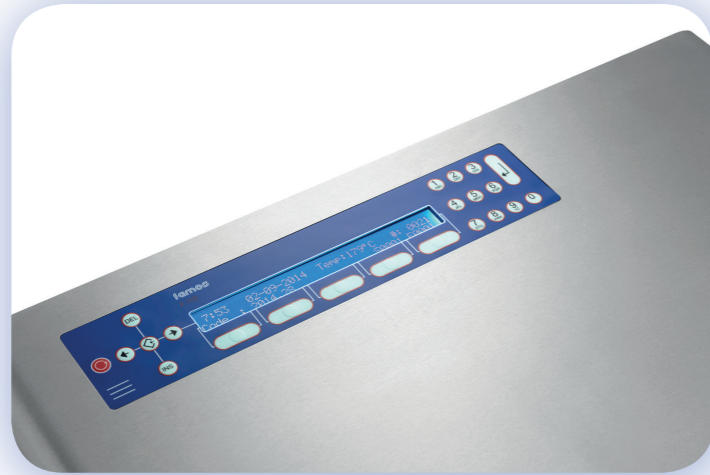


## New Rotary Heat Sealers F110 series



# F110 PROTEC®

Perfection Into Every Detail



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Completely made of AISI 304 stainless steel | Hygienic and innovative design | Validatable process according to ISO 11607-2 | Parameter controlled and equipped with USB port | View and monitor parameters real time on pc and display | Ethernet connection to monitor multiple heat sealers | Internal printer | Possibility for external label printing | TÜV tested and CE-certified | comply to DIN 58953-7:2010 and EN 868-5 | Low energy consumption | Low noise level |

General

All hospitals and the medical industry are constantly striving for perfection in sterility. An important aspect in this matter is the sterilisation of instruments and other necessities.

However, sterilisation alone is not enough; maintaining this sterility for a fixed period of time after the sterilisation process is at least as important. In order to assure that the sterility is maintained for a long period of time it is crucial that the packaging is perfectly sealed. That's where Famos comes in.

Famos BV was founded in 1946 in the Netherlands and over the past 70 years this family-owned company has gained a lot of experience and an excellent reputation within the medical field due to the reliability and flexibility of its products as well as its customer-oriented approach.

Its extensive experience allows Famos to develop the most sophisticated and reliable heat sealing machines available within the medical and pharmaceutical markets.

Famos is a pioneer in the medical field with leading inventions to increase the technical benefits of its heat sealers and to provide the best machines that are currently available.

During the years breaking edge technologies like microprocessor controlled machines, built-in printers and parameter controls to guarantee a perfect seal are innovations that have been brought onto the medical market by Famos. All these features have been developed to provide the best seal time after time. Each Famos heat sealer is both internally and externally made of stainless steel, which reduces maintenance to a minimum and offers the best solution as far as hygiene is concerned.

Due to the use of special brass heating bars the heat is being retained well and is being transferred onto the packaging very efficiently. This results into a very low energy consumption.

Nowadays, Famos offers an extensive range of heat sealers, which includes some very basic models which are being used in small clinics, dental practices and many others. The core business however consists of more distinguished rotary sealers which are used within universities and general hospitals as well as the pharmaceutical industries.

Today, over 60.000 heat sealers of the Famos brand are being used world-wide and Famos commits itself to a long-term business relationship with its appointed distributors who have an extensive knowledge of the Famos heat sealing equipment. Needless to say that the Famos sealers comply to the highest standards and guidelines. They are manufactured from the best materials available to guarantee the sterility of your sterilized instruments and to protect them by a perfect seal time after time, year after year.

As we believe strongly in the quality of our heat sealing machines Famos gives a warranty of two years on all of its heat sealing equipment, with exception of the motors and the fans. On these parts there is a warranty period of five years.

F110 PROTEC series

As one of the leading manufacturers in the medical market we recognize trends and customer needs and we implement these in our sealer range to guarantee utmost customer satisfaction. PROTEC has been derived from the word "protect" and symbolizes the high level of protection that is created by the seal made with the PROTEC sealers. The PROTEC series distinguishes itself by its innovative design and technically advanced features. The housing has been designed out of a hygienic point of view. Surface disinfection and cleaning can be easily done due to the round corners and closed housing.

Another unique feature is that the machines can be easily opened without the use of any tools. The feed-in guide can be simply and quickly adjusted by an easy click system (0-40mm).

According to ISO 11607-2 the sealing process needs to be validated. For this purpose Famos has implemented parameter control in the F110 PROTEC series\* which is a unique feature which entails the constant monitoring of the three seal parameters temperature, speed and force. These parameters are being checked with every single seal and in case one of these parameters is incorrect, the machine will give the operator a warning and stops sealing. An external software program is standard included with these models which allows the user to view and monitor the parameters real time on a pc. The data will be stored so the user can always look back at previously made seals.

When a USB drive is being connected to the USB module, a log will be made of the parameters of each seal. This log file can be read out on a pc and can be imported into the external parameter monitoring program which is supplied by Famos.

