

Operating Instructions

Disinfection Gate MBDESTOR 100

(Stand 02/2019)

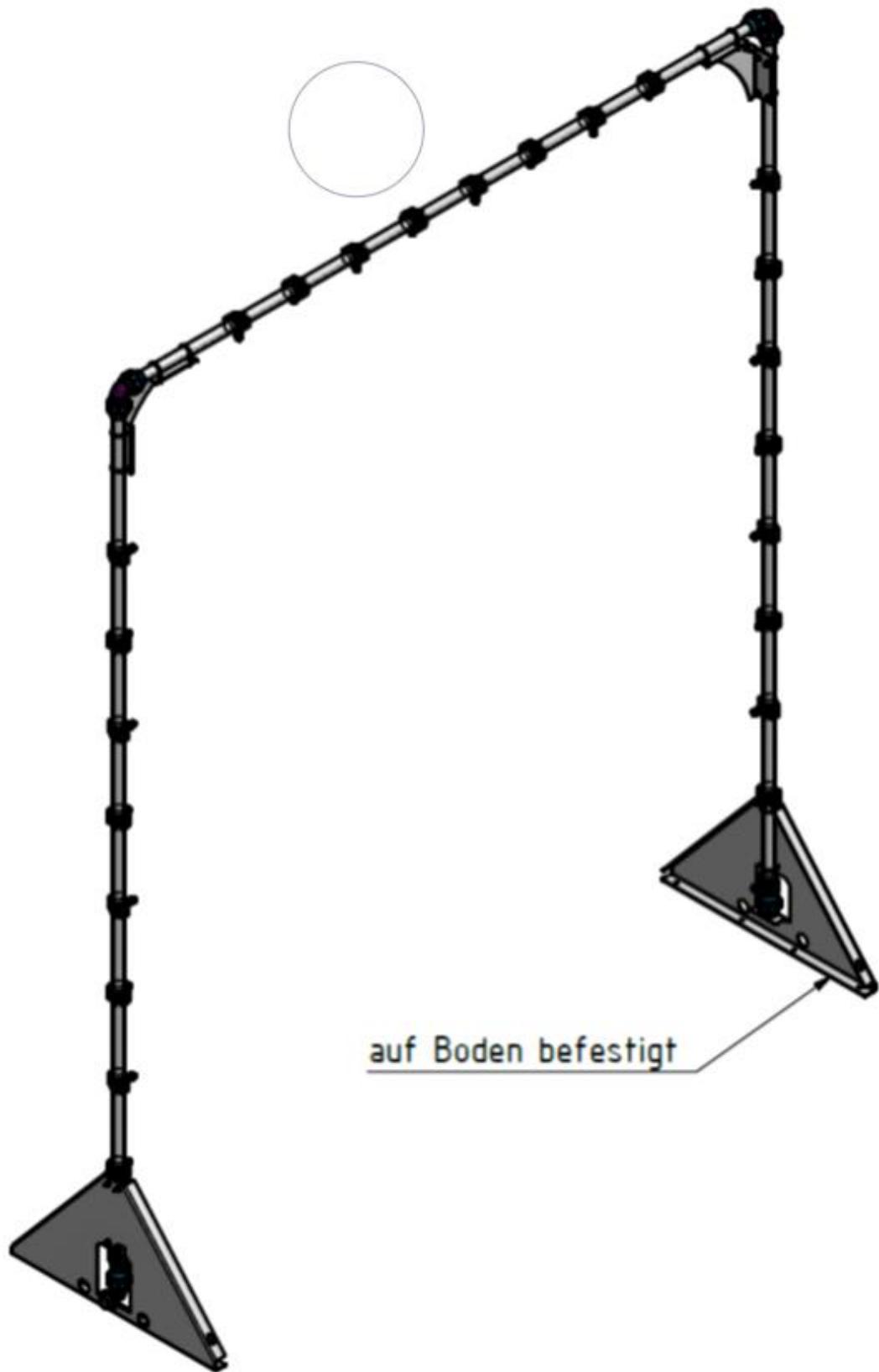


Before assembly, these operating instructions for the disinfection gate and any additives used must be read in full and all instructions, in particular those relating to health protection must be implemented. The system is approved exclusively for disinfecting closed vehicles. The system may only be operated with disinfectants approved in writing by Meier-Brakenberg. For this purpose a written enquiry for each individual product must be submitted.

