USE AND MAINTENANCE HANDBOOK FOR

AGSS TYPE 1L

TERMINAL UNITS AND ACCESSORIES

CONFORM TO EN ISO 9170-2 STANDARD

CE 0476

93/42/EEC

1. General information

1.1 Introduction

Pres Block AGSS terminal units and accessories are medical devices "CE" marked, built to comply with 93/42/EEC European directive and EN ISO 9170-2 standard.
Before using the device, please read this handbook and ensure it is read by authorized operators.

1.2 Destination of use

Pres Block AGSS terminal units and accessories have been designed to connect in a safe way medical equipment to the anaesthetic gas scavenging system.

1.3 Classification and information under 93/42/EEC directive

The medical device:

- is identified with class of risk IIa, according to 93/42/EEC European directive – Annex IX – Rule 3;
- is neither for single use, nor sterile, nor latex free;
- does not incorporate neither medicinal substances, nor biological or animal tissues, nor human blood;
- does not contain phthalates classified as carcinogenic, mutagenic or toxic to reproduction.

1.4 Marking

Markings on every device are:

"PB" or "Pres Block"	Identifies Pres Block as the manufacturer
"CE 0476"	Identifies the Notified Body that approved the CE certification for the device
"LOT XXYYZZ"	Batch number, where "XX" identifies the year of manufacture
"EN ISO 9170-2"	Referenced standard
"AGSS Type 1L"	According to EN ISO 9170-2 standard. National languages can be used for this marking.
Name of the Customer	(optional)

2. Technical information

2.1 Components

Available components are:

Name	Code	Description	Models
BASE BLOCK	ZEG	Part connected to the scavenging system	MR MS SI
SOCKET	VEG	Part integrated in or connected to the base block by a gas-specific interface. It contains the gas-specific connection point	VEGA (active) VEGS (centralized system)
PROBE	IEG	Male component designed to be accepted and retained by the socket	Straight F1/2 90° barb 22 60° barb 22
	IEG…FC…	Male component that, connected to a flowmetering device, is used to calibrate the scavenging system according to EN ISO 7396-2 standard.	FC (DP 2 kPa) FC1 (DP 1kPa)
SET	AEGS	Set made up of several components intended as a single device.	-

2.2 Technical and Operating characteristics

In compliance with the following standards:	EN ISO 9170-2 (please refer to type 1L)
Transport, storage and working temperatures range:	-20 ÷ +60° C
Transport, storage and working humidity range:	10 ÷ 90 %
Atmospheric pressure limits:	700 ÷ 1060 hPa
Materials used:	Brass (type CW614N) with and without nickel plating, Aluminium EN AW-2011, AISI (302/304/420), PA66, PE, POM, NBR, EPDM
Lubricants:	Compatible with compressed and anaesthetic gases (especially for O2)

2.3 Transport and storage

The original packaging is designed to guarantee the proper transport and storage of the product, in compliance with the requests of EN ISO 15001 standard.

The device must be transported and stored in its original packaging; any damage to the packaging may be detrimental to the functioning or safety of the product.
The device must be protected from atmospheric agents (rain, snow, etc.): water may cause malfunctioning.

3. Installation

The medical device must be installed only by expert and authorized operators. The installation must strictly follow these instructions and the requests of EN ISO 7396-2 standard.
The medical device must be installed at an easily accessible height, reducing as much as possible the risk of damages, due to furniture or other medical devices, and granting a distance ≥ 100 mm between 2 consecutive terminal units.
All the materials used during installation must be compatible with the gases supplied and the materials of the device.
Every precaution must be taken to guarantee and maintain the cleanliness of the device according to EN ISO 15001 standard.
Before installation, verify that the device is compatible with the devices it must be connected with, especially if supplied by different manufacturers.
Before use, connect the device to equipotential earth.

