



HAND PUMP SYSTEMS SELECTION GUIDE

SELECTING THE HAND PUMP

Model 11HA

This is the most basic hand pump. Not to be used if cylinder is to be set more than 25 feet.

NOTE: The 11HA does not have a sealed packing in the top of the pump and is therefore more suitable for watering flowers and livestock than for drinking water.

Model 11HD

The most popular hand pump in America. With its sealed packing, it's the ideal pump for drinking water.

Model 12HD

Same as the 11HD except with bibb spout. This means that the spout can be shut off in the event that you want to pump water out the back of the pump only. In other words, you can "force" water to a tank, pond, reservoir, etc. by piping out the back of the pump.

Model 146HD

An adapter that can be quickly attached to the spout of the 11HD or 12HD force pump and allows you to attach a garden house.

SELECTING THE PUMP FLANGE

The pump flange attaches to the well. The hand pump attaches to the pump flange. You must provide the nuts, bolts and washers (available at your hardware store) to connect the pump to the pump flange.

Measure the inside diameter of your well casing and then select the appropriate pump flange. 4", 5" or 6" only.

The standard pump flange will suffice in most cases. If you are especially concerned about contamination, order the sealed flange.

Although the pump flange is not required to complete a functional hand pump system, it is highly recommended to stabilize the hand pump and prevent any rocking motion.

SELECTING THE CYLINDER

This is the part of the system that goes down the well typically below the water table. It's a barrel with a plunger inside. When you pump on the handle of the hand pump, it makes the cylinder plunger go up and down. This forces the water up the pipe and out the hand pump.

To select the cylinder, go to the Table of Hand Pump Data. See the column titled "Cylinder Size"? That refers to the I.D. (inside diameter) of the cylinder. Cylinders are referred to by their I.D.

Now read across until you reach the depth-to-water (not the total depth of your well) that comes closest to your installation. This tells you what I.D. cylinder you need.

For shallow wells, 25 feet or less to the water table, you may install the cylinder above the water table and attach a section of 1-1/4 inch pipe from the bottom of the cylinder. This section must extend below the water table.

Note that the 11HD and 12HD hand pumps have adjustable stroke settings on the handle. You can set them for the stroke you want. The shorter the stroke, the easier it is to pump.

CAUTION: Be sure that the O.D. (outside diameter) of the cylinder does not exceed the I.D. of the well.

SELECTING THE PUMP ROD

The pump rod, sometimes referred to as sucker rod, provides the mechanical connection between the hand pump and the plunger in the cylinder. This means when you pump the hand pump, it makes the pump rod and plunger go up and down, delivering the water out the spout of the hand pump.

Pump rod is threaded and coupled and comes in 21' lengths. Order enough pump rod so that your cylinder is about 15' below water, for deep well applications.

IMPORTANT: Always order one additional rod coupling (besides what's on the pump rod). You'll need this extra rod coupling to make the final connection.

NOTE: You'll also need 1-1/4" X 21' lengths of pipe. This is the water supply line between the cylinder and the hand pump. This can be purchased from your local hardware store or plumber. Buy the same amount of pipe as you do pump rod. The pump rod is installed inside the pipe.

This is everything you need for your hand pump system. Assembly and installation instructions will come with your order.

CAUTION: Be sure and sanitize your well in accordance with your state codes and have your water tested before drinking the water.

BE CAREFUL: This is heavy equipment with sharp edges and pinch points.

NOTE: A 1/8" weep hole should be drilled in the drop pipe just below your frostline to prevent freezing.