

Types

	Off-cut remover HEKTOR 2	Page 3
	PCB separators MAESTRO 2, 2M	Page 4
	PCB separator MAESTRO 3E	Page 5
	PCB separator MAESTRO 4S Conveyor belt	Pages 6/7
	PCB separator MAESTRO 5L	Page 8
000	PCB separator MAESTRO 6	Pages 9 - 11
	PCB magazine series 100, 180, 300	Pages 12 - 14
	PCB magazine series 600, 700, 800 PCB magazine accessories	Pages 15 - 20
	Special magazines	Page 21

Off-cut remover HEKTOR 2



Technical data			
Separation method		Punch blade	
Operation		manual	
Material		FR4	
PCB thickness		up to 2.5 mm	
Air pressure supply		1/4" coupling socket	
Operating pressure, typical		4 bar	
Temperature /	Operation	+ 10 - 35°C / 10 - 85 %	
humidity	Stock	0 - 60°C / 20 - 80 %	
not condensing	Transport	– 25 - 60°C / 20 - 80 %	
Width x Height x Depth		220 x 170 x 255 mm	
Weight		2.7 kg	
Approvals		CE, FCC Class A	

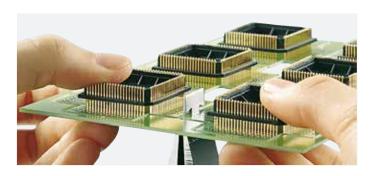
PCBs are separated carefully and quickly, off-cuts are removed precisely and smoothly. A two-part matrix enables the different blades to be assembled resp. exchanged easily.

Off-cuts are punched out with the help of a compressed air cylinder. The operating pressure can be set on the unit.

Safe operation

PCBs are positioned with their milled groove over the blade onto the matrix. The off-cut is fed below the punch blade. A foot switch triggers the punching and the off-cut is collected in the bottom tool.

Part no.	Product
8932145	Off-cut remover HEKTOR 2 (no blades)
8932xxx	Blade (to be ordered separately)
Scope of delivery	Off-cut remover with pressure regulator Foot switch Allen key 2 mm Allen key 4 mm Operator's manual DE/EN



T blade to punch out off-cuts on the right and left margins. Turning the PCB is not necessary	
L blade used with small distances between the off-cuts	C P P P P P P P P P P P P P P P P P P P

	га
D C	893
	893
*** F	893
	893
20	893
n 🖰	893
	893
188 P	89
	89
20	893
	893
В	

Blade

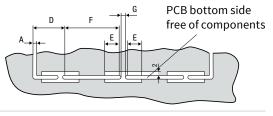
To prevent from getting stuck in the PCB, the milled groove $\,$

should extend the by at least 0.15 r		Milled width	Blade	Blade	Cuttin	Solder of con	Milled length	Off-cu
Part no.		A	В	С	D	E	F	G
8932137.001	Blade 1,5 T	≥ 1.5	1.35	17.2	4.7	> 19	> 19	3
8932138.001	Blade 2,0 T	≥2.0	1.85	17.2	5.2	> 19	> 19	3
8932191.001	Blade 2,4 T	≥2.4	2.25	18	5.7	> 19	>19	3
8932139.001	Blade 2,5 T	≥ 2.5	2.35	18	5.7	> 19	> 19	3
8932144.001	Blade 3,0 T	≥ 3.0	2.85	18	5.7	> 19	> 19	2.5
8932122.001	Blade 1,5 L	≥ 1.5	1.35	12	4.7	> 15	>13	3
8932123.001	Blade 2,0 L	≥ 2.0	1.85	12	5.2	> 15	>13	3
8932141.001	Blade 2,4 L	≥ 2.4	2.25	12	5.7	> 15	>13	3
8932124.001	Blade 2,5 L	≥ 2.5	2.35	12	5.7	> 15	>13	3
8932125.001	Blade 3,0 L	≥ 3.0	2.85	12	5.7	> 15	>13	2.5
8932171.001	Matrix (as a spa	re part)						

groove



Further blade thicknesses on request



ng length

PCB separators MAESTRO 2, 2M



Technical data		MAESTRO 2	MAESTRO 2M	
Separation met	hod	Component sic	le Circular blade	
		Solder side	Circular blade	
Operation		manual	motor-driven	
Separation spee	ed .	-	100, 200, 300 mm/s	
Separation leng	th	15 - 300 mm		
Material		FR4		
Component height		Solder/component side up to 34 mm		
Power supply		-	230/115 VAC, 50/60 Hz	
Temperature /	Operation	+ 10 - 35°C / 10	- 85 %	
humidity	Stock	0 - 60°C / 20	- 80 %	
not condensing	Transport	– 25 - 60°C / 20	- 80 %	
Width x Height x	Depth	195 x 330 x 620	mm	
Weight		16 kg	19 kg	
Approvals		CE, FCC Class A		

The compact MAESTRO 2 separates PCBs quickly and economically. Little footprint is required.

MAESTRO 2

is the affordable entry-level device to handle smaller demands. PCBs are fed between the circular blades manually to be separated.

MAESTRO 2M, motor-driven

to separate large numbers of PCBs without tiring. The lower circular blade is motor-driven. The PCB is fed, seized by the circular blade, transported and separated. The device especially fits with highly dense assembly or slim margin strips. Three speeds can be selected.

Safe operation

The distance between the holder 1 and the guide 2 is set so the PCB can be fed only in the milled groove.

Component height Outside dimensions increased after separation: typically 0.2 mm	47.5 35 21.5
The milled groove may be interrupted by cutouts to a length of up to 5 mm.	08-32 08-32 min.0.25 max.0.8







	Part no.	Product
	8933900 8933935	PCB separator MAESTRO 2 PCB separator MAESTRO 2M
	Scope of delivery	PCB separator Power cable Type E+F, length 1.8 m (MAESTRO 2M only) Allen key 2 mm Operator's manual DE/EN
Pos.	Part no.	Wear parts
1 2 3 4 5	8930509.001 8930522.001 8930744.001 8933661.001 8930514.001 8930745.001	Circular blade FR4 Holder Upper blade protection Lower circular blade Guide Lower blade protection

PCB separator MAESTRO 3E



The MAESTRO 3E separates both small and large PCBs. The support table and the rest can be set continuously to the best possible operational position. By adjusting the distance between the linear blade and the rest, margin strips can fall through and are sorted out.

Safe operation

A PCB is positioned with its milled groove onto the linear blade and the circular blade is moved manually through the PCB. The distance between the holder and the linear blade is set so the PCB can be separated only in the milled groove.







