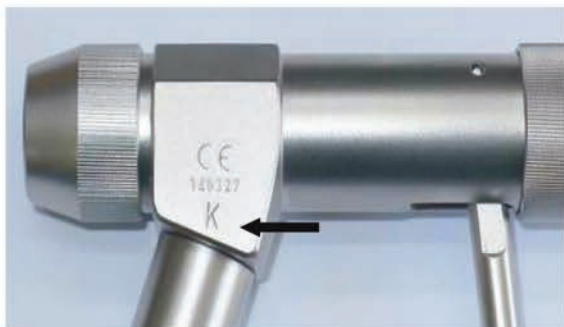


Famos Stainless Steel Spray Gun



NOTE:

The cleaning spray gun type **(K)** must be operating only with the plastic piston.

The Letter **K** is imprinted on the body under the LOT-Number.

REF 205-16-000 Compressed air set (K) with quick-lock coupling	LOT:
REF 205-25-000 Drinking water set (K) with quick-lock coupling	LOT:
REF 205-30-100 De-ionized water set (K) with quick-lock coupling	LOT: 160203
REF 205-17-000 Compressed air set (K) with threaded gun hose coupling	LOT:
REF 205-27-000 Drinking water set (K) with threaded gun hose coupling	LOT:
REF 205-32-000 De-ionized water set (K) with threaded gun hose coupling	LOT:

1. Purpose of use for the cleaning gun

REF 205-16-000 Compressed air set with quick-lock coupling

For blow-cleaning of contaminated medical devices with medical compressed air with up to 0.5Mpa (= 5bar).

REF 205-25-000 Drinking water set with quick-lock coupling

For rinsing contaminated medical devices with cold water with up to 0.5Mpa (= 5bar).

REF 205-30-000 De-ionized water set with quick-lock coupling

For rinsing contaminated medical devices with cold de-ionized water with up to 0.5Mpa (= 5bar).

REF 205-17-000 Compressed air set with threaded gun hose coupling

For blow-cleaning of contaminated medical devices with medical compressed air with up to 0.5Mpa (= 5bar).

REF 205-27-000 Drinking water set with threaded gun hose coupling

For rinsing contaminated medical devices with cold water with up to 0.5Mpa (= 5bar).

REF 205-32-000 De-ionized water set with threaded gun hose coupling

For rinsing contaminated medical devices with cold de-ionized water with up to 0.5Mpa (= 5bar).

2. Reprocessing intervals

The cleaning gun and accessories (nozzles, luer-lock connector, coupling protection cap, hose end cap and trigger locking ring) must be cleaned and sterilized prior to the first use! The cleaning gun must be disassembled for cleaning and sterilization!

The reprocessing intervals must be determined by the user depending on the purpose of use and the frequency of the resulting contamination and soiling of the instrument itself. When contaminated, the cleaning gun must be reprocessed together with all accessories! We therefore recommend to carry out microbiological tests, depending on the purpose of use.

3. Disassembly of the cleaning gun (It is not necessary to remove the fitted O-ring seals)



1. Disassemble the end cap from the body of the gun by turning it counterclockwise.
2. Remove the piston spring
3. Pull trigger back and pull the piston out backwards
4. Loosen nozzles from nozzle cap by turning them counterclockwise
5. Disassemble the nozzle cap from the body of the gun by turning it counterclockwise.
6. Disassemble the handle from the body of the gun by turning it counterclockwise.
7. Disassemble the shower nozzle sieve from the shower nozzle body by turning it counterclockwise.

