

Data Sheet

Domed Circular Manway

Alchem offer a range of domed circular manways that feature a profiled seal design that minimises all internal crevices.

The domed outer cover is self-draining by design and this property makes the manway ideal for outdoor use, as rainwater hold-up areas are almost entirely eliminated.

Seal replacement is a simple operation where the gasket is stretched over the flanged neck ring and its profiled design ensures a snug fit and smooth interface between the neck and the lid.



Features:

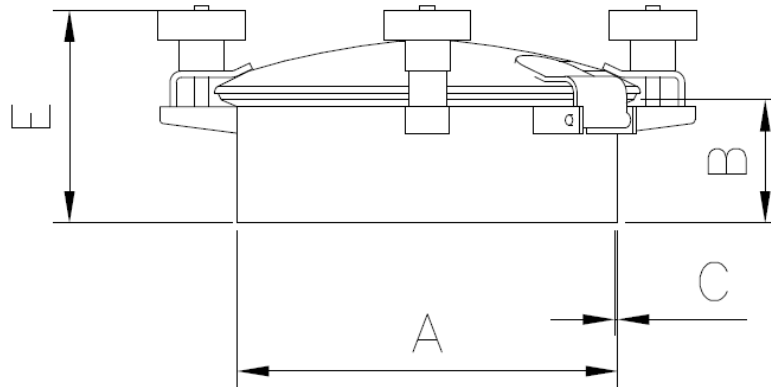
- Two closure systems are offered, multi-clamp and lever arm
- Domed cover facilitates self draining properties
- 316L and 304 Stainless Steel materials offered as standard
- Mirror polished lid and brushed skirt
- Vacuum rated across the range, see table for details
- Glueless seal design eliminates unsightly adhesives
- The seal design prevents seal drop off into the vessel
- Sizes range available from 200 to 1200mm
- Nylon handles offered as standard with SS Spin handles available

Options:

- Sight Glasses, Pressure Relief Valves and Bursting Discs
- Range of Handles and Stainless Steel Wing Nuts
- Polishing to customer specification such as 0.8 μ m Ra internally
- Full range of FDA approved seal materials, including EPDM, Silicone and Viton®
- Safety Grids, Crosses and Meshes
- Safety Bolts for vacuum and pressure release
- Proximity switches to monitor lid position
- Pneumatic opening and closing devices

Data Sheet

M127- Domed Hygienic Manway, Multi Clamp

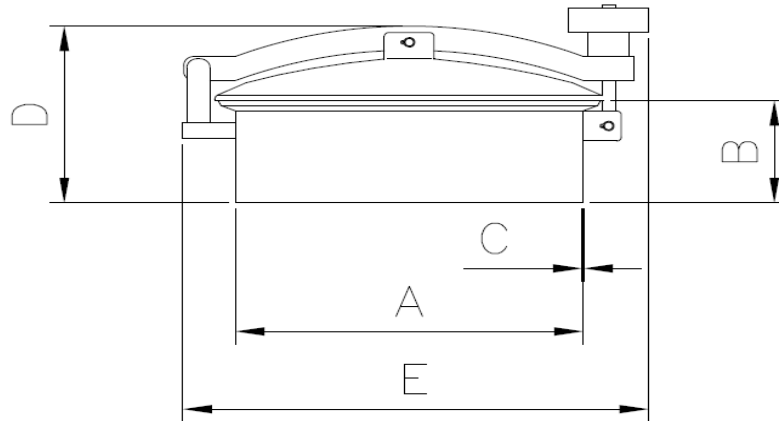


Part No:	A	B	C Neck Thickness	D No of Clamps	E	Lid Thickness mm	Working Pressure Bar	Vacuum Bar Absolute	Weight Kgs
TRC-200	205	100	2.5	3	180	2.0	0.8	0.05	4
TRC-300	305	100	2.5	3	180	2.0	0.4	0.05	6
TRC-420	425	100	2.5	4	210	2.5	0.4	0.10	8
TRC-460	465	100	2.5	5	210	2.5	0.4	0.10	9
TRC-500	505	100	2.5	5	210	2.5	0.3	0.10	10
TRC-600	605	100	2.5	6	220	2.5	0.3	0.10	15
TRC-800	806	100	3.0	8	220	3.0	0.2	0.10	38
TRC-1000	1006	100	3.0	10	220	3.0	0.2	0.10	44
TRC-1200	1206	100	3.0	12	040	3.0	0.2	0.10	50