3.1 Base blocks

Perform the following operations in succession:

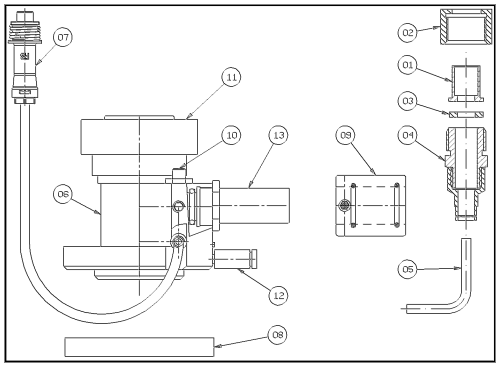
- braze-weld the base block to the scavenging copper pipe according to the standards of good practice (e.g. absence of oxides on the surfaces to be welded, silver solder, quenching without thermal shocks, etc.);
- clean the line with carbon dioxide or nitrogen;
- connect the base block to the wall, using suitable screws and an adequate box.

3.2 Sockets

Socket model VEG120 / VEGA120 for copper pipe supply

Perform the following operations in succession:

- insert the nut (2) into the supply copper pipe (O/D 10 mm);
- braze-weld the fitting to be welded (1) to the supply copper pipe according to the standards of good practice;
- clean the line with carbon dioxide or nitrogen;
- put the seal (3) between the fitting male threaded (4) and the fitting to be welded (1) and tighten the nut (2) on the threaded fitting male (4);
- connect the flexible hose (5) to the fitting male threaded (4);
- fix the socket (6) on the plate (8) (if supplied) using the 3 supplied M3x16 screws;
- connect the socket (6) to the wall / trunking / ceiling pendant, using suitable screws;
- connect the flexible hose (5) to the push-in connector (12);
- connect the scavenging copper pipe (O/D 16 mm) to the ejector (13) of the socket (6), with the plain coupling (9);
- open the bayonet frontal connection of the suction indicator (7) and fix it to the lid (I/D 13 mm), using an appropriate tool and paying attention not to crush its body (max. thickness of the lid 3 mm);
- regulate the performances using the adjusting screw (10).



Socket model VEG120 / VEGA120 for flexible hose supply

Perform the following operations in succession:
- fix the socket (6) on the plate (8) (if supplied) using the 3 supplied M3x16 screws;
- connect the socket (6) to the wall / trunking / ceiling pendant, using suitable screws at an easily accessible height, reducing as much as possible the risk of damages, due to furniture or other medical devices;
- open the bayonet frontal connection of the suction indicator (7) and fix it to the lid (I/D 13 mm), using an appropriate tool and paying attention not to crush its body (max. thickness of the lid 3 mm);
- connect the 4 or 5 mm flexible hose to the push-in connector (12) of the socket (6);
- connect the scavenging copper pipe (O/D 16 mm) to the ejector (13) of the socket (6), with the plain coupling (9);
- regulate the performances using the adjusting screw (10).

Socket model VEGA120/EN2 for copper pipe supply

Perform the following operations in succession:
- insert the nut (2) into the supply copper pipe (O/D 10 mm);
- braze-weld the fitting to be welded (1) to the supply copper pipe according to the standards of good practice;
- clean the line with carbon dioxide or nitrogen;
- put the seal (3) between the fitting male threaded (4) and the fitting to be welded (1) and tighten the nut (2) on the threaded fitting male (4);
- connect the flexible hose (5) to the fitting male threaded (4);
- connect the socket (6) to the wall / trunking / ceiling pendant, using the 3 supplied M4x40 screws;
- connect the flexible hose (5) to the push-in connector (12);
- connect the scavenging copper pipe (O/D 16 mm) to the ejector (13) of the socket (6), with the plain coupling (9);
- open the bayonet frontal connection of the suction indicator (7) and fix it to the lid (I/D 13 mm), using an appropriate tool and paying attention not to crush its body (max. thickness of the lid 3 mm);
- fix the frontal disk on the lid using the 3 supplied M4x8 screws.
- regulate the performances using the adjusting screw (10).