Personell operating the system must be trained by Meier-Brakenberg. Protect the system from unauthorized operation. Suitable personal protective clothing must be worn in accordance with the instructions for the chemicals used. Persons must not pass through the gate, as the system starts by remote control. As a precaution for third persons, the door area must be fenced in extensively and secured against access. Additional warning signs indicating dangers during the use of chemicals as well as a sign indication the prohibition of access must be erected.

Select a suitable location for installation: Prerequisites are a level stand, a safe, stable surface, passability by the vehicles to be disinfected and sufficient wind protection. In front of and behind a possible drip pan, a complete vehicle length is required on a level surface to avoid exerting any tensile force on the pan or ramp. Precautions must be taken to protect the door against collision. For tensioning, 4 stainless steel storm ropes must be hooked into the loops on both sides at the top. Securely anchor the storm ropes in the ground. Insert the ground ramp in the area of the spray arch. The ramp must be secured against slipping by bolting it to the ground. The ramp must be screwed to the floor using all screwing options. Only then the ramp may be driven on. Stability must be checked before each operation.

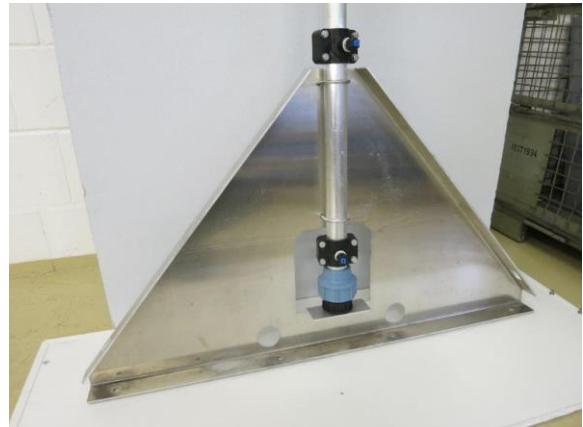
Assembly spray arch



Fixed to the ground.