4. Reprocessing of the cleaning gun, nozzles, luer-lock connector, coupling protection cap, trigger locking ring, nozzle rack and the hose end cap. (It is not necessary to remove the fitted O-ring seals)

Cleaning by qualified specialist staff in compliance with the guidelines for cleaning and disinfection following the latest RKI (Robert Koch Institute) recommendations. www.rki.de. The specifications of the manufacturer of the cleaning agents (product data sheets and safety data sheets) must be observed. Furthermore, appropriate protective clothing compliant with the requirements of the competent employer's liability insurance association shall be worn for reprocessing. The cleaning validation of the instrument was performed with following preparation and cleaning devices:

Cleaning agents for instruments: neodisher MediClean forte (alkaline cleaning agent with surfactants, pH 10,4 – 10,8 in de-ionized water)
Manufactured by Chemische Fabrik Dr. Weigert GmbH & Co.KG – Hamburg (Web: www.drweigert.de)

4.1 Pre-cleaning: Cleaning agents for instruments: neodisher MediClean forte 2% solution up to 40°C maximum

- a. Disassemble the instrument (see "Disassembly of the cleaning gun for reprocessing"). Place the parts of the cleaning gun in a trough with the neodisher MediClean forte 2% cleaning solution and clean all visible stains with a soft brush or cloth below the liquid's surface.
- b. If soiled heavily, the instrument parts filled with the cleaning solution without bubbles must remain in the trough to soak for 30 minutes. The cleaning solution must be renewed at least once daily or immediately if contamination is visible.
- c. Rinse and flush all instrument parts under cold running water (drinking water quality) which is free from pathogenic germs before the subsequent ultrasonic cleaning.

4.2 Ultrasonic cleaning: This is imperative!

Cleaning agents for instruments: neodisher MediClean forte 2% solution up to 40°C maximum, 10 minutes duration

The ultrasonic device must be suitable for the cleaning of medical instruments and should have a frequency of 35-40kHz. When using devices with a higher frequency, the cleaning time increases! Important: As soon as the ultrasonic cleaning device is turned on, the cleaning solution in the ultrasonic bath heats up. To avoid the cleaning solution heating up to more than 40°C, additional heating in the ultrasonic bath should be avoided. All instrument parts must be fully immersed in the cleaning solution and all hollow spaces must be filled. Ultrasonic baskets may not be overloaded since this creates sonic shadows, and the cleaning effect cannot be guaranteed! The cleaning solution must be renewed at least once daily or immediately if contamination is visible.

4.3 Rinsing - Flushing

Rinse and flush all instrument parts with cold water (drinking water quality) which is free from pathogenic germs. Check cleaning efficiency!

4.4 Machine cleaning: Cleaning agents for instruments: neodisher MediClean forte

Cleaning device by Miele G7835 CD – flushing program Desin Vario TD (Web: www.miele-professional.de)

Place the disassembled instrument in the respective basket of the cleaning and disinfection device and connect all accessible hollow spaces to the hollow space flushing system of the cleaning and disinfection device. Close the door, select the appropriate program and start the cleaning and disinfection device.

Remove the cleaned instrument parts from the cleaning and disinfection device after the cleaning process has been completed, wearing disposable gloves to avoid further contamination. Check cleaning and drying of the instrument parts. If they have not been cleaned completely, the appropriate cleaning steps must be repeated, or a final drying process must be performed using compressed air for medical purposes.

Check the completely cleaned and dried instrument parts for possible defects.

Steam sterilization: sterilizer class B EN13060 - Fractioned fore-vacuum – temperature 134°C – minimum dwell time 5 minutes

The shelf life after sterilization depends on the storage container. Please observe the manufacturer's information!

- the instrument is not properly cleaned and sterilized.
- parts of the cleaning unit are bent, have corroded or defect threads.
- O-rings or washers be missing or are damaged.

Diagram illustrating the components of a high-pressure water gun assembly:

- Nozzle
- Nozzle cap
- Body of the gun
- Piston
- Piston spring
- End cap
- Trigger
- Gun handle

Fasten shower nozzle sieve on the shower nozzle body by turning it clockwise

Front end of piston with small piston O-ring only minimal lubrication with pure silicone oil



Cleaning gun, assembled for use
with threaded hose coupling



Cleaning gun, assembled for use with quick-lock coupling

1. Lubricate the front end of the piston and the small piston O-ring with pure silicone oil prior to the assembly!

If you insert the dry piston the piston seal will be damaged!

