

PRINTING MACHINES OVERVIEW



Printing data

| | | | | | |
|--------------------------------------------------------------------------------------|-----------------------|--------------------------------------------|--------------------------------------------|-----------------------------|----------------------------------------------|
| Frame size (WxLxH) mm (orientation: W-left/right, L-front/rear, H-at clamping) | Max | 584 x 680 x 40 | 650 x 610 x 33 | 762 x 780 x 40 | 1500 x 600 x 40 |
| | Min | 584 x 584 x 18 | 300 x 300 x 18 | 300 x 300 x 25 | 300 x 300 x 25 |
| Stencil frame weight | Max | No limit | 8 kg | 8 kg | 10 kg |
| Board size (WxL) mm | Max | 460 x 410 | 510 x 420 | 620 x 550 | 1400 x 420 |
| | Min | 50 x 60 | 50 x 60 | 50 x 60 | 50 x 60 |
| Board thickness (adjusted) mm | Max | 4 | 4 | 4 | 4 |
| | Min | 0.5 | 0.5 | 0.5 | 0.5 (thinner board on request) |
| Print area (mm) | Max | 410 x 390 (standard) 440 x 390 (option) | 440 x 400 (standard) 480 x 400 (option) | 600 x 540 | 1200 x 350 (standard) 1200 x 410 (option) |
| | Component height (mm) | Max | 63.5 | 23.5 | 23.5 |
| Printing accuracy | | ±20 µm in 3σ (FA23) | | | |
| Print capability | | 01005 (0402 metric) chip | 01005 (0402 metric) chip | 01005 (0402 metric) chip | 0402 (1005 metric) chip |
| Typical cycle time (without printing) | | 10 - 20 s | 10 - 20 s | 10 - 20 s | 10 - 20 s |

Programmable parameters

| | | | | |
|-------------------------------------|----------------------|--------------------|--------------------|--------------------|
| Print pressure (manual control) | 1-5 bar (10 – 140 N) | 2-5 bar (40-120 N) | 2-5 bar (40-120 N) | 2-5 bar (40-100 N) |
| Print pressure (electronic control) | 1-3 N/cm | | | |
| Separation speed control | 0.1 - 3.5 mm/s | 0.5-6 mm/s | 0.5-6 mm/s | 0.5-6 mm/s |
| Print speed range | 10 – 99 mm/s | 20-150 mm/s | 20-150 mm/s | 30-200 mm/s |

Alignment conditions

| | | | | |
|----------------------------|----------------------------------------|------------------------|------------------------|-----------------------------------|
| Alignment solder pad shape | square or rectangle with max. rate 2:1 | | | |
| Table X/Y alignment | X, Y, (theta): +/- 5 mm (+/- 2.5°) | X, Y ±10 mm, Theta ±3° | X, Y ±10 mm, Theta ±3° | X, Y, (theta): ±10 mm (± 1.5°) |

Installation data

| | | | | |
|-------------------------------|-----------------------------------------|---------------------|---------------------|---------------------|
| Machine dimension (mm) | 860 (+448 control console) x 846 x 1416 | 745 x 985 x 695 | 895 x 1135 x 695 | 1730 x 930 x 720 |
| Weight | 220 kg | 100 kg | 128 kg | 160 kg |
| Power supply | 230 V/50 Hz, 150 VA | 230 V/50 Hz, 150 VA | 230 V/50 Hz, 150 VA | 230 V/50 Hz, 150 VA |
| Compressed air (oil free air) | 0.6 – 0.80 Mpa | 0.6 – 0.80 Mpa | 0.6 – 0.80 Mpa | 0.6 – 0.80 Mpa |
| Control system | PC with Windows®7 OS | PLC Touchscreen | PLC Touchscreen | PLC Touchscreen |

FA23

PRINTER WITH AUTOMATIC ALIGNMENT SYSTEM



APPLICATION

- Maximal printing area for 23" stencil
- High flexible mid-size production
- Prototyping
- Research

UNIQUE FEATURES

- Very fast setup for new and repeated products
- Unique double squeegee with minimized blades distance
- Smooth pneumo-hydraulic separation with very low speed, important for printing HI-density structures
- Integrated underside cleaning system
- Programmable print gap
- Programmable print modus

CONTROL SYSTEM

- PC with WINDOWS®7 OS
- All print parameters programmable
- Operator influence eliminated
- Dual speed of table separation
- Three password levels
- Logging of all process parameters
- Process data transfer to LAN possible

ALIGNMENT SYSTEM

- Stencil-to-board automatic alignment system with unique through-stencil view technology
- System can use square solder pads or printable fiducials
- Alignment system also accepts reduced apertures
- No table movement after alignment
- Keeping the accurate position independent on physical and climatic influence

