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# INSTRUCTION MANUAL

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## **CLEMENTS**

### **VENTURI NOZZLE FOR HIGH FLOW / HIGH VACUUM**



PUBLICATION CODE: MO093  
EDITION: n° 1  
DATE: February 2021

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# Contents

Important.....	2	Installation and use.....	3
Application.....	3	Cleaning and disposal .....	4
Controls and connections .....	3	Technical features .....	4



## Important

CAUTION: INDICATION OF DANGER

Attention: Important indication

### General information

- Read this manual carefully before using the venturi nozzle for high flow/ high vacuum.
- AFTER UNPACKING, CONNECT THE DEVICE AS DESCRIBED IN THE SECTION "INSTALLATION AND USE".
- BEFORE EACH USE CARRY OUT THE OPERATIONS DESCRIBED IN THE SECTION "INSTALLATION AND USE".
- INSTALLATIONS THAT ARE NOT ENVISAGED BY THIS MANUAL MAY REDUCE THE SAFETY LEVEL OF THE APPLIANCE.
- BEFORE EACH USE, ENSURE THAT THE DIRECT SUCTION NOZZLE FOR HIGH FLOW / HIGH VACUUM, IS DIRECTLY OR INDIRECTLY CONNECTED TO A COLLECTION VESSEL FITTED WITH AN OVERFLOW VALVE AND ANTIBACTERIAL FILTER, AND THAT THE CONNECTOR HOSES USED CONFORM WITH THE STANDARD EN ISO 10079-3.
- The company will not accept any responsibility if the instructions in this manual are not observed, if original spare parts and/or authorized technicians are not used.

### Connections

- CONNECT THE UNIT AND CHECK THE SEALS BETWEEN THE COMPONENTS AS DESCRIBED IN "START-UP PROCEDURE" SECTION. FAILURE TO MAKE THESE CONTROLS MAY COMPROMISE THE SAFETY AND FUNCTIONING OF THE DEVICE.
- OILS AND GREASES MUST NOT COME IN CONTACT WITH THE EQUIPMENT.
- The vacuum supply connector is positioned on the back part of the device and may be identified by referring to the drawing on page 3 of this manual (pos. 4).

### Operation

- THE VENTURI NOZZLE FOR HIGH FLOW / HIGH VACUUM, MUST BE USED CAREFULLY AND ONLY BY PERSONNEL WHO ARE FAMILIAR WITH THE CONSEQUENCES OF THIS THERAPY.
- Disconnect the vacuum supply when the unit is not in use.

### Service

- All the modifications and repairs must only be performed by personnel authorized by the Manufacturer or by hospital technicians approved by the same company.
- Original spare parts must always be used for the maintenance operations.
- Check the direct suction nozzle every day or in accordance with hospital routine.
- For periodical updating reasons, the device configuration can be subjected to changes. Therefore, the Manufacturer guarantees spare parts to be available for at least 5 years from the manufacturing date.
- Any modifications to the device must be approved by the Manufacturer, and carried out in accordance with the procedures prescribed.

The device has been designed and manufactured to satisfy the safety requirements of the following standards:  
EN ISO 10079-3

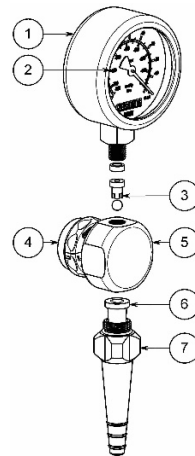
# Application

Venturi nozzles for high flow / high vacuum are used where simple On-Off suction control is required. The Nozzles have a simple and robust construction and are designed for applications where direct suction is instantly required. The dual-scale vacuum gauge for controlling the line depression is accurate and easy to read. The non-return valve protects the suction system from blowbacks. Venturi nozzles for high flow / high vacuum are suitable for connection to most of terminal units available on the market.