Note: The enclosed silicone oil SLC 2000 by company Fujinon is not sterile.

Note: If it is difficult to remove the cg piston from the gun body or insert it into the gun body

Please note: The water or compressed air supply line must always be disconnected when the gun is not used or if you want to carry out assembly work on the cleaning gun unit, and then the pressure in the system must be relieved through the cleaning gun by activating the trigger. Before every opening of the pressure line, the whole system has to be checked for damages! When the pressure line has been opened the system must be checked for leakage!

6. Cleaning gun sets: 205-16-000 / 205-25-000 / 205-30-000

Reassembly of the cleaning gun to the gun coupling:

1. Introduce the gun handle with coupling plug DN7.2 straight into the gun coupling and press it in until it audibly engages into position.
2. Open the pressure supply line and check the whole system for leakage!

Dismounting the cleaning gun from the gun coupling:

1. If you want to dismount the cleaning gun from the coupling again for reprocessing, you must interrupt the pressure supply.
2. Relieve the pressure in the hose through the gun by activating the trigger.
3. Press the gun handle into the coupling and, at the same time, pull the sliding ring on the coupling towards the hose and pull the gun out of the coupling.
4. Put the sterile coupling protection cap over the gun coupling.
5. The hose must be stored in such a way that it does not come into contact with liquids and cannot be contaminated.

The coupling protection cap is cleaned and sterilized in the same way as the cleaning gun parts.



7. Cleaning gun sets: 205-17-000 / 205-27-000 / 205-32-000

Assembly of the cleaning gun with the hose (screw connection between gun and hose)

1. Check if the O-ring for the internal thread of the handle is inserted in the handle's union nut.
2. Screw the turnable union nut of the gun handle to the hose by turning it clockwise.
3. Open the water supply line and check the whole system for leakage!

Removal of the cleaning gun from the hose:

1. If you want to remove the cleaning gun from the hose again for reprocessing, interrupt the water supply and relieve the pressure in the system through the cleaning gun by activating the trigger.
2. Loosen the turnable union nut of the gun handle from the hose by turning it counterclockwise.
3. Screw the sterile hose end cap with the internal sterile O-ring onto the hose.
5. The hose must be stored in such a way that it does not come into contact with liquids and cannot be contaminated.

The hose end cap is cleaned and sterilized in the same way as the cleaning gun parts.



8. Wall holder for the cleaning gun

The wall holder for the cleaning gun must be located in an adequate position to prevent contamination of the gun unit while it is not in use.

The attachment screw and the rawl plug for the wall holder must be adapted to the type of wall and must ensure firm support.

For this reason it is not always possible to use the enclosed mounting devices.



9. Trigger locking ring

The trigger locking ring makes uninterrupted rinsing or blowing possible. If you want to fill troughs with water, you can achieve a very high flow rate when you remove the nozzle.

The trigger locking ring is cleaned and sterilized in the same way as the cleaning gun parts.



10. Nozzel rack – table model

Nozzel rack -Table model to pin up 7 nozzels for the cleaning gun type 205.

The nozzel rack is cleaned and sterilized in the same way as the cleaning gun parts.

Reprocessing without nozzels!



11. Installation of the cleaning gun unit

The cleaning gun unit (Cleaning gun, hose, hose fitting, quick-lock coupling) must be installed by a specialist company in accordance with the guidelines applicable depending on the intended use.

12. Hose

The hose, hose fittings and hose couplings are **not medical devices**.

The user must replace the hose depending on the type of use, state of the hose unit and duration of use.

In case of any damage or leakage the usage of the pipe is not allowed!

Hose materials and maximum pressure: See under Technical data.

The tube length must be chosen to allow for an admitted bending radius of at least 60 mm during mounting and operation of the tube. In case of curved laying, the tube must be long enough to form an open curve since otherwise the tube will be kinked and destroyed at the connections. In no case must the flexible connection be twisted or kinked. The tube must not be subject to any tensile or compressive stress from the outside both during mounting and during operation. The fitter of the tube always is responsible for the tightness of the connection (tube/connector). Since we do not know the shape and the material of the counter pieces, the fitter must test the suitability of the provided sealing material. The warranty will only come into effect in case of professional installation considering all standards and prescriptions.

