



FEUMA Gastromaschinen GmbH

Original Operating Instructions



Universal Drive Type TFS

FEUMA Gastromaschinen GmbH / Wehrstraße 24 / D-04639 Gößnitz
Phone +49 34493 21555 Fax +49 34493 21414 info@feuma.de www.feuma.de

Status 06/2019



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1. PREFACE

These operating instructions contain all information that must be observed for proper setup, operation and maintenance of the delivered device.

The product is technical equipment that is intended for use at work only. Only instructed staff must be deployed.

Use of the machine is limited to persons older than 14 years.

We cannot meet our warranty obligations in case of damage from improper setup, commissioning or operation.

Claims from defects generally do not apply in case of the following wear parts: cutting sets, tamper of the meat grinder; steaker/strip cutter: Cutting sets in the roll sets, tamper.

These documents are intended for our customer circle only and therefore must not be fully or partially reproduced, distributed or used without authorisation for competitive purposes, nor delivered to any third parties.

The TFS universal drive is a high-quality product of FEUMA Gastromaschinen GmbH Gößnitz.

We guarantee high performance and long function if you choose this FEUMA device.

All of our products are subject to technical further development. Because of this, these instructions only apply where your device complies with the status described in them.

The device is reviewed according to the relevant safety provisions. The declaration of conformity according to CE is present.

2. SAFETY PROVISIONS AND WORK PROTECTION

- Read the following safety notes **WITH CARE**. Instruct the operating staff and inform it of the residual dangers that apply when operating the machine.
- The general provisions of work and health protection, as well as the operational instructions, must be observed.
- FEUMA Gastromaschinen GmbH Gößnitz assumes no liability for any damage caused by improper handling.
- Repairs must only be conducted by specialists or by authorised specialist workshops.
- Only genuine FEUMA spare parts ensure the proper use of the device.
- The mains plug must be pulled before any manipulation of the device.
- The relevant accident prevention and safety provisions must be observed.
- When planning and setting up the machine, observe that the environment can be cleaned according to the hygienic requirements.
- Non-ionising radiation is not produced in a targeted manner, but only emitted by the electrical equipment for technical reasons. The machine has no strong permanent magnets either. When complying with a safety distance of 30 cm, an influence on active implants can be excluded with high probability.



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3. General Description

The TFS universal drive comprises the drive for the attachments meat steaker, strip cutter, salad cutter, tenderiser and adjustable tenderiser that are needed in food processing. High-quality interlocking elements guarantee for low-noise operation and a long service life. The tensioning and latching elements for latching the assemblies ensure safe fit and permit easy re-equipment of the unit. Overload will trip the motor protection switch to prevent damage to the drive motor. The safety technology of the unit ensures that the machine can only start up when the hopper hood is pushed on and latched.

4. Use

The universal drive TFS can be used with the following attachments.

- Meat steaker, for tenderising meat slices with a thickness of up to 25 mm. Additionally, it is possible to treat small pieces of meat or several thin slices at the same time.
- Strip cutter for cutting meat, sausage and cheese slices, vegetables or fruit into 3.3 / 5 /10 or 25 mm wide strips, e.g. for diced meat, sausage and cheese salads.
- Salad cutter for cutting of leafy salads, such as endives, lettuce, iceberg lettuce, etc.
- Tenderiser 4 mm for tenderising similar to use of a meat tenderiser mallet.
This device must only be used to process meat without bone shares. The meat must not be frozen when processed.
Thicknesses up to 30 mm may be processed.
Pork, beef, chicken and turkey can be processed.
- Adjustable tenderiser for tenderising similar to use of a meat tenderiser mallet. The roll distance is variable (adjustment range 1 to 5 mm), so that the meat can also be brought to the desired result step by step. For example, the first pass can be done with a larger roll distance, followed by a second one with a smaller one. The device can be disassembled into its parts without tools in order to make cleaning easier for the user.
This device must only be used to process meat without bone shares. The meat must not be frozen when processed.
Thicknesses up to 25 mm may be processed.
Pork, beef, chicken and turkey can be processed.

4.1. Material

The TFS universal drive is made of stainless steel and special aluminium. The hopper hoods are made of stainless steel. The roll sets are made of stainless steel and POM. The tampers are also made of POM.

All materials correspond to the provisions on hygiene and are food-grade.



