

EN 16035:2023 Hardware performance sheet

EL596FU

No : HPS240000-00

Table 1 Building hardware

| Line | Feature | Required indication / Properties | | | | | | | | | | | | | | | | | | |
|------|------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.1 | HPS No./version | HPS240000-00 | | | | | | | | | | | | | | | | | | |
| 1.2 | Date | 7.8.2024 | | | | | | | | | | | | | | | | | | |
| 1.3 | Prepared by | Abloy Oy, Testing, Maarit Jumppanen | | | | | | | | | | | | | | | | | | |
| 1.4 | Manufacturer | Abloy Oy | | | | | | | | | | | | | | | | | | |
| 1.5 | Type of building hardware | Electric lock | | | | | | | | | | | | | | | | | | |
| 1.6 | Product line | EL596 | | | | | | | | | | | | | | | | | | |
| 1.7 | Relevant EN standard | EN 14846: 2008 | | | | | | | | | | | | | | | | | | |
| 1.8 | Classification / performance | <table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr><tr><td>3</td><td>S</td><td>5</td><td>F</td><td>-</td><td>L</td><td>3</td><td>1</td><td>1</td></tr></table> <p>Category of use/Durability and load on latchbolt/Door mass and closing force/ Suitability for use on fire /Smoke doors/Safety/Corrosion resistance, temperature and humidity/Security/Security - electrical function/Security - electrical manipulation</p> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | S | 5 | F | - | L | 3 | 1 | 1 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | | | | | | | | | | | | |
| 3 | S | 5 | F | - | L | 3 | 1 | 1 | | | | | | | | | | | | |
| 1.9 | Test evidence used | VTT-S-00636-14, VTT-S-00746-18 | | | | | | | | | | | | | | | | | | |

Table 2 Test evidence used

| Line | Feature | Required indication / Properties |
|------|---|---|
| 2.1 | HPS No./version | HPS240000-00 |
| 2.2 | No. of test evidence | EXAP - EUFI29-21001886-T2 |
| 2.3 | Product version | EL596FU |
| 2.4 | Main dimensions of the specific building hardware | <p>Dimensions (height x width x depth): lock body 159 mm x 20.5 mm x 79 mm forend 225.5 mm x 22 mm x 3 mm</p> <p>(Technical drawings with dimensions attached).</p> <p>EL596FU represents the whole product family as it has biggest fire load, with largest main dimensions and largest cutout on fire door. EL596FL and EL596 are equal size, fire load is equal (EL596FL) / smaller (EL596)</p> <p>EL581, EL583, BL581, BL583 are smaller sizes. Dimensions: lock body 158 mm x 20 mm x 79 mm forend 225.5 mm x 21.8 mm x 3 mm</p> <p>LC102, LC190, LC193, LC194, LC197, LC290, LC291 are smaller sizes. Dimensions: lock body 152 mm x 19 mm x 77 mm forend 225 mm x 22 mm x 4 mm</p> <p>OP193, LE180, LE184 are smaller sizes. Dimensions: lock body 152 mm x 19 mm x 78 mm forend 225 mm x 22 mm x 4 mm</p> |
| 2.5 | Fixing, building hardware to element | - |

| | | |
|------|--|--|
| 2.6 | Settings | - |
| 2.7 | Material of doorset and/or openable window | <input type="checkbox"/> Steel doorset <input type="checkbox"/> Aluminum doorset <input type="checkbox"/> Metal framed glazed doorset <input checked="" type="checkbox"/> Timber <input type="checkbox"/> Additional information |
| 2.8 | Type and material of the element frame | Type - Material <input type="checkbox"/> Steel <input type="checkbox"/> Aluminum <input checked="" type="checkbox"/> Timber |
| 2.9 | Element frame thickness | 92 mm |
| 2.10 | Mode of operation | <input checked="" type="checkbox"/> Hinged <input type="checkbox"/> Pivoted <input type="checkbox"/> Sliding <input checked="" type="checkbox"/> Single leaf <input type="checkbox"/> Double leaf |
| 2.11 | Mounting position building hardware | <input type="checkbox"/> Surface mounted <input checked="" type="checkbox"/> Mortise mounted |
| 2.12 | Building hardware is mounted on | <input checked="" type="checkbox"/> Primary (active) leaf <input type="checkbox"/> Secondary (inactive) leaf |
| 2.13 | Leaf mass | - kg |
| 2.14 | Leaf width | 922 mm |
| 2.15 | Leaf height | 2040 mm |
| 2.16 | Leaf thickness | 62.5 mm |
| 2.17 | Thermal separation | - |
| 2.18 | Insulation layer | Flax boards |
| 2.19 | Intumescent layer | - |
| 2.20 | Seals or gaskets | <input checked="" type="checkbox"/> Yes 10 mm ball seal around the door leaf and the inner side of the door leaf. Pyroplex 10x4 mm intumescent (expansion) seal in the door leaf. <input type="checkbox"/> N/A |

