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Original

Operating Instructions

Electrical foil feeder VE 70T and VE 120T Stainless steel version, Panasonic time relay



App.1

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As of 01/03/2018

1. Safety regulations

The foil feeder is only to be used for the intended purpose.

ATTENTION!

- Pull the mains plug before opening the switch housing.
- The device is provided with the CE mark in accordance with the EC Machinery Directive 2006/42/EC, and a Declaration of Conformity has been prepared. This Declaration of Conformity loses its validity if the machine is modified without the agreement of the manufacturer

2. Intended use – Field of application

The electrical foil feeder is a modular system to realize a material feed when working from roll to roll.

Application areas:

- Hot stamping feed of the stamping foil
- US welding transport of protective foil

It is particularly suitable for the initial equipping or retrofitting of manually operated presses, which have previously been equipped with mechanical feed systems, or as a component in machines. The foil feeder is prepared for connection to 230 VAC.

The control is takes place via a control element and a time relay. The control element can be an external switch, an inductive sensor or a relay. A synchronous motor serves as drive. The minimum feed step per period is approx. 2 mm. It is attached to the machine by means of a ø 12 mm linkage or as shown in **App.1** a holding assembly K4.

Advantages:

- Low-cost solution
- Decoupling of the feed process from the embossing process thus lower handling forces
- Possibility of longer feeds
- Immediately ready for use after installation and connection to the mains.



3. Technical data

Technical data:					
Parameters	Time control				
Drive	Synchronous motor (250 rpm)				
Feed rate:		0.1 m/s			
Feed path:		5 – 450 mm			
Feed accuracy:	Repeat accuracy time measurement				
		± 1%			
	Temperature impact				
		max ± 4%			
Voltage:		230 VAC			
Power consumption:		10 VA			

Components:						
Working width	Foil width max. 70 mm or 120 mm					
Feed control	via running time with time relay, preselection of feed time in the range of 0.05 to 10 s with scale potentiometer (2 time levels 1 s and 10 s)					
Trigger unit	Control relay 24 VDC integrated					
	Tilt switch directly on the hand lever					
	external pushbutton or inductive sensor 230 V, 10 VA					
Accessories	Unwinding unit					
	Bracket system					

4. Components directory

Seq. no.	Character	Function	Designation	Туре	Company
1	S1	On/Off	Rocker switch 230 V	2 NO contacts	
2	B1	Trigger element a) 240 V Switch/Relay	e.g. Ind. sensor Ue 24240 V =~ Ie 5200 mA	NJ2-12GM50- WS	Pepperl & Fuchs
3			e.g. mercury tilt switch	344-883	RS
4	Q2	b) 24 VDC/AC External voltage on coupling relay	e.g. pulse control Coupling relay normally closed (changeover contact) 24 VDC 6 A 240 VAC	231-2383 APE3024	RS
5	M1	Drive motor	Synchronous motor 106 mNm 230 VAC 250 rpm	440-414	RS
6	Q1	Time control	Time relay Panasonic S1 DXM-M2C 10M- AC220V		Panasonic

5. Commissioning and operation

Before putting the foil feeder into operation, reattach the parts that were dismantled during transport.

♦ ATTENTION!

A visual check for loose connections must be carried out. Fastening screws may have to be retightened.

The electric foil feeder is to be connected to 230 VAC supply with the power cable.

• ATTENTION!

The connection may only be made to sockets with a proper protective conductor.

The foil feeder is controlled by a power switch, trigger element and timer.

The trigger element can be a mercury tilt switch, a mechanical switch, a sensor or a coupling relay, which is able to switch 230 VAC with a max. load of approx. 200 mA directly.

The switch is arranged so that it switches at the desired time. For the embossing press, this is preferably the rest position before the next embossing cycle.

When the mains switch is switched on, the motor is switched on with the switching of the trigger element. It runs until the time set on the time relay has elapsed.

The time relay has 4 time functions and is operated in the operating mode: **Start-up delay** (1off, 2off).

The other modes

- ♦ Making pulse contact Off-Start (1off, 2on)
- Making pulse contact ON Start (1on, 2off)
- Pulse stretching (1on,2on)

cannot be used in the foil feeder.



The feed rate is determined by time.

The 4 time ranges are: 1 s/10 s/1 min/10 minFor short distances the 1 s range is sufficient, Switch to x1 or 10 s Switch to x10.



Notes:

- The products are delivered from the factory with the switch position OFF/left.
- The selector switches must not be adjusted with a sharp object.
- The time functions and time ranges must be set with the voltage switched off. When the power is switched on, malfunctions or destruction/defects may occur in the device.
- The selector switches for time function and time range must not be operated with a force exceeding 5 N. (Extract from the product data sheet)

A restart is only carried out again when the switching state of the trigger element changes from Off to On. If the trigger element is switched, the first feed cycle is also triggered when the mains is switched on.

Two variants can be used for relay control (changeover contact on the output side):

- Standard: Normally closed contact: Pulse control (6-24 VDC/AC 100 ms) resets the time relay when the contact is open and starts the feed after the end of the switching pulse.
- Option: Normally open contact: Feed start by applying the start signal (6-24 VDC/AC) Resetting the time relay at 0 V (switch off start signal)

The relay control can be converted by changing the internal wiring.

The foil is to be inserted according to the picture. The spring on the pressure plate of the foil unwinding device serves as spring accumulator during unwinding. When the foil is pulled off by the feed drive, the spring is tensioned. When the feeding process is finished, the spring pulls the roller back and keeps the tape taut.



Attention!

Care must be taken that the spring is not pressed too tightly, as the spring load effect is then hindered or the feed force is insufficient.



6. Declaration of Conformity

EC Declaration of Conformity

according to EC Machinery Directive 2006/42/EC Annex II 1 A

We hereby declare that the machine described below, in its design and construction as well as in the version marketed by us, complies with the basic safety and health requirements of the EC Machinery Directive 2006/42/EC.

Where this machine is mounted as partly completed machine to another machinery, it may not be put into service until such other machine also satisfies the provisions of this directive.

Electrical foil feeder VE 70T					
VE 70T – K4	Control: inductive sensor				
Machine No. Year of construction 2020					
to Company					
	Electrical foil feeder VE VE 70T – K4 Year of constru				

Observed EC Directive :

EC Directive Electromagnetic compatibility 2017/30/EU EC Low Voltage Directive 2014/35/EU

Technical documentation according to the directives is available. Upon reasonable request, these documents shall be transmitted to public authorities as a file. The operating instructions belonging to the machine are available in German.

Applied harmonised standards: DIN EN ISO 12100:2011, DIN EN349:208, DIN EN ISO 13850:2016, DIN EN 60204-1:2007.

Manufacturer: Horst Sitte Co. Special machine construction Owner David Kajcsos Pirnaer Landstraße 227-229 01259 Dresden

Responsible for the documentation: David Kajcsos Pirnaer Landstraße 227-229 01259 Dresden

Dresden, 17/07/2020

David Kajcsos Owner



7. Circuit diagram





8. Layout drawing with foil flow