Technical data		
Separation method		Component side Circular blade Solder side Linear blade
Operation		manual
Separation length		up to 450 mm
Material		FR4
Component height		Component side up to 34 mm Solder side up to 23 mm
Temperature /	Operation	+ 10 - 35°C / 10 - 85 %
humidity	Stock	0 - 60°C / 20 - 80 %
not condensing	Transport	– 25 - 60°C / 20 - 80 %
Width x Height x De	pth	350 x 455 x 700 mm
Weight		22 kg
Approvals		CE, FCC Class A

Outside dimensions increased after separation: typically 0.2 mm	27 21.5
The milled groove may be interrupted by cutouts.	08-32 min 025
Protruding components need a recessed linear blade. Contact us, if required	

	Part no.	Product
	8933945	PCB separator MAESTRO 3E/450
	Scope of delivery	PCB separator Allen key 2 mm Operator's manual DE/EN
Pos.	Part no.	Wear parts
		vicui pui to

PCB separator MAESTRO 4S

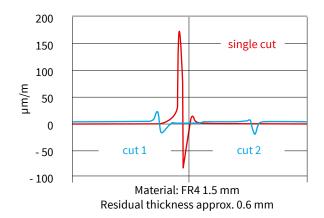


MAESTRO 4S separates both small and large PCBs quickly and economically without stress.

Key features:

- Blade distance to be entered on the operation panel is set motor-driven.
- Up to nine programs to be stored
- Separation length to be continuously adjusted via limit switches
- In terms of a preventive blade maintenance, the cutting performance is displayed.

By traversing the milled groove once, tensile and compressive stresses can cause damage to sensitive components located close to the groove. A second traverse and simultaneous readjustment of the blade distance already reduces stresses considerably. The quality of the assembled PCBs improves significantly.



Dial gauge

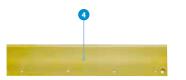
In order to separate without stress and to achieve a long service life, the circular and linear blades have to be guided along the entire separation. The dial gauge setting and regularly checking the parallelism is assembled to the carriage.



Technical data Separation method	4\$/450	4S/600		
Separation method				
		Component side Circular blade		
	Solder side Linear blade			
Operation	path-optimized, mo			
Separation speed	300, 500 mm/s, to b	e switched		
Materials	FR4, aluminum			
Component height	Component/solder	side up to 34 mm		
Separation length	up to 450 mm	up to 600 mm		
Support table depth	200 mm			
Programming				
Start	Traverse to initial p	osition		
Programs	9			
Separation steps	1-5			
Blade distance	0.9 - 0.05 mm			
Key button	Unlock program se	lection		
Performance display	up to 99 km			
DEL	Step reset			
Power switch	ON/OFF			
Foot switch	START separation			
Safety switch	E-stop			
Power supply	100 - 240 VAC, 50/60 Hz			
Emmission	LpA < 70 dB (A)			
sound pressure level				
Temperature / Operation	+ 10 - 35°C / 10 - 85 %			
humidity Stock	0 - 60°C / 20 - 80 %			
not condensing Transport	– 25 - 60°C / 20 - 80 %			
Width x Height x Depth	702 x 434 x 425 mm	852 x 434 x 425 mm		
Weight	38 kg	46 kg		
Approvals	CE, FCC Class A			

	Part no.	Product
8936800 8936800.520 8936745 8936745.520		PCB separator MAESTRO 4S/450 PCB separator MAESTRO 4S/450/Alu PCB separator MAESTRO 4S/600 PCB separator MAESTRO 4S/600/Alu
Scope of delivery		PCB separator Power cable Type E+F, length 1.8 m Foot switch Allen key 2 mm Support table including assembly kit Dial gauge Operator's manual DE/EN
Pos.	Part no.	Wear parts
1 2 3 4	8930509.001 8936615.001 8936614.001 8933394.001 8933682.001	Circular blade Blade protection Blade protection Linear blade 450 Linear blade 600





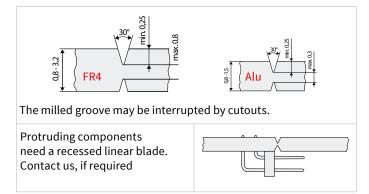
PCB separator MAESTRO 4S

Separating aluminum

To separate aluminum with MAESTRO 4S, special adjustment is needed for the standard circular blade. For information see the operator's manual

Outside dimensions increased after separation: typically 0.2 mm

Aluminum PCBs are manufactured in various alloys. Sample PCBs added to a request help with adjusting the circular blade and optimizing the cutting geometry.



Accessory



Conveyor belt

to deposit separated PCBs individually and further transport them aside. The speed adapts to the size of the PCB. Incoming PCBs are detected by a light barrier and the belt stops.

Part no.	Product
8931240	Conveyor belt 450
Lieferumfang	Power cable Type E+F, length 1.8 m Assembly kit Operator's manual DE/EN

Technical data	450	600	
Conveyor belt material	antistatic		
Direction of movement	to the right		
Belt speed	5, 6, 7, 8, 9 m/min		
Light barrier	to be activated to stop the belt moving		
Vertical distance	5 - 17 mm		
to the linear blade			
PCB depth	up to 200 mm		
Belt width	170 mm		
Length	1,200 mm	1,350 mm	
Power supply	100 - 240 VAC, 50/60 Hz		
Temperature / Operation	+ 10 - 35°C / 10 - 85	%	
humidity Stock	0 - 60°C / 20 - 80 %		
not condensing Transport	– 25 - 60°C / 20 - 80 %		
Weight	14 kg		
Approvals	CE, FCC Class A		

PCB separator MAESTRO 5L



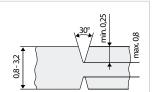
It can be used economically when large quantities of milled PCBs have to be separated.

Up to 15 PCBs arranged next to one another can be separated simultaneously. 310 mm is the maximum passage width. The distances and the number of circular blades are adapted to the PCB. Solid and precisely manufactured blade shafts ensure smooth PCB separation. The hardened and ground and titaniumcoated circular blades achieve a high running performance.

PCBs are inserted to the guide manually or are fed automatically by a loader resp. an external conveyor belt. When separated, the PCBs are deposited on the built-in conveyor belt.

A SMEMA interface provided, installation in an assembly line is possible (for information see the operator's manual). With the help of a base frame vertically adjustable, MAESTRO 5L can be adapted to any application. A possibility to connect an extraction and filter device is in preparation.