Side with connection to pump container



Floor profile with end plug



Upper corner profile with eyebolt nuts for tension ropes

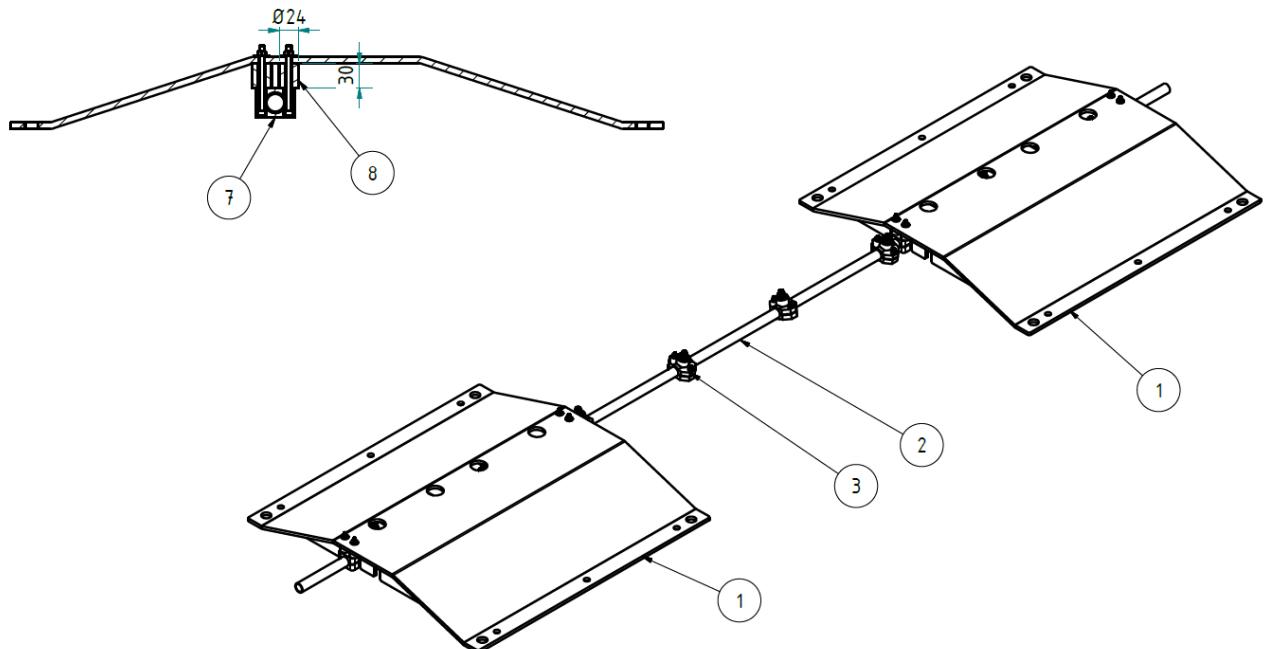


Nozzle-set with intersections and non-return valve

Construction sequence

1. Use a vice to seal the double nipple in the nozzle holder.
2. Attach the nozzle holder to 50 mm pipes, align to the centre of the hole.
3. Screw nozzles together with filter and gaskets to double nipple. The lower two nozzles each are large nozzles, alignment of spray jet lengthwise to the pipe.
4. Connect pipes using PE fittings (elbow, end piece, intersection). Top short pipe.
5. Attach corner profile at the top with eye nuts, at the bottom floor profiles with clamps.
6. Erect the gate and anchor it to the ground with heavy-duty anchors, tension with ropes.

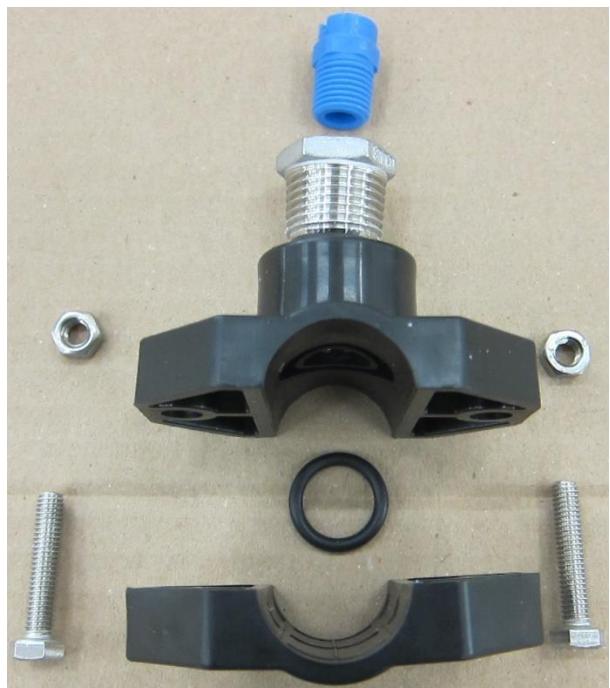
Installation instructions aluminium drive-over ramp



General view with two aluminium ramps (1) and nozzle pipe (2) and nozzle holder (3).



Ramp (1) from below



Nozzle holder (3) with large nozzles and clamp



Mounting with clamping jaw clamp (7) and spacer (8)



Supply connection to pump box



End cap other side

Construction sequence

1. Attach the nozzle holder to the 25mm pipe, align to the centre of the hole.
2. Screw in nozzles (only large nozzles) with reduction, align spray jet lengthwise to pipe.
3. Connect both ramps with nozzle pipe.
4. Dowel the ramp on the floor with all screwing options.
5. Establish connection to pump box via hose.
6. Insert end cap on other side and screw tight.

Set up solvent container and pump container

Place the solvent container and pump box on the spray arch. The side corresponds to the inlet side.