# Controls and connections

## LEGEND

- 1 - Silicone protection sleeve (optional)
- 2 – Controlling vacuum gauge (optional)
- 3 – Non-return ball valve
- 4 – Specific gas quick coupling for suction supply (VAC-IN)
- 5 – Chrome-plated metal body
- 6 – Sintered bronze filter
- 7 – Vacuum supply hose connector (VAC-OUT)



# Installation and use

Check the functioning of the unit every day or in accordance with the hospital routine. The connection procedures for the venturi nozzle is described below.

- Connect the specific gas quick coupling for suction supply VAC IN (4), to the rapid supply outlet of the centralised hospital plant;
- Connect a suitable flexible hose to the vacuum supply hose connector VAC OUT (7) (e.g. silicone hose autoclavable at 134 °C for 18 minutes), pressing onto the end;
- Connect a suitable type of collection container for aspirated fluid to the other end of the hose.

The procedure below must be followed to make the appliance operational:

- Check the suction on the control vacuum gauge (2), after the block of the hose connector used for the suction. The system is then ready for use.

After use, the procedure below must be followed:

- Disconnect the vacuum supply (4) from the main supply outlet of the centralised hospital plant;
- Remove the collection container by disconnecting it from the suction nozzle and detaching the PATIENT circuit.

# Installation and use



## WARNING

FOR THE CORRECT USE OF THE COLLECTION CONTAINER, READ THE INSTRUCTIONS IN THE USER MANUAL SUPPLIED WITH THE DEVICE.

THE LIQUIDS COLLECTED MUST ONLY BE DRAINED OUT IN AREAS ASSIGNED TO THE DISPOSAL OF HOSPITAL WASTE AND/OR STRICTLY FOLLOWING THE INSTRUCTIONS OF THE AUTHORITIES FOR THE TREATMENT OF THESE PRODUCTS.

# Cleaning and disposal

- Clean the device every day or in accordance with the hospital routine
- Clean or replace the sintered bronze filter (6) if necessary.
- Carefully clean all the external surfaces of the device using a soft damp cotton cloth rinsed in neutral detergent diluted 10% in water.



## CAUTION

**DO NOT USE SOLVENTS OR ABRASIVE PRODUCTS FOR CLEANING: THESE CAN SERIOUSLY DAMAGE THE SURFACES OF THE EQUIPMENT AND THE PLASTIC PARTS.**

- DO NOT IMMERSE THE UNIT IN DISINFECTANT;
- DO NOT PLACE THE UNIT IN AN AUTOCLAVE;
- DO NOT USE INFLAMMABLE PRODUCTS.

IF THE EQUIPMENT IS ACCIDENTALLY CONTAMINATED BY SUCTIONED LIQUIDS, IT MUST BE ISOLATED AND THE NECESSARY CLEANING AND DISINFECTION OPERATIONS MUST BE CARRIED OUT BY QUALIFIED PERSONNEL.

IF NECESSARY, STERILISE THE VENTURI NOZZLE WITH A VALIDATED ETHYLENE OXIDE STERILIZATION CYCLE (E.G. 14% EO 12 H. / 50 KPA / 37 °C).



## CAUTION FOR DISPOSAL

IF THE DEVICE IS DAMAGED AND CANNOT BE REPAIRED, DISPOSE AND DISCARD IT ACCORDING TO THE INTERNAL PROCEDURES OF THE HOSPITAL. DO NOT RECYCLE OR REUSE ANY COMPONENT.

# Technical features

Sales description .....	Direct suction nozzle
Dimensions (mm).....	Height: 195 Width: 68 Depth: 48
Weight (g).....	400
Scale of the vacuum gauge.....	From 0 to -100 kPa graduated at 5 kPa From 0 to -760 mm Hg graduated at 20 mm Hg
Maximum suction flow.....	60 L/min $\pm$ 5 L/min at -98 kPa
Maximum supply depression.....	-98 kPa
Vacuum supply connection .....	Thread M8x1 F
Vacuum connector.....	Hose connector $\varnothing$ 10÷12mm
Storage conditions .....	-40 °C $\pm$ 2 °C / +60 °C $\pm$ 5 °C and 40% to 70% RH
Operating conditions.....	+5 °C $\pm$ 2 °C / +35 °C $\pm$ 5 °C