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4.2 Performance

The steaker tenderises up to 2300 steaks, schnitzels, short-roast pieces, etc. per hour.

The strip cutter can cut approx. 250 kg of meat or approx. 230 kg of sausage per hour.

The salad cutter can cut approx. 30 kg of endive salad or approx. 40 kg of lettuce per hour.

The tenderiser 4 mm and the adjustable tenderiser tenderise up to 2300 steaks, schnitzels, short-roast pieces, etc. per hour.

4.3 Function description

Meat steaker

The material to be processed moves through the filling shaft of the hopper hood, between the knife rollers, is tenderised and ejected from the exit opening in the bottom of the hopper hood. The separation of meat fibres during tenderising reduces the shrinkage of meat while roasting while giving the meat a tender structure.

Strip cutter

The material to be processed moves through the filling shaft of the hopper hood, into the cutting space, is cut and ejected from the exit opening in the bottom of the hopper hood. Only the enclosed tamper must be used for pushing down material to be cut.

Salad cutter

The material to be processed moves through the filling shaft of the salad cutter hood, into the cutting space, is cut and ejected from the exit opening in the bottom of the salad cutter hood. Only the enclosed tamper must be used for pushing down material to be cut.

Tenderiser 4 mm/adjustable tenderiser 1-5 mm

The material to be processed moves through the filling shaft of the hopper hood, between the tenderising rollers, is tenderised and ejected from the exit opening in the bottom of the hopper hood. Only the enclosed tamper must be used for pushing down material to be cut.



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4.4. Accessories for the TFS universal drive

Roller set & hood for expansion into steaker, tenderiser, strip cutter



Type: TFS
Item no. 542910

item no.

Accessories

When used as meat steaker



Hopper hood TFS (180 x 28), with tamper narrow

545909



Compact steaker - knife roller set (standard)

542290



Compact steaker- knife roller set (special sharpening)

542291



When used as tenderiser



Hopper hood TFS (180 x 28), with tamper narrow

545909



Tenderising roller set 4 mm (not adjustable)

542282



Hopper hood "adjustable tenderiser" (180 x 25), with tamper narrow

545912



Adjustable tenderising roller set 1 – 5 mm

542299



When used as strip cutter



Hopper hood TFS (180 x 28), with tamper narrow

545909



Compact cutting roller set 3.0 mm

542292



Compact cutting roller set 5.0 mm

542293



Compact cutting roller set 10.0 mm

542294



Compact cutting roller set 20.0 mm

542295



Compact cutting roller set 25.0 mm

542296



When used as salad strip cutter



Hopper hood TSAS (180 x 90), with tamper wide

545921



Tamper narrow (spare part)

543058



Tamper wide (spare part)

545670





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Note: For reasons of safety, the hopper hood TSAS (for salad and strip cutter) can only be used in connection with the cutting roller sets. The hopper hood TFS (for the steaker) in contrast can be used for all roller sets.

!!! Attention!!!

**The devices listed above must only be operated when completely installed.
Operation without wiper combs is forbidden.**



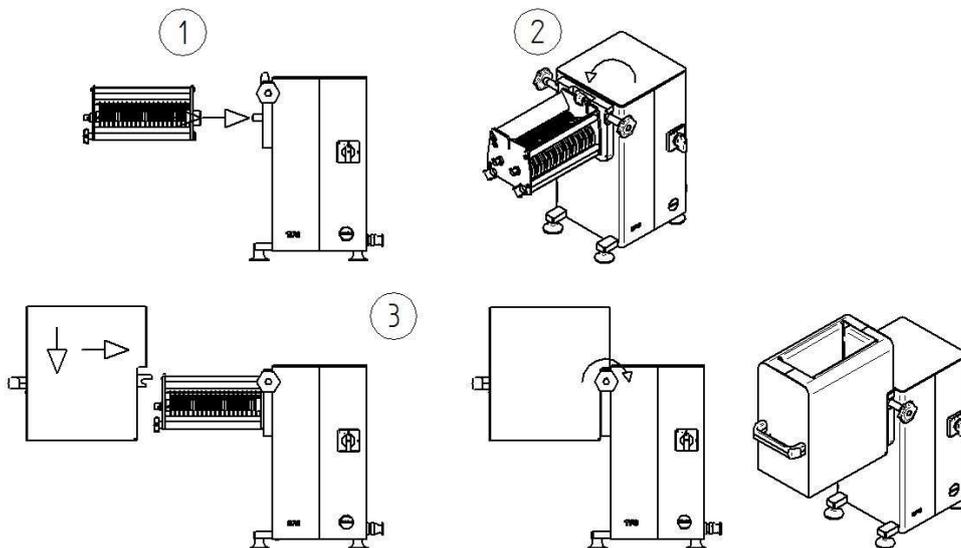
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5. Preparing the machine for use

- Plug the mains plug into the socket.
- Connect the roll set to the basic unit and turn the latch down (the roller set must not come off when pulled anymore).

