



Bedienungs- und Wartungsanleitung

Maintenance and Operating Instructions

Großflächenregner *Large area sprinkler*

Type : P2M

PERROT



ZW0199537



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1. General

We presume, that you are experienced in the field of irrigation. Therefore we have kept this instruction as brief as possible, and have included only such information which you must have for the use of this product.

A guarantee can be accepted only, if the sprinkler has been operated in accordance with these instructions, and if the defect occurs within the guarantee period.

1.1. Application

The sprinkler is used for the uniform distribution of the water. The water should be pre-cleaned, and free of coarse and fibrous impurities.

Max. water temperature 50°C.

Max. ambient temperature 75 °C

2. Safety

These operation and safety instructions include basic remarks and hints for the assembly, installation, operation, maintenance, inspection and repair. For this reason these instructions must be read by the installer as well as by the customer's authorized staff, prior to the installation and commissioning.

Apart from the general safety instructions of this paragraph the special safety instructions include in other paragraphs of these operating instructions have to be observed also.

2.1. Symbols of hints given in these operating instructions

The non-observance of the safety instructions mentioned in these operating instructions can endanger persons and is

marked with the general danger symbol



Safety instructions which can endanger the sprinkler and its function, if not observed, are specially marked with

ATTENTION

2.2. Dangers if the safety instructions are not observed

Non-observance of safety instructions can endanger persons as well as the environment and the sprinkler. Non-observance of the safety instructions can result in a loss of all claims for indemnity.

2.3



Operator / Owner has to guarantee that there are no persons in the operation area during running of the system.



Build in or erection of large area sprinkler over height of head. If not possible the use of other safety measures has to be taken.

3. Description

Recommended operating pressure 5 to 7 bar

Permissible operating pressure 4 to 10 bar

ATTENTION

The pressure at the sprinkler must not exceed 10 bar.

For further data please refer to the separate spec sheet.

4. Assembly

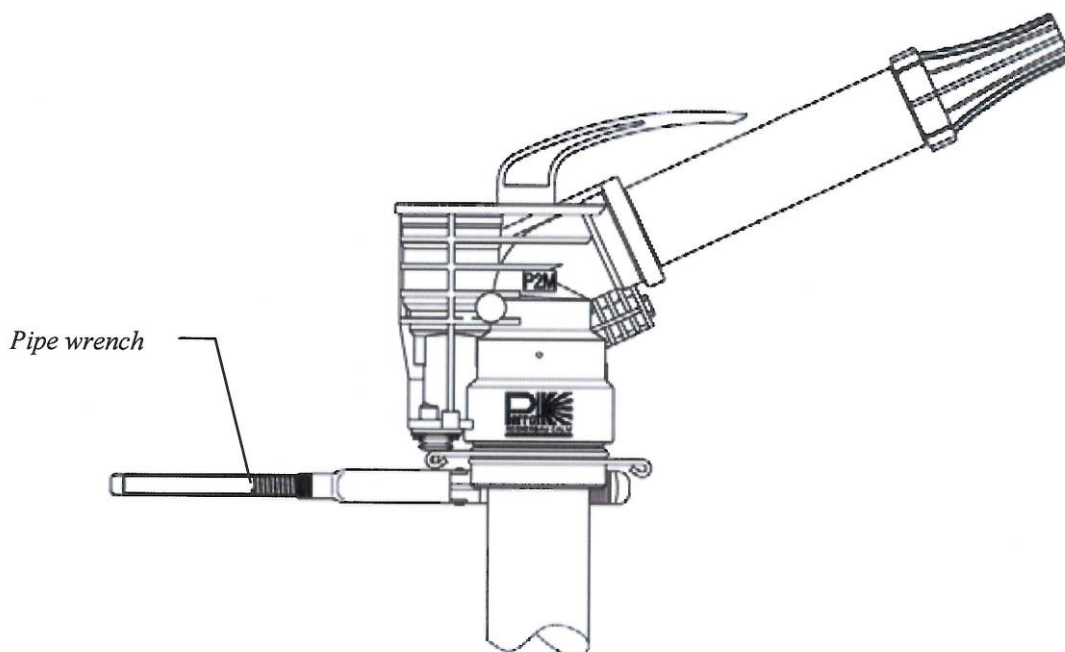
☆ *Threaded connection on the sprinkler is 3" female thread.*

☆ *For sealing the thread, hemp and a jointing compound has to be used e.g. Fermit special*

☆ *To screw on the sprinkler, always use a pipe wrench size 3".*

ATTENTION

Do not turn the sprinkler by using the jet pipe.



picture.1

Screw on the connection socket as far as it will go, so that the sprinkler cannot unscrew during operation.

