

FLUSHER DISINFECTOR RANGE

Tornado™



Available as a free standing or under-counter model, the Tornado flusher disinfecter offers excellent cleaning and disinfection of human waste containers.

Tornado offers a number of automated features to further reduce the risk of cross-contamination, and offers operational traceability with the option to track disinfection records via printer or USB.

Key features and advantages



AUTOMATIC DOOR FUNCTION

To support hygienic non-contact routines, Tornado has an option for an automatic door activated by an IR sensor. To improve choice in automatic door operation, a foot pedal option is also available.

COOLING FAN

Receptacles are rapidly cooled using HEPA-filtered (H13) air at the end of each cycle.

EFFICIENT CLEANING RESULTS

Customers can choose between 22 available programs depending on the level of soiling that can be installed on the three main buttons (economy, normal and intensive program). 9 fixed and 2 rotating spray nozzles are arranged in such a way that effective cleaning can take place.

A₀ VALUE AND CONTROL

The A₀ value can be set to different values for greater efficacy against more heat resistant microorganisms. The disinfection phase can be controlled by either time and temperature, or by the chosen A₀ value to further shorten the cycle time.

FLEXIBLE DESIGN

The casing can be either made of polymer or stainless steel. Every model is fitted with a stainless steel chamber.

LOW WATER AND ENERGY CONSUMPTION

Tornado has a low water and energy consumption leading to a low cost of ownership.

PROCESS RECORD

Many healthcare facilities are moving towards greater reportability with detailed records of disinfection operations. Tornado provides the option to record and track process operations via a printer or USB device.

PIPE SYSTEM DISINFECTION (PSD)

Rapid disinfection through all fixed and rotating nozzles disinfects the entire pipe and nozzle system during each cycle reducing the risk of contamination.

CERTIFIED TO BE EFFECTIVE AGAINST C. DIFFICILE AND VIRUSES

Testing demonstrated a 5 log (99,999%) reduction of C. difficile¹ and a 6 log (99,9999%) reduction of parvovirus². This level of effectiveness can also be expected against any other common human pathogenic viruses such as rotaviruses, adenoviruses, noroviruses and coronaviruses.²

| PRODUCT INFORMATION | | |
|--|---|--------------------|
| Model | Free standing/ wall mounted | Under counter |
| Measurements | 450 x 580 x 1320 mm | 900 x 620 x 870 mm |
| Weight | 100 kg (220 lbs) | 120 kg (265 lbs) |
| Noise level | 53 dB (A) accordingly to EN ISO 3747:2000 | |
| Max. external temperature | 40° C (104° F) | |
| Electric connection | depending on market, e.g. 230V, 1N, 50 Hz, 1x16A | |
| Energy Consumption | 0,16 kWh/cycle | |
| Water Consumption | Economy program 11 liters/cycle ±10% Normal program 18 liters/cycle ±10% Intensive program 25 liters/cycle ±10% | |
| Water Connection (Cold & hot water) | Pressure 1-8 Bar (14-116 PSI) 15 mm (½"), Rate of flow 20 l/min | |
| Drain Connection | Wall ø 90 mm or 110 mm (3½ or 4¼") Floor ø 90 mm or 110 mm (3½ or 4¼") | |
| Ingress Protection Rating (general) | IP22 | |
| Option for Tornado FD1800/FD1810 | IP24 | |
| Tornado FD1805 | IP21 | |

| TORNADO | FD1800 | FD1805 | FD1810 |
|--------------------------------|--|--------|--------|
| Free standing/ wall mounted | ✓ | x | ✓ |
| Under counter | x | ✓ | x |
| Manual door | ✓ | ✓ | x |
| Automatic door | x | x | ✓ |
| Foot pedal | x | x | ✓ |
| Polymeric exterior | ✓ | x | ✓ |
| Stainless steel exterior | ○ | ✓ | ○ |
| Compliance | Medical Device Regulation (EU) 2017/745 EN ISO 15883-1 EN ISO 15883-3 | | |

○ = Option

References:

- Walder M, Nilsson B, 2018. Validation of Clostridium Difficile spore elimination in Arjo flusher disinfectors: Tornado/FD18-series, Ninjo/FD16-series & Typhoon SP6000. Department of Medical Microbiology, Faculty of Medicine, Lund University. Arjo data on file: 100078423- Ninjo, 100078426- Tornado, 100074176- Typhoon
- Arjo product performance testing: Assessment for virus-decontamination/ Virus-inactivating processing of bedpans and urine bottles in the Flushers Disinfectors Tornado FD1800; Prof. Dr, rer. nat. Dr. med. habil. Friedrich von Rheinbaben (2022)