Outside dimensions increased	
after separation: typically 0.2 mm	
_, ,,,,	
The milled groove	
may be interrupted by cutouts.	'



	min.0
)	ag ag
)	

Separation method Operation Separation speed Operation Separation speed 100 - 220 mm/s to be set in ten steps PCB length light barrier activated light barrier deactivated light barrier deactivated PCB width Residual off-cut width Component height Component side up to 30 mm Solder side up to 10 mm Number of circular blades Programming Display - Separation speed - Separation length resp. number of PCBs Control buttons - Start, Stop, Reverse Programming button Monitoring - Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces - external start / stop - SMEMA (round, 14 pins) Power supply Temperature / Operation humidity Stock O - 60°C / 20 - 80 % not condensing Transport Veight Approvals Component side up to 30 mm up to 310 mm - Separation speed - Separation speed - Separation length resp. number of PCBs - Start, Stop, Reverse - Separation speed setting - Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping - external start / stop - SMEMA (round, 14 pins) - SMEMA (round, 1	Technical data			
Separation speed DCB length light barrier activated light barrier deactivated light barrier deactivated PCB width Residual off-cut width Component height Display Component side up to 30 mm Solder side Up to 10 mm Number of circular blades Programming Display Separation speed Separation length resp. number of PCBs Control buttons Programming Monitoring Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces Power supply Temperature / Operation Humidity Stock O-60°C / 20 - 80 % Width x Height x Depth Weight 100 - 220 mm/s to be set in ten steps 100 - 570 mm up to 2,000 mm Pos 40 mm Pos 40 mm Solder side up to 30 mm Solder side up to 10 mm Pos 40 mm Pos 40 mm Pos 40 mm Separation speed Separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Power supply 230/115 VAC, 50/60 Hz Temperature / Operation - 25 - 60°C / 20 - 80 % Width x Height x Depth Weight	Separation method			
to be set in ten steps PCB length light barrier activated light barrier deactivated PCB width Residual off-cut width Component height Component side up to 30 mm Solder side up to 10 mm Number of circular blades Programming Display - Separation speed - Separation length resp. number of PCBs Control buttons - Start, Stop, Reverse Programming button Monitoring - Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces - external start / stop - SMEMA (round, 14 pins) Power supply 230/115 VAC, 50/60 Hz Temperature / Operation + 10 - 35°C / 10 - 85 % humidity Stock - 0 - 60°C / 20 - 80 % Width x Height x Depth Weight	Operation		motor-driven	
PCB length light barrier activated light barrier activated light barrier deactivated PCB width Residual off-cut width Component height Component side up to 30 mm Solder side up to 10 mm Number of circular blades Programming Display - Separation speed - Separation length resp. number of PCBs Control buttons - Start, Stop, Reverse Programming button Monitoring - Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces - external start / stop - SMEMA (round, 14 pins) Power supply 230/115 VAC, 50/60 Hz Temperature / Operation + 10 - 35°C / 10 - 85 % humidity Stock - 0 - 60°C / 20 - 80 % Width x Height x Depth Weight	Separation speed		,	
Residual off-cut width Component height Component side up to 30 mm Solder side up to 10 mm Number of circular blades Programming Display - Separation speed - Separation length resp. number of PCBs Control buttons - Start, Stop, Reverse Programming button Monitoring - Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces - external start / stop - SMEMA (round, 14 pins) Power supply Temperature / Operation humidity Stock O - 60°C / 20 - 80 % Width x Height x Depth Weight At least 3 mm Component side up to 30 mm Solder side up to 16 per blade shaft Programming Lapta Separation speed - Separation length - Accumulation before / behind the blades - Conveyor belt finally stopping - external start / stop - SMEMA (round, 14 pins) Power supply 230/115 VAC, 50/60 Hz Temperature / Operation - 25 - 60°C / 20 - 80 % Width x Height x Depth 440 x 750 - 1,000 x 1,100 mm Weight	light barrier activated		up to 2,000 mm	
Component height Component side up to 30 mm Solder side up to 10 mm Number of circular blades Programming Display - Separation speed - Separation length resp. number of PCBs Control buttons - Start, Stop, Reverse Programming button Monitoring - Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces - external start / stop - SMEMA (round, 14 pins) Power supply Temperature / Operation humidity Stock O - 60°C / 20 - 80 % Width x Height x Depth Weight Component side up to 30 mm Solder side up to 10 mm Separation speed - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection of separation length - Accumulation - Separation speed setting - Detection	. 02		·	
Solder side up to 10 mm Number of circular blades up to 16 per blade shaft Programming Display - Separation speed - Separation length resp. number of PCBs Control buttons - Start, Stop, Reverse Programming button - Separation speed setting Monitoring - Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces - external start / stop - SMEMA (round, 14 pins) Power supply 230/115 VAC, 50/60 Hz Temperature / Operation + 10 - 35°C / 10 - 85 % humidity Stock 0 - 60°C / 20 - 80 % Width x Height x Depth 440 x 750 - 1,000 x 1,100 mm Weight		:h		
Programming Display - Separation speed - Separation length resp. number of PCBs Control buttons - Start, Stop, Reverse Programming button - Separation speed setting - Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces - external start / stop - SMEMA (round, 14 pins) Power supply Temperature / Operation + 10 - 35°C / 10 - 85 % humidity Not condensing Transport - 25 - 60°C / 20 - 80 % Width x Height x Depth Weight - Separation speed - Separation length - Accumulation before / behind the blades - Conveyor belt finally stopping - external start / stop - SMEMA (round, 14 pins) - SMEMA (r	Component height		· •	
Display - Separation speed - Separation length resp. number of PCBs Control buttons - Start, Stop, Reverse Programming button - Separation speed setting Monitoring - Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces - external start / stop - SMEMA (round, 14 pins) Power supply 230/115 VAC, 50/60 Hz Temperature / Operation + 10 - 35°C / 10 - 85 % humidity Not condensing Transport - 25 - 60°C / 20 - 80 % Width x Height x Depth Weight	Number of circular blades		up to 16 per blade shaft	
- Separation length resp. number of PCBs Control buttons - Start, Stop, Reverse Programming button - Separation speed setting Monitoring - Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces - external start / stop - SMEMA (round, 14 pins) Power supply 230/115 VAC, 50/60 Hz Temperature / Operation + 10 - 35°C / 10 - 85 % humidity Stock 0 - 60°C / 20 - 80 % ont condensing Transport - 25 - 60°C / 20 - 80 % Width x Height x Depth 440 x 750 - 1,000 x 1,100 mm Weight	Programming			
Programming button Separation speed setting Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces - external start / stop - SMEMA (round, 14 pins) Power supply 230/115 VAC, 50/60 Hz Temperature / Operation humidity Stock 0 - 60°C / 20 - 80 % not condensing Transport Width x Height x Depth Weight - Separation speed setting - Detection of separation length - Accumulation - External start / stop - SMEMA (round, 14 pins) - 230/115 VAC, 50/60 Hz - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 % - 25 - 60°C / 20 - 80 %	Display		- Separation length	
Monitoring - Detection of separation length - Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces - external start / stop - SMEMA (round, 14 pins) Power supply 230/115 VAC, 50/60 Hz Temperature / Operation + 10 - 35°C / 10 - 85 % humidity Stock 0 - 60°C / 20 - 80 % Width x Height x Depth 440 x 750 - 1,000 x 1,100 mm Weight	Control buttons		- Start, Stop, Reverse	
- Accumulation before / behind the blades - Conveyor belt finally stopping Interfaces - external start / stop - SMEMA (round, 14 pins) Power supply 230/115 VAC, 50/60 Hz Temperature / Operation + 10 - 35°C / 10 - 85 % humidity Stock 0 - 60°C / 20 - 80 % not condensing Transport - 25 - 60°C / 20 - 80 % Width x Height x Depth 440 x 750 - 1,000 x 1,100 mm Weight	Programming button		- Separation speed setting	
- SMEMA (round, 14 pins) Power supply 230/115 VAC, 50/60 Hz Temperature / Operation + 10 - 35°C / 10 - 85 % humidity Stock 0 - 60°C / 20 - 80 % not condensing Transport - 25 - 60°C / 20 - 80 % Width x Height x Depth 440 x 750 - 1,000 x 1,100 mm Weight 63 kg	Monitoring		- Accumulation before / behind the blades	
Temperature / Operation + 10 - 35°C / 10 - 85 % humidity Stock 0 - 60°C / 20 - 80 % not condensing Transport - 25 - 60°C / 20 - 80 % Width x Height x Depth 440 x 750 - 1,000 x 1,100 mm Weight 63 kg	Interfaces		, ·	
$\begin{array}{llllllllllllllllllllllllllllllllllll$	Power supply		230/115 VAC, 50/60 Hz	
not condensing Transport - 25 - 60°C / 20 - 80 % Width x Height x Depth 440 x 750 - 1,000 x 1,100 mm Weight 63 kg	Temperature /	Operation	+ 10 - 35°C / 10 - 85 %	
Width x Height x Depth 440 x 750 - 1,000 x 1,100 mm Weight 63 kg	humidity	Stock	0 - 60°C / 20 - 80 %	
Width x Height x Depth 440 x 750 - 1,000 x 1,100 mm Weight 63 kg	not condensing	Transport	– 25 - 60°C / 20 - 80 %	
Weight 63 kg			440 x 750 - 1,000 x 1,100 mm	
Approvals CE, FCC Class A	Weight			
	Approvals		CE, FCC Class A	

