

## Pressure Generator with OIL/WATER (Models : BPPOH)



Model : BPPOH-1000B

### Concerns the models :

✓ model : BPPOH-1000B

**(Arémeca)**  
-Instrumentation-

**europascal**  
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Your Model :

.....

Serial number :

.....

Made the :

.....



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Read the instructions before handling and retain this information for future use

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The pressure generators models BPPOH describes in this manual are designed and manufactured by AREMECA (France).

Our products follow manufacturing procedures and controls in line with our Quality System ISO9001 and in accordance with the standards in force.

This manual commissioning informs the user about the functioning of the instrument and the safety limits for work peacefully.

This manual is an integral part of the device. It must be kept close to the workstation and accessible at any time by the user.

AREMECA reserves the right to alter the content or form of this manual at any time and without notice. And to make technical amendments to change the product.

Responsibility AREMECA is not liable for any damage caused by :

- not in accordance with intended usage,
- non compliance with instructions for use,
- use of the instrument by unqualified untrained operator ,
- a transformation / modification of the device carried by the user.

The operator must have read and understand prior to operating mode and use the device to start handling.

## a) Device

### Device identification



indicates the model of comparator  
ex : BPP0H-1000B

indicates the serial number of comparator

indicates the date of commissioning of the unit

### Intended use of the device

Before switching on the device, ensure that the technical characteristics (measuring range, precision, fluid etc...) correspond to your needs



*> For example : the maximum pressure defined for this compressor must not be exceeded*

The pressure comparator is designed and manufactured for use as described in this document

Dans le cas d'une utilisation inappropriée ou d'une mauvaise manipulation, en dehors des spécifications techniques mentionnées dans cette notice. L'instrument doit être immédiatement isolé, identifié comme hors service et doit être contrôlé par notre service SAV.

### Precautions storage and transport

It's necessary to take care of the unit during storage or transportation. It must be protected from moisture, shock, extreme temperatures and shouldn't be removed or changed.

If the comparator is moved to a new environment (warmer, colder, etc...). Observe the phase of "stabilization" and wait until the device temperature stabilizes at room temperature before handling.

## **b) User**

### **User qualifications**



*> Improper use of the device can cause significant bodily injury and properly*

Qualified operator, due to : it's product training, knowledge in the field of metrology and experiences in field of pressure and knowledge on standards and guidelines, is able to perform the operations describes in this manual. He will be able to detect potential dangers.

AREMECA offers on demand, an installations / commissioning of the instrument performance.

### **Personal protective equipment (PPE)**

The personal protective equipment must be defined in the security register of the user company and made available to the operator. These devices are used to protect the operator from potential risks that impede their safety and health at work.

- Protecting fluid



*> Wear eye protection : protects the eyes against splashes and projections of the fluid.*



*> wear gloves : protect the skin against irritation, allergies.*

### a) Unpacking the unit

Upon receipt of the equipment, check the status and content of your package. All of the following elements must be present in the package :

- 1 bench comparison
- 0.5 liter can of demineralized water.
- 1 handwheel
- 2 standard G1/2 pressure fittings (or use one of our 17 standard fittings)
- 1 instruction manual + data sheet

If, despite our checks and vigilance, you find that a component is missing, or that your product has been damaged in transit, please inform AREMECA or your local distributor immediately.

### b) Installation

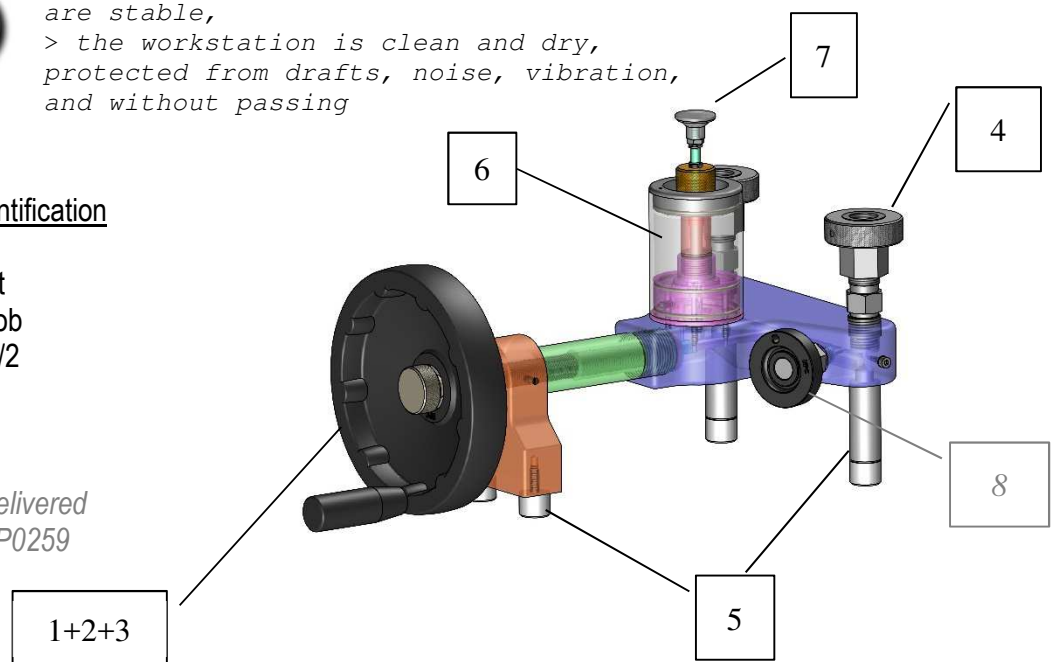
Preferably, install your unit in a stable and controlled environment



