The Quick Guide To The Types of PVC Couplings

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PVC couplings are one of the simplest and most inexpensive types of PVC fittings. Couplings are a very short length of pipe or tube applied in the piping system. These couplings find use to connect the pipes and to adjust the thickness of the tubing. They also help to patch broken or leaking pipes. PVC couplings are widely used for water supply, water treatment, petroleum, gas, chemical industry, environmental protection, pharmaceutical, and other fields. PVC couplings commonly serve to prolong or stop pipeline operations.

They are applicable in diameters ranging from 1/4 to 12 inches. These couplings are of high quality, corrosion-resistant, and available in multiple sizes and configurations to fit the pipe they will connect. In this article, we review the types of PVC couplings to help you find the best one that suits your needs. Follow this new blog in Linquip to find out more.

What Are The Different Types of PVC Couplings?

Several popular types of these couplings are as follow:

- Full Couplings
- Half Couplings
- Reducing Couplings
- Compression Couplings
- Slip Couplings / Repair Couplings



Full Couplings

Full coupling is used for connecting small bore pipes. They find use to connect pipe to pipe or pipe to swage or nipple. Full couplings have both ends of threaded or socket welded connection. These couplings can be threaded or socket ends types.

A socket weld full coupling is used to join small-bore plain end pipes where the pipe spec requirement is socket weld.

A threaded full coupling is used to join small bore pipes with threaded ends. If the two ends of coupling are different, then it is usually referred to as an adapter.

Half Couplings

Half couplings are called so due to their half-size and also because they have a socket or thread end on only one side. They find a use for small-bore branching from a vessel or large bore pipe. These couplings can be threaded or socket type.

A socket weld half coupling can be directly welded to a large bore pipe, to make a branch connection. It is used to take a small bore pipe branch-off from a large bore pipe where the pipe spec requirement is socket weld in small bore size.

A threaded half coupling only has one thread end and another end of the coupling should be a butt welding end with either a plain end or a bevel end.



Reducing Coupling

Couplings whose ends use the same connection method but are of different sizes are called Reducing couplings or Reducers. These types of PVC couplings are used to connect pipes of dissimilar diameters. They have two different sizes of threads on each

side. Reducing couplings are typically used to extend an existing pipe where small process feeder lines are joined into large supply circuits or where small diameter fittings are installed or where repairing broken pipes is needed.

- Features a simple, stepped-down profile
- Screws in the same way a standard pipe joint does
- Welded reducing coupling designs are similar to threaded designs without the threads.



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Compression Coupling

Compression couplings or tees are special fittings designed for joining existing PVC pipes or tubes. They consist of three parts: The compression nut, the compression ring, and the compression seat. As regular couplings, they prevent leakage by the arrangement of gaskets or rubber seals on both sides, otherwise, glue is provided. These <u>couplings</u> connect two perfectly aligned pipes in which a slotted tapered sleeve is placed over the junction and two flanges are drawn over the sleeve so that they automatically center the pipes and provide sufficient contact pressure. They are primarily used for underground connections.

- Easy installation
- Fits both schedule 40 and 80 PVC
- Turns water back on right away
- Suitable for potable drinking water
- Appliable for cold water applications

Slip Coupling / Repair Coupling

The PVC slip coupling is a fitting that allows up to two inches of PVC pipe to be removed and repaired using one fitting. Slip couplings, also called repair couplings, are the most efficient way to repair a burst pipe or leak. Slip coupling is deliberately made without any internal stop, to allow it to be slipped freely into place in tight locations, such as the repair of a pipe that has a small leak due to corrosion or freeze bursting, or which had to be cut temporarily for some reason. Slip couplings do the job of two couplings and extra pipe.

These couplings contain two pipes which are arranged as one into another, the inner pipe can slide up to various lengths. So, slip coupling can fix long-length damaged pipes.

The installer should carefully measure the final location of the slip coupling to ensure that it is located correctly as the alignment stop is missing.

- Quick and easy installation
- No special tools or glue needed for installation
- Can be installed in wet lines
- Compatible with schedule 40, 80, and 120 PVC
- Ideal to have on hand for emergency freezes
- Rated for 200 psi and 200°F (93°C)

PVC Couplings connect two PVC pipe segments inline to extend pipe lengths. They are also used to add breakdown points within your PVC structure. Two types of PVC couplings options are as follow:

Internal Couplings

These couplings connect inside PVC pipe and leave a smooth appearance.

External Couplings

These couplings connect over PVC pipe and leave a visible connection.

The two other main categories that couplings under the scope of PVC fittings can be divided into:



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Permanent Couplings

In the case of steel or copper tubing or adhesives, permanent pipe couplings generally make use of soldering or brazing in the case of PVC pipes. If properly mounted, these permanent couplings provide excellent rigidity, outstanding stability, and sealing properties where no potential piping improvements are foreseen.

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Removable Couplings

Removable pipe couplings are most commonly of a threaded design that allows them to be screwed onto the pipes to be joined and tightened. The ends of the pipes are also threaded, and the coupling is conveniently sealed and set with hemp or sealing tape and screwed onto both pipes.

The most simple and the smallest of these is a much wider base pipe segment slightly larger than the pipes to be joined and cut by an internal thread.

So, there you have every single fact about the types of PVC couplings. If you enjoyed this article in Linquip, let us know by leaving a reply in the comment section. Is there any question we can help you through? Feel free to <u>sign up</u> on our website to get the most professional advice from our experts.