Attention! There is a danger of injury from sharp blades when working.

- Push on the hopper hood and firmly tighten both rotary handles (the device can only be switched on after installation of the hopper hood).



6. Commissioning

1. Put the drive in the vertical position.
2. Insert the desired roller set and fasten it with the latch.
3. Place the suitable hopper hood vertically on the roller set and insert horizontally before the click position. Then tighten both turning handles.
4. Set the desired roll distance; pull the mini latch, enlarging the roll distance: turn up, reducing the roll distance: turn down, latch the mini latch pin, (adjustable only for tenderiser).

Attention! There is a danger of injury from sharp blades when working.

Switch function

- Position "0" Off the device is off
- Position "T" Jog mode the device will run in the reverse rotating direction; when the toggle switch is released, the switch will automatically return to the "0" position.
- Position "1" On the device runs in the working direction.
-



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Use

- Take the device into operation by putting the switch in position "1".
- Place a collection dish under the output opening of the hopper hood to collect the processed material.
- Put the material to be processed into the inlet opening of the hopper hood.

Attention! Only insert peeled and skinned meat slices. Do not fill in any bones or foreign bodies. This may break the device. Only push in the material to be processed with the enclosed tamper.

Note: When the device is switched off by the motor protection switch (overload), a function-related cooling time of 1-5 min must be observed. For this, switch the device to "off" by the switch. After cooling off, the thermal protection will switch back independently. The device can be switched on again

7. Disassembly

- Switch off the device (switch to position "0").
- Pull the mains plug.

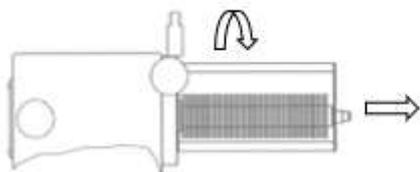
Attention! Switching off the device by removing the hopper hood is not permitted.

Steaker, strip and salad cutters, tenderiser*

- Release the rotary handles and remove the hopper hood.



- Turn the latch up and remove the roller set.



- Remove the wiper combs or wipers.

Attention! There is a danger of injury from sharp blades.

*Adjustable tenderiser: assembly and disassembly see cleaning.



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8. Cleaning

First flush the parts with **cold water** thoroughly. The grease that remains on the parts can be removed with **hot water** in a sink filled with soapy water, or in the dishwasher.

Attention! The universal drive TFS is not jet-water protected; only use a moist rag for cleaning. Do not use any water jet or high-pressure cleaner.

