

Am I Buying the Correct Size Natural Gas Hose & Quick Disconnect?

Many people will order a natural gas quick disconnect or a natural gas hose without understanding how to properly measure the size needed. To understand how to measure the quick disconnect and hose, you can somewhat follow the theory of National Pipe Threads (NPT) sizing.

Nominal Pipe Size (NPS) is loosely related to the inside diameter (ID) of Schedule 40 pipe, in our case it would be the inside diameter of the hose. Because of the pipe wall thickness, the actual diameter of the threads is larger than the NPS, considerably so for small NPS. Other schedules of pipe have different wall thickness but the OD (outer diameter) and thread profile remain the same, so the inside diameter of the pipe is therefore different from the nominal diameter. For example, a 1/2" Male Pipe Thread will have an OD of 0.84.

In the case of the Natural Gas quick disconnect, the size of the Female Quick Disconnect corresponds with the ID of the hose it is mating with, **in most cases**. Therefore, if you have a natural gas quick disconnect with an inside diameter of 5/8", you actually have a 3/8" Quick Disconnect and the 3/8" is actually reflecting the inside diameter of the hose it connects with. On the opposite side of the female quick disconnect socket is the Female Pipe Thread side of the quick disconnect will also measure 5/8" inside diameter, but is actually a 3/8" FNPT. The following is a list of the sizes for each of the Natural Gas Quick Disconnects:

1/4" Female Quick Disconnect – 1/2" Socket I.D.

3/8" Female Quick Disconnect – 5/8" Socket I.D.

1/2" Female Quick Disconnect – 3/4" Socket I.D.

3/4" Female Quick Disconnect – 1" Socket I.D.

In regards to the Natural Gas hose, you can't really measure the ID of the hose because there are fittings connected to the hose restricting access to the inside of the hose itself. Therefore, you are force to measure the outside diameter (OD) of the hose to get the proper measurement. For our natural gas hoses, the measurements are as follows:

3/8" Hose has a 5/8" O.D.

1/2" Hose has a 3/4" O.D.

3/4" Hose has a 1" O.D.

Where I say above "in most cases", there are some exceptions to this. The biggest exception is our hose we call the "Hybrid Hose". The Hybrid Hose was designed specifically to connect the Weber Genesis 330 Natural Gas Grill to the gas line. This particular natural gas hose kit comes with a 3/8" Female Quick Disconnect and a 1/2" ID Natural Gas hose. The plug on the hose is a

3/8" and the appliance connection side is a 1/2" Female Flare Gas Fitting. In this case, the I.D. of the hose and I.D. of the quick disconnect are different so you must follow another rule below:

Lay the hose over a ruler or tape measure. If the hose is 5/8" wide it is a 3/8" ID hose. If the hose measures 3/4" wide, it is a 1/2" ID hose. (2) Measure the internal diameter of the quick disconnect. The 3/8" hose will fit a quick disconnect with a 5/8" I.D. and the 1/2" hose will fit a quick disconnect with a 3/4" I.D. (3) If the quick disconnect is an MB Sturgis Inc Quick Disconnect, the 3/8" will have the numbers "375" on the retractable sleeve and the 1/2" will have "Model 4" on the retractable sleeve.

For additional reference, please check the drawing below with dimensions of each of the quick disconnects and plugs. If you have any questions or you are unsure you are ordering the correct size, please contact us at (888) 291-6665 Ext. 3 prior to placing your order.