Socket model VEGS120

Perform the following operations in succession:
- tighten the socket onto the base block, with a 30 mm pipe wrench.

3.3 Probes

Probe model IEG120-F1/2

Perform the following operations in succession:
- connect the female thread, granting the tightness with a suitable O-ring or PTFE tape.

Probe model IEGG120-PG22 / IEGP120-PG22

Perform the following operations in succession:
- fix the barb end to the flexible hose (I/D 22 mm) with a suitable single-use clip or crimped ferrule, according to EN ISO 5359 standard.

Probe model IEG120-F1/2-FC…

Perform the following operations in succession:
- connect the probe to the flow-metering device, granting the tightness with a suitable O-ring or PTFE tape.

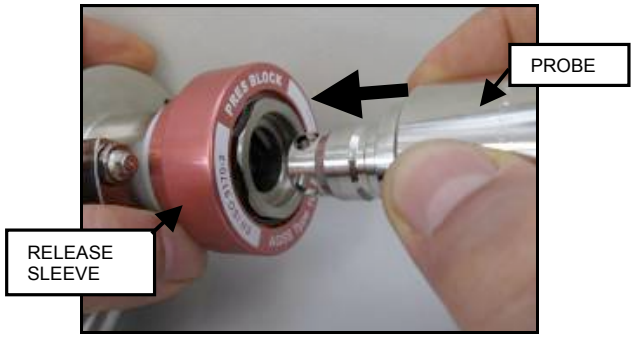
⚠ Once installation is completed, verify the tightness: no leakages are allowed.
Afterwards testing required by EN ISO 7396-2 standard must be run.

4. Use

4.1 Functioning

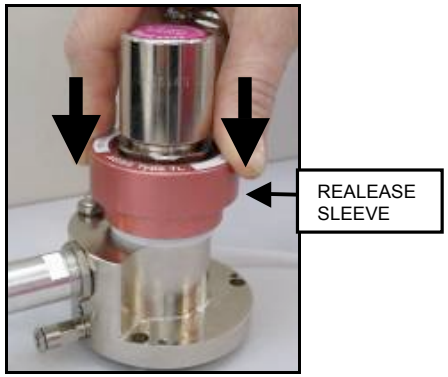
SOCKET / PROBE CONNECTION

1. Verify that the socket and the probe refer to the same standard;
2. Insert the probe into the socket with enough force to oppose the upstream pressure, until the release sleeve of the socket clicks into place;
3. Release the probe verifying that it remains anchored into the socket.



SOCKET / PROBE DISCONNECTION

1. Keep the probe, in order to prevent its quick projection;
2. Push the release sleeve of the socket, towards the base block.



4.2 Cleaning

For cleaning use only distilled water or diluted ethyl alcohol.

4.3 Safety

Before use, personnel must familiarize with the control devices and their operation.
If the medical device is out of order or in maintenance, disconnect it from its supply and place a visible sign stating “NOT IN SERVICE. DO NOT USE”.

⚠ Do not use the medical device for gases or pressures different from those for which it is designed.
Do not crash the probe, in order not to spoil its functionality.
Do not try to insert probes designed for a different gas and/or different standard into the sockets. This may damage both devices.

5. Maintenance

The maintenance program must envisage a minimum of biannual inspections with particular reference to:
- easy coupling and disconnection;
- wear or damage;
- contamination;
- marking – labelling;
- tightness;
- flow rate according EN ISO 7396-2.

These operations must be recorded.

⚠ Every precaution must be taken to maintain the cleanliness according to the requests of EN ISO 15001 standard.
During maintenance and repair only original parts must be used.
Do not use lubricants that aren’t compatible with the distributed gases at their operating pressures.
Once maintenance is completed, testing required by EN ISO 7396-2 standard must be run again

PRES BLOCK S.p.A.
Via Alpignano 151-155 – I-10040 Caselette (TO)
Ph: 0039-011-9688055 - Fax : 0039-011-9688668
www.presblock.com