Coupling hoses

Connecting hoses pump box - spray arch

Connecting hose pump box - ramp

Suction hose pump container - solvent container (optional)

Commissioning and venting

Before each use, all components must be tested for tightness and resistance to pressure with pure water. Additives may only be added after the complete and successful test run. Fill solvent container with water up to approx. 50 %, minimum height 20 cm above pump box. Connect the solvent container to the pump box at the lower nozzle with a hose, nominal diameter 40 mm. Open the solvent container. Open the black-blue ball valve until pure water without air inclusions comes out of the blue hose.

Wait for full water flow from ventilation. Close the blue-black ball valve. Connect the 230V/50Hz mains connection for the pump box via the safety contact plug. Close the pump box cover and keep it closed. Close again immediately after operation (spray mist and weather protection).

Start pump with remote control. Wait for full spray pattern. If pump does not build up full pressure, stop the pump by remote control and open blue-black ball valve. Loosen the third nozzle in the vertical pipe from below on the pump box side using the union nut and remove the nozzle with drip stop. Close the blue-black ball valve. Start the pump. Wait for full spray pattern. Stop the pump. Reinstall nozzle and drip stop. Start the pump. Check spray pattern and spray bend as well as connecting hoses for leaks.

Fill solvent container with mixed solution

Prepare the solution according to the instructions of the disinfectant. Close the container. Ensure venting for the container due to large extraction quantities.

Disinfection

Start pump with remote control, held towards pump box.

Let the system run until air has escaped from the spray arch and a uniform spray pattern has developed.





Operation

The pump box must only be operated with the cover closed. The pump container must also be protected against weather by suitable measures such as a tent or pavilion. The disinfection gate must be driven over slowly at a constant speed of max. 3 km/h. The speed of the vehicle must not exceed 3 km/h.

Output approximately 200 l/min. At 2.4 km/h, the spray rate on the vehicle is approx. 0.4 l/m². Suitable antifreeze must be added for winter operation.

After each use the system must be cleaned and completely flushed with water from inside and outside. After operation, all pipes and water-carrying components must be drained and dried with compressed air. Store in a dry and frost-proof room.

Safety instructions pump

The stainless steel pump is an electric pump that complies with EC directives. Before the pump is installed, ensure that the power supply is earthed and that the guidelines are complied with. Before any inspection or maintenance, disconnect the installation from power supply and disconnect the plug from the outlet. A 16A slow-blow fuse is required for power supply. The pump is designed to pump clean water and must not be used to pump flammable liquids or in areas where there is a risk of explosion. Since the pump is powered by electricity, any contact between power supply and liquids to be pumped must be avoided.

Only use original spare parts. Regular maintenance after each use and at least every six months when not in use can be carried out by Meier-Brakenberg directly or by Meier-Brakenberg authorized personnel. This includes a complete functional check, a pressure test and an e-check. Furthermore, the components must be checked for stability, wear condition and possible damage with regard to stability. A disinfection gate that has not been or only insufficiently maintained must not be operated. Maintenance must be recorded and service documentation is to be carried with the disinfection gate.

Training

Personnel must be regularly instructed by the operator. Keep records of these trainings.

Date	Name	Type of training	Training conducted by	Signature

EC Declaration of Conformity

The Manufacturer

MEIER-BRAKENBERG GmbH & Co. KG
Brakenberg 29
32699 Extertal, Germany

Herewith declares for the devices and machines stated below

- Stationary Disinfection Gate

This declaration is no longer valid if the machine is modified without our approval. Furthermore, this EC Declaration of Conformity becomes invalid if the machine is not used in accordance with the intended use as described in the operating instructions and in case the regular inspections are not carried out.

Conformity with the provisions of the following EC directives in the respective valid version:

Relevant EC directives

EMV-Richtlinie 2004/108/EG / EMC Directive 2004/108/EC
Niederspannungsrichtlinie 2006/95EG / Low Voltage Directive 2006/95EG

Applied harmonized standards

EN 614-1:2006+A1:2009
EN ISO 12100-1:2003
EN ISO 12100-2:2003
EN ISO 13850:2008

Extertal, 29 March 2021

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(Place), (Date)

Wolfgang Meier - Executive

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Name and Function of Signatory


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Signature

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