

## Understanding Quick Connect Fittings

Air Systems offers standard 1/4" Hansen style Industrial Interchange brass or 1/4" Schrader Twist Lock style fittings on most of our products. The plug on the end of the respirator **MUST** be compatible on the hose or they will not connect. **For example, Hansen 1/4" Industrial Interchange plug only fits into a 1/4" Hansen Industrial Interchange Socket.**

**Fitting - can refer to either a Plug or a Socket**

**Plug** - Commonly referred to as the male end.



Hansen Style Plug  
Male Threads



Hansen Style Plug  
Female Threads



Schrader Style Plug  
Male Threads



Schrader Style Plug  
Female Threads

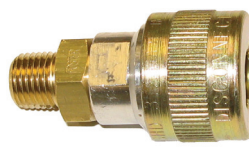
**Socket** - Commonly referred to as the female end.



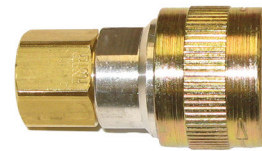
Hansen Style Socket  
Male Threads



Hansen Style Socket  
Female Threads



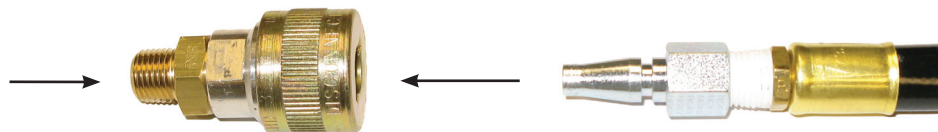
Schrader Style Socket  
Male Threads



Schrader Style Socket  
Female Threads

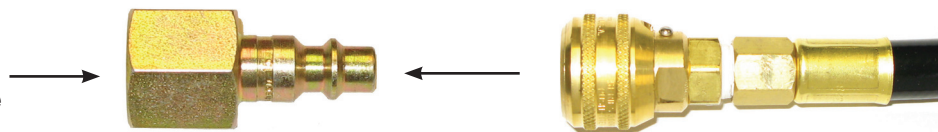
**MPT (Male Pipe Thread)** - Threads on the outer body part of a plug or socket. Thread sizes are typically 1/8", 1/4", 3/8", 1/2", or 3/4" pipe thread. A fitting with male pipe threads (MPT) can only mate to fitting with female pipe threads (FPT) of the same pipe thread size.

The male end will only thread to female pipe threads of the same size



**FPT (Female Pipe Thread)** - Threads 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 with female pipe threads (FPT) can only mate to fitting with male pipe threads (MPT) of the same pipe thread size.

The female end will only thread to male pipe threads of the same size



**"Nominal"** - A plug and socket must both have the same "nominal size" in order to mate together properly.



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. There are a large number of companies manufacturing quick connect couplings. Hansen, Schrader, Parker and Foster are a few of the more popular manufacturers.

## Quick Connect Couplings



Almost all manufacturers make an industrial interchange style. A 1/4" industrial interchange from Hansen will be compatible with a 1/4" industrial interchange from either Parker or Foster. If a customer states they are in need of a Foster fitting, ask if it is a Foster Schrader or Foster Hansen style. We can cross reference additional fitting types; please provide part numbers imprinted on the socket or plug.