



DM104 Manifold

Liquip offers a pneumatically operated manifold valve that allows the use of a permanently attached hose for discharge of "split drops" via pump or gravity.

The DM104 manifold system improves the speed and performance of metered truck tank product-delivery operations

The DM104 is a bolt up modular assembly system that is used per compartment and is bolted directly together to form the manifold.

Pneumatics allow the user a choice of control e.g. valves may be interlocked to allow only one manifold to open at a time or to prevent any manifold being open when bottom loading etc.

Features & Benefits

- Pneumatic operation provides easier and quicker operation through centralised control.
- Open/Closed indicator mounted at the top of the pneumatic actuator (red = closed, green = open).
- Allows the use of a permanently attached hose for discharge of 'split drops' via pump or gravity, deleting the need to change jumper hoses.
- Prevents spills and drips and saves considerable driver time.

- Two gallery design.
- Upper gallery is drained through to the lower gallery by pneumatic operation of the poppet in the manifold valve.
- Passed European CEN test for endurance to 25,000 cycles and subsequent leak test.
- A special 100mm TTMA blank flange (BF4-5) has a 3/4" BSP port to allow fitting of a vacuum breaker (VB100U) to allow the manifold to drain effectively.

Technical Information

Operation

- The upper gallery forms a Ø100mm pipe connecting a bolted-on API adaptor to the tanker pipe work, so allowing completely normal bottom loading & gravity discharge of individual compartments.
- A second, lower, gallery runs at right angles and when bolted together they form an Ø80mm pipe. Discharge from this lower gallery can be from an end fitting or from any of the bottom outlets on each valve.

Air Pressure

- Tanker air pressure 600 kPa to 800 kPa to operate.
- Poppet lifts at 120 kPa back pressure against spring only.

Ordering Information

- **DM104:** Discharge Manifold with open/closed indicator.
- **DM104-1Z:** Single compartment kit-DM104 c/w Viton™ A gasket, vacuum breaker and aluminium blanking plates.
- **DM104-2Z:** Two compartment kit- DM104 c/w Viton™ A gasket, vacuum breaker and aluminium blanking plates.
- **DM104-3Z:** Three compartment kit- DM104 c/w Viton™ A gasket, vacuum breaker and aluminium blanking plates.

Associated Equipment

- **BF4-5:** blind flange with 3/4" BSP mount.
- **BF4-7:** Blanking flange, 100mm (4") TTMA flange.
- **VB100U:** Vacuum breaker.
- **MC4-V4A:** 4" Al Camlock adaptor to 100mm TTMA flange.
- **MC3-V4A:** 3" Al 10° Camlock adaptor to 100mm TTMA flange.

Materials

- Body and cover: Aluminium.
- Spindle: Stainless steel.
- Bonded Viton™ seal.
- Spring steel, zinc plated.

Mounting

- 100mm (4") TTMA to tank.
- 100mm (4") TTMA to API adaptor.
- 100mm (4") TTMA side to side.
- 75mm (3") TTMA bottom outlet.
- Centre-to-centre distance is 282mm. Fit spacers for other pipe centres.

- **DM104-4Z:** Four compartment kit- DM104 c/w Viton™ A gasket, vacuum breaker and aluminium blanking plates.

- **DM104-5Z:** Five compartment kit- DM104 c/w Viton™ A gasket, vacuum breaker and aluminium blanking plates.

- **DM104-6Z:** Six compartment kit- DM104 c/w Viton™ A gasket, vacuum breaker and aluminium blanking plates.

- **MC3-V3A:** 3" Al 10° Camlock adaptor to 75mm TTMA flange.

- **PFR114:** 1 1/4" product return flange assembly.

- **PFR112:** 1 1/2" product return flange assembly.

- **MAC1XX:** pneumatic control system.

DM104 DISCHARGE MANIFOLD

