‘Screw-lid’

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Fig 1


Fig 2


Fig 3


Fig 11

Lids of valve chambers are increasingly being vandalised (see fig 1), allowing thieves to gain access to steal the copper and brass components of the valves. Thereafter the valves need to be manually operated (see fig 2), and if not carefully monitored, reservoirs either run empty in a matter or hours, or overfill (see fig 3).

A ‘screw-lid’ , shown in fig 4 in its fully closed position, is an effective means of securing a valve chamber. Once the tool is inserted into the access tube, it may be turned, resulting in the lid coming out of the opening (see fig 5). Note that the thread of the tool may be varied in terms of diameter, pitch, and shape, so that each tool may be uniquely customised.

With the lid fully up, two sets of wheels fastened to the underside of the lid come into view (see fig 6). The lid is now be rotated by hand (see fig 7) until it has gone through 90 degrees (see fig 8).


Fig 4


Fig 10

Next the tool is turned in the opposite direction, so that the lid’s wheels come to rest on the rails (see inset). With further turning the tool exists the support tube in the beam (see fig 9).

If the tool is turned up almost to the nut, the lid is free to be pushed all the way to one side for maximum access into the valve chamber (see fig 10). The inset shows the opening with the beam still in position, while in the main picture the beam has been lifted out. However it is only necessary to lift out the beam when a large valve or pipe requires replacement.


Fig 5

Figure 11 shows another screw-lid, is this case to provide secure access to a reservoir.

Note that other lid designs are also available – see www.damsforafrica.com. Further products in our range include sliding concrete doors (for pump & sub-stations), and various vaults with slidable/liftable members (for transformers, borehole installations, stand alone control panels, etc). Products can be made to any size, all from 60MPa with up to 5% reinforcing.


Fig 9


Fig 8


Fig 7


Fig 6