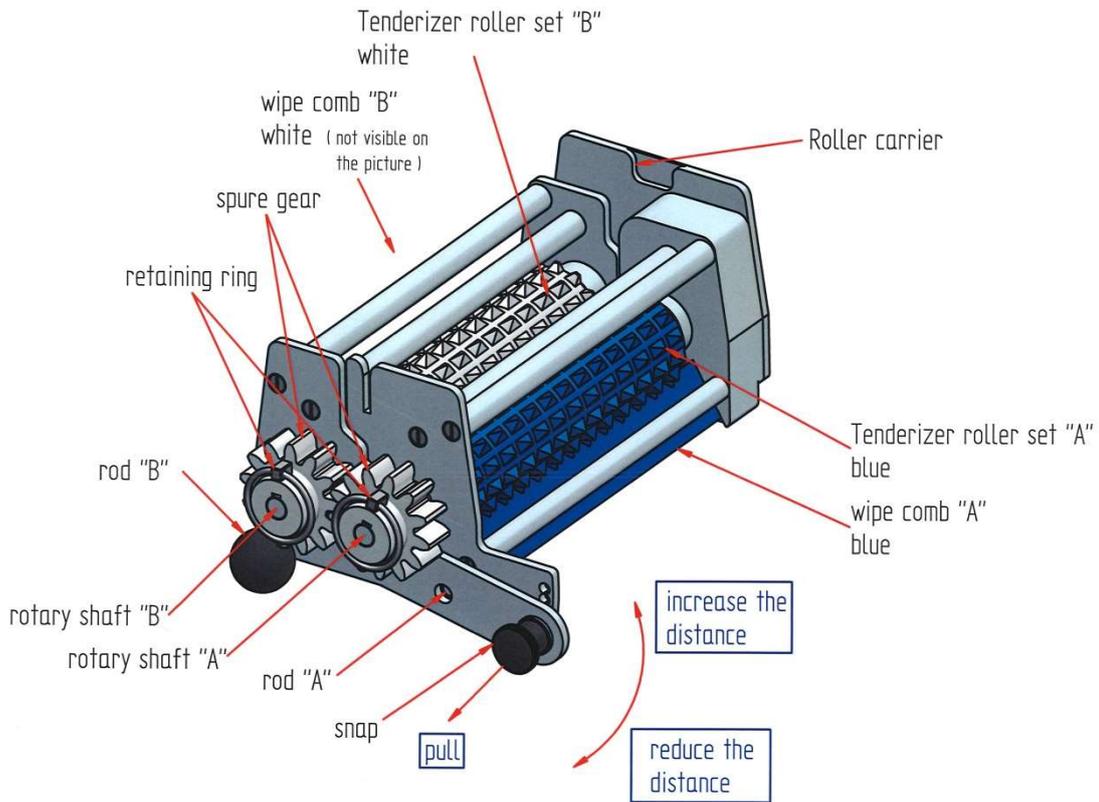
The hopper hood, roller set and tamper may be cleaned with a water jet or in the dishwasher. The tamper, wiper combs and wipers must not dry on hot surfaces (plastics).

Note: Do not use any bleaching, chlorine-containing and abrasive cleaning agents.
Only work using commercial hand-washing detergents.



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Adjustable tenderiser

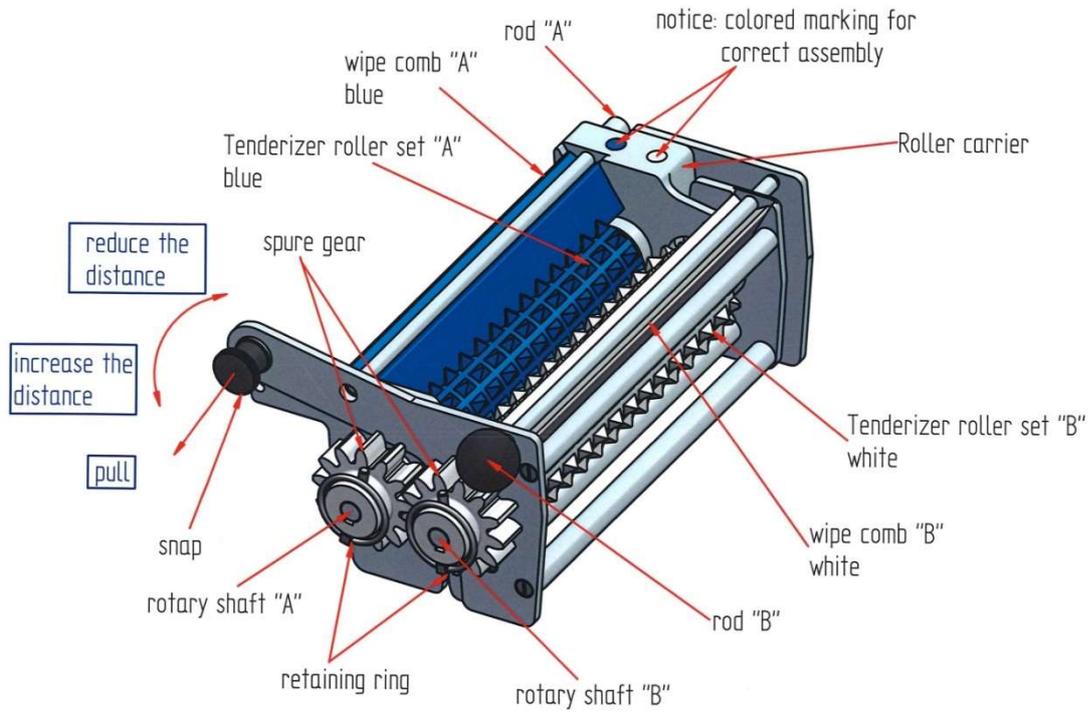


Disassembly (taking apart)

Set the smallest roll distance and place the tenderiser roll set onto a level, stable base with the outlet side up.