Part no.	Product	
8934520	PCB separator MAESTRO 5L neither circular blade or protective cover	
	The blade shaft has to be ordered separately. It is assembled to the device and adjusted ex factory by the manufacturer.	
893xxxx 893xxxx	Blade shaft assembled Device-specific parts	
Scope of delivery	PCB separator, base frame Power cable Type E+F, length 1.8 m Service tool Warning light Auxiliary device for blade shaft Rest, entirely End piece for extraction Operator's manual DE/EN	
Part no.	Wear parts	
8934803.001	Circular blade, width 8 mm	
893xxxx.001	Circular blade, customer-specific	



PCB separator MAESTRO 6



Separation of milled PCBs up to a length of 1,500 mm with a minimum of stress on the components

The MAESTRO 6 is the consequent further development of the proven cab PCB separators. Even very lengthy PCBs can be separated fast, economical and without stress.

The carriage power unit is assembled behind the linear blade. This crucially simplifies the separation and removal of the PCBs.

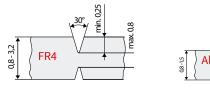
Dial g	auge
--------	------

In order to separate without stress and to achieve a long service life, the circular and linear blades have to be guided along the entire separation. The dial gauge setting and regularly checking the parallelism is assembled to the carriage.



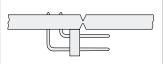
Overall technical data Separation method Component side Circular by Solder side Linear blate Department of Linear blate Depart	inum	
Separation speed up to 500 mm/s up to 250 mm/s with alumi Support table depth 160 mm Operation panel Control buttons - Home / Position - Carriage moving to and fi Programming buttons - Carriage start / stop position		
up to 250 mm/s with alumi Support table depth 160 mm Operation panel Control buttons - Home / Position - Carriage moving to and fr Programming buttons - Carriage start / stop position		
Operation panel Control buttons - Home / Position - Carriage moving to and fr Programming buttons - Carriage start / stop position	ro	
Control buttons - Home / Position - Carriage moving to and fr Programming buttons - Carriage start / stop position	ro	
- Carriage moving to and fi Programming buttons - Carriage start / stop positions	ro	
- Carriage moving to and fi with or without interrupt - Separation speed - "Number of cuts" or "Separation length" selection - Deletion of selection - Conveyor belt activation - Belt speed	ro tion ection	
Power switcher ON / OFF		
·	START separation	
, ,	E-stop	
11.7	100 - 240 VAC, 50/60 Hz	
Emmission sound pressure level LpA < 70 dB (A)		
Temperature / Operation + 10 - 35°C / 10 - 85 %		
humidity Stock 0 - 60°C / 20 - 80 %		
not condensing Transport - 25 - 60°C / 20 - 80 %		
Approvals CE, FCC Class A		

Outside dimensions increased after separation: typically 0.2 \mbox{mm}

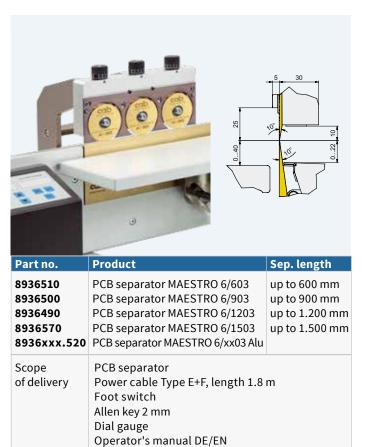


The milled groove may be interrupted by cutouts.

Protruding components need a recessed linear blade. Contact us, if required



PCB separator MAESTRO 6



MAESTRO 6/X03

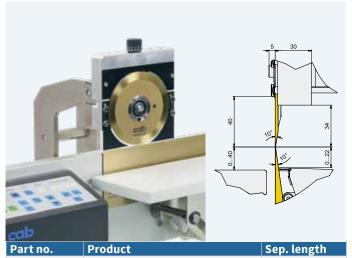
Separation of FR4, CEM3 and aluminum PCBs up to lengths of 1,500 mm

Simple and quick change of FR4/CEM3 blades to aluminum blades or the other way round

Height of circular blades to the linear blade to be set individually

Technical data	6/603	6/903	6/1203	6/1503
Circular blade	diameter 6	0 mm		
Separation speed	up to 500 r	,		
	up to 250 r	nm/s with a	luminum	
Materials	FR4, CEM3, aluminum			
Component height	Component side up to 10 mm Solder side up to 22 mm			
Width	1,150 mm	1,450 mm	1,750 mm	2,050 mm
Height x Depth	350 x 450 mm			
Weight	50 kg	55 kg	60 kg	65 kg