5. Commissioning

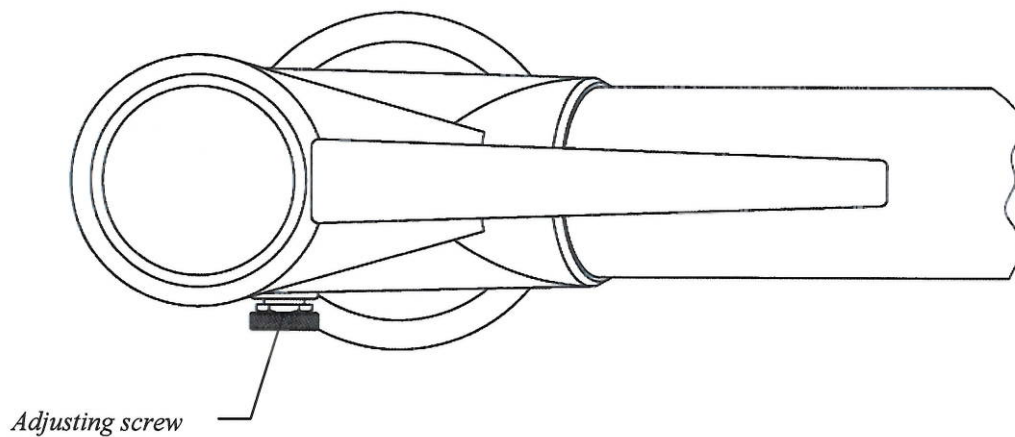
*There are no special measures necessary for commissioning.
Only the rotating speed of the sprinkler has to be adjusted as well as the part circle operation for the sector, which has to be irrigated.*

5.1 Adjustment of Rotation Speed (for agricultural applications)

By turning the adjusting screw to the right a slower rotation speed is achieved. Turning to the left means faster rotation speed.

ATTENTION

*For minimal speed, the use of clear water is required.
In case dirty water is used, the regulation screw has to be opened completely, otherwise the sprinkler can stop its operation.*