*You will get better performance if :*  
*> the temperature and humidity of the room are stable,*  
*> the workstation is clean and dry, protected from drafts, noise, vibration, and without passing*

#### Component Identification

- 1 : capstan
- 2 : rotation shaft
- 3 : clamping knob
- 4 : adaptors G1/2
- 5 : feet
- 6 : tank
- 7 : push button
- 8 : Fine valve delivered  
In option Ref OP0259



#### Installation / Assembly (Pmax 1000 bar)

- Set up the portable bench on a stable, rigid workbench or surface
- Insert handwheel 1 on rotation shaft 2, screw tightening knob 3 to end of rotation shaft 2.
- Remove the (yellow) protective caps from the pressure connections 4. Check that seals are present on the sealing rings (see section 5.d) ) **and that the sealing ring is correctly positioned for the fitting used !**



*> Dirty or polluted gauges must be cleaned before mounting the pressure generator to prevent contamination on the hydraulic circuit. Don't clean the tank with alcohol  
Option : cleaning bench (Ref.OP0062)*

### **c) Put into service**

#### **Filling the unit with fluid and purging**

1. Turn handwheel **1** fully clockwise until it reaches the upper stop,
2. Fill tank **4** with the appropriate fluid: demineralized water or a mineral oil of your choice (type H40 Aremecca).



*> Our devices are mounted and designed to a standard use. They function with the fluid provided. Some fluids such skydrol, castor oil etc... are corrosive and can damage the o-ring of your device.*

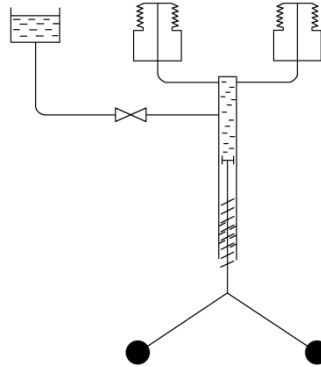
*On request : we can deliver a device designed for these fluids.*

3. Use the small pump on top of the reservoir: press push-button **7** on the reservoir until fluid escapes from the 2 fittings.
4. Install the reference instrument and the device to be tested on the outlet fittings. Depending on the fitting used, position the sealing ring in the correct direction. (see Chap.5 d) ) and check that the seals are in place.
5. Turn handwheel **1** counter-clockwise 2 times.
6. Press tank push-button **7** again until you see resistance, and a slight rise in pressure can be seen on the reference manometer. (Around 5 bar). This step primes the system.
7. Turn handwheel **1** anti-clockwise to the bottom stop. The liquid level in tank **4** will drop; top up if necessary. Bubbles may also appear in the reservoir.
8. Once you have reached the low stop, turn the handwheel **1** clockwise 2 times, then press the tank push-button **7** one last time until you feel resistance,
9. **The unit is purged and ready to operate.**



### Procedure for pressure generator models BPPOH-1000B

#### > Hydraulic diagram



#### > Pressure mounted



> > *Observe the maximum operating pressures of the pressure generator*

Maximum operating pressure : BPPOH-1000B → 1000 bar

- You have installed your instruments and purged the system in the previous chapter. Your unit is now ready for operation.
- Turn handwheel **1** clockwise to reach the desired pressure value.
- Carry out measurement points during pressure build-up.

> *We suggest you purchase the accessory kit ref OP0259.*



*You'll get a fine-tuning valve for fine-tuning measurement values, a carrying case, 4 standard fittings (to choose from our 17 fittings), a wrench, a bag of gaskets for after-sales service, and a sealing ring kit.*

#### > Pressure decrease

- After measuring upwards, turn handwheel **1** anti-clockwise to decrease pressure.
- Carry out measurement points during pressure descent.
- Turn handwheel **1** as far as the rear limit stop, pushbutton **7** becomes soft again.
- Pressure is at zero, **measuring instruments can be dismantled without risk.**

### a) Daily maintenance

Cleaning the comparator and checking the fluid levels are the only periodic maintenance required. No additional maintenance should be necessary if all instructions are followed.