Part no.	Wear parts	
8936446.001 8936507.001	Circular blade 60 FR4 Circular blade 60 Alu	•
8936593.001 8936592.001	Linear blade 450 Linear blade 600	
8936437.001	Blade protection X03	



Part no. Product Sep. length 8936560 PCB separator MAESTRO 6/601 up to 600 mm PCB separator MAESTRO 6/901 up to 900 mm Scope PCB separator Power cable Type E+F, length 1.8 m Foot switch Allen key 2 mm Dial gauge Operator's manual DE/EN

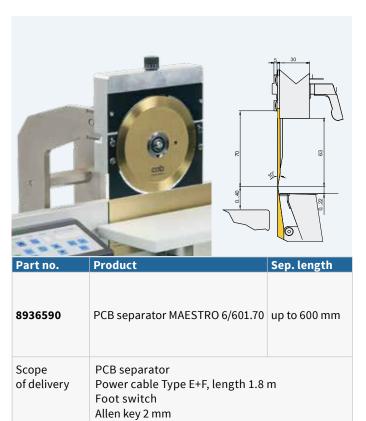
MAESTRO 6/X01

Separation of FR4 and CEM3 PCBs up to lengths of 900 mm; further lengths on request

Technical data	6/601	6/901					
Circular blade	diameter 125 mm						
Separation speed	up to 500 mm/s						
Materials	FR4, CEM3						
Component height	Component side up to 34 mm Solder side up to 22 mm						
Width x Height x Depth	1,150 x 410 x 450 mm	1,450 x 410 x 450 mm					
Weight	50 kg	55 kg					

Part no.	Wear parts	
8930509.001	Circular blade 125 FR4	
8936593.001 8936592.001	Linear blade 450 Linear blade 600	
8936614.001 8936615.001	Blade protection 1 X01 Blade protection 2 X01	

PCB separator MAESTRO 6



Dial gauge

Operator's manual DE/EN

MAESTRO 6/601.70

Separation of FR4 and CEM3 PCBs up to lengths of 600 mm and component heights of 70 mm; further lengths on request

Technical data	6/601.70
Circular blade	diameter 185 mm
Separation speed	up to 500 mm/s
Materials	FR4, CEM3
Component height	Component side up to 63 mm Solder side up to 22 mm
Width x Height x Depth	1,150 x 410 x 450 mm
Weight	50 kg

Part no.	Wear parts	
8933933.001	Circular blade 185	
8936593.001 8936592.001	Linear blade 450 Linear blade 600	
8936583.001 8936584.001	Blade protection 1 X01/70 Blade protection 2 X01/70	

PCB magazine series 100, 180, 300

providing 32 PCB slots



To be equipped both in vertical and horizontal orientation

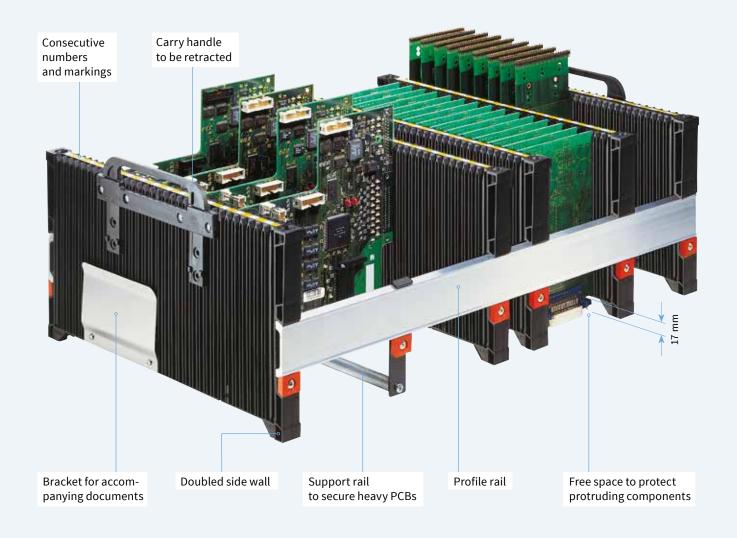
The system's variable width enables individual assembly according to any PCB size.

Magazines 100, 180 and 300 mm in height are offered for the various PCBs.

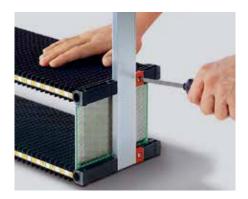
32 slots in gaps of of 10 mm offer maximum packing density.

Safe guidance

Funnel-shaped slot entries ensure safe PCB insertion. Yellow position stickers indicate the exact positions and prevent from falsely inserting PCBs diagonally by hand.



PCB magazine series 100, 180, 300



Quick and simple assembly

The side walls are adjustable with the help of the profile rails. Two PCBs are inserted in the outer adjusting grooves. The upper side wall has to be pressed against the PCBs and be fixed with screws.



Solid and resistant to torsion

The double-wall construction makes the side walls extremely solid. A metal tube is provided to further stiffen a side wall in the case of high mechanic and thermal forces.



Slot lock

To prevent from component damage when inserting PCBs in a magazine, slots that are not in use can be covered.



Stackable

Boreholes and pins on the outer margins allow the magazines to be stacked. On the bottom of the side walls, molded recesses simplify the lifting.



Upright position

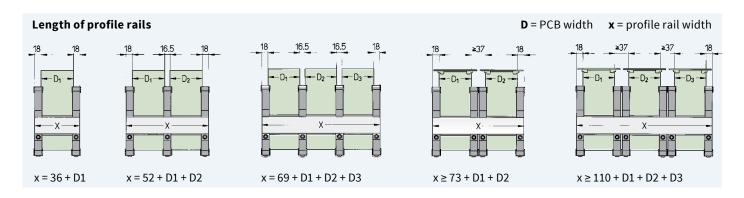
Assembled PCBs need horizontal storage before soldering. For this purpose, the magazines are set upright.



