

Installation Instructions



Area Valve Service Unit

Part number 2212020896

Revision 01

March, 23, 2018



BEACONMEDAES[®]

Installation Manual

Area Valve Box

This unit is purchased from:

Date purchased:

Model number:

Serial number:

Option(s) included:

Any information, service or spare parts requests should include the serial number and be directed to:

BeaconMedæs
Telford Crescent, Staveley
Derbyshire S43 3PF

Telephone: +44 (0) 1246 474242
Email: gbn.info@beaconmedaes.com
Website Contacts: www.beaconmedaes.com

BeaconMedæs reserves the right to make changes and improvements to update products sold previously without notice or obligation.



Manufacturer: DeltaP s.r.l. via Thansau, 4 Rosate (MI) - Italy
tel: +39 02-90005313; fax: +39 02-90005255



Personnel must make themselves familiar with the contents of this manual and the function of the unit before installing, operating or maintaining.

Abbreviations

Abbreviation	Full Description	Abbreviation	Full Description
HTM	Health Technical Memorandum	%	Percentage
BS	British Standard	Kg	Kilograms
BSP	British Standard Pipe	kPa	Kilo pascals
ISO	International Standard Organisation	PSI	Pounds per square inch
EN	European Standards	NRV	Non-return valve
ID	Identification	1st	First
Med	Medical	2nd	Second
°C	Degree Celsius	O2	Oxygen
∅	Diameter	N2O	Nitrous oxide
OD	Outside Diameter	N2O/O2	O2/N2O 50%/50% V/V
m	Meter	MA	Medical Air
mm	Millimetres	SA	Surgical Air
"	Inch	VAC	Medical Vacuum
Max	Maximum	CO2	Carbon Dioxide
Min	Minimum	N2	Medical Nitrogen

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1. Safety Precautions

▲ If you do not understand completely the information contained in this manual, DO NOT USE the device and contact BeaconMedaes in order to obtain any necessary information

1. This device is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of appropriate experience and knowledge
2. Remove the device from its packaging immediately before installation to avoid contamination
3. Check that no part of the device is visibly damaged, that each part is perfectly clean and especially free of lubricants
4. Do not oil or grease the device: this may cause fires and/or explosions
5. Do not use solvents, disinfectants or other substances not compatible with medical gases
6. The installation shall be carried out by competent and qualified technicians; BeaconMedaes is not responsible for installations carried out by non-competent and non-certified personnel
7. The use of the device is permitted only by persons who have received proper instructions and trained on the risks associated with oxygen and other medical gases in pressure
8. Maintenance shall be carried out exclusively by BeaconMedaes or by technicians authorized, trained and qualified by BeaconMedaes; BeaconMedaes is not responsible
9. for any maintenance carried out by personnel not expressly authorised, trained and qualified by BeaconMedaes
10. Use appropriate personal protective equipment
11. The tools used shall be appropriate and they do not damage the device
12. Do not use adapters and / or extension not suitable for oxygen and / or other medical gases in high pressure
13. Check the gaskets, they have to be genuine and intact
14. Handle the device with extreme caution
15. Do not smoke near the device
16. Do not approach with open flames
17. Do not tamper with the device
18. Place the device away from heat sources or flammable materials
19. Do not expose the device to environmental conditions different from those specified
20. During the opening of the valves, do not remain in front edge of gas
21. During operations wear appropriate protection goggles
22. Always open valves VERY SLOWLY and in particular the valve of the cylinder (when used for emergency / maintenance supply), ignition might occur due to oxygen pressure shocks
23. In order to prevent accidental fall of the cylinders, use adequate protection means in accordance with current regulations
24. Spare parts shall be original; BeaconMedaes is not responsible in case of use of any non-original spare parts
25. Always make sure that the device is not under pressure before its maintenance / replacement
26. At the end of the cycle of life, dispose of the device according to the current regulations
27. Do not remove any labels from the device
28. The vibrations due to long transport could slightly loosen the connections and cause small leaks, look for these leaks exclusively with proper liquid
29. Do not over tighten the threaded components
30. The entire pipeline system shall comply with all project requirements provided by current rules in order to ensure continuity of supply to the patients; the device alone can not guarantee the continuity of supply but it need additional components and procedures as required by current regulations
31. Check that any other components used with the device comply with current regulations and are perfectly clean and degreased in accordance with ISO 15001 standard
32. Once the installation is completed and before its commissioning, the device shall be tested according to the test procedures required by the relevant standards for medical gas pipeline systems
33. In order to prevent catastrophic damage, pay particular attention to the locations where the device is installed and in case of building works.
34. In addition, make sure that the locations are always accessible to authorized personnel
35. All electrical wiring and grounding shall comply with relevant current regulations
36. BeaconMedaes is not responsible for failure to follow the instructions provided in this document, for the use of non-genuine spare parts and/or of work performed by non-authorized technicians

2. Environmental Transport and Storage Conditions

2.1 Environmental Transport and Storage Conditions


Ambient temperature: -20°C to 60°C
Relative humidity (non-condensing): 10%-95%

2.2 Environmental Operating Conditions

Ambient temperature: 10°C to 40°C
Relative humidity (non-condensing): 40%-80%

Environmental Operating Conditions

Adverse environmental conditions and harsh abrasives or chemicals may cause damage to the unit.

 **WARNING!** Only use approved leak detection fluids with this product. Other leak detection fluids may contain surfactants that can impair the structural integrity of the terminal unit.

Cleaning

The exterior of the Valve Box should be wiped over with a damp cloth frequently to remove any dust or foreign substances

4. Installation

4.1 Housing in Box

The device shall be housed in suitable box that meets the following requirements:

1. equipped with door or cover which can be secured in the closed position and that allow quick access in case of emergency
2. labelled with the following or similar wording: "CAUTION — Do not close valve(s) except in emergency"
3. vented to the room to prevent accumulation of gas
4. visible and accessible at all times
5. located within normal hand height

4.2 Procedure for proper housing in the box:

1. Remove the device from the packaging only immediately prior to installing it
2. Make sure that the box is attached to a solid masonry wall, compact or perforated, or on another solid support
3. Check the correct positioning of the device within the box according to the version (H - Horizontal or V - Vertical),
4. Pay particular attention to the correct pipe which connects the device and the proper position of its inlet and outlet; for this purpose, the process gas / vacuum is indicated on the device, together with an arrow indicating the correct flow direction

Make sure that the inlet and outlet pipes are connected to the line containing the same gas / vacuum which the device is intended

5. Fix the device in the set position using the proper screws.

2.4 Connection to the line

To prevent damage to the device, the brazing shall be carried out considering the proper distance between the brazing point and the device

Braze the nuts of inlet and outlet pipes to the pipeline, using high-grade alloy of silver, cadmium free, flushing nitrogen or CO₂
Thoroughly clean the inlet and outlet pipes and the brazed connections.



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