#### Reminder instructions :

- Use only mineral oil or demineralized water. Guaranteed performance and operation can only be guaranteed when these fluids are used.



*> Wear safety goggles: protects eyes from splashes and splatter.*

### b) Maintenance

#### **> Oil Tank**

Make sure the reservoir contains enough fluid to perform the required calibrations. Because some instruments require large volumes of fluid.

If necessary, refill the reservoir with the same fluid already in use. Don't mix different types or brands of fluid.



*Note : Corrosive products such as skydrol, solvents, brake fluid etc. may attack the seals fitted to the comparator bench and damage your unit. If you wish to use such products, please contact us!*

Keep the bench clean, wipe up any splashes, and keep a close eye on the oil/water in the reservoir for any traces of contamination. If the fluid is dirty, drain the unit to remove soiled fluid, rinse, and replace with clean fluid.



*> Option : cleaning kit Ref. OP0025 you will aspirate oil dirty present in the tank.*

Don't clean the tank with alcohol

### c) Preventive maintenance / Overhaul

We recommend a complete overhaul of the unit every 2 years. This involves replacing all seals and performing a thorough cleaning. We recommend that you send your unit to us, as we cannot be held responsible if the service is carried out by the customer. On receipt of your appliance, we will carry out a full inspection and send you a repair estimate.

The average after-sales intervention time is 1 week.

### d) Adaptors

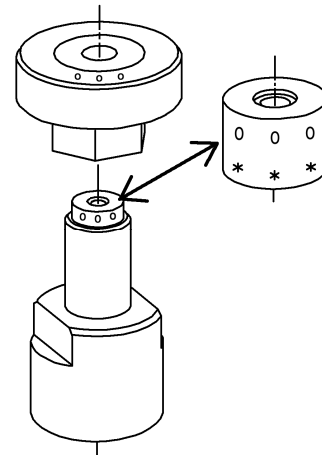
The device is equipped with a specific connection system for pressures below 1250 bar.

*It is necessary to orientate the ring correctly according to the type of connection (see chapter below).*

#### Thread M10x100, G1/8, 1/8 BSP-TR, 1/8 NPT

For these connectors guide ring, mark : **000** visible.

The connector must be tightened by hand.



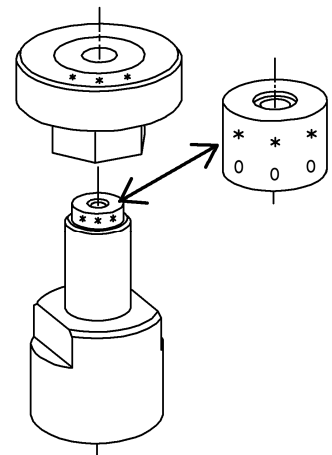
#### Thread M12x150, M16x150, M18x150, M20x150, G1/4, G3/8, G1/2, 1/4 BSP-TR, 3/8 BSP-TR, 1/2 BSP-TR, 1/4 NPT, 3/8 NPT, 1/2 NPT

For these connectors guide ring, mark : **\*\*\*** visible.

The connector must be tightened by hand.



> Available as an option :  
Suitcase with 4 connectors type G  
(Ref.OP0171)  
Suitcase with 4 connectors type NPT  
(Ref.OP0172)  
Suitcase with 4 connectors type BSPTR  
(Ref.OP0173)  
Suitcase with 5 connectors type M  
(Ref.OP0174)  
Suitcase with 17 connectors  
(Ref.OP0037)  
standard o-ring (Ref.OP0038CEO)



## > OPTIONS

Kit OP0259 : carrying case + fine adjustment valve + 4 standard fittings + 1 key + SAV gasket kit + sealing ring with gaskets.

We can also supply a reference digital pressure gauge.

## > ACCESSOIRES

### Connectors

OP0174 : Suitcase with 5 connectors metrics - M10x100 ; M12x150 ; M16x150 ; M18x150 ; M20x150

OP0171 : Suitcase with 4 connectors gas cylindrics - G1/8 ; G1/4 ; G3/8 ; G1/2

OP0172 : Suitcase with 4 connectors NPT - 1/8NPT ; 1/4NPT ; 3/8NPT ; 1/2NPT

OP0173 : Suitcase with 4 connectors BSPTR - 1/8BSPTR ; 1/4BSPTR ; 3/8BSPTR ; 1/2BSPTR

OP0037 : Suitcase with 17 connectors - all connectors

### Kit cleaning

OP0025 : Cleaning kit for tank

OP0062 : Cleaning bench for manometers

## Notes

## Notes

## Notes