Table 3 Performance level(s) fire resistance

| Line | Feature | Required indication / Properties | | |
|------|--------------------------------|---|-----|---|
| 3.1 | HPS No. and test evidence used | HPS240000-00 EUFI29-20005903-T1 | | |
| 3.2 | Fire resistance test | <input checked="" type="checkbox"/> EN 1634-1 :2014 + A1:2018 <input type="checkbox"/> EN 1634-2:2008 | | |
| 3.3 | No. Test report | EUFI29-20005903-T1 | | |
| 3.4 | Notified test body | 0809 Eurofins Expert Services Oy | | |
| 3.5 | Direction of test exposure | <input checked="" type="checkbox"/> Towards the furnace <input checked="" type="checkbox"/> Away the furnace | | |
| 3.6 | Precondition test | <input checked="" type="checkbox"/> 25 cycles <input type="checkbox"/> 5000 cycles <input type="checkbox"/> N/A | | |
| 3.7 | Classification | <input checked="" type="checkbox"/> EN 13501-2 classification including overrun time E: 38 min W: - min I ₁ : 38 min I ₂ : 38 min <input type="checkbox"/> N/A | | |
| 3.8 | | Time (min:s) | E/U | Observation E = exposed side, U = unexposed |
| | | 0:00 | | Test was started. |

| | | | | |
|------|--|---|---|---|
| | Observations during the test related to hardware | ~5:00 | U | Door A: large amount of steam was emerging from the gap between frame and top of the door leaf. |
| | | ~32:50 | U | Door B: smoke was emerging from the letter plate |
| | | ~36:00 | U | Door A: some furnace glow was visible from the gap between frame and the top of the door leaf. |
| | | 38:20 | U | Test was terminated. |
| | | Door A opened towards fire; Door B opened away fire | | |
| 3.9 | Applicable EXAP Standard | <input type="checkbox"/> EN 15269-2 Part 2 Fire resistance of hinged and pivoted steel doorsets <input checked="" type="checkbox"/> EN 15269_3 Part 3 Fire resistance of hinged and pivoted timber doorsets <input type="checkbox"/> EN15269-5 2014 A1:2016 Part 5 Hinged and pivoted metal framed glazed doorsets and openable windows <input type="checkbox"/> N/A | | |
| 3.10 | Data confirmed by | Not confirmed by Notified body | | |

Joensuu 2024-08-15

Signed for and on behalf of Abloy Oy



Minna Sallinen
VP Digital Access Solutions BU

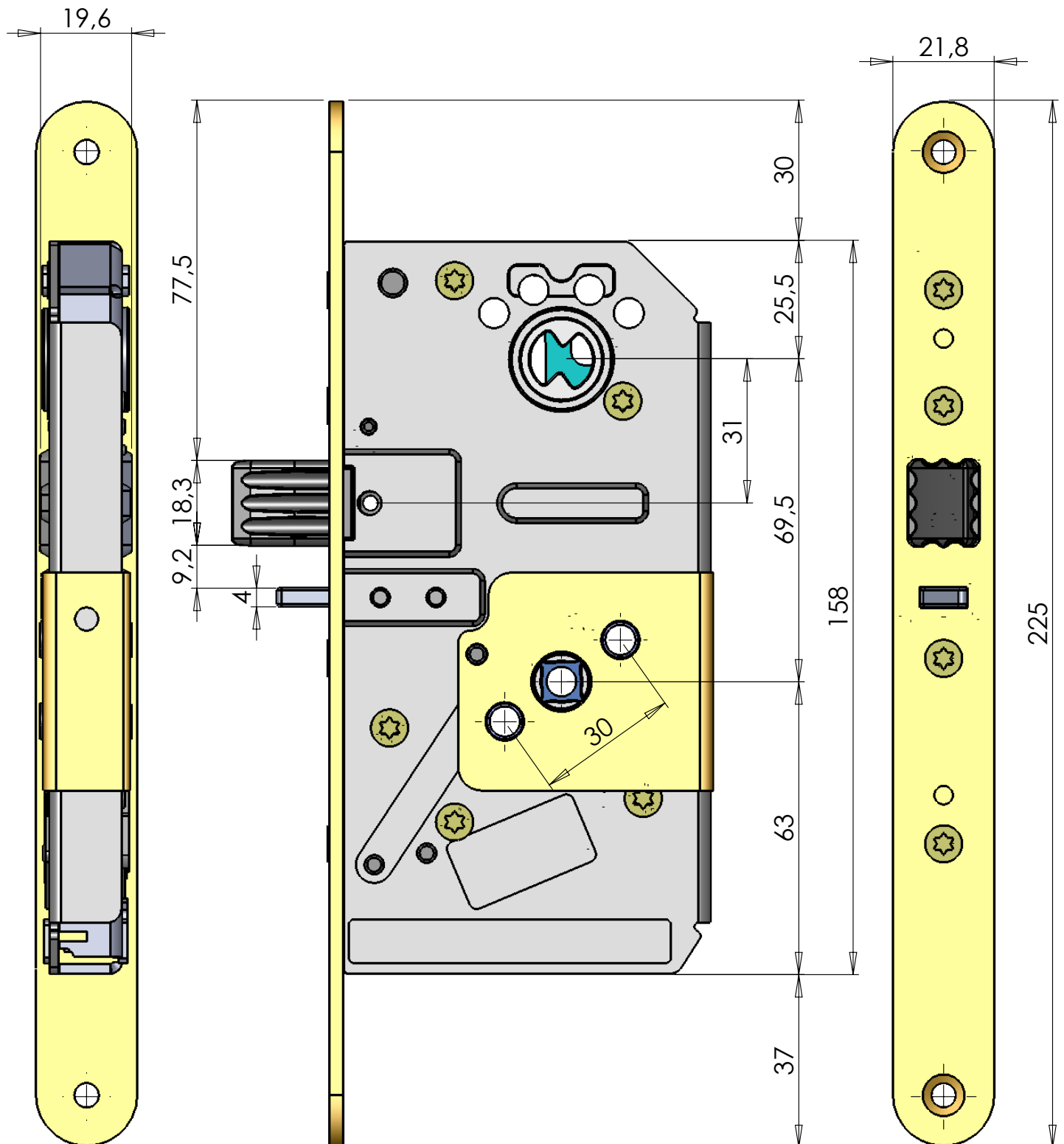
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