The Ethernet connection allows the user to connect multiple sealers into a network environment and monitor the parameters on a central place.

The F110 PROTEC series consists of 3 models: F110D, F110DEP-P/USB and F110DBC-P/USB. Each model of the F110 PROTEC series is equipped with an automatic transport start, a reverse transportation feature and a production counter with alarm.

The machines are also equipped with an internal printer which can print the packing date, expiry date, code, texts and barcodes on the packaging. Furthermore, all models are equipped with a RS232 port to update the machines with the newest software releases. In case of the F110DEP-P/USB and F110DBC-P/USB the RS232 port can also be used to connect the sealer to a pc to program texts and to read-out parameters with the external monitoring software. The F110DEP-P/USB and F110DBC-P/USB are equipped with parameter control, and a USB module. An ethernet connection is available as an option. The F110DBC-P/USB can work with many instrument traceability systems which generate the barcode and other data that needs to be printed on the packaging.

General specifications	F110D	F110DEP-P	F110DBC-P
Rotary heat sealer	•	•	•
Version available with rib seal 30.100.____*	570	574	582
Version available with flat seal 30.100.____*	571	575	583
Completely made of stainless steel	•	•	•
110/ 120 VAC, Mains voltage 50/60 Hz	•	•	•
220/240 VAC, Mains voltage, 50/60 Hz	•	•	•
Microprocessor controlled	•	•	•
Digital menu operation	•	•	•
Serial communication port RS232	•	•	•
USB port	•	•	•
Keyboard control	•	•	•
Alphanumeric keyboard	•	•	•
Clock and calendar function	•	•	•
Intake protection	•	•	•
Retention of data	•	•	•
Number of lines in display	2	2	2
Seal width in mm	15	15	15
Seal length in mm	1->	1->	1->
Distance to medical product conform DIN58953-7	•	•	•
Self adjusting pressure	•	•	•
Transportation speed (... m/min)	10	10	10
Temperature adjustment (50-199°C)	•	•	•
Temperature tolerance conform DIN58953-7	+/-1%	+/-1%	+/-1%
Over heating protection	•	•	•
Digital temperature indication	•	•	•
Seal edge adjustment	•	•	•
Stand-by function	•	•	•
Reverse transport	•	•	•
Automatic transportation start	•	•	•
Safety auto insert feed (within temp. range ± 5°C)	•	•	•
Resettable production counter with alarm	•	•	•
Service menu	•	•	•
Parameter menu which indicate seal parameters	•	•	•
Continuous monitoring of seal parameters	•	•	•
Adjustable upper limit of seal pressure param. alarm	•	•	•
Maximum power consumption (in Watts)	365	365	365
Average power consumption (in Watts)	70	70	70
Dimensions in mm (LxWxH)	527 x 314 x 162	527 x 314 x 162	527 x 314 x 162

Certifications	F110D	F110DEP-P	F110DBC-P
EN ISO 11607-2		•	•
DIN 58953.7:2010 / 2006/42 CE / 2014/35/EU	•	•	•

Printing possibility

	F110D	F110DEP-P	F110DBC-P
Internal printer	1	1	2
Printer head test	•	•	•
Possibility for external label printing	•	•	•
Adjustable print start position	•	•	•
Date as: dmy/ymd/mdy	•	•	•
Adjustable character width	•	•	•
Packing and expiry date	•	•	•
Year as YY/YYYY	•	•	•
Alphanumeric code (Pers.no. / batch )	•	•	•
Total counter	•	•	•
Programmable description	•	•	•
Text with max. 30 characters	•	•	•
Second line printer for text or barcode	•	•	•
CE symbol	•	•	•
Steril symbol	•	•	•
EN980 symbols	•	•	•
On/off function printer	•	•	•
Text rotation of 180°	•	•	•

Programming options

	F110D	F110DEP-P	F110DBC-P
Display in user's language	•	•	•
Multiple programmable expiry times	•	•	•
Temperature units in C ° or F °	•	•	•
Expiry time adjustment up to 9999 days	2	2	2
Flexible line printing format	•	•	•
Flexible label printing format	•	•	•
Flexible label height & quantity	•	•	•
Max. 2000 texts with 30 characters each	•	•	•
Code of maximum 20 characters	•	•	•
Programming by external PC	•	•	•
Communication software for the PC	•	•	•
Ext. software program to view param. on pc	•	•	•

Options

	F110D	F110DEP-P	F110DBC-P
Ethernet converter		•	•
Front table 30.100.____	626	626	626
Roller front table 30.100.____	619	619	619

Services

	F110D	F110DEP-P	F110DBC-P
Seal strength test EN 868-5	•	•	•
Calibration	•	•	•

\* Article numbers mentioned refer to 220/240 Volt machines

- Version with rib seal is suitable to seal laminated pouches and paper pouches, to accommodate a controlled opening of the pouch.
- Version with flat seal is suitable to seal Tyvek material as well as laminated pouches and paper pouches.