Transport boxes

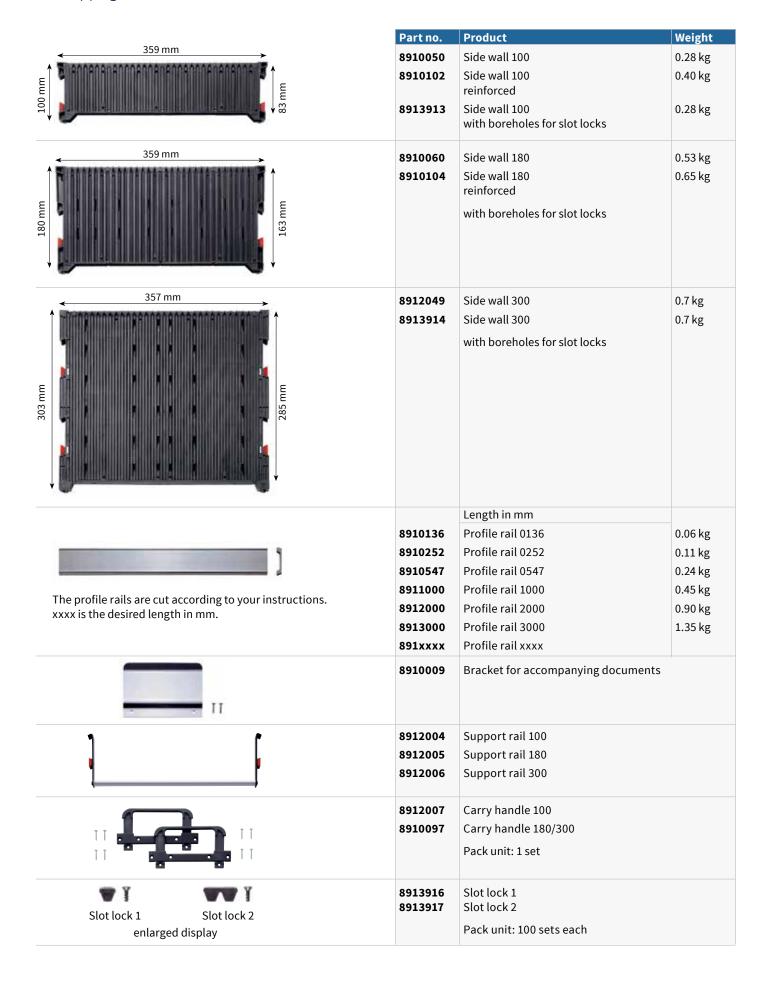
The magazines can be inserted into standard 600 x 400 resp. 400 x 300 mm boxes for transport. Retractable carry handles simplify the insertion and removal.

Technical data	100	180	300			
Material	Polypropylene					
Color	black					
Surface resistance	accord. to DIN EN 61340-5-1 < 109					
Slot width	2.8 mm	4 mm	3.5 mm			
Slot depth	2 mm	2.5 mm	2.5 mm			
Number of slots	32					
Distance between the PCBs	s 10 mm					



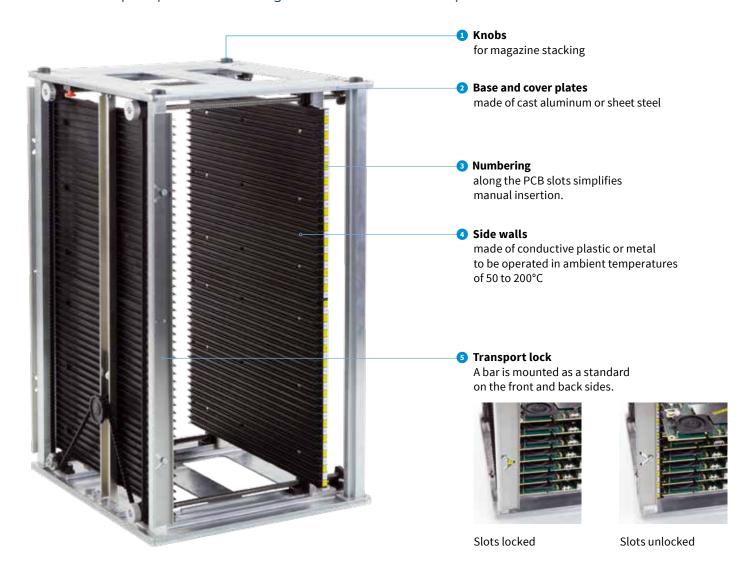
PCB magazine series 100, 180, 300

Delivery program



PCB magazine series 600, 700, 800

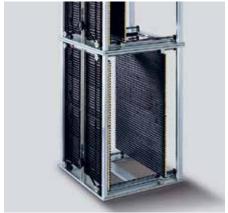
Automation requires precision when magazines are in use in assembly lines.





Metal magazine

In the case of high mechanic force and high thermal force up to 200°C, metal side walls are provided.



Safe stacking

All the magazines can be stacked safely and in a space-saving manner with the help of our knobs provided on the upper plate.

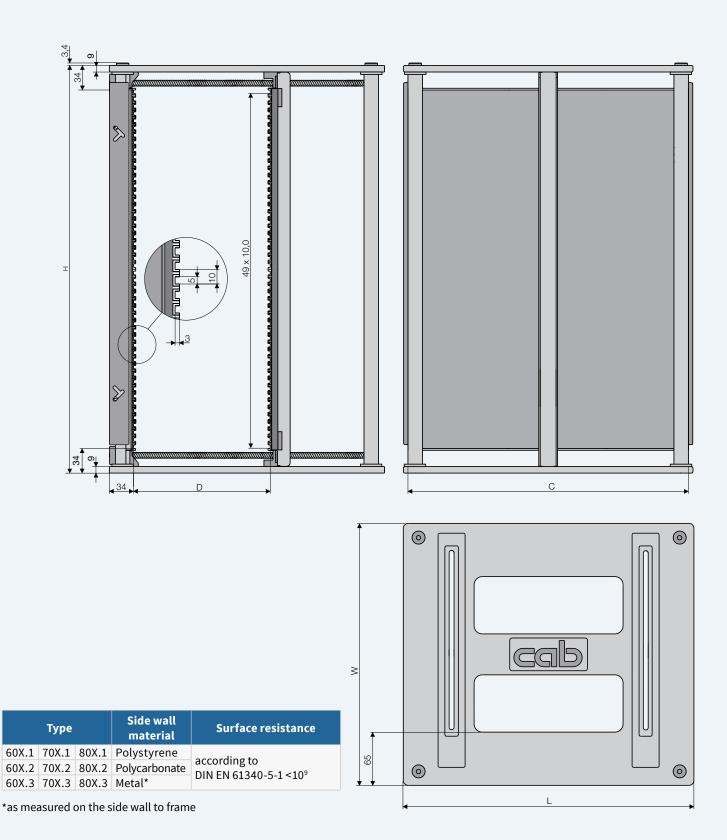


Perfecting operation

Its vertical symmetry allows the magazines to be turned upside down if use is in perfecting mode. To be operated only without stacking knobs

