phoenix italia srl AP 4042

AUTOMATIC LABEL APPLICATOR FOR DATAMAX PE 42, ZEBRA 170 PAX AND SATO 84xx PRINTERS



The AP 4042 is an accessory for the most popular print engines 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 dangers to the operators. Both tamp-blow and tamp-on are suitable for applying labels at various attitudes, including top, side or bottom. The 300 mm diameter label roll assures a good autonomy. 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 synchronisation 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 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 90 labels per minute.

TECHNICAL SPECIFICATIONS

PRINTER ENGINE	Datamax PE 42
PISTON STROKE	up to 240 mm standard ,up to 490 mm option
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 (I x h x w)	710x610x270mm (including the printer support plate): 110 mm plate overhang from the support plate with the piston fully extended
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 60NI/min, peak flow 100 I/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

P/N	
4.151.000	490 mm STROKE. Normally used with variable stroke kit P/N 152.000 or when a longer stroke is required.
4.152.000	4.152.000 VARIABLE STROKE KIT. It adapts automatically the length of the stroke to the distance of the product.
4.153.000	FRONT APPLICATOR. For application on the front of a box
4.158.000	EXCANGABLE APPLICATION TAMP Used when a quick change of the label size is required

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