

ZelFlex

Pneumatic 4-Side Stretching Frame

LPKF ZelFlex Z4P

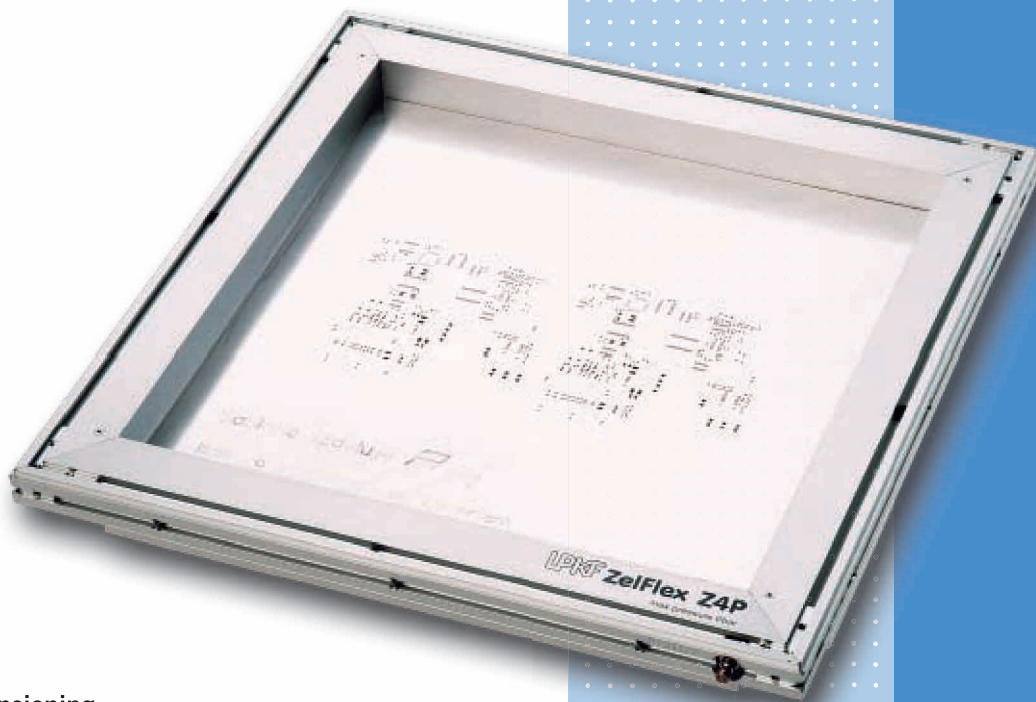
The only pneumatic stretching frame with no need of constant air connection

General Description

LPKF ZelFlex Z4P is a pneumatic 4-sided stretching frame for fast clamping of SMT metal stencils. Simple, fast and repetitive changing of stencils is provided by patented perforation. A unique patented system of stretching with compressed air enables perfect tensioning all over the work area. Air source is disconnected after setting the stencil to the frame.

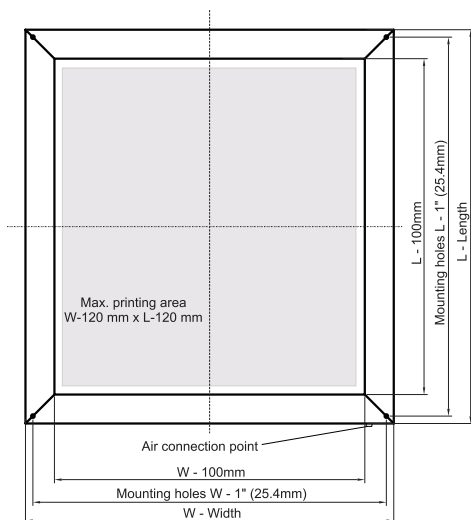
Main Specification

- Fast exchange of stencils
- Perfect tensioning all over the stencil
- No air connection required while printing
- Royalty-free production of stencils
- Less storage place required
- Short pay-off time



Perfect Tensioning

The design of LPKF ZelFlex Z4P frame enables on-contact printing. Air pressure level defines stencil tension. Various thicknesses of stencil can be used and perfectly tensioned for print application. Additionally, the frame provides constant tensioning and therefore consistent print quality over time. The functioning of the frame is very simple and therefore reliable. Compressed air is supplied into a flexible tube and distributed to all four sides. As the air pressure rises the tube expands and moves all four tensioning bars apart simultaneously. With an advanced perforation and tensioning bar design, optimal pressure distribution is guaranteed.



Compatibility with different printers

LPKF ZelFlex Z4P produced in several dimensions and with different adapters fits to the most available screen printers. Innovative designing solutions also enable custom-sized frames to be produced in short time.

Quality

A rigid aluminium profile, tensioning and protection bars are specifically designed for this application. All parts are electronically designed and produced using CNC systems. Precision machining guarantees consistent high quality production. Each frame is assembled individually and tested to ensure a very high standard. Our implemented procedures have gained us ISO 9001 accreditation.

Royalty-free

Stencil perforation as well as ZelFlex frame design are patented. Reproduction of perforation for ZelFlex users is royalty free.