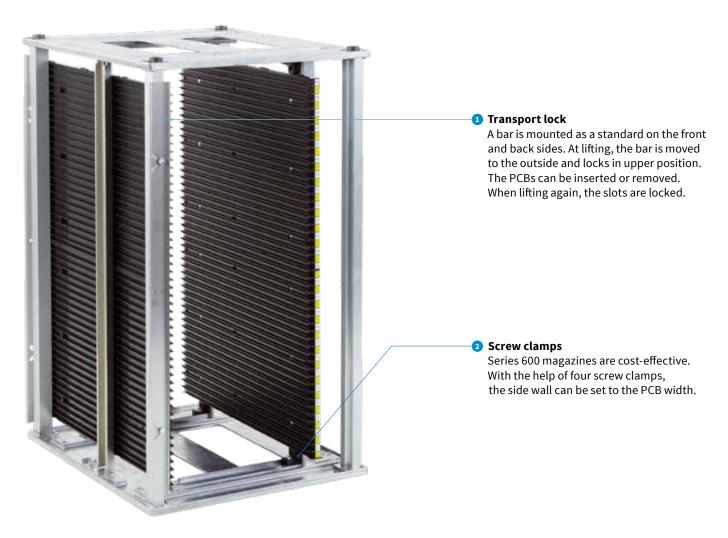
PCB magazine series 600, 700, 800

Dimensional drawing



PCB magazine series 600

Screw-clamped width setting



			Temper	atur e °C	ur e °C F				РСВ		
			Insertions	Surrounding	htkg	Outsio	de dime	nsions		dth D	Length C
Туре	Part no.	Side wall material	Inser	Surro	Weight	L mm	W mm	H mm	min. mm	up to mm	up to mm
601.1 601.2 601.3	8917601 8916601 8915601	Polystyrene Polycarbonate Metal	60 130 200	50 100 200	5.6 5.9 6.9	355	320	563	40	250	342
602.1 602.2 602.3	8917602 8916602 8915602	Polystyrene Polycarbonate Metal		50 100 200	5.8 6.1 7.2	400	320	563	40	250	387
603.1 603.2 603.3	8917603 8916603 8915603	Polystyrene Polycarbonate Metal		50 100 200	6.2 6.5 7.6	400	380	563	40	310	387

further sizes on request

The **PCB magazines 60X.1** and **60X.2** are delivered partially assembled.

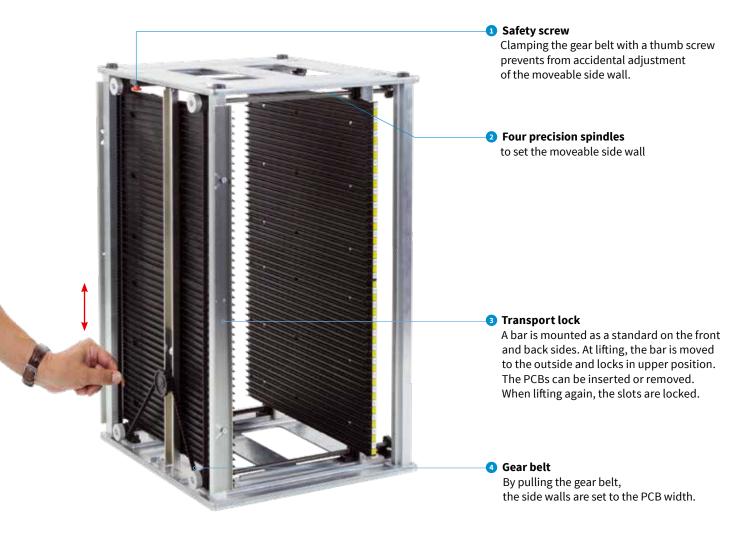
Assembled magazines to be ordered with an additional part no.:

D	L31001	-	assembled with stacking knobs
D	L 31002	1	assembled for perfecting operation

The **PCB magazines 60X.3** are delivered assembled with stacking knobs.

PCB magazine series 700

Variable width setting by pulling the gear belt by hand



			Temper	ature °C						РСВ	
			Insertions	Surrounding	Weight kg	Outsic	le dime	nsions		dth D	Length C
Туре	Part no.	Side wall material	Inser	Surre	Weig	L mm	W mm	H mm	min. mm	up to mm	up to mm
701.1 701.2 701.3	8917701 8916701 8915701	Polystyrene Polycarbonate Metal	60 130 200	50 80 100	5.6 5.9 6.9	355	320	563	40	250	342
702.1 702.2 702.3	8917702 8916702 8915702	Polystyrene Polycarbonate Metal	60 130 200	50 80 100	5.8 6.1 7.2	400	320	563	40	250	387
703.1 703.2 703.3	8917703 8916703 8915703	Polystyrene Polycarbonate Metal	60 130 200	50 80 100	6.2 6.5 7.6	400	380	563	40	310	387
704.1 704.2 704.3	8917704 8916704 8915704	Polystyrene Polycarbonate Metal	60 130 200	50 80 100	7.8 8.0 9.5	460	400	563	10	330	447
716.2 716.3	8916716 8915716	Polycarbonate Metal	130 200	80 100	9.5 10.9	535	460	563	10	390	522
717.2 717.3	8916717 8915717	Polycarbonate Metal	130 200	80 100	9.7 11.1	535	530	563	10	460	522

The **PCB magazines 70X.1** and **70X.2** are delivered partially assembled.

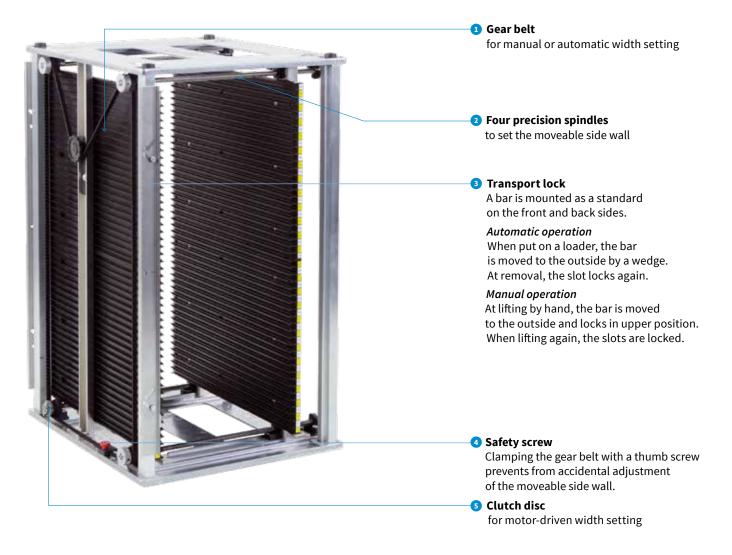
Assembled magazines to be ordered with an additional part no.:

DL31001	7	assembled with stacking knobs
DL 31002	-	assembled for perfecting operation

The **PCB magazines 70X.3** are delivered assembled with stacking knobs.

