

# Operation manual

for PERROT agricultural impact sprinkler

ZX30  
ZA7  
ZA22  
ZS30  
ZB22  
ZE30  
ZK30  
ZM22



## 1. Introduction

This operation manual shows on what you should pay attention during installation, operation and maintenance of solid set sprinkler irrigation systems. In spite that maintenance and operating of impact sprinklers require less attention, there are some details you should pay attention to, so that the installation fulfils its function and works to your complete satisfaction during a long period.

## 2. Type of sprinklers and inlet sizes

Type of sprinkler	Available types	Inlet size
ZX 30 	ZX30WR	½" MBSP
ZA 7 	ZA7 / ZA7D / ZA7W	½" MBSP
ZA 22 	ZA22 / ZA22D / ZA22W / ZA22WF	½" MBSP
ZS 30 	ZS30	¾" MBSP
ZB 22 	ZB22 / ZB22D / ZB22W	¾" MBSP
ZE 30 	ZE30 / ZE30W / ZE30F / ZE30WF	1" MBSP
ZK 30 	ZK30 / ZK30W	1" MBSP
ZM 22 	ZM22 / ZM22W	1½" MBSP

number = trajectory angle  
 Without letter = full circle sprinkler  
 D = with 2 nozzles (back nozzle)  
 W = part circle sprinkler (30-360°)  
 WR = part circle sprinkler flip up control lever  
 F = full circle sprinkler with tripod  
 WF = part circle sprinkler with tripod

Example:

**ZX**

Type of  
sprinkler

**30**

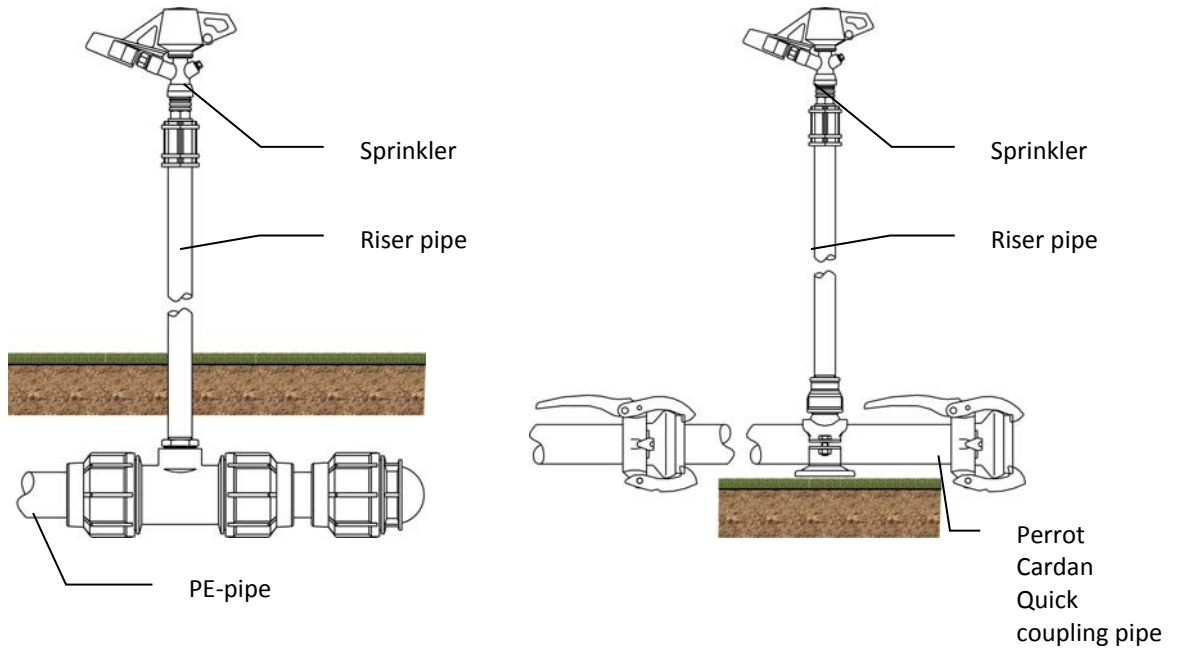
trajectory angle

**WR**

part circle sprinkler  
flip up control lever

## 2.1 Installation

- When connecting to the public supply network, observe the local regulations
- Pipes are to be laid in a sand bed on stony ground. The sand bed should surround the pipe 10 cm on all sides
- When installing the sprinkler, e.g. on a standpipe, make sure that the sprinkler head can easily be turned by hand.



- Flush the pipes proper before installation of the sprinklers

## 3. Commissioning

Pipes must always be filled slowly, that means you must open the gate valve gradually, under observance of the assigned operating pressure. Despite of a thoroughly flushing it may happen that the sprinkler nozzle may clog. To clean the nozzle, you must unscrew the nozzle and flush the sprinkler. (Use socket wrench)

## 4. Adjustments

### 4.1 Watering arc (setting range 30-360°)

- The arc of the part circle sprinklers is adjusted by pressing against the spring stopper, which widens the spring. A rough alignment is possible before installation, the fine adjustment should be made with the sprinkler running

### 4.2 Radius range

- The radius range is set using different nozzles and pressures. For further information see data sheet

### 4.3 Jet deflector screw (not available for all sprinkler models)

- The jet deflector screw is for adjustment of the irrigation near the sprinkler. If the screw is turned further into the water jet, the precipitation close to of the sprinkler is increased and the radius will be reduced

## 5. Maintenance / Cleaning / Repair

- ☆ Check the sprinkler function at regular intervals
- ☆ If the sprinkler or the turning device gets dirty, it should only be rinsed with clear water. **Do not use** lubricants or grease, as this will damage the sliding discs in the sprinkler!!!
- ☆ Remove and repair defective parts immediately or return for repair

## 6. Winterizing

Before shutting down the irrigation system for winter, drain the pipe system and if necessary, the pumping station. Leave drain valve open until restart.  
With the sprinklers, make sure that there is no water in the sprinkler.

Assure that there remains no water in the sprinklers.

## 7. Troubleshooting and Solutions

☆



### **Attention!!!**

Before carrying out the following task, it must be ensured that the piping system is depressurised.

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If the radius of individual sprinklers is too short, dirt particles may be present in the nozzle or in the sprinkler body. Remove and clean the sprinkler nozzle. If necessary, the sprinkler must be dismantled to clean the sprinkler body.

☆

If the sprinkler does not turn, there are usually dirt particles in the nozzle. Unscrew nozzle and clean!

☆

If the sprinkler only turns in one direction and then stops, either the turning device is blocked, or the pressure is too low. Clean the turning device with clean water or compressed air (only for part circle sprinklers).

Subject to change without prior notice.

# Notes



*We remain at your full disposal for any further information you may require!*

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