

CVS110 HOLDBACK CHECK VALVE

The CVS110 is a non return holdback valve for bottom loading arms. It is designed to hold back the product in the loading arm until the loading arm supply pump is activated. This prevents product contamination within the tanker in the event that the wrong API is connected and opened and as an added bonus it also prevents the loading arm from being drained preventing theft of product from the loading arm. The CVS holdback valve also allows the removal of the API coupler for service without draining the entire loading arm.

The internal poppet opens at a pump pressure of 40 kPa, and a thermal relief valve ensures little or no pressure can build up between the API Coupler and the poppet. Flange type sight glasses can also be fitted to one side of the CVS110 for product verification during the loading procedure.

Construction is of aluminium and the CVS110 has 100 mm (4") TTMA flanges either end.



LBV450VGL ISOLATING VALVE

The LBV450VGL is a 100mm (4") TTMA flanged butterfly style isolation valve, fitted to the loading arm adjacent to the API coupler to provide an isolating point in event of coupler failure or for conducting coupler maintenance.

By closing the valve and isolating the coupler from the rest of the loading arm contents, the coupler may be opened or removed for maintenance purposes without draining the arm.

Available with bonded Viton GFLT seal as standard.

Slim and unobtrusive, the shaft can be mounted on the underside of the arm to remain practically invisible. The LBV450VGL isolation style valve is recommended by API RP1004.



API710 DRYBREAK COUPLERS

The API710 automatic latching bottom loading coupler provides effortless automatic connection for a safe, and drip free product transfer from the loading rack to the tanker.

One touch connect and disconnect operation makes it ideal for high volume terminals.

This latest coupler in the Liquip range addresses inherent weaknesses in standard coupler designs with innovative and solid design features.

API710 series couplers are a major advance on previous designs, addressing well-known issues:

- Advanced latching mechanism geometry for security and minimal wear.
- Cast stainless steel collar and latches for longer operating life and easy operation.
- Latch spindles are now precision machined and centred, not cast integrally.
- Optional handle sizes, 150mm (6") or 200mm (7.9") swing, incorporates a ball-end for improved ergonomics and a carry-loop to ease the handling during parking.
- Easiest coupler to maintain in today's market. Once the coupler is removed from the load arm, all seals can be replaced in less than 5 minutes.

Liquip couplers include interlocks to prevent opening until coupled, and prevent uncoupling until closed, they are interchangeable with other industry standard API couplers and adaptors which comply with API RP1004.

Various seal materials available to suit a broad range of fluid applications.



LA560 TOP LOAD VALVE

Normally used as a control valve for Top Loading arms. The model 560 top load valve is available in 75 (3") mm and 100mm (4") sizes. They feature double-acting closing and have a needle valve enabling adjustment of the opening and closing time. A dash-pot arrangement provides controlled closing.

Normally configured for dead man operation they are available as stay-open as well.

A remote handle kit is available for these valves.

MOUNTING

3" (75mm) TTMA Flange

4" (100mm) TTMA Flange



ILS400 STRAINER

Liquip manufacture a 4" in-line strainer in cast aluminium with TTMA flanged ends. The ILS400 incorporates an easily removable basket strainer in a variety of mesh sizes and materials to suit various applications.



SIGHTGLASSES

A sightglass is commonly mounted in the loading arm to indicate the presence and colour of the fuel in the arm. Liquip make a 4" TTMA flanged wafer style sightglass for mounting adjacent to the API coupler. Useful for product identification and when draining the arm to show when the arm is empty, the Liquip sightglass is inexpensive and effective.

PART NUMBERS

BF3-SG - 3" (75mm) TTMA Flange x 25mm

BF4-SG-40 - 4" (100mm) TTMA Flange x 40mm

BF4-SG-25 - 4" (100mm) TTMA Flange x 25mm

API-SG-150 - 4" (100mm) ANSI 150 Flange x 40mm



VCF500 VAPOUR COUPLER

The VCF500 vapour coupler incorporates the patented Liquip SLV100 hinged poppet design to provide lower pressure drops than standard poppets at higher flow rates.

The spring loaded hinged poppet retains vapours until coupled to the male vapour adaptor. Conforming to GEN regulations for pressure drop, flow area, and vapour retention, the VCF500 will operate at flow rates up to 10,000 litres per minute at 20 degrees Celsius (4 compartments loading each at 2500lpm).

A sightglass in the body shows vapour condensation if present, and enables visual checking of function.

FEATURES

- High flow rates and low pressure drop
- Patented hinged poppet design
- Aluminium, stainless steel and Viton construction, with brass cams
- Weight 4.3kg
- Poppet is automatically opened when connected to male adaptor
- Flange mount is universal 4" TTMA with threaded M10 mount holes
- Universal camlock connection



VCF075W VAPOUR COUPLING

The VCF075W is a spring loaded vapour coupler designed to automatically open when coupled to a compatible vapour adaptor.

It incorporates a 100mm hosetail and 4" standard NATO Camlock.



VCM450 VAPOUR ADAPTOR

For terminals with no dedicated vapour recovery hose or arm i.e. a vapour recovery hose is attached to the tank truck. Liquip manufacture a series of poppeted vapour collection adaptors. All are of aluminium construction with 4" TTMA flanged mounts.

The VCM450 (and VCM450AIZ which includes an air interlock) comes with a full 100mm flow area and minimal pressure drop characteristics. Designed for loading at up to 10,000 litres per minute it includes a sight glass and drain plug for visual checking and draining of condensation in the vapour recovery system it also incorporates a standard mil spec camlock connection.

Commonly used in Australia and New Zealand the VCM3 series have a smaller flow area than the VCM450, and the connection is designed so that a standard camlock will not connect to the coupler. With only an approved vapour coupler being able to connect.



APIRC DRYBREAK COUPLERS

The APIRC is a dry break coupler intended only for gravity discharge. It is designed to fit API standard bottom loading adaptors and is suitable for unloading rail cars or for connection from API adaptors to pumping systems. A lightweight, simple & inexpensive option to standard API bottom loading coupler.

Cam levers securely clamp the coupler onto the API adaptor. Opening the operating handle will open the poppet on the coupler and adaptor. There are no interlocks on the operating handle but an over-centre cam style operation and a detent retains the handle in the open or closed positions.

An extended front face seal engages the nose cone of the API coupler before the poppet opens to ensure no product loss, while a multiple lip seal design gives great tolerance to damage from dirt and other contaminants.

The APIRC has a straight through 4" female BSP threaded mount.



BAYONET COUPLERS

For industrial applications in chemicals, mining and petroleum transfer where API couplers are not suitable, 3 point bayonet style dry disconnect couplers may be ideal. Available in a range of metals and seal types to suit a wide range of chemicals and aggressive fluids, the coupling unit consists of male and female components which are coupled by a push-and-twist action. This simultaneously locks the two together and opens both poppets to permit flow. The female coupler comes with an integral swivel and both units may be threaded or flange mounted.

Available in a range of sizes from 38mm to 100mm NB.