picture 2

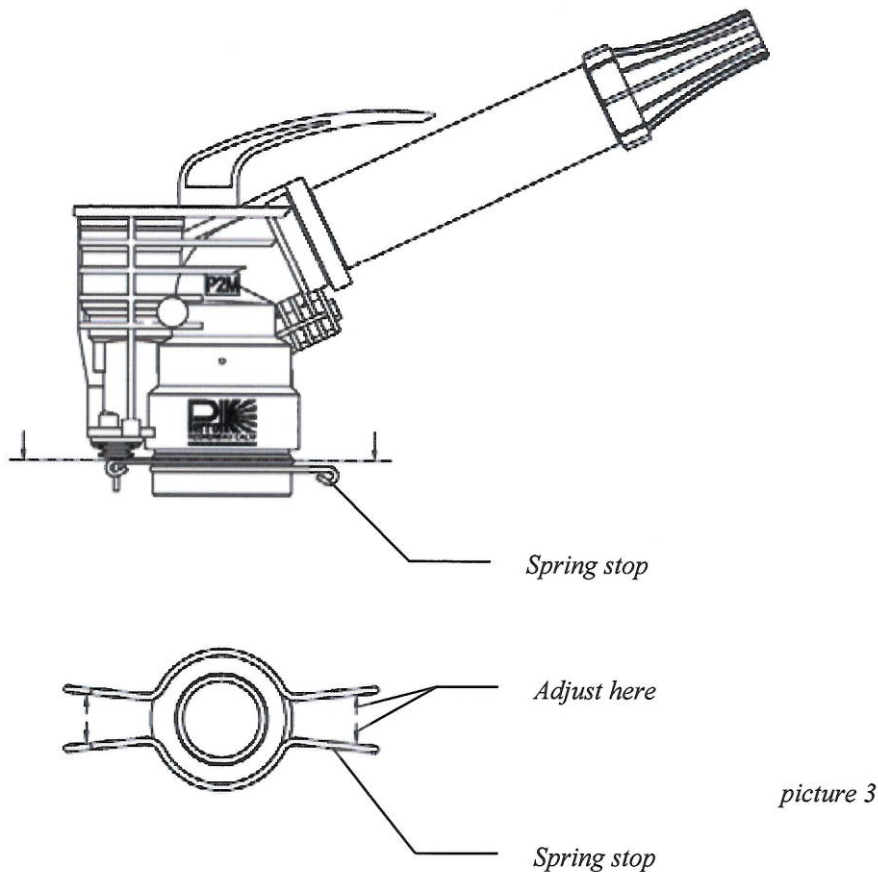
5.2 Sector Setting

Infinitely adjustable by pulling (not pressing) the relevant end of the upper or lower spring stop. The irrigated part circle has to be adjusted by the spring stops (see sketch).

Setting part circle angle

ATTENTION

Infinitely adjustable by pulling (not pressing) the relevant end of the upper or lower spring stop.



5.3 Full circle irrigation

For full circle irrigation the spring stops have to be removed.

ATTENTION

Pull spring stops only so far apart that they can be stripped off easily. In case of overstretching, they cannot be used again for part circle operation.

5.4 Winterizing

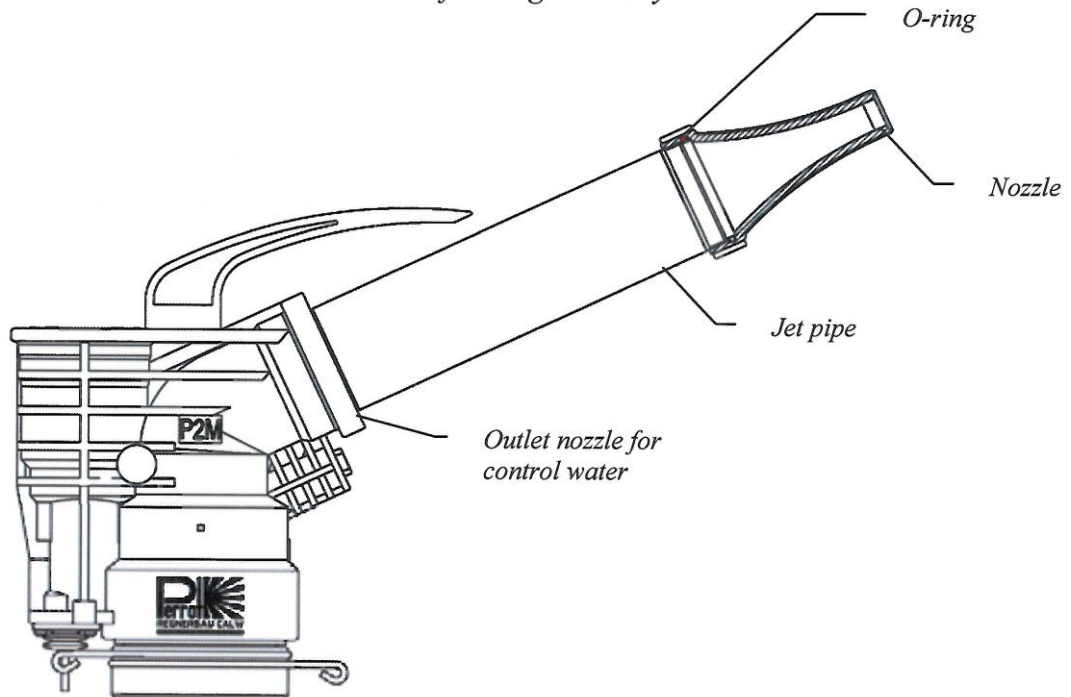
During the frost period please take care, that there is no water standing in the sprinkler. Remaining water in the piston drive unit, does not cause frost damages. When the sprinkler is put into operation again, although there is still ice in the piston area, it will take about 15 minutes to defrost the drive unit at an ice temperature of approx. -20°C .

6. Maintenance

6.1 Lubricate thread of jet pipe

When changing the main nozzle, the thread at the jet pipe and the O-ring seat should be cleaned and lubricated.

Thus, the nozzle can be removed and fixed again easily.

