

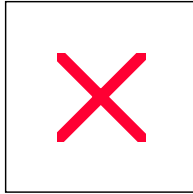
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AP 4010

**AUTOMATIC LABEL APPLICATOR FOR
Z4M THERMAL TRANSFER PRINTER**



Images of AP 4000: [Click here](#)



The AP 4000 is an accessory of the [Zebra Z4M](#) thermal transfer label printer for automatic tamp-blow or tamp-on application of the last printed label on still or moving objects.

The application tamp is driven by a small diameter cylinder, so the force is limited and cannot cause injuries to the operators.

It has been designed to satisfy a wide range of needs, but it fits better in medium to high speed applications, where labels need to be applied on boxes or pallets at the end of the production line.

Both tamp-blow and tamp-on methods are suitable for applying labels at various attitudes, including top, side or bottom.

The 300 mm diameter label roll and the 500 m carbon ribbon length assure a good autonomy.

To assure a good peeling capability even with difficult materials the rewinder is powered by a stepping motor driven by a microprocessor and a web tension sensor.

The applicator is controlled by a second microprocessors, that takes care of the synchronization and alarm signals too, allowing easy integration into complex industrial automation systems.

In the typical operating cycle, the applicator waits for a trigger signal (the object breaking the photocell beam or an external signal) to print the label, which is kept flat on the application plate by the air-assist nozzles. Once the label has been completely dispensed, it is locked on the plate by vacuum suction while the piston extends to the application position, then the air-blast applies the label on the object's surface and the piston retracts to the initial position, ready for a new cycle.

Several variations to this basic cycle can be programmed by means of four DIP-switches, selecting the phase of the trigger signal (none, print label, extend piston, blow label), allowing maximum flexibility for system integration.

Piston stroke timings and length are adjustable. Application distance may vary between 0 and 50 mm, depending on label size and precision required (typically better than +/- 1 mm).

Maximum application speed may vary (depending on applicator and printer configuration, cylinder length, label size, etc.) typically between 15 and 60 labels per minute.

Are supplied as standard: air-assist valve to reduce air consumption during stand-by, air regulators for smoother piston movement in slow applications, proximity sensor input for variable-distance application, piston home sensor, possibility of remote control, adjustment of the stroke length.

TECHNICAL SPECIFICATIONS

PRINTER ENGINE	Zebra Z 4010
PISTON STROKE	up to 240 mm standard ,up to 490 mm option. Swing arm available
LABEL SIZE	min 19 x 19 mm, max 120 x 170 mm
LABEL STOCK	up to 300 mm diameter
SPEED	up to 60 labels per minute
APPLICATION DISTANCE	from 0 to 50 mm, depending by the label size
ACCURACY	+/- 1 mm , for a flight distance smaller than 50% of the shortest side of the label
REWINDER	stepping motor driven, microprocessor controlled for a constant tension of the web
DISPLAY 5 LEDs	show the status of the solenoid valves and of the sensors
CONTROLS	START and RESET pushbuttons 2 trimmers for timing adjustment 1 trimmer for rewinder acceleration control 1 DIP-switches for selection of the operating modes
DIMENSIONS (l x h x w)	730x640x390mm (including the printer support plate): 110 mm plate overhang from the support plate with the piston fully
WEIGHT	approx. 20 kg, not including the printer
POWER SUPPLY	supplied by the printer
AIR SUPPLY	dry air (filter-regulator supplied) min 6 bar, max 8 bar air consumption at full speed max 60Nl/min, peak flow 100 l/min
ENVIRONMENT	temperature 5 - 35 °C, relative humidity from 20 to 90 % not condensing)
INTERFACE	25 pin "D" connector for product-sensing photocell and other interface signals

ACCESSORIES

4.151.000	500 mm stroke kit
4.152.000	Variable stroke kit
4.153.000	Swing arm kit
4.154.000	Supporting stand, fixed
4.155.000	Custom lenght stroke kit, 100-600 mm
4.156.000	Custom lenght swing arm kit, 0-400 mm
4.157.000	Dampener kit for swing arm kit
4.158.000	Exchangable application plate kit