PCB magazine series 800

Variable width setting by pulling the gear belt motor-driven or by hand



			Temperatur e °C					PCB			
			Insertions	Surrounding	Weight kg	Outsic	le dime	nsions		dth D	Length C
Туре	Part no.	Side all material	Inser	Surro	Weig	L mm	W mm	H mm	min. mm	up to mm	up to mm
801.1 801.2 801.3	8919801 8918801 8915801	Polystyrene Polycarbonate Metal	60 130 200	50 80 100	5.6 5.9 6.9	355	320	563	40	250	342
802.1 802.2 802.3	8919802 8918802 8915740	Polystyrene Polycarbonate Metal	60 130 200	50 80 100	5.8 6.1 7.2	400	320	563	40	250	387
803.1 803.2 803.3	8919803 8916745 8915803	Polystyrene Polycarbonate Metal	60 130 200	50 80 100	6.2 6.5 7.6	400	380	563	40	310	387
804.1 804.2 804.3	8919804 8918804 8915804	Polystyrene Polycarbonate Metal	60 130 200	50 80 100	7.8 8.0 9.5	460	400	563	10	330	447
816.2 816.3	8916816 8915816	Polycarbonate Metal	130 200	80 100	9.5 10.9	535	460	563	10	390	522
817.2 817.3	8916817 8915817	Polycarbonate Metal	130 200	80 100	9.7 11.1	535	530	563	10	460	522

The **PCB magazines 80X.1** and **80X.2** are delivered partially assembled.

Assembled magazines to be ordered with an additional part no.:

DL31001	-	assembled with stacking knobs
DL 31002	-	assembled for perfecting operation

The **PCB magazines 80X.3** are delivered assembled with stacking knobs.

PCB magazine series 600, 700, 800

Accessories



Slot lock

to lock the slots on magazines with plastic side walls. The clipping on and removal need no additional tools.

A slot lock in use reduces the maximum PCB width setting by 3 mm.

Pos.	Part no.	Product	Pack unit
1.1	8916571	Slot lock 1 (onefold)	100
1.2	8916575	Slot lock 5 (fivefold)	20







Bracket

to attach accompanying documents on magazines with plastic side walls.

Part no.	Product	Pack unit
8913416	Bracket	1



Protective cover

It prevents PCBs inserted in a magazine from pollution. conductive, solid, tear-proof

Material: Permastat ESD Color: pink / thickness: 150 μm

Magazine type	Part no.	Pack unit
601, 701, 801	8916411	10
602, 702, 802	8916412	10
603, 703, 803	8916413	10
704, 804	8916414	10
716, 816	8916416	10
717, 817	8916417	10

Special magazines



Low structural height for series 600, 700, 800 magazines

Low height PCB magazines, e.g. in use in annealing furnaces; Reducing the height also prevents from overload in the case of heavy PCBs or product carriers in use. Side wall material: metal; plastic on request

		Temperature °C		bū	Outside			ns	lamping	
Туре	Part no.	Insertions	Surrounding	Weightkg		mensio W mm		Insertion	Screw cla	Gear belt
601.3	8916130	200	200	5.5	355	320	343	28	•	-
701.3	8916410	200	100	5.9	355	320	263	20	-	
701.3	8916175	200	100	6.1	355	320	343	28	-	



Twin and triple magazines of the 700 series to process long PCBs

The magazines are assembled torsion resistant. PCBs up to 1,187 mm in width can be stored safely and transported.

Twin magazines are delivered fully assembled. Triple magazines are delivered partially assembled.

Side wall material: polycarbonate

		Temperature °C					РСВ			
		Insertions	Surrounding	ht kg	Outside dimensions				dth D	Length C
Туре	Part no.	Inser	Surre	Weight	L mm	W mm	H mm	min. mm	up to mm	up to mm
701.2-2	8916712	130	80	12.3	710	320	563	40	250	697
702.2-2	8916722	130	80	12.7	800	320	563	40	250	787
703.2-2	8916732	130	80	13.5	800	380	563	40	310	787
701.2-3	8916713	130	80	18.7	1,065	320	563	40	250	1,052
702.2-3	8916723	130	80	19.3	1,200	320	563	40	250	1,187
703.2-3	8916733	130	80	20.5	1,200	380	563	40	310	1,187



Doubled capacity by parallel insertion in series 600 magazines

Up to 100 PCBs put in one magazine; In the case of narrow PCBs, magazines with two insertion units can be used side by side. Side wall materials: polystyrene, polycarbonate, metal

			Temperature °C					РСВ		
			Insertions	Outside Width D D D D D D D D D D D D D D D D D D D		Outside dimensions			Length C	
Тур	oe .	Part no.	Inser	Surro	L mm	W mm	H mm	min. mm	up to mm	up to mm
601.	1-P	8916435	60	50	355	320	563	40	100	342
601.	2-P	8915485	130	100	355	320	563	40	100	342
603.	2-P	8916425	130	100	400	380	563	40	100	387
603.	3-P	8916395	200	200	400	380	563	40	100	387

Notes	we identify m
	we weary m

cab product overview

Label printers MACH1, MACH2

in the lower price segment



Label printers SQUIX 2

Industrial device for print widths up to 57 mm





Label printers XD4T

for double-sided printing



Print modules PX

to be integrated in labeling machines



Label dispensers HS, VS

for horizontal or vertical dispense



Label printers MACH 4S

where little space is available



Label printers SQUIX 4

Industrial device for print widths up to 108 mm



Label printers XC

for two-color printing



Labels

made from more than 400 materials



Labeling heads IXOR

to be integrated in labeling machines



Label printers EOS2

Desktop device for label rolls up to diameter 152 mm



Label printers SQUIX 6

Industrial device for print widths up to 168 mm



Print and apply systems Hermes+

for automation



Ribbons

in wax, resin and resin/wax qualities



Marking lasers FL+

with output powers 10 to 50 Watt



Label printers EOS5

Desktop device for label rolls up to diameter 203 mm



Label printers A8+

Industrial device for print widths up to 216 mm



Print and apply systems Hermes C

for two-color printing and applying



Label software cablabel S3

Design, print, control



Laser marking systems XENO 1

for single workpieces and series



Germany

cab Produkttechnik GmbH & Co KG

Karlsruhe

Phone +49 721 6626 0

www.cab.de

France

cab Technologies S.à.r.l.

Niedermodern Phone +33 388 722501

www.cab.de/fr

USA

cab Technology, Inc.

Chelmsford, MA

Phone +1 978 250 8321

www.cab.de/us

Mexico

cab Technology, Inc.

luáre:

Phone +52 656 682 430

www.cab.de/es

Taiwan

cab Technology Co., Ltd.

Taipe

Phone +886 (02) 8227 3966

www.cab.de/tw

China

cab (Shanghai) Trading Co., Ltd.

Shangha

Phone +86 (021) 6236 3161

www.cab.de/cn

China

cab (Shanghai) Trading Co., Ltd.

Guangzhou

Phone +86 (020) 2831 7358

www.cab.de/cn

South Africa

cab Technology (Pty) Ltd.

Randburg

Phone +27 11 886 3580

www.cab.de/za

cab // 820 distribution partners in more than 80 countries