1. Pull rod B (with ball head, white side) out of the roller set in the axial direction.
2. Use rod B to push rod A (blue side) out of position and pull it out. For this, insert rod B into the intended bore in the bearing shield.
3. Now pull the two wiper combs up diagonally upwards. Avoid canting by taking the wiper combs by both ends and pulling evenly.
4. Now lift the rings of the folding pins slightly and push the folding pin out of its bore.
5. Pull the two gears from the shaft ends.
6. Push the tenderiser shafts (viewed from the shaft end of the gear seat) into the roll carrier until the shafts stick out again on the opposite side.
7. Pull out both shafts. Now remove the tenderiser rollers that are placed loosely in the roller carrier.

Note: If the shafts are too tightly seated, the device may be too cold. Rinse the roller set with hot water.



Assembly (putting together)

Assembly takes place in the opposite sequence of disassembly. Ensure that the blue parts are paired together and the white parts are paired together. The proper arrangement of the parts in the roll carrier is indicated by the coloured marks placed in the solid area of the roll carrier. The proper installation position can be achieved by aligning the longer, conical end with the smaller bearings in the roller carrier; accordingly, the shorter, conical end is placed at the larger bearings.

1. Guide the longer shaft with the small shaft diameter through the large bearing into the blue tendering roller first, then into the small bearing. Note that the key way of the roller is aligned with the key of the shaft (see groove) and that they are pushed into each other. When the shaft collar in the small bearing is flush and the tappet pins of the large shaft end in the large bearing is flush, the shaft has been properly installed. Only then can the gear be installed and fastened correctly.
2. Now install the short shaft according to the same principle. When it is properly installed, the shaft collar in the small bearing is flush again, and the thick shaft end on the opposite side is also flush in the bearing.
3. Now put on the gears and push them onto the shaft to the stop. Hold the shaft by the other shaft end to prevent axial shifting of the shaft. The folding pin cannot be inserted otherwise.
4. Lift the ring of the folding pin slightly, and push the pin into the intended bore until the ring latches audibly.
5. Now insert the blue and white wiping comb into the respective holder. Guide it back diagonally from the outer top to the inner bottom. Take the combs by their ends again to prevent canting.



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6. Push rod B (with ball head) to the stop into its holding bores from the gear side to fasten the white wiper comb. We recommend turning the rods additionally just before they reach their end positions. This facilitates insertion of the rubber ring on the rod. This may be a bit stiff in particular on new devices.
7. Push rod A (without ball head) into its holding bores from the opposite side to fasten the blue wiper comb.
8. Check that the device moves smoothly by turning the plastic wheels. The shafts must turn without application of force. If this is not the case, disassemble the device again and reassemble it. If the problem cannot be removed, contact service.



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9. Maintenance

The universal drive TFS is maintenance-free. Ensure that the tools of the attachments are not damaged. When necessary, consult a specialist workshop.

Operating faults

The plug connection of the drive unit to the E-grid must be accessible at all times!
Switch off the device and pull the mains plug if there are any operating problems. Only now find and remove the error cause. If necessary, bring in an expert service operation.

Technical Data

Power type	400V, 50Hz, 3P+N
Protection class	IP 54
Power consumption	580 W
Shaft speed	100 rpm
Protection	16 A
Connection cable with protective contact plug according to CEE 7/VII	2.5 m

Weight TFS (<i>without hopper hood and roller set/tenderizer</i>)	23 kg
<i>Weight Hopper hood</i>	4 kg
<i>Weight Steaker Cutting Roller Set / Cutting roller set / Tenderizer 4 mm</i>	4 kg
<i>Weight Adjustable tenderiser</i>	8 kg

