

KERBL 221100

Kerbl P100 Willow Pump Instruction Manual

Model: 221100 | Brand: KERBL

INTRODUCTION

This manual provides detailed instructions for the safe and efficient operation, installation, and maintenance of your Kerbl P100 Willow Pump. The P100 is a robust pasture pump designed to provide fresh and clean water for animals, drawing water from depths of up to 8 meters. Its design features an aluminum lever and smooth-mounted pivot points for extremely smooth operation, and a sturdy cast iron drinking bowl.

SAFETY INSTRUCTIONS

Please read all safety instructions carefully before installing or operating the pump. Failure to follow these instructions may result in injury or damage to the product.

- Ensure the pump is installed on a stable, level surface to prevent tipping.
- Keep hands and loose clothing away from moving parts during operation.
- Do not allow children or untrained individuals to operate the pump.
- Regularly inspect the pump for any signs of wear or damage. Do not operate if damaged.
- Ensure proper connection of all pipes and hoses to prevent leaks.

COMPONENTS OVERVIEW

The Kerbl P100 Willow Pump consists of several key components designed for durability and efficient water delivery.

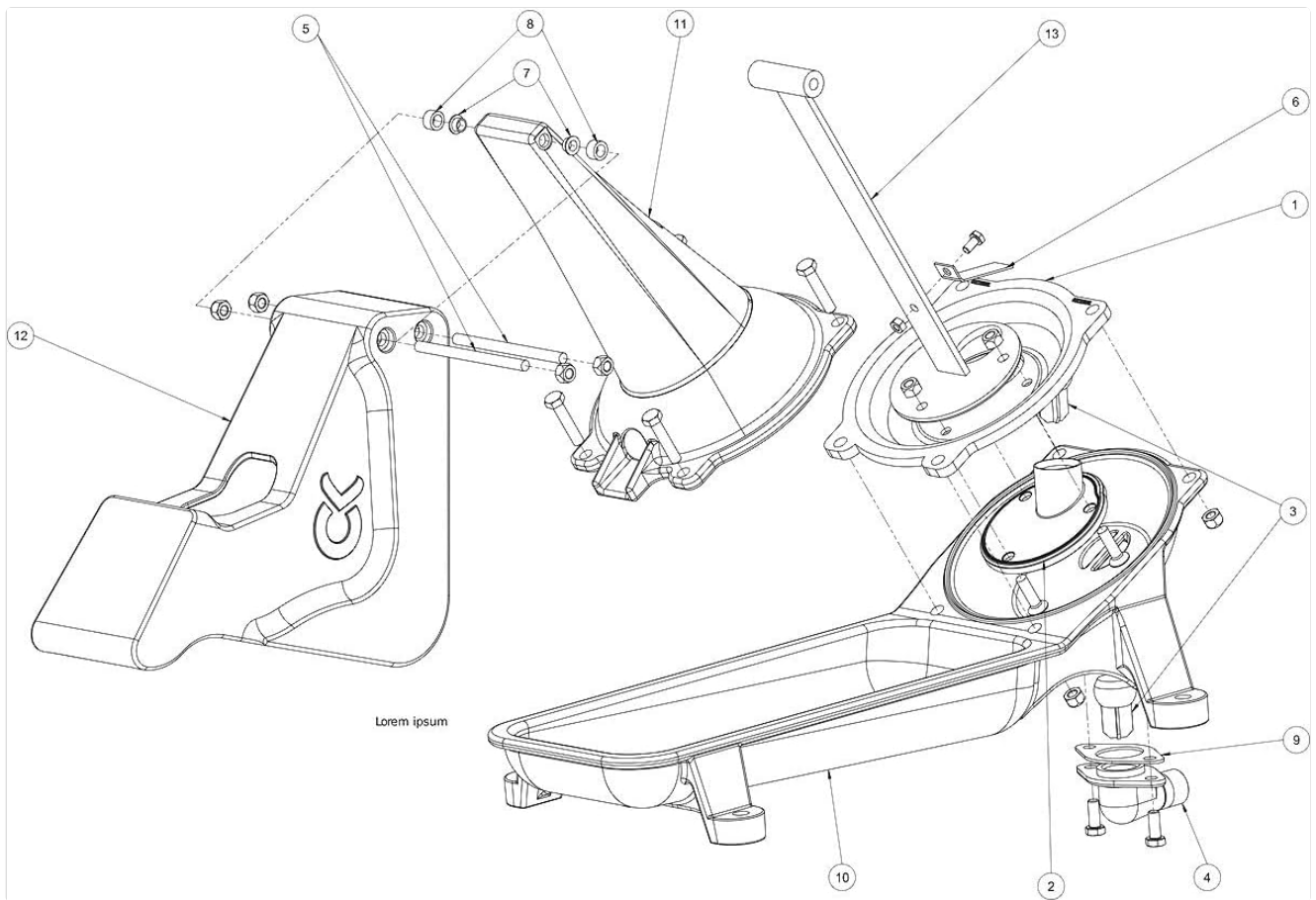


Figure 1: Exploded view of the Kerbl P100 Willow Pump, illustrating the various components and their arrangement for assembly and maintenance.



Figure 2: Internal mechanism of the Kerbl P100 Willow Pump, highlighting the lever, piston, and valve system responsible for water suction and delivery.

Key Components:

- **Pump Body:** The main housing, typically made of cast iron, containing the pumping mechanism.
- **Lever Arm:** The aluminum handle used to operate the pump, providing leverage for water extraction.

- **Piston/Diaphragm:** Internal component responsible for creating suction and pushing water.
- **Valves:** Inlet and outlet valves that control water flow direction.
- **Drinking Bowl:** The cast iron basin where water collects for animals to drink.
- **Connection Port:** For attaching the suction pipe (3/4 inch connection).

SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance and longevity of your Kerbl P100 Willow Pump.

Site Selection:

- Choose a firm, level, and stable surface for installation, preferably concrete or a reinforced base.
- Ensure the location is easily accessible for animals and for maintenance.
- The water source (well, pond, etc.) should be within 8 meters vertical depth from the pump's location.

Mounting the Pump:

1. Position the pump on the chosen surface.
2. Mark the drilling points using the pump's base holes. The hole spacing for mounting is 425 x 260 mm.
3. Drill appropriate holes for anchor bolts (not supplied).
4. Securely fasten the pump to the surface using suitable anchor bolts.

Connecting Water Lines:

1. Connect a suction pipe to the pump's inlet port. The pump is suitable for pipe and hose connections with an inner diameter of 19-25 mm (3/4 to 1 inch).
2. Ensure all connections are airtight to prevent loss of prime. Use appropriate sealants or thread tape.
3. Extend the suction pipe into the water source, ensuring the end is submerged but not resting on the bottom to avoid drawing sediment.

