 kg

Part No.	Description
8910064	PCB Magazine Testset 180

e.g. for 100 mm wide PCBs.
Contents: 4 Side Wall 180
2 Profiled Rails 369 mm long
1 Document Clamp
1 Set Carrying Handles



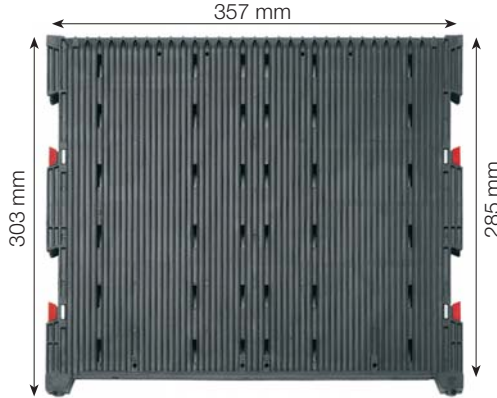




Weight: 2.5 kg

Part No.	Description
8910065	PCB Magazine Testset 300

e. g. for 233,4 mm wide PCBs.
Contents: 2 Side Wall 300
4 Profiled Rails 269 mm long
1 Document Clamp
1 Set Carrying Handles

Weight: 2 kg

Delivery program

	Part No.	Description	Weight	PU 1	PU 2																																										
	8910050	Rack Wall 100	0.28 kg	1 piece	30 pieces																																										
	8910102	Rack Wall 100 reinforced	0.40 kg	1 piece	30 pieces																																										
	8910060	Rack Wall 180	0.53 kg	1 piece	30 pieces																																										
	8910104	Rack Wall 180 reinforced	0.65 kg	1 piece	30 pieces																																										
	8912049	Rack Wall 300	0.7 kg	1 piece	18 pieces																																										
 <p>The profiled rails are supplied according to your requirements, xxxx is the length in mm.</p> <table border="1"> <thead> <tr> <th>Length X</th> <th>Part No.</th> <th>Description</th> <th>Weight</th> <th>PU 1</th> <th>PU 2</th> </tr> </thead> <tbody> <tr> <td>136 mm</td> <td>8910136</td> <td>Profiled Rail 0136</td> <td>0.06 kg</td> <td>2 pieces</td> <td>-</td> </tr> <tr> <td>252 mm</td> <td>8910252</td> <td>Profiled Rail 0252</td> <td>0.11 kg</td> <td>2 pieces</td> <td>-</td> </tr> <tr> <td>547 mm</td> <td>8910547</td> <td>Profiled Rail 0547</td> <td>0.24 kg</td> <td>2 pieces</td> <td>-</td> </tr> <tr> <td>1000 mm</td> <td>8911000</td> <td>Profiled Rail 1000</td> <td>0.45 kg</td> <td>2 pieces</td> <td>-</td> </tr> <tr> <td>2000 mm</td> <td>8912000</td> <td>Profiled Rail 2000</td> <td>0.90 kg</td> <td>2 pieces</td> <td>-</td> </tr> <tr> <td>xxxx mm</td> <td>891xxxx</td> <td>Profiled Rail xxxx</td> <td></td> <td>2 pieces</td> <td>-</td> </tr> </tbody> </table>	Length X	Part No.	Description	Weight	PU 1	PU 2	136 mm	8910136	Profiled Rail 0136	0.06 kg	2 pieces	-	252 mm	8910252	Profiled Rail 0252	0.11 kg	2 pieces	-	547 mm	8910547	Profiled Rail 0547	0.24 kg	2 pieces	-	1000 mm	8911000	Profiled Rail 1000	0.45 kg	2 pieces	-	2000 mm	8912000	Profiled Rail 2000	0.90 kg	2 pieces	-	xxxx mm	891xxxx	Profiled Rail xxxx		2 pieces	-					
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	8910009	Document Clamp		1 set	25 sets																																										
	8912004	Support Bar 100		1 set	10 sets																																										
	8912005	Support Bar 180		1 set	10 sets																																										
	8912006	Support Bar 300		1 set	10 sets																																										
	8912007	Carrying Handle 100		1 set	25 sets																																										
	8910097	Carrying Handle 180/300		1 set	25 sets																																										
 <p>Slot Lock 1 Slot Lock 2</p> <p>pictures increased</p>	8913916	Slot Lock 1*		100 sets	-																																										
	8913917	Slot Lock 2*		100 sets	-																																										

*for Rack wall 180 from delivery date 09/2002, older versions and Rack wall 100 and 300 on request

PU = Packing Unit



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All specifications about delivery, design and technical data are given to the best of our current knowledge and are subject to change without prior notice.

Representatives in other countries on request.