Safety switch	yes
Motor protection switch	yes
CE testet	yes
GS mark	yes

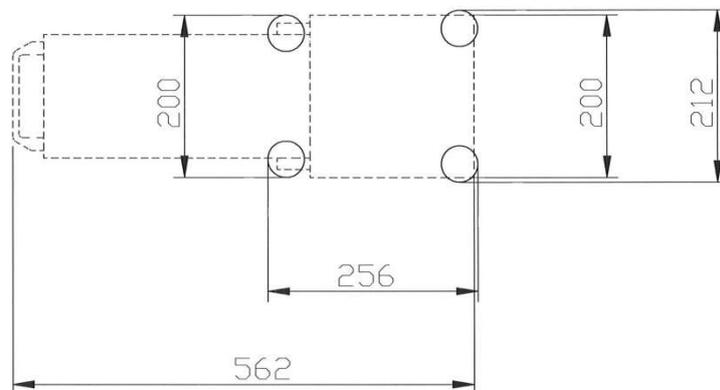
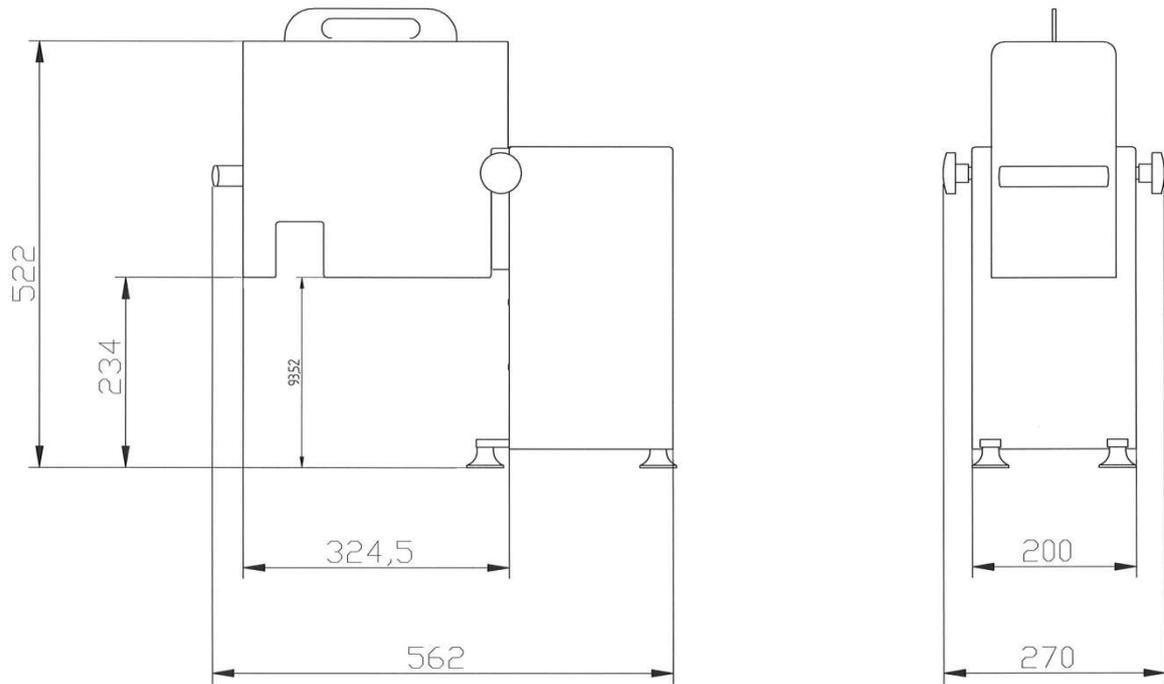
The sound pressure level is below 70 dB(A). The measurement was performed purs. to DIN 45735 part 1.



