

## FlexRite Chemgiene Quick Disconnect Coupling

### FlexRite Chemgiene Coupling:

A quick disconnect coupling is a device that facilitates the connection and disconnection of hydraulic, pneumatic and fluid transfer components or hoses.

There are three basic groups based on the overall design - single shutoff, double shutoff and straight through. That is - the sealing of one, both or neither sides of the connection when disconnected.

FlexRite Chemgiene have teamed up with one of the world's leading manufacturers to produce a range specifically targeted at our traditional customer bases' requirements.

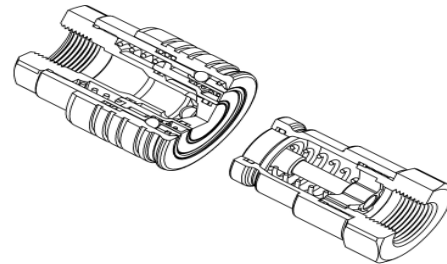


### Features:

- Connection and disconnection is fast, requiring less than a second, saving expensive labour cost and plant shutdown
- The Connection is foolproof - it cannot be wrongly or partially connected
- No tools are required and unskilled personnel can operate the coupling
- When connected the coupling can swivel through 360°, eliminating torsional stress on hose assemblies
- The coupling is reliable, robust and maintenance free
- In shutoff versions the closure against fluid escape is automatic - and there is no halfway point should the operator change their mind
- Loss or spillage of fluid on connection or disconnection is negligible
- The system is often cheaper to install than two manually operate valves
- The system is ideal for the maintenance of clean working areas and the avoidance of dangerous liquid spillages

### The Mechanism:

The design is ball-locking. A ring of stainless steel balls controlled by a spring loaded external sliding sleeve lock into a mating groove in the plug. For those products that are single or double shutoff, the sealing is effected by a spring operated valve. This operates automatically to allow full flow of gas or liquid and provides automatic positive shutoff on disconnection, eliminating all chances of fluid escape due to error. The design is such that when the coupling is being connected, the seal is made before the valves open to allow the fluid to flow. On disconnection the valves close to seal off both ends of the line before the main coupling seal is broken.



### System Design:

The FlexRite Chemgiene coupling provides flexibility in system design or plant layout by allowing fluid connections to be made in a variety of configurations as the plant demands. Connecting flexible hoses to fixed pipes, vessels, cylinders etc. or connecting hoses between fixed equipment or hose to hose connections. Where multiple hoses are used and selected at different times, the hoses and connections not in use can be automatically sealed.

### Typical Fluids Handled

Hydraulic Fluids	Ammonia	Methanol
Compressed Air	Carbon Dioxide	Methyl Ethyl Ketone
Water	Brake Fluid	Nitrogen
Lubricants	Butane	Oxygen
Vacuum	Aviation Fuel	Propane
Solvents	Beer	Skydrol
Steam	Caustic Solutions	Soft Drinks
Refrigerants	Diesel Fuel	Natural Gas
Acetone	Ethanol	Toluene
Acetylene	Ethylene Glycol	Trichloroethylene
Acids	Fuel Oil	Whisky
Alkalies	Helium	

### Construction Materials:

The body of the coupling is manufactured from steel, stainless steel or brass. Key components are hardened and locking balls, valves, springs etc. Are manufactured in stainless steel or plated.

The nitrile seal supplied as standard gives excellent resistance to oil, air, water and many other liquids and gases. There are also seal options in EPDM, Viton, Neoprene, Silicone, Aflas and Kalrez to cover specific applications

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