

The background of the lower half of the page is a close-up, blue-tinted photograph of industrial machinery. It shows several cylindrical components, likely pneumatic cylinders, with threaded rods and hexagonal nuts. The focus is sharp on the foreground components, while the background is blurred.

OPERATION MANUAL LOCKING UNITS

1. Brief Description

- Clamping the piston rod with spring force.
- When pressure is applied to the clamping unit, the piston rod will be released.



Do not use in safety equipment! Not approved as a safety element!

- ***The clamping unit is not a brake and is not designed to slow or dynamically stop the movement of the cylinder.***
- Can be connected to VDMA 24562 pneumatic cylinders with extended piston rods.
- ***The clamping unit may only be used with the designated cylinders from PWB.***
- Clamping elements can be used in line with VDMA 24562.
- Can be installed in any way.

2. Technical Data

Medium: filtered compressed air (40 µm), unoled or oiled

(see 6.1) Operating pressure : 4 to 10 bar

Equipment temperature: -20°C to 80°C (please monitor the air quality if temperatures drop below 2°C)

3. Safety



The text elements marked with this symbol refer to ***potential hazards to your personal safety or damage to the clamping unit.***

The clamping unit is state of the art and safe to operate. The clamping unit can pose a hazard when

- the clamping unit is installed or serviced improperly or by untrained personnel.
- the clamping unit is not used for its designated purpose.
- the accident prevention regulations, VDE guidelines and safety and assembly manuals are not followed.

Anyone responsible for installing, operating and servicing the clamping unit must have read and understood the entire operating manual, especially the section on safety. The clamping unit may only be installed, disassembled, connected and operated by authorised professionals. Working methods that might impair the functionality or operating safety of the clamping unit must be avoided.

The clamping unit may only be used within the parameters of its technical data; any other use is considered improper. The manufacturer cannot be held liable for damage resulting from such use. When servicing the clamping unit, it is advisable to remove the unit from the working area and carry out the work outside of the hazard zone.

When configuring, operating and testing the clamping unit, please ensure that you do not accidentally touch the cylinder or the clamping unit. Additional drills, threads or extensions that are not available as accessories may only be used after consultation with PWB.

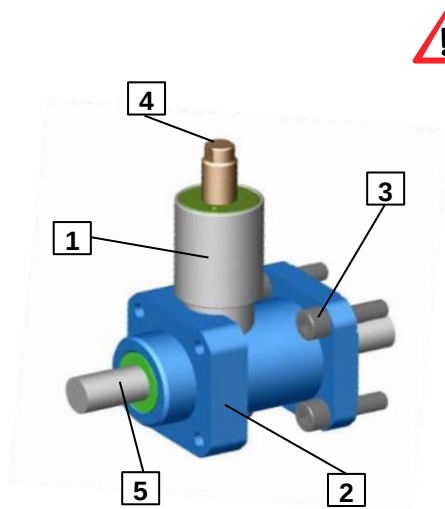
The clamping unit may not be operated in an environment with abrasive particles or aggressive liquids or vapours without the prior consent of PWB. Otherwise, the safety and accident prevention regulations in force at the place of operation apply.

4. Unpacking and Inspecting

Remove the packaging carefully. Inspect the clamping unit for damage sustained during transportation and report any such damage to us immediately. If the clamping unit is to be stored temporarily for an extended period, please note the following:

- Store the unit in its original packaging in a clean, dry place
- Protect the unit against aggressive media
- Avoid major temperature changes.

5. Assembly



The erection screw (4) in the air supply may only be loosened once the piston rod has been inserted. It cannot then be reset.

Insert the clamping cartridge (1) into the right locating hole in the adapter (2) from above. Place the clamping unit (1-4) on the piston rod (5) and gradually tighten the fastening screw (3) diagonally. **Only the frontal holes may be used to attach the clamping unit!** Once the fastening screw (3) has been tightened, the piston rod (5) must still be able to move freely. When the piston rod (5) can be moved freely, the erection screw (4) can be removed. The piston rod will then be clamped. The erection screw (4) is now replaced by a pressure connection. When pressure is applied, the clamping unit will release and the piston rod will be movable again. **See section 6 of this operating manual.**

6. Operation

6.1 Oiled compressed air



If you use oiled compressed air once, you must always use oiled compressed air. Too much oil can lead to functional problems.

6.2 Important information



Leave the hazard zone before pressurising the cylinder and clamping unit and ensure that no one else is present! Slowly ventilate the cylinder when it is starting up! Ensure that manipulating the cylinder does not cause a collision.



The clamping unit may only be released once the axial force of the piston rod (5) has been balanced out (with no clamping force). For example, this can be done by applying pressure to both cylinder chambers. Warning: Take external loads (weights) into consideration.



The clamping unit may not be used in safety equipment. It is not approved as a safety element! The clamping unit is not a brake and is not designed to slow or dynamically stop the movement of the cylinder. When clamped by the clamping unit, the piston rod (5) may not be distorted or exposed to external impacts. This can neutralise the clamping force. Under changing loads, the clamping unit is not free from axial play when clamped. Please note the maximum static holding forces.

7. Maintenance

The clamping unit is lubricated in the factory. Oil mist lubrication is not absolutely necessary, yet it does extend the life span of the wear parts (see 6.1). If a maintenance unit is to be used, it must be positioned close to the cylinder.

*Store this document in a safe place and
pass it on to any end customer!*

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