Seal Materials: EPDM, Nitrile, Silicone and FKM (Viton)

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M128- Domed Hygienic Manway, Lever Arm



Part No:	A	B	C Neck Thickness	D No of Hinges	E	Lid Thickness mm	Working Pressure Bar	Vacuum Bar Absolute	Weight Kgs
TRL-200	205	100	2.5	1	320	2.0	0.40	0.05	4
TRL-300	305	100	2.5	1	425	2.0	0.20	0.05	6
TRL-420	425	100	2.5	1	560	2.5	0.10	0.10	10
TRL-460	465	100	2.5	1	605	2.5	0.10	0.10	12
TRL-500	505	100	2.5	1	640	2.5	0.07	0.10	13
TRL-600	605	100	2.5	2	740	2.5	0.05	0.10	15
TRL-700	706	100	3.0	2		3.0	0.02	0.10	20
TRL-800	806	100	3.0	2		3.0	0.02	0.10	40

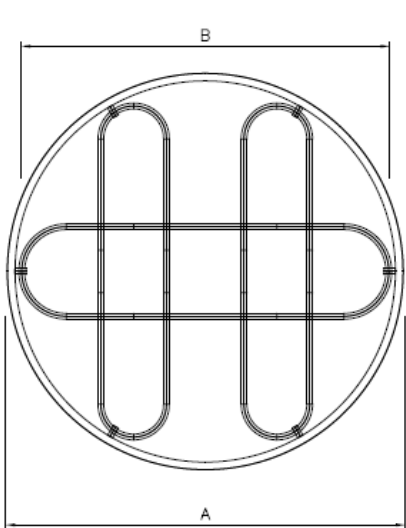
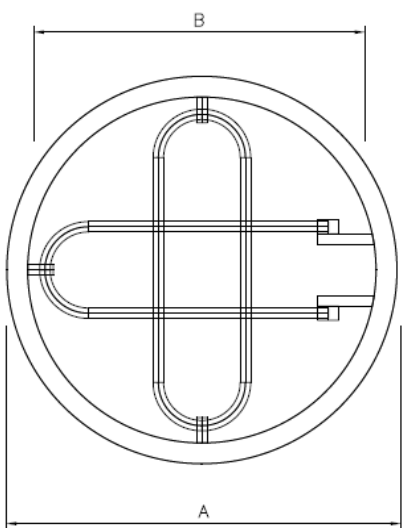
Seal Materials: EPDM, Nitrile, Silicone and FKM (Viton)

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Security Grid, Crosses and Meshes

Several types of safety grids are offered including perforated plate, wire mesh and the more the common Marguerite Cross. These can be fixed into position permanently or can be fully removable or hinged to suit the customers' requirements. The mesh and perforated plate are made from standard sheet products available in the market whereas the crosses are made from 8mm bar formed, welded and fabricated to suit the particular application.

Security Grids, Crosses and Meshes

	A	B	C
	205	200	
	305	300	
	425	425	
	465	460	
	505	505	
	605	600	
	706	700	
	806	800	
	1006	1000	
	1206	1200	

Applications:

- The grids, crosses and meshes can hinged or fully removable for easy access
- The grids are often installed to prevent accidental contamination of the product
- The grids are often used to support bags of powder when manual filling is required

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Custom Fabrication

Alchem offer a full fabrication service for our manways including the installation of sight glasses, charge ports, inspection hatches, sprayballs, bursting discs and pressure relief valves.

The manways can also be fabricated to form reactor vessels where the neck rings are extended to form the body of the vessel.

Alchem also offer dished ends for reactor vessels that match the diameter of our manways.



Options:

- Sight Glasses, Pressure Relief Valves and Bursting Discs
- Range of Handles and Stainless Steel Wing Nuts
- Polishing to customer specification such as 0.35 μ M Ra internally
- Full range of FDA approved seal materials, including EPDM, Silicone and Viton®
- 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

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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.