13. Safety guidelines and hazard notes for the use of the cleaning gun unit

Before using the unit you must always ensure that all connections of the cleaning gun unit are tightly assembled and do not leak.

The water- and compressed air supply line must always be disconnected when the gun is not used or if you want to carry out assembly work on the cleaning gun unit and then the pressure in the system must be relieved through the cleaning gun by activating the trigger.

Before every opening of the pressure line, the whole system has to be checked for damages!

When the pressure line has been opened the system must be checked for leakage!

The user must be protected from spray (goggles, mask, splash guard, clothing etc.). Furthermore you have to stick to all terms for the usage of the clean gun, provided by your competent employer's liability insurance association.

The nozzles on the cleaning gun must be firmly attached to the nozzle cap.

14. Examination of the instrument by the user before its use

The instrument must not be used if:

- The instrument is not properly connected.
- The instrument is not properly cleaned and sterilized.
- The cleaning unit have damages or leaks.
- Parts of the cleaning unit have corroded.
- O-rings or washers be missing or are damaged.

The user is responsible for the use of the instrument. If any defects should be found during the examination, even if they are not mentioned here, the instrument must not be used.

15. Technical data

Medium: Oil-free compressed air / cold water / cold de-ionized water

Max. pressure: 0.5Mpa (=5 bar)

Materials:

Cleaning gun: Stainless steel 1.4404 / Piston spring 1.4310

Piston: Plastic – USP Class VI

Nozzles: Stainless steel 1.4404 / Shower nozzle sieve: Plastic - USP Class VI
Luer-lock connector - Nickel brass

Quick-lock coupling: Stainless steel 1.4404 / Springs 1.4571

Washer Quick-lock coupling / hose EPDM with KTW approval

O-Rings for Cleaning gun, Piston, Nozzles and Quick-lock coupling:

EPDM O-ring approval: WRAS (BS6920), KTW (1.3.13 D1-D2), NSF 51, NSF 61, DIN EN 681-1, DVGW W270, DVGW W534, USP Class VI, ÖNORM B 5014-1, KIWA (BRL 17504), FDA (CFR§177.2600-21) ACS, 3-A Sanitary Standard (N° 18-03 ClassII) BfR recommendation XXI– 4, ADI free (Animal Derived Ingredient), 2011/ 65/EU RoHS.

Hose for compressed air*: PVC fabric hose with KTW-C / FDA (21 CFR §170 - §190) (§ 175.300) approval
Inside diameter 6mm / outside diameter 12mm

Hose fitting: Anodized aluminum

Hose for drinking water*: Silicone hose with stainless steel braiding and KTW-A / W270 / W543 approval

Hose fittings: Nickel brass

Hose for de-ionized water*: Silicone hose with stainless steel braiding and KTW-A / W270 / W543 approval

Hose fittings: Stainless steel 1.4404

*No statement by the manufacturer for reprocessing.

Water flow rate at 0.35Mpa (=3.5 bar)

Pointed nozzle approx. 0.75 liters/min

Luer lock connection approx. 5.0 liters/min

Shower nozzle approx. 6.0 liters/min

Without nozzle approx. 6.4 liters/min

Air flow rate at 0.35Mpa (=3.5 bar)

Pointed nozzle approx. 35 liters/min

Luer lock connection approx. 230 liters/min

Shower nozzle approx. 270 liters/min

Without nozzle approx. 350 liters/min

Warranty:

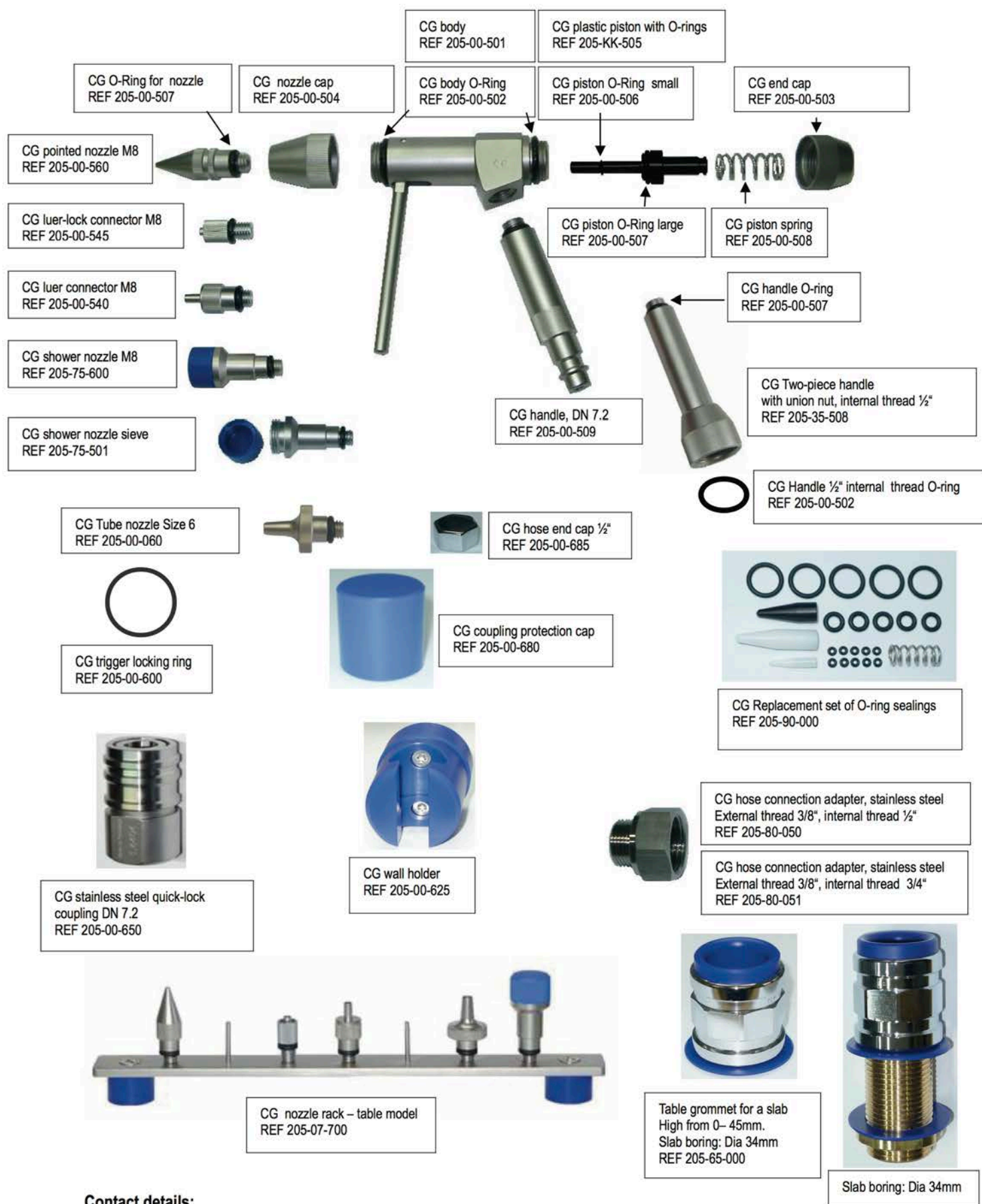
1 year for stainless steel parts, piston and hose.

O-rings are wear parts and not covered by the warranty.

Color changes at the plastic elements and damages caused by force are excluded from any warranty.

Warranty and liability claims are only accepted, when you strictly adhered to our delivered instruction manual.

16. Components of the cleaning gun



Contact details:

155 rue de Rosny, 93100 Montreuil, FRANCE
TEL +33 1 48 58 33 55 FAX +33 1 48 58 45 46
www.ltamedical.com

famos
Competence in CSSD