

FITTINGS 101

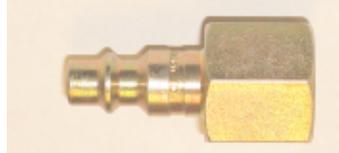
There is a large selection of fitting manufacturers; Air Systems offers standard 1/4" Hansen Brass (Pull to disconnect) or 1/4" Schrader Steel (Twist to disconnect) brand fittings on most of our products. In ALL cases, the fitting on the end of the respirator hose and what it is being connected to MUST be of the same manufacturer or they will not connect. For example Hansen Plug fits to a Hansen Socket.

Fitting – can refer to either a plug or a socket

Plug – Is commonly referred to as the male end



Hansen Plug Male Threads



Hansen Plug Female Threads



Schrader Plug Male Threads



Schrader Plug Female Threads

Socket – Is commonly referred to as the female end



Hansen Socket with Male Threads



Hansen Socket with Female Threads



Schrader Socket Male Threads



Schrader Socket Female Threads

MPT (male pipe thread) – threads that are on the outer body part of a plug or socket. Thread sizes are typically 1/8", 1/4", 3/8", 1/2" or 3/4" pipe thread. A fitting that has male pipe threads (MPT) can only mate to something with female pipe threads (FPT) that are of the same pipe thread size.

This end will only adapt to female pipe threads of the same size at the end of the breathing air hose



FPT (female pipe thread) – threads that are on the inner body part of a plug or socket. Thread sizes are typically 1/8", 1/4", 3/8", 1/2" or 3/4" pipe thread. A fitting that has female pipe threads (FPT) can only mate to something with male pipe threads (MPT) that are of the same pipe thread size.

This end will only adapt to male pipe threads of the same size at the end of the breathing air hose



Nominal – the inner diameter size that the compressed air passes through. A plug and socket must both have the same "nominal size" in order to mate together properly.



Inner diameter of the Socket

Inner diameter of the Plug



Additional important information about fittings -- When "coupling" a plug and socket together, only the "nominal" diameter size must be the same; thread sizes may differ. When trying to attach a plug or socket to another device, the thread size must match and if the fitting has male threads, the part being connected to must have female threads and visa versa.

Lastly, the biggest misconception when it comes to fittings/couplings is that Foster is an exclusive manufacturer of its own brand of fittings and they are NOT. They merely duplicate styles of other fitting manufacturers and we do use them from time to time. If a customer states they are in need of a Foster fitting, ask them if it is a Foster Hansen OR a Foster Schrader style. We can cross additional types of fittings – please provide all numbers off of the existing fitting. Foster's website is www.couplers.com should you want to take a look.