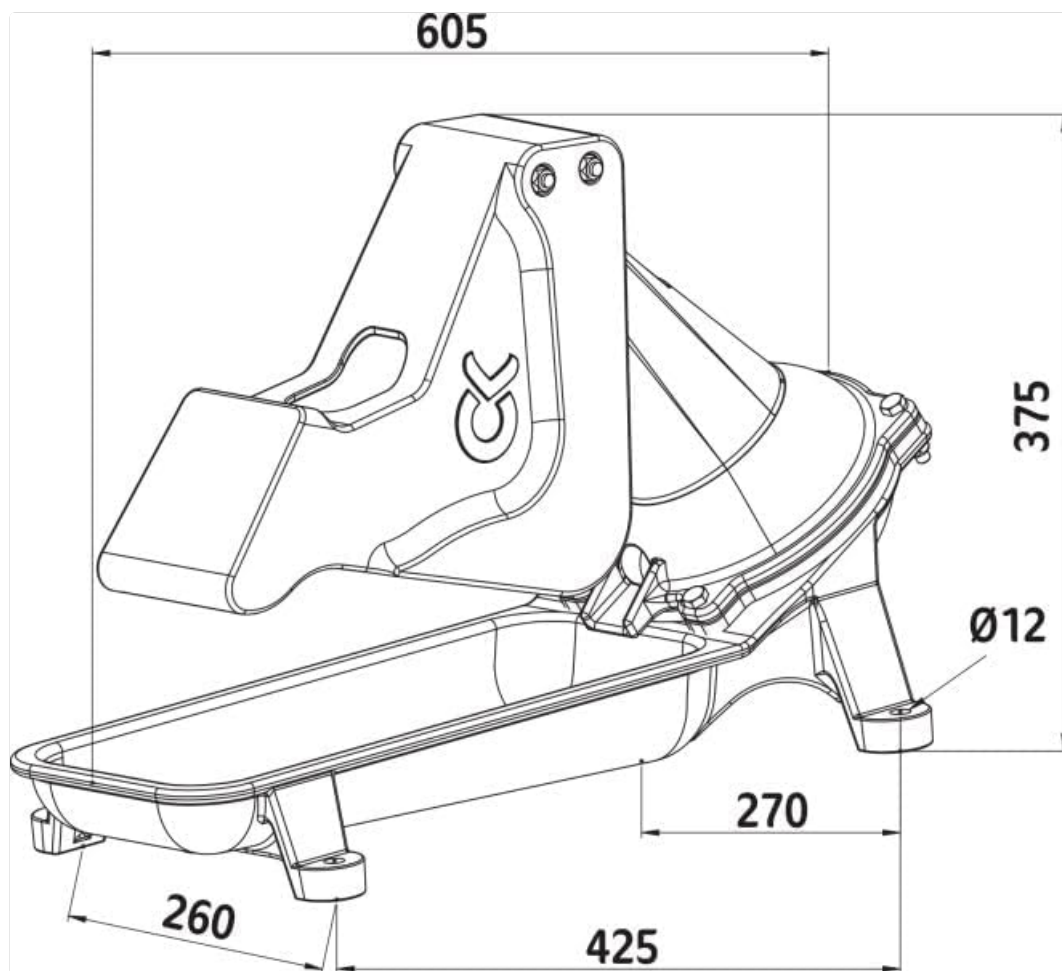


Figure 3: Dimensional drawing of the Kerbl P100 Willow Pump, showing overall dimensions and mounting hole spacing for installation planning.

OPERATING INSTRUCTIONS

The Kerbl P100 Willow Pump is designed for simple and effective operation.

Priming the Pump:

Before first use or if the pump loses its prime, it may need to be primed:

1. Locate the priming port (if available) or the top opening of the pump.
2. Pour clean water into the pump until the chamber is full.
3. Operate the lever arm slowly several times to help draw water up the suction pipe.
4. Repeat if necessary until water flows consistently from the drinking bowl.

Normal Operation:

1. Ensure the drinking bowl is clear of debris.
2. Grasp the lever arm firmly.
3. Pump the lever arm up and down with a steady, full stroke.
4. Each stroke delivers approximately 0.6 liters of water (depending on suction depth).
5. Continue pumping until the desired amount of fresh water is in the drinking bowl.



Figure 4: The Kerbl P100 Willow Pump, illustrating its robust design and ready state for manual water pumping.

MAINTENANCE

Regular maintenance ensures the longevity and efficient performance of your pump.

Daily/Weekly Maintenance:

- **Clean Drinking Bowl:** Regularly clean the cast iron drinking bowl to prevent algae growth and ensure fresh water for animals.
- **Check for Leaks:** Inspect all connections for any signs of water leaks. Tighten connections as needed.
- **Clear Debris:** Ensure the suction pipe inlet is free from debris that could block water flow.

Monthly/Seasonal Maintenance:

- **Lubrication:** Apply a suitable, food-grade lubricant to the pivot points of the lever arm to ensure smooth operation and prevent wear.

- **Inspect Internal Components:** Periodically check the piston/diaphragm and valves for wear or damage. Replace if necessary. Refer to the exploded view diagram for component identification.
- **Winterization (if applicable):** In freezing climates, drain the pump completely to prevent damage from ice expansion. Disconnect the suction pipe and allow all water to escape.