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Dimensions

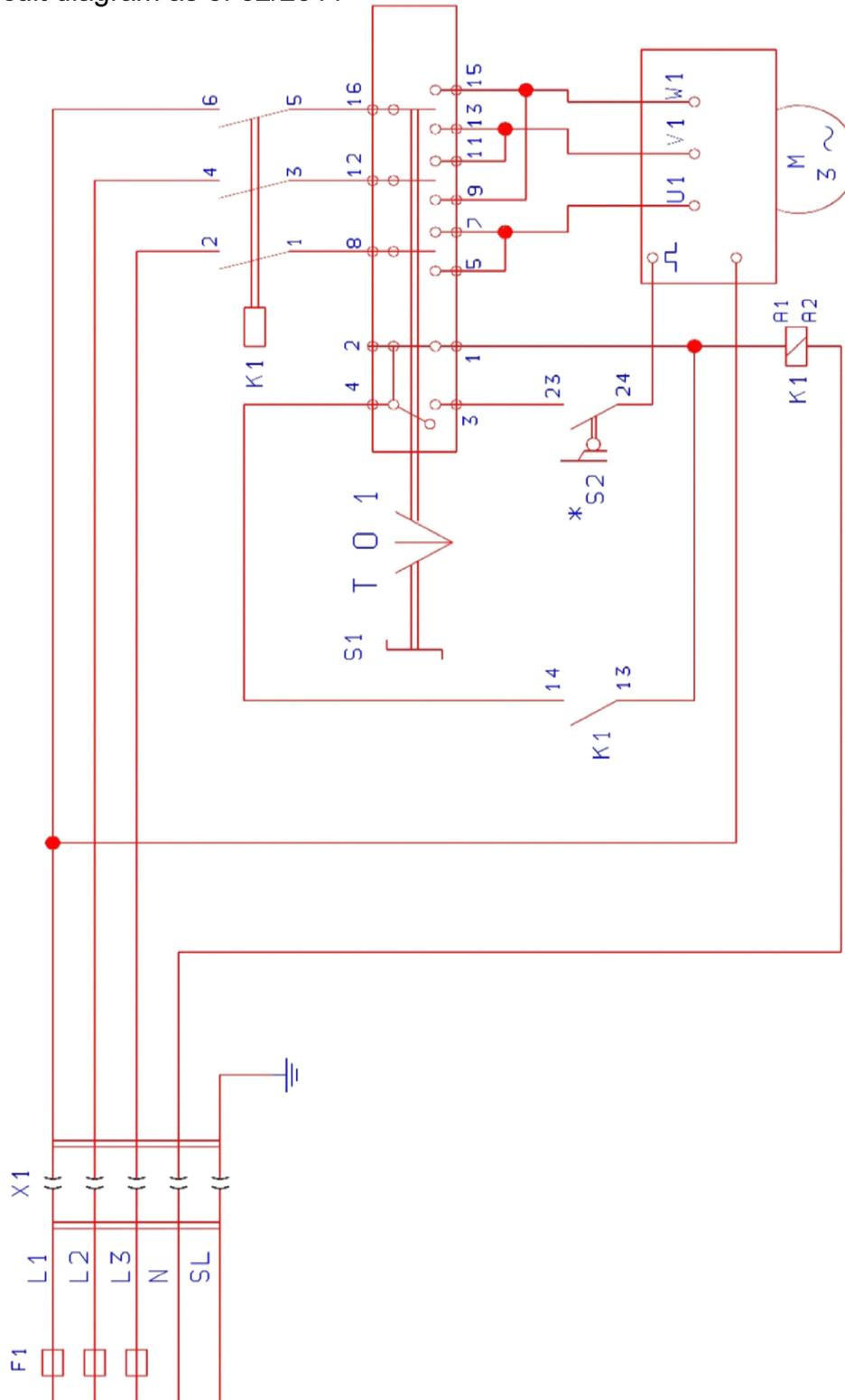
Length: max 562 mm
Width: 270 mm
Height: 522 mm





10. Appendix

10.1 Circuit diagram as of 02/2011





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10.2 CE declaration of conformity

CE declaration of conformity according to the EC machinery directive 2006/42/EC

The manufacturer: FEUMA Gastromaschinen GmbH
Wehrstraße 24
D-04639 Gößnitz/Thür.

hereby declares that the following machines:

<u>Product</u>	<u>TYPE</u>
* High-performance Universal Large-kitchen machine	HU 1020-2
* High-performance Universal Large-kitchen machine (Height-adjustable)	HU 1020-2H
* High-performance Universal Large-kitchen machine (Machine cabinet)	HU 1020-2E
* High-performance Universal Large-kitchen machine (Machine cabinet - extract of drive unit)	HU 1020-2A
* Universal-Kitchen machine	SUPRA 6e
* Vegetable cutter (230V / 400V)	GVM 210
* Meat Mincer	TW-H 82
* Meat Mincer	TW-R 70
* Mincing and Separating	T-SWF 82-1
* Universal-Drive	TFS
* Universal-Drive-Combination	TW 70/TFS
* Appel processing machine	ASETM
* Appel processing machine	ASETSM

comply with the provisions of the following above-named EC directives:

The control of the machines is designed so - that sufficient immunity to interference of safety-relevant control signals is given.

