## Medizone™ Area Valve Service Module

## HTM02-01 / HTM2022 / ISO7396-1

## SPECIFICATION

### Medizone Area Service Module

The Medizone Area Service Module may contain a local area medical gas alarm and a maximum of six area valve service units. The Medizone shall be pre-piped, wired and tested ready for installation into a finished building. Medical gas/vacuum services shall be fixed copper, piped to and from their respective area valve service units, and shall normally terminate in 22mm copper stub pipes for pressure gas installations and 22 or 28mm stub pipes for oxygen and vacuum installations. Pipes shall normally be connected at ceiling level. The position of copper stub pipes shall be handed as specified by the customer. Area valve service units shall be BeaconMedæs ZSU$^2$ type and shall conform to BS EN ISO 5359, HTM 02-01 and BS EN ISO 7396-1. The ZSU$^2$ shall provide a zone isolation facility, for use either in an emergency or for maintenance purposes.

### Emergency Access

The 2nd fix shall include a transparent plastic window incorporating the words 'Pull in Emergency and Close Valve'. In order to gain access in an emergency, a ring pull shall be fitted to the removable portion of the window. The emergency access mechanism shall be safely operable by a 5th percentile woman without the use of a tool. Glass windows shall not be used. It shall not be possible to refit or reset the means of emergency access.

### Door Tamper Alarm

A door tamper alarm facility shall be available, with a reed switch initiating a system alarm indication on the local alarm panel when the emergency access window is removed. Normally only oxygen and medical air ZSU2's controlling high acuity care areas, esuscitation bays and accident and emergency wards shall be fitted with the door tamper facility.

### Materials

The second fix assembly shall be manufactured from fire retardant V0 rated ABS moulded corner pieces connecting an extruded aluminium frame in which a high pressure compact laminate fascia plate is positively retained. The fascia plate shall be available in a range of colours to match the chosen hospital décor.

All wetted parts (except seals and gaskets) shall be brass or copper. Copper pipe shall be manufactured from phosphorous de-oxidised non-arsenical copper to EN 1412 grade CW024A, manufactured to metric outside diameters in accordance with EN 13348:2001R250 (half hard). Copper to copper joints shall be made using a silvercopper-phosphorous brazing alloy type CP1 or CP4 to BS EN ISO 17672 using a dry, clean, oil and oxygen free nitrogen inert gas shield with no flux. Each Medizone assembly shall be factory tested for gas tightness. Rubber pipe grommets shall be provided to ensure any leaking gas does not escape from the medizone into a wall cavity. All elastomeric gas seals shall be manufactured from Viton with a Shore hardness of 75.

All visible aluminium surfaces shall be powder coated RAL9010 60% gloss by a DuPont/Akzo Nobel approved powder coating specialist, offering a minimum guaranteed service life of 25 years.

### Gas Specific Connections

The area valve service unit shall be fully gas specific and labelled to identify the medical gas service. The gas specific shrouds shall clearly show the gas service and use colour coding to BS EN ISO 5359. Shrouds shall be pin indexed such that the only the correct shroud can be fitted to each 1st fix. Gas specific NIST connections to BS EN ISO 5359 shall be incorporated on each side of the line valve and include a permanently fitted gas identification label. Pressure gas service (not vacuum) NIST connections shall incorporate 100% self sealing valves which, held closed by gas pressure until insertion of the appropriate gas specific male NIST fitting. Additional sealing of NIST fittings shall be achieved using blank NIST nuts, with a knurled outer diameter. The blank NIST nuts shall include an internal 'O' ring groove and 'O' ring to seal on the smooth outer diameter of the female NIST. Blank NIST nuts shall be hand tightened only. Each NIST connection shall be capable of providing a free air flow rate of 00 l/min with a pressure drop of 0.4 bar from a 4 bar nominal inlet pressure.
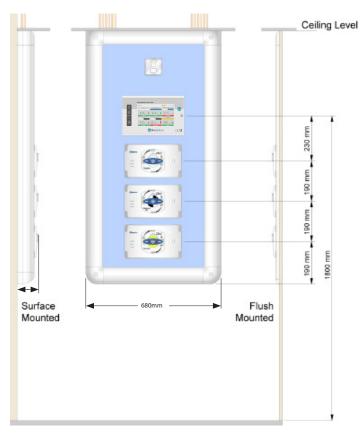
### Local Alarm Pressure Sensores

The area valve service unit shall normally accommodate local alarm pressure sensores. Optionally, pressure sensores may be fitted within a high level access panel. Pressure sensor connections shall incorporate minimum leak pressure sensor connection ports. Wetted parts of pressure sensores shall be manufactured from inherently corrosion proof materials. Plating or sacrificial protection on mild steel is not acceptable.
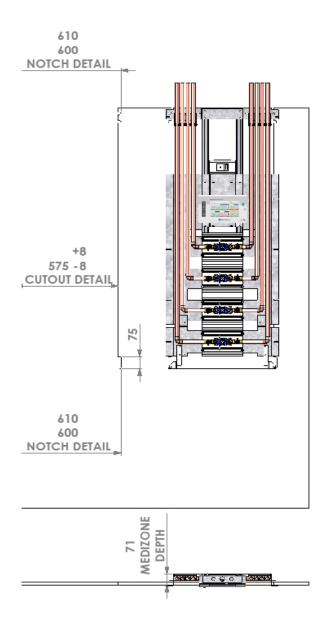
### CE Marking