TROUBLESHOOTING

This section addresses common issues you might encounter with your Kerbl P100 Willow Pump.

Problem	Possible Cause	Solution
Pump not drawing water / No prime	Air leak in suction line or connections; Suction pipe not submerged; Pump not primed; Worn piston/valves.	Check all connections for tightness; Ensure suction pipe is fully submerged; Re-prime the pump; Inspect and replace worn internal components.
Low water output	Partial blockage in suction line; Worn piston/valves; Insufficient stroke length.	Clear any blockages; Inspect and replace worn internal components; Ensure full, consistent strokes of the lever.
Stiff or difficult lever operation	Lack of lubrication at pivot points; Internal friction/corrosion.	Apply lubricant to pivot points; Disassemble and clean internal components if necessary.
Water leaking from pump body	Loose seals or gaskets; Cracked housing (rare).	Inspect and tighten seals/gaskets; Replace damaged parts.

SPECIFICATIONS

Feature	Detail
Model	221100 (P100 Willow Pump)
Brand	KERBL
Material	Cast Iron (drinking bowl), Aluminum (lever)
Color	Green
Max Suction Depth	Up to 8 meters
Output per Stroke	Approx. 0.6 liters (depending on suction depth)

Feature	Detail
Connection Size	3/4 inch (19-25 mm inner diameter hose/pipe)
Mounting Hole Spacing	425 x 260 mm
Item Weight	Approx. 55.1 pounds (25 kg)
Product Dimensions (L x W x H)	Approx. 25.2 x 11.81 x 15.35 inches (64 x 30 x 39 cm)

WARRANTY AND SUPPORT




For warranty information, technical support, or to order replacement parts, please contact KERBL customer service or your authorized dealer. Keep your purchase receipt as proof of purchase.

Manufacturer: Albert Kerbl GmbH

For further assistance, please visit the official KERBL website or consult your local distributor.

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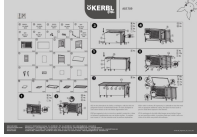
Related Documents - 221100

	<p>Kerbl NoFrost Superior 2.0 Heated Drinking Bowl for Small Animals Instructions</p> <p>Comprehensive instructions for the Kerbl NoFrost Superior 2.0 heated drinking bowl (#82738). Learn about setup, operation, maintenance, and safety for keeping small animal water frost-free in winter conditions.</p>
	<p>KERBL Heat Radiator for Animals 22729: 22729-E - Operating Instructions</p> <p>Operating instructions for the KERBL Heat Radiator for Animals (models 22729, 22729-E). This guide covers intended use, appliance data, safety precautions, commissioning, assembly, and disposal for livestock heating.</p>
	<p>Kerbl Heat Lamp 22318: Operating Instructions and Safety Guide</p> <p>Comprehensive operating instructions and safety guidelines for the Kerbl Heat Lamp 22318, designed for chick rearing and young animal heating. Includes specifications, installation, recommended lamps, and safety precautions.</p>



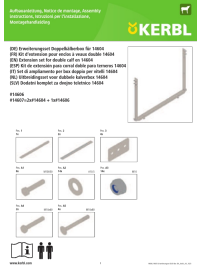
AniScale Animal Scale #291322 - Operating Instructions

Operating instructions for the KERBL AniScale Animal Scale #291322, detailing setup, operation, safety precautions, and technical specifications for weighing animals up to 1500 kg.



Kerbl 81709 Nagerstall XXL Vario Rodent Hutch: Care and Placement Guide

Comprehensive care and placement guide for the Kerbl 81709 Nagerstall XXL Vario rodent hutch. Learn essential wood treatment techniques and optimal positioning to maximize the product's lifespan. Includes contact details for Kerbl subsidiaries worldwide.



KERBL 14606/14607 Extension Set for Double Calf Box Assembly Instructions

Detailed assembly instructions for the KERBL 14606 and 14607 extension sets, designed to expand double calf boxes. Includes part lists and step-by-step guidance for livestock equipment.