Gößnitz, 19.09.2019

FEUMA Gastromaschinen GmbH


Dr. Maik Döring
CEO



FEUMA Gastromaschinen GmbH

10.3 GS Mark (page 1)

 DGUV Test Prüf- und Zertifizierungsstelle Nahrungsmittel und Verpackung Fachbereich Nahrungsmittel	
Zertifikat Nr. NV 22064 vom 31.03.2022	
 GS-Zertifikat	
Name und Anschrift des Zertifikatsinhabers: (Auftraggeber)	FEUMA Gastromaschinen GmbH Wehrstraße 24 04639 Gößnitz
Produktbezeichnung:	Universalküchenmaschinen Tischgerät
Typ:	TFS, TW 70 / TFS, T-SWF 82-1, TW-H 82, TW-R 70
Prüfgrundlage:	GS-NV 2:2019/08 Prüfgrundsätze für Nahrungsmittelmaschinen
Zugehöriger Prüfbericht:	Prüfbericht zum Zertifikat NV 22064
Weitere Angaben:	Das Zertifikat bezieht sich auf die im zugehörigen Prüfbericht beschriebene Ausführung des Produkts. Nachfolgebescheinigung zu derjenigen mit der Prüfnummer NV 17075
 <p>Das geprüfte Baumuster stimmt mit den in § 21 Absatz 1 des Produktsicherheitsgesetzes genannten Anforderungen überein. Der Zertifikatsinhaber ist berechtigt, das umseitig abgebildete GS-Zeichen an den mit dem geprüften Baumuster übereinstimmenden Produkten anzubringen. Der Zertifikatsinhaber hat dabei die umseitig aufgeführten Bedingungen zu beachten.</p> <p>Dieses Zertifikat einschließlich der Berechtigung zur Anbringung des GS-Zeichens ist gültig bis einschließlich:</p> <p style="text-align: center;">30.03.2027</p> <p>Weiteres über die Gültigkeit, eine Gültigkeitsverlängerung und andere Bedingungen regelt die Prüf- und Zertifizierungsordnung.</p>	
 	
<small>P2204_D 01.18 Deutscher Gesetzliche Unfallversicherung (DGUV) e.V. Spitzenverband der gewerblichen Berufsgenossenschaften und der Unfallversicherungsträger der öffentlichen Hand Verzeichnisregister Nr. VR 751 B, Amtsgericht Charlottenburg</small>	<small>DGUV Test Prüf- und Zertifizierungsstelle Nahrungsmittel und Verpackung Fachbereich Nahrungsmittel Dynamstraße 7 - 11 • 68165 Mannheim • Deutschland Telefon: +49 (0) 6 21 64 56-34 30 • Fax: +49 (0) 800 1977 553 16625</small>



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10.3 GS Mark (page 2)

Rückseite GS-Zertifikat: NV 22064

GS-Zeichen



Normalausführung



Bei einer Höhe von 20 mm oder weniger
auch zulässige Ausführung

1. Der Zertifikatsinhaber hat die Voraussetzungen einzuhalten, die bei der Herstellung des umseitig genannten Produktes zu beachten sind, um die Übereinstimmung mit dem geprüften Baumuster zu gewährleisten.
2. Die Prüf- und Zertifizierungsstelle des Fachbereichs Nahrungsmittel führt in regelmäßigen Abständen Kontrollmaßnahmen zur Überwachung der Herstellung und rechtmäßigen Verwendung des GS-Zeichens durch.
3. Die für die Herstellung verantwortliche Person hat sich zur Einhaltung der Voraussetzungen nach Nummer 1 und Duldung der Kontrollmaßnahmen verpflichtet.
4. Die Prüf- und Zertifizierungsstelle entzieht dem Zertifikatsinhaber die Zuerkennung des GS-Zeichens, wenn sich die Anforderungen nach § 21 Absatz 1 Produktsicherheitsgesetz geändert haben oder die Voraussetzungen nach Nummer 1 nicht eingehalten werden.
5. Das GS-Zeichen darf nur verwendet und mit ihm darf nur geworben werden, wenn die Voraussetzungen nach § 22 Produktsicherheitsgesetz erfüllt sind.