

Data Sheet

Rectangular Manways

Rectangular manways are used in a variety of different application from hygienic industrial washing machines and autoclaves through to solvent and chemical storage applications.

Available with both inward and outward opening options in most sizes.

Their shape compliments itself perfectly to flat surface mounting and consequently they are often the preferred choice for cubic vessels and flat sided tanks. Here these manways are usually installed either on the top of the vessel for easy access or they are side mounted for inspection and cleaning.

There is now a comprehensive range of sizes offered from small inspection ports through to the large 740mm x 540mm hatch that facilitates entry to vessels with breathing apparatus.

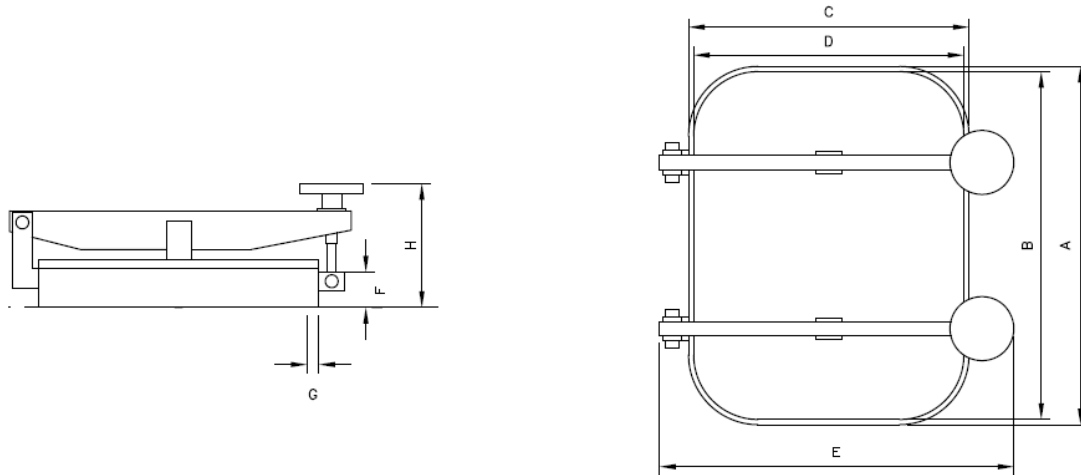


Features and options:

- Sizes from 170mm x 225mm through to the 740mm x 540mm
- Carbon steel neck rings and manways available to order
- Special neck rings available for glass fibre and concrete tanks
- FDA approved seals in EPDM, Silicone, Viton® or Nitrile
- Working pressures of up to 2.5 Bar
- Alternative hinge mechanisms allow vertical and horizontal installation
- Safety Grids, Crosses and Meshes
- Safety Bolts for vacuum and pressure release
- Proximity or micro switches to monitor lid position
- Pneumatic opening and closing devices

Data Sheet

Rectangular Manways



| Part No: | A | B | C | D | E | F | G | H | W. Press | Handles |
|-----------------------------------|-----|-----|-----|-----|-----|----|----|-----|----------|---------|
| Outward opening manway dimensions | | | | | | | | | | |
| M12A-AH007 | 234 | 224 | 195 | 185 | 325 | 17 | 5 | 134 | 0.5 | 1 |
| M12A-AH014 | 440 | 424 | 326 | 310 | 545 | 60 | 8 | 179 | 0.5 | 1 |
| M12A-A054 | 554 | 530 | 439 | 415 | 690 | 60 | 12 | 240 | 0.5 | 2 |
| M12A-A704 | 760 | 740 | 470 | 450 | - | - | 10 | 205 | 0.5 | 6 |
| M12A-AV014-12 | 440 | 420 | 330 | 300 | - | 28 | 10 | 150 | 2.0 | 6 |
| M12A-AV014-22 | 440 | 420 | 330 | 300 | - | 28 | 10 | 150 | 2.5 | 6 |
| M12A-AV054-12 | 554 | 530 | 439 | 415 | - | 28 | 12 | 150 | 2.0 | 6 |
| M12A-AV054-22 | 554 | 530 | 439 | 415 | - | 28 | 12 | 150 | 2.0 | 6 |

| Part No: | A | B | C | D | E | F | G | H | W. Press | Handles |
|----------------------------------|-----|-----|-----|-----|---|---|----|----|----------|---------|
| Inward opening manway dimensions | | | | | | | | | | |
| M12B-AA014 | 440 | 420 | 330 | 310 | - | - | 10 | 83 | 1.0 | 1 |
| M12B-AA054 | 554 | 530 | 439 | 410 | - | - | 12 | 83 | 1.5 | 2 |

Materials:

- 304L and 316L Stainless Steel
- Seal Materials Natural Rubber, EPDM, Nitrile & Viton

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Manway Safety Devices

Alchem are pleased to announce the arrival of additional safety features to our comprehensive range of tank manways. In addition to the Safety Bolt, Meshes and Crosses we now offer Air Actuated Locking Devices and Magnetic Proximity Switches. These additions to our comprehensive range of high pressure and atmospheric manways allow us to offer you the complete solution for your vessel closure design.



- **Safety Bolt**

The safety bolt has been developed to ensure operator safety remains paramount. This product is offered as a standard option with all our high pressure manways but is also suitable for use with our atmospheric range. The bolt operates on a cam principle and simultaneously raises the lid and vents any residual pressure or vacuum. This prevents any dangerous blow back of the lid under pressure and helps to un-stick the lid in vacuum conditions. This is a particularly useful option for applications with gas or compressed air.

- **Air Actuated Locking Devices**

The locking device consists of a Double Acting Air Actuator and is usually mounted on the neck ring and can be operated remotely from a control panel or locally by the operator. Often used in conjunction with a proximity switch, these two devices can be linked to a control panel and operated fully automatically as part of a cycle such as filling and cleaning or inspection.

- **Magnetic Proximity Switches**

These devices are used in a variety of applications from simply detecting that the lid is open or closed or they can be installed as part of a control loop. Here the Agitator supply or the Cleaning Cycle can be linked to the proximity switch and the system will only operate when the lid is safely closed. This is commonly used to ensure operator safety where the vessels have to be filled manually. Here the switch is used to break the circuit when the lid is open and thus preventing the agitator from running or can be used to stop the cleaning cycle.