

AUTOMATIC PRESS (AP) 3T/5T

Product Brochure

AUTOMATIC PRESS (AP) - 3T/5T

TE Connectivity's (TE) automatic press (AP) 3T/5T machines apply compliant pin connectors to a wide range of PCBs. They are fully capable of handling demanding applications such as daughter cards, mid-planes and backplanes in data communication, aerospace defense & marine, medical, automotive, and energy industries. The press machine can hold up to 12 insertion tools and uses a lower support fixture. These machines use Windows 10 operating system which closely monitors force, distance and speed. They feature a touch screen monitor for enhanced machine operation and two barcode scanner options. One vision camera for PCB offset can integrate this function while an extra scanner can be added which provides fast PCB serial number entry. Five load cells for pressing force monitoring allows one low force range load cell dedicated for the low force monitoring which is sensitive for detecting bent pins at the early stage of the pressing cycle. This reduces scrap and simplifies troubleshooting and maintenance. The integrated floating head can adaptively enter the male-female connector, while the rigid head either frequently faults alarms or easily crushes the connector. The PCB capacity is 760 x 880 mm (30 x 36 in). The statistical process control feature within the machine's software provides a press log and allows press force plotting for every connector. Our machines are customizable with the manufacturing execution system (MES) software to optimize the manufacturing process by monitoring, tracking, documenting, and controlling the entire production lifecycle. We also offer a wide range of insertion tools for these machines for both TE and non TE products, allowing customizations available to meet your production requirements. Together with our global manufacturing footprint, we can offer the quality, reliability and trust to meet your next project's needs.



Optimized High-Performance Tool



Quality and Control Management



Customizable

Key Features	Benefits
Optimized High-Performance Tool	<ul style="list-style-type: none"> Windows 10 operating system closely monitors force, distance, and speed Touch screen monitor for enhanced machine operation Two barcode scanner options: <ul style="list-style-type: none"> One vision camera for PCB offset can integrate barcode scanner function Customer can also add an extra scanner Five load cells for pressing force monitoring <ul style="list-style-type: none"> One low force range load cell dedicated for the low force monitoring, sensitive for detecting bent pins at the early stage of pressing cycle, reduces scrap and simplifies troubleshooting and maintenance Four high force range load cell to confirm high precision measurement We offer an integrated floating head can adaptively enter the male- female connector, while a rigid head can frequently fault alarms or easily crush the connector
Quality and Control Management	<ul style="list-style-type: none"> Automatic X/Y/Z axis and rotation press head motion control PCB capacity of the AP 3T/5T machine is 760 x 880 mm (30 x 36 in) The statistical process control (SPC) feature within the machine's software provides a press log and allows press force plotting for every connector
Customizable	<ul style="list-style-type: none"> Manufacturing execution system (MES) available to meet your production requirements Wide range of insertion heads for TE & non TE terminals

Industries

- Data Communications
- Aerospace Defense & Marine
- Medical
- Automotive
- Energy

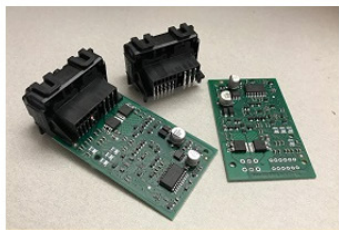
Applications

- Data Centers
- Servers
- Switching & Routing
- Storage
- Printed Circuit Board Assembly (PCBA) - Aerospace Defense & Marine
- Insulated-gate Bipolar Transistor (IGBT) - Automotive & Energy

Technical Details

Technical Specifications	
Operation System	Windows 10
Force (metric)	3T (29KN) ,5T(44KN)
X-Y Axis Speed	300mm /s
Z Axis Speed	0.05mm-20mm/s
Force Error F.S.	1% Full Scale
PCB Size	880mm x 760mm
Motion Control	X/Y/Z/R Servo
Auto Tool Changer	12 Tools + 1 Thickness Gage
Vision PCB Position	Apply Fiducial Mark for automatic offset by X/Y/R
Barcode Screening	Camera installed in press head for recording PCB SN (optional: contact TE expert)
PCB Conveyor	Automatic Loading
Interface	Touchscreen
Safety Device	Light Curtain, Door Interlock
Position Accuracy	±0.01mm
Size (not incl. stack light)	1950mm x 2000mm x 2300mm (LxWxH)
Weight	3500 Kg approx.
Power	220V AC 1P

Connector Seating Product Applications



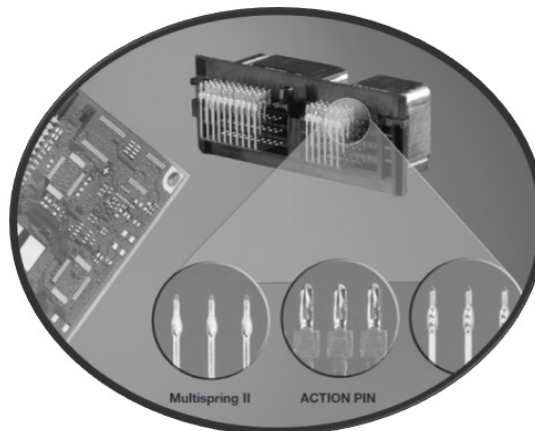
Auto Hybrid Connectors



Z-PACK 2mm HM Connectors

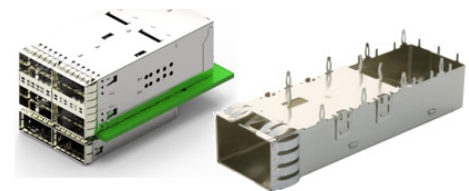


Power Connectors



Multispring II

ACTION PIN



SFP Cage Types: SFP-DD, SFP28, SFP56, SFP+, zSFP+



STRADA WHISPER Connectors and Cable Assemblies



Board-to-Board Connector

Ordering Information

Specifications	
PN 2418020-1	AP-3T, IN-LINE MACHINE
PN 1-2418020-1	AP-5T, IN-LINE MACHINE

Connect With Us

Our tooling is supported by an established, experienced and responsive field service organization. TE Connectivity field engineers are located worldwide and are available to assist with on-site and remote service; selection and installation of new equipment; training; and technical support. Service agreements are available to provide protection and support for all your application tooling equipment.

Contact Us

Phone: Americas 1-800-722-1111

EMEA 49-6151-607-1518

APAC 86-021-3325-9030

Tooling Portfolio: tooling.te.com

Field Service: te.com/fieldservice

te.com

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