

Couplings

General Information

Coupling Selection

This catalog lists the most common type of coupling used for each hose. Consider the following items when selecting couplings for your application. Consult your coupling manufacturer and Eaton for further information about these items:

- Environment
- Temperature ranges - external environment year round, temperature of material being conveyed, and temperature of cleaning solution
- Maximum pressure requirements
- Corrosive resistance and compatibility with material being conveyed
- Conductivity - especially in flammable applications (non-spark brass cam lever arms)
- Gasket material required, if any, keeping in mind compatibility with the material being conveyed
- Port or fitting the hose assembly must be connected to
- Coating (if any) on coupling (i.e. zinc, etc.)

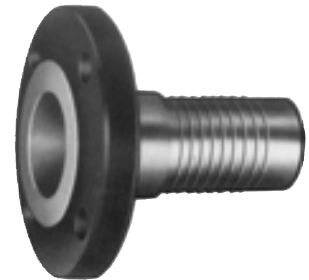
There are two general types of couplings to consider, field-attachable and permanent. The most common types of field-attachable end fittings include cam and groove, king combination nipple and flange.



Cam and groove coupling



King combination nipple coupling or "KC"



Flange end



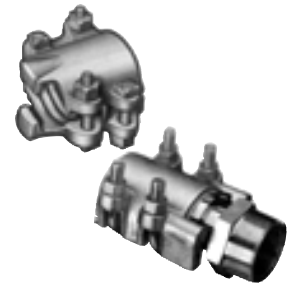
Flat band clamp



Double bolt clamp.



Single bolt clamp



Interlocking clamps

Field-attachable couplings are usually secured by one of the following methods; flat bands, single bolt, double bolt or interlocking clamps.

Band clamps are generally used for applications requiring cam and groove style couplings (less than 150 psi). Bolt clamps generally offer greater security than bands and are therefore chosen more often for higher pressure applications. They can also be retightened after a hose has been in service.

Permanent couplings are also used in applications where you could see pressures greater than 150 psi. These end fittings are swaged, crimped or internally expanded onto the hose. Internal expansion couplings exist for full-flow applications and allow easier assembly cleaning.