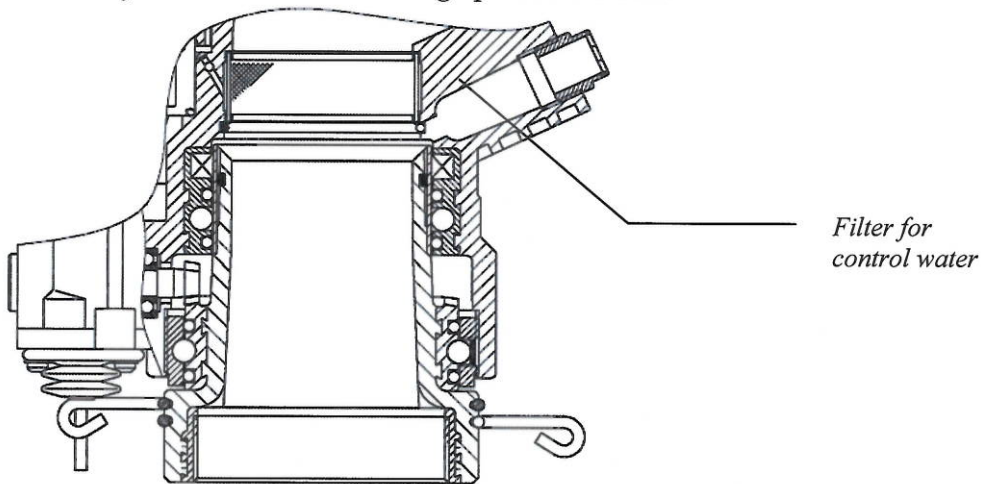


picture 4

6.2 Clean filter for control water

The sprinkler is driven by a cylinder. The control water is pre-cleaned by a filter. The cleaning interval has to be defined against the level of the pollution and operating hours.

To clean the filter use a brush or a high pressure cleaner



picture 5

6.3 Clean piston drive and piston drive area

If the drive unit does not function due to heavy stains, the piston drive has to be removed and cleaned.

6.3.1 Remove piston drive: (see TDP055e-rep)



7. Malfunction and trouble-shooting

<i>Defects</i>	<i>Reasons</i>	<i>Elimination</i>
<i>Sprinkler does not rotate or just very slowly.</i>	<i>The water is dirty. Speed regulation is adjusted at min. Filter is blocked.</i>	<i>Open adjusting screw, dirt is flushed out. Clean filter, as mentioned under 6.2 and 6.3</i>
<i>Sprinkler with poor water jet.</i>	<i>Nozzle or jet straightener is blocked.</i>	<i>Remove nozzle. Clean jet pipe. Take care nozzle is positioned right when reassembling, lubricate thread of jet pipe.</i>
<i>Sector angle gets bigger during operation</i>	<i>Spring stop is loose. Spring strength is slackened. Spring stop is overstretched.</i>	<i>Assemble new spring stop.</i>
<i>Sprinkler's bearing is leaking.</i>	<i>Grooved ring is worn out</i>	<i>Repair only possible by the manufacturer</i>

Subject to change without prior notice.



EC-declaration of conformity

According to machinery directive (98/37/EG), appendix II A
According to low voltage directive (73/23/EWG)
According to electromagnetic compatibility directive (89/336/EWG)

Manufacturer : *Regnerbau Calw GmbH*
Industriestrasse 19-29
75382 Althengstett – Germany
Tel. +49-(0)7051-162-0

Explains hereby that the following product:

Product description: *Large area sprinkler P2M*
Year of manufacture: *from 2009*

Corresponds to the regulations of the guidelines designated above.

Following harmonizing standards were used:

<i>DIN EN 292-1</i> <i>EN 12100</i>	<i>Security of machines; fundamental terms, common guidelines; part 1: basic guidelines and specifications</i>
<i>DIN EN 1050</i>	<i>Security of machines; guidelines for assessments of risk</i>
<i>DIN EN 60204-1</i>	<i>Security of machines; Electrical equipment of machines; part 1: generals' requirements (IEC 204-1:1992, modified)</i>

The manual belonging to the machine as well as the technical documentation is present in original version.

This declaration of conformity loses its validity, if changes are made at the machine, which were not coordinated with us before and approved in writing by us.

Althengstett,

28.09.2009
Date

Leiter tech. Büro, Günther Flick
Signatory and data to the signatory

Gün. Flick
Signature