**How Does a Touchless Faucet Work**

Touchless faucet is a magic faucet. Yes, you read it right. It’s really a technological miracle. And when you will know that how does a touchless faucet work, you will surely be flabbergasted.

Earlier touchless faucets are only used in stadium bathrooms or international airports. But, currently, these ultra-modern faucets are getting increasingly popular inside homes and schools. They are a great option for kitchen sinks or children’s bathrooms.

**What Is a Touchless Kitchen Faucet**

As the name suggests, a touchless kitchen requires a wave of your hand to turn it on. Moreover, this beautiful faucet not only makes your life easy but also brings modernity into your lovely house.

Additionally, these wonderful faucets are typically pull-down models, so you can easily utilize them for washing cups and plates.

**How does a touchless faucet work**

Before knowing the working mechanism of a touchless faucet you should gain knowledge of different parts of this faucet. Most of these top-class faucets are consist of 3 common parts. They are-

**Solenoid valve:** The solenoid is mainly an electromagnet that may push or pull, based on the polarity of the electron. Diaphragm valves control the water. This valve makes a quick response to any kind of sensor signal.

**Sensor:** The faucet sensor typically controls the solenoid-activated diaphragm valve. In a touchless faucet, it is placed at the base or lip of the spout. Actually, it is not a motion sensor rather it’s a presence sensor intended to sense the presence of hands under the spout.

However, the majority of faucet sensors use a small infrared light with a light detector. When your hands go under the lip of the spout, infrared light bounces back to the detector, which turns on the valve.

**Spout:** The faucet spouts, that hold all the functioning parts, are made of zinc in inexpensive models, while the expensive ones are made of brass. Nickel or chrome is plated on them for appearance and robustness.

There are many types of spouts available for standard kitchen or bathroom use, bar sinks, lab sinks. The size, shape and finish of the touchless faucets' spouts are main reasons buyers prefer one faucet above another.

Here I will let you know how does a touchless kitchen faucet work.

* Usually, a solenoid-activated diaphragm valve is used to start and stop the flow of water.
* When the presence sensor detects anything below it, the sensor permits the solenoid valve to let the water come out. But, as soon as the presence sensor detects the absence of that object, it will instruct the solenoid valve to discontinue the water flow after a fixed quantity of time.

On the other hand, some advanced faucet models have an ultrasonic field sensor that orders the valve to start water flow when your hands interrupt the ultrasonic field.

* The spout holds fibre optic cables that attach it to the presence sensor. The presence sensor conveys its signals throughout this fibre optics. The spout may also include batteries in some models.

This is, in a nutshell, how does a touchless faucet work.

Simply, when the presence sensor or light sensor detects an object, it permits the solenoid which pulls the valve to begin the water flow. If it does not detect the same thing or anything in front of it, it orders the solenoid that will stop the water flow after a period of time (around 3 minutes) by pushing the valve.

In addition to that, these touchless faucets not only save water, but they are great in preventing the spread of bacteria which leads to illnesses. Moreover, this faucet is well-organized than regular faucets as it lets you use both hands while washing dishes.

**Do touchless faucets have batteries?**

The sensor and solenoid of a touchless faucet need batteries as a power source. However, some modern faucet uses current from an AC transformer. But, a large number of models use AA batteries while some use 9 Volt or 6 Volt Lithium batteries.

Additionally, battery-powered faucets consume less current than the transformer-powered ones.

**To sum up,**

Touchless faucets are getting popular in most of the modern houses all around the world. Surprisingly, now you will find a lot of people who are interested to know how does a touchless kitchen faucet work. This is because these faucets are simple to use, and they also seem gorgeous.