Specifications

1. Pump
   - Cylinder assembly: PVC body and end caps.
   - PVC-stainless steel plunger: fitted rubber cup washer.
   - PVC foot-and discharge-valve plates.
   - Large-diameter suction tube, reduces sand intake into cylinder.
   - Lever-operated lift pump.

2. Drive head:
   - Galvanized, fabricated mild steel head with stainless steel fittings.
   - Long and heavy handle bar to counter balance the connecting rod weight.
   - Welded bearing block with ball races that can be lubricated.
   - PVC delivery cup, located in bracket to connect SBF-KATUR pipe system.
   - Pump-head cover, secured with one screw to help keep contaminants out of the well.

3. General
   - Complete set of operator manuals, English.
   - 48 mm Ø PVC KATUR, corrosion-proof riser main, in standard 3m lengths.
   - 10.8mm Ø x 3m stainless steel pump rods, with M12 threaded couplers.
   - Separate assemblies for pump cylinder and drive head.
   - Stroke length 150mm.
   - Installation and maintenance toolkit, including special tools and spanners.
   - Special foundation frame, in galvanized steel.
   - 1-year spare part kit.

Composed of:

A. HAND PUMP, submersible, raw water, Kardia K50VA, 4"
   - Pump head and foundation frame.
   - Pump cylinder: Kardia K50VA.
   - Risers in lengths of 3, 1 or 0.5m, including the rods.
   - Optional centralizers.
   - Tool set, standard installation tool set, in a metal box.
   - Tool set, special installation tool, installation clamp for riser pipe.
   - Tool set, maintenance set.
B. HAND PUMP, submersible, raw water, Kardia K65, 4"

- Pump head and foundation frame.
- Pump cylinder: Kardia K65.
- Risers in lengths of 3, 1 or 0.5m, including the rods.
- Optional centralizers.
- Tool set, standard installation tool set, in a metal box.
- Tool set, special installation tool, installation clamp for riser pipe.
- Tool set, maintenance set.

See the maintenance guideline: [http://www.interaide.org/pratiques/content/livret-pour-la-maintenance-des-pompes-manuelles-kardia-sierra-leone](http://www.interaide.org/pratiques/content/livret-pour-la-maintenance-des-pompes-manuelles-kardia-sierra-leone)