Cost reduction - short pay off time

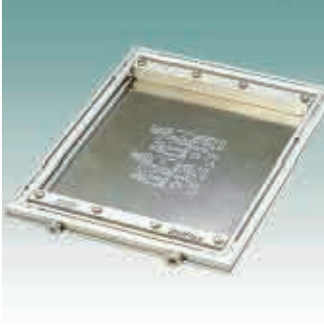
With only one frame, many of existing problems can be solved, so that less space is necessary for storing used frames, the cleaning process of templates is simplified - no problems with glues and solvents, simplified delivery of stencils. Your cost will be reduced since there is no need for new frames, gluing of templates, protection adhesive tapes and lacquers. The pay-off time is around one month, which usually means 10-15 frames.

Technical data:	Standard model	Slim model
Filling air pressure	4-6 bars (60-90 p.s.i.)	4-6 bars (60-90 p.s.i.)
Recharge	daily	daily
Height	33 mm (1.3") without adapters	25 mm (1.3") without adapters
Inner area	outer dimensions - 100 mm	outer dimensions - 80 mm
Stencil size	outer dimensions - 38 mm	outer dimensions - 35 mm
Weight	5 to 12 kg (11 to 26.4 lb)	4 to 10 kg (8.8 to 22 lb)

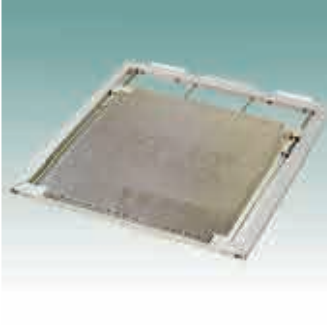
ZelFlex frame type	Outer dimension [mm]	Height at clamping [mm]	Inner dimensions [mm]	Printing area [mm]	Foil size [mm]
ZelFlex Z4P 457x584	457 x 584 (18,8" x 23")	33mm (1.3")	357 x 484 (14" x 18")	330 x 460 (13" x 18")	337 x 464
ZelFlex Z4P 508x508	508 x 508 (20" x 20")	33mm (1.3")	408 x 408 (16" x 16")	285 x 285 (15" x 15")	470 x 470
ZelFlex Z4P 540x540 / 40	540 x 540	40mm*	440 x 440	420 x 420	402 x 402
ZelFlex Z4P 558x558	558 x 558 (22" x 22")	33mm (1.3")	458 x 458 (18" x 18")	430 x 430 (17" x 17")	520 x 520
ZelFlex Z4P 558x558 / 736x736	736 x 736 (29" x 29")	40mm (~1 1/2")*	458 x 458 (18" x 18")	430 x 430 (17" x 17")	520 x 520
ZelFlex Z4P 584x584x25 Slim	584 x 584 (23" x 23")	25mm (1")	504 x 504 (19.8" x 19.8")	460 x 460 (18" x 18")	546 x 546
ZelFlex Z4P 636x636	636 x 636 (25" x 25")	40mm (~1 1/2")*	536 x 536 (21" x 21")	510 x 510 (20" x 20")	598 x 598
ZelFlex Z4P 636x636 / 736x736	736 x 736 (29" x 29")	40mm (~1 1/2")*	536 x 536 (21" x 21")	510 x 510 (20" x 20")	598 x 598
ZelFlex Z4P 650x680x25 Slim	650 x 680 (25.6" x 26.8")	25mm (1")	570 x 600 (22.4" x 23.6")	530 x 560 (20.9" x 22")	615 x 645
ZelFlex Z4P 736x736	736 x 736 (29" x 29")	40mm (~1 1/2")*	636 x 636 (25" x 25")	610 x 610 (24" x 24")	698 x 698

*adapter height

ZelFlex Related Products



ZelFlex ZR



Washing frame



Air supply unit



Measuring gauge

This double-sided mechanical stretching frame is especially suitable for smaller printers. A patented tension system provides the best and most equal tension in the range of double-sided stretching frames. Gap printing is also applicable. The adjustable rear bar provides a possibility of clamping smaller templates. The frame is deliverable in different dimensions up to 23".

The washing frame is designed for easy and reliable clamping of stencils with ZelFlex perforation. The frame can be put or hung into a washing machine. Two dimensions are available: smaller 584x584mm (23"x23") and larger 736x736mm (29"x29"). The former supports templates with ZelFlex perforation from frames from 508mm (20") to 584mm long (23") and the latter from 636mm (25") to 736 (29").

An air supply unit is an option for controlled filling of the ZelFlex frame. This is especially important for foils thinner than 150µm. In addition to an air pressure regulator, it consists of a water separator, 5µm filter and sliding valve for releasing air. The system is easily clamped to the edge of a working table.

On request, the ZelFlex frame can be assembled with a measuring gauge. It measures the actual pressure in the frame and is sometimes required for a follow-up of production parameters.

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ISO 9001 certified
No. 12 100 15161 TMS

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NEW
ZelFlex Protect
Stencil is permanently
attached on protective frame,
which ensures protection from
operator injury during the complete
stencil handling process.
Additionally stencil can be
washed, dried and stored
together with
protective frame.

Contact your LPKF Representative for Details