



**LIFTING KEYHOLE DETAIL**

**BOLTING BOSS DETAIL**

**NOTES:**

1. This drawing is for use in non commercial loading applications where vehicle loads are less than 3.5t.
2. All edges to be square.
3. Casting to be free of burrs and pits.
4. **Material**  
Ductile cast iron  
Tensile strength : 600-3 (AS 1831)  
Hardness : 145-185 (HB)  
Design load = 80kN (AS 3996)  
Mass = 39kg
5. **Tolerances**  
Cast size  $\pm 1.00\text{mm}$   
Angle profile  $\pm 0.25^\circ$   
Machined size  $\pm 0.125\text{mm}$   
Overall diameter of cover  $+0\text{mm}-0.25\text{mm}$   
DFT of coating 50  $\mu\text{m}$

6. Machine surface symbol:  $3.2/\sqrt{\quad}$
7. All machine surfaces shall have a coating approved as fit for purpose of providing a rust proof, non-stick and gas/water proof joint.
8. Lids to be bolted down if required by Design, using M8 coarse thread 316 stainless steel bolts in four (4) places.
9. Refer Std Dwg DS-015 for manhole frame details.
10. Refer Std Dwg DS-018 for manhole riser details.
11. Refer Std Dwg DS-019 and DS-021 for alternate cover details.
12. All dimensions are in millimetres unless shown otherwise.

These drawings have been developed in consultation between the participating Councils.  
BEFORE USE, the user shall confirm that the drawing has been adopted by the appropriate Council.

Rv.	DATE	REVISIONS
C	06/14	Review
B	03/14	Amended Drawing Number
A	10/12	ORIGINAL ISSUE



**INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA  
STANDARD DRAWINGS**

**MANHOLE COVER  
(NON ROADWAY)  
1050 TO 2100 DIAMETER**

**DS-020**

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