The standard range of BeaconMedæs Medizone Area Service Modules are 'CE' marked under the Medical Devices Directive 93/42/EEC with approval from notified body no. 2460 (DNV GL Presafe AS). Under this directive, the specified products are classified as Class IIb Medical Devices.

## Dimensions



Ceiling Level

230 mm

190 mm

190 mm

190 mm

1800 mm

Surface Mounted

680mm

Flush Mounted

## Flush Mount Cut Out Details



610
600
NOTCH DETAIL

+8
575 - 8
CUTOUT DETAIL

75

610
600
NOTCH DETAIL

71
MEDIZONE DEPTH

## Ordering

| Part No | Description | Size |
|---|---|---|
| MZTAI1 | High Dependancy Medizone with Tai Alarm Notification System and pressure transducers | 1 Gas |
| MZTAI2 | | 2 Gas |
| MZTAI3 | | 3 Gas |
| MZTAI4 | | 4 Gas |
| MZTAI5 | | 5 Gas |
| MZTAI6 | | 6 Gas |

| Part No | Description | Size |
|---|---|---|
| MZ2716 | Medizone without pressure sensores, no alarm | 1 Gas |
| MZ2726 | | 2 Gas |
| MZ2736 | | 3 Gas |
| MZ2746 | | 4 Gas |
| MZ2756 | | 5 Gas |
| MZ2766 | | 6 Gas |

| Part No | Description | Size |
|---|---|---|
| MZ272616 | Medizone with Medipoint 26 alarm and pressure sensores | 1 Gas |
| MZ272626 | | 2 Gas |
| MZ272636 | | 3 Gas |
| MZ272646 | | 4 Gas |
| MZ272656 | | 5 Gas |
| MZ272666 | | 6 Gas |

| Part No | Description |
|---|---|
| MZ27125 | Extra for adding a Medipoint 125 Central Alarm to a Medizone without any alarm panel |
| MZ27F-C | Extra for floor to ceiling Medizone |
| MZ22-28 | Extra for installing 28mm vacuum ZSU2 |
| MZSAXFI | Extra for installing free issue 3rd party Alarm |
| MZ27AI | Extra for a double pole fused switch for isolation of alarm |
| MZ27ACCESS | Extra for installing pressure sensores in a high level access panel |

| Part No | Description | Size |
|---|---|---|
| MZ27PS16 | Medizone with pressure sensores, no alarm | 1 Gas |
| MZ27PS26 | | 2 Gas |
| MZ27PS36 | | 3 Gas |
| MZ27PS46 | | 4 Gas |
| MZ27PS56 | | 5 Gas |
| MZ27PS66 | | 6 Gas |

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In an effort to continuously improve our products, the right is reserved to change the specification of the items described herein at any time. Please contact us for further information and up to date specifications.

**Order Sheet**

Please fill out the following sheet on order placement (note an excel version is available - please contact customer services).

# Medizone Order Sheet

| | | | |
|---|---|---|---|
| **Company Name** | | **Date Added** | 23/02/2017 |
| **Contact Person** | | **Required Date** | |
| **Purchase Order Number** | | | |
| **Medizone Project/Ref.** | | | |
| **Medizone Type** | | **Medizone Qty.** | |
| **Alarm Option** | | **Ceiling Height** | |
| **D/P Fused Switch for Alarm** | | **Medizone Length** | 0 |
| **Pressure Switch Options** | | | |
| **Front Panel Colour** | | | |
| **Inlet Position** | A | | |
| **Outlet Position** | B | | |
| **Medizone ZSU2 Selection** | | | |

D/P Fused Switch for

A   B

Pressure switches

C   D

Pressure switches mounted in ZSU

**Special Notes:**

To ensure that your order can be processed efficiently and in a timely manner, please complete the relevant boxes indicated in Grey.

With regard to Medizone Length the spreadsheet calculates for the most economic solution taking into consideration the requirements of both HTM2022 and HTM02-01. Any specified deviations from his calculated length are the responsibility of the Customer.

NOTE:

For 6 gas Medizones with Alarm or Pressure Switches fitted in Access Panel, the lowest ZSU will not meet the height requirements of HTM02-01. Height to centre line will be 600mm Approx. instead of 800mm (HTM02-01) Only select options which are inlcuded in the original sales quotation - the invoice price will match the medizone plus any additional options.

*Life is in the details.*®

CERTIFIED ISO 13485   CERTIFIED ISO 14001   CERTIFIED OHSAS 18001