IMPACT PUMPS FLEXEXTEND®

TYPE 1 TANK BASE SYSTEM

PRODUCT OVERVIEW

What Is Type 1 Installation?

Type 1 is the standard and recommended installation method for the FlexExtend (SLX-40). It uses a permanent raised surface tank to simplify priming, remove air automatically, and provide stable, reliable operation.
This configuration is the most forgiving, most reliable, and best suited for agricultural and livestock applications.

How the System Works

- FlexExtend operates on the hydraulic ram principle.
- A surface pump sends pressurized water down the drive line.
- The FlexExtend submersible converts flow (volume) into pressure.
- Water is lifted from depth and returned to the surface.
- The raised tank:
  - Keeps the system flooded
  - Absorbs air
  - Stabilizes circulation

There are no electric motors or electronics in the well.

Required Components (Type 1)

- FlexExtend (SLX-40) submersible pump
- Compatible surface pump (fuel, electric, or solar)
- Permanent raised surface tank (minimum 200 L / ~50 gal recommended)
- Impact Pumps well head assembly
- Pressure relief valve
- Quick-connect fittings and piping

⚠ The tank must be positioned above the well head.

Why Type 1 Is Recommended

Type 1 is the easiest and most reliable configuration.

Key Advantages

- Simplest priming and start-up
- Automatic air separation
- Stable, smooth operation
- Very forgiving of minor leaks or air entry
- Best for continuous daily use

Ideal for:

- First-time installations
- Farms and livestock systems
- Long-term, unattended operation

Contact us to learn more or find a dealer near you.
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TYPE 1 TANKED INSTALLATION

Typical Applications

- Livestock watering systems
- Irrigation supply
- Header tanks and storage tanks

Performance (Type 1 Systems)

- Pump from depth of up to 165 ft
- High Flow (SLX-40-HF): designed for high daily volumes
- Works with:
  - Gasoline or diesel engines
  - Grid-powered electric pumps
  - Solar / DC shallow-well pumps

Efficiency gains allow smaller engines or motors compared to jet pumps.

Operational Notes

- All plumbing must be airtight
- Do not exceed recommended flow or pressure limits
- Use the supplied pressure relief valve
- Follow installation guide for pipe sizing and layout

⚠️ Operating outside specifications can damage the pump and void warranty.

Type 1 vs Type 2 Installation Comparison

Feature	Type 1 – Tanked Installation	Type 2 – Tankless Installation
Surface Tank	Permanent surface tank installed	No permanent surface tank
Priming Method	Self-priming via surface tank	Temporary elevated priming tank used only at start-up
Normal Operation	Open loop with visible water level	Closed hydraulic loop
Complexity	Simplest to understand	Slightly more technical
Installer Skill Level	Basic	Intermediate
Installation Speed	Fast	Fast once familiar
Material Cost	Higher (tank + fittings)	Lower (no permanent tank)
Footprint	Larger	Compact
Visual Confirmation	Easy (tank water level visible)	Indirect (flow at outlet)
Air Management	Tank absorbs air naturally	Requires careful priming
Re-priming Need	Rare	Required if air enters system
Best For	First-time installs, training, conservative setups	Clean layouts, experienced installers

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