



Nira 1 and 3B Well Pumps

Operating and maintenance manual

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 Read these instructions carefully.

1 Nira Pumps

Device is meant to be used for handpumping of the water in wells. Height of the pump in standard package is about 2,5 meters from the well cover to the bottom of the cylinder.

It is possible to lower the cylinder using the 0,5 m, 1 m or 3 m pipe modules, max. 6 m. At the lower end of the cylinder there is an inside thread of 1 ¼", where you can install a pipe connector for 40 mm polythene suction pipe. You can install suction pipe max. 6 m. If you install suction pipe more than 1,5 m, you will also need a pipe connector and bottom valve to the lower end of the pipe. It is not allowed to install the pumps deeper than that. Plastic intake pipe HDPE 40, bottom valve 1 ¼" and connectors are sold as accessories.

This document gives instructions for operating and maintaining the device. Please familiarize yourself with these instructions before using the device. Use the device only as described and for the specified applications. Store these instructions in an appropriate way, making sure that the instructions are available to all possible users throughout the life of the device.

 To avoid injury, follow the instructions given in this document

1.1 Description of parts

The sections of Nira Pumps are shown below (Figure 1, Figure 2).

- | | | |
|----|-------------------------------|-----------|
| 1 | Bottom flange of the cylinder | P29 |
| 2 | Cylinder pipe | P28 |
| 3 | Upper flange of the cylinder | P27 |
| 4 | Bottom valve of the cylinder | R30 |
| 5 | Piston seal | R56 |
| 6 | Piston extension part | P35 |
| 7 | Cylinder | P3 |
| 8 | Piston | P606 |
| 9 | Pipe 1 m | M2100K |
| 10 | Piston driver 1 m | L210 |
| 11 | Socket 47,8x1/8" | SD106 |
| 12 | Base flange | P1102 |
| 13 | Base seal | R5819 |
| 14 | Body | A151 |
| 15 | Hex.screw M8x50 | R2000835 |
| 16 | Handle mounting bracket | P31502V |
| 17 | Handle | P31503V |
| 18 | Rod | P12777 |
| 19 | Hex.screw M8x50 | R200850 |
| 20 | Nut M8 | R2268 |
| 21 | Hex.screw M12x80 | R2001280 |
| 22 | Nut M12 | R22612 |
| 23 | Hex.screw M10x40 | R2001040 |
| 24 | Nut M10 | R22610 |
| 25 | Bearing | R2821010 |
| 26 | Intake pipe | R1964058 |
| 27 | Intake pipe connector 40mm | R26211440 |
| 28 | Base valve 1 ¼" | 2002 |



Figure 1: Nira 1 Antique Pump

1	Bottom flange of the cylinder	P29
2	Cylinder pipe	P28
3	Upper flange of the cylinder	P27
4	Bottom valve of the cylinder	R30
5	Piston seal	R56
6	Piston extension part	P35
7	Cylinder	P3
8	Piston	P606
9	Pipe 1 m	M2100K
10	Piston driver 1 m	L210
11	Socket 47,8x1/8"	SD106
12	Attachment socket of the body	P34
13	Base flange	P1102
14	Base seal	R5819
15	Body	A151
16	Hex.screw M8x50	R2000835
17	Handle mounting bracket	P31502S
18	Handle	P31503S
19	Rod	P12777
20	Hex.screw M8x50	R200850
21	Nut M8	R2268
22	Hex.screw M12x80	R2001280
23	Nut M12	R22612
24	Hex.screw M10x40	R2001040
25	Nut M10	R22610
26	Bearing	R2821010
27	Intake pipe	R1964058
28	Intake pipe connector 40mm	R26211440
29	Base valve 1 1/4"	2002



Figure 2: Nira 3B

2 Introduction

2.1 Inspection upon delivery

Before the device is taken into use, check that the packaging is intact and that it has not been damaged during transportation. Please notify the transport company and the supplier of any transit damage within two (2) days of receiving the delivery.

Ensure that the delivery contains all the parts detailed in the delivery note. If there is anything missing from the delivery consignment, please contact the supplier immediately.

3 Using the device

3.1 Installation

ASSEMBLE STEPS 1-4 WHEN THE PUMP IS IN HORIZONTAL POSITION. YOU CAN ALSO ASSEMBLE THE PUMP FULLY READY IN HORIZONTAL POSITION AND LIFT IT AFTERWARDS IN THE WELL.

1. Attach the 1-meter piston driver (Figure 1/2,(10)) to the extension piece of the piston (Figure 1/2 (6)) and tighten (Figure 3).



Figure 3: Fastening of the extension part



2. Fasten the 1-meter pipe to the top thread of the cylinder (Figure 1/2 (7)).
NOTE! Check that the pipe has 3,5 mm drainage hole above the cylinder (Figure 4).



Figure 4: Fastening of the pipe

3. Attach the next piston driver and pipe to continuation of the previous ones (Figure 5).
NOTE! Bronze socket to the upper pipe.



Figure 5: Fastening of the extension part

4. Put the piston driver holder (Figure 6) to the piston driver, so that the rod doesn't fall lower than the pipe head. **NOTE!** Be careful not to drop the holder in to the well.



Figure 6: Piston driver holder

5. Lift the cylinder with the pipes in to the well. Make sure not to drop the piston driver holder in to the well. Carry the pipes for example with pipe tongs

6. Install the base flange (Figure 1/2 (12/13)) to the tube at the body.



Figure 7: Base flange

7. Attach the basic piston driver to the piston driver of the ascension pipe (Figure 1/2 (9)). **NOTE!** In Nira 3B first attach parts 18 ja 26.



Figure 8: Pipe

8. Fasten the main pipe/frame to the socket of the ascension pipe (Figure 9).



Figure 9: Fastening of the main pipe

9. Fasten the pump from its flange tightly to the well cover.

NOTE! Fasten the extensions of the piston drivers tightly.

10. Pump is ready for use.

5 Maintenance

The pump doesn't require any regular maintenance. Piston driver of the pump is made of stainless material and the cylinder of plastic.

Pump is also non-freezing, so it can be left on its place through the winter without any specific care. Non-freezing feature is guaranteed with the drainage hole (diameter 3,5 mm) located at the ascension pipe in two meters deep. This hole enables the water inside the pump to run off itself.

6 Technical information

6.1 Characteristics

Weight	Nira 1	30 kg
	Nira 3B	22 kg

Size of the package 109x42x16 cm

6.2 Recycling

Most of the materials used in the device are recyclable. When the device is removed from usage, it should be disassembled and recycled appropriately. Recycling should be done by specialized company. Do not dispose the device in the household waste. Contact your local disposal authority for more details of how to recycle. Follow the instructions given in local collection points.

7 Limited International Warranty

The warranty period is determined in the agreement documents. Unless otherwise agreed, the warranty period for manufacturing and material defects is **1 year**, hand pump models NIRA 1, NIRA 67 and NIRA 3B which carry a warranty of **3 years**.

Warranty Conditions

The warranty is only valid if the warranty demand is presented together with the original invoice or sales slip or (order) confirmation.

NIRA's obligations are limited to the repair or, at its discretion, replacement of the product or the defective part. Defective parts shall be replaced with new or equivalent "as new" parts. If necessary, the entire product shall be exchanged with an identical or functionally identical product. The value of the warranty service is always limited to the value of the defective product. The defective parts removed from a product as part of a warranty case shall become the property of NIRA and shall be retained for by the End Customer for NIRA, if necessary. If these parts cannot be returned to NIRA upon request, NIRA is entitled to charge for a corresponding amount. When genuine NIRA parts are installed in a NIRA product under warranty, only the remaining warranty period of the repaired device applies.

Warranty repairs must be carried out by NIRA or authorised NIRA Dealers. No re-imburement will be made for repairs carried out by a non-NIRA representative, and any such repair work or damage to the products caused by such repair work will not be covered by this warranty.

This product is not considered to be defective in materials nor workmanship if it requires adaptation in order to conform to other local or national technical or safety standards.

This warranty covers none of the following:

- a) Periodic checks, maintenance and repair or replacement of parts due to normal wear and tear
- b) Costs relating to transport, removal or installation of the product;
- c) Misuse, including the failure to use this product for its normal purposes or incorrect installation;
- d) Damage caused by lightning, water, fire, acts of God, natural catastrophes, war, public disturbances or any other cause beyond the control of NIRA;
- e) Spillage of chemicals or liquids, or use of any other hazardous or non-instructed substances, which may affect the product;
- f) Minor defects or deviations from the product specifications which are immaterial, negligible or trivial as regards to the value or the functioning of the product

Proceeding in a Warranty Case

The following information is an explanation of what you must do in the case of a warranty claim. First, please contact your NIRA dealer and describe the problem (possibly with photographs or videos) and inform NIRA of the product type and date of purchase. NIRA's technicians will help to diagnose defects and malfunctions, and are often capable of eliminating the malfunction over the phone.

In the event that warranty service is required, you should return the product to the dealer from whom it was purchased, or directly to NIRA's factory in Finland. In this case, the customer is responsible for the dispatch and insurance of the product, and the transport and insurance costs shall be borne by the customer. NIRA shall assume the costs for the materials / spare parts and the labour costs as required, as well as the standard return transportation to the sender. In case of difficulty, details of local dealers are available online at www.nira.fi. You may also contact the service centre in Finland (e-mail: nira.info@nira.fi).

The guarantee will become void if:

- A NIRA product has been used in unspecified conditions or if the product is allowed to come into direct contact with chemicals or agents other than those specified in the manual;
- A NIRA product is equipped or used with parts that have not been approved by NIRA for the product in question;
- Someone other than a person authorised by NIRA has serviced/repaired or otherwise modified the device and these measures have caused a fault in the product;
- Regular maintenance has not been performed.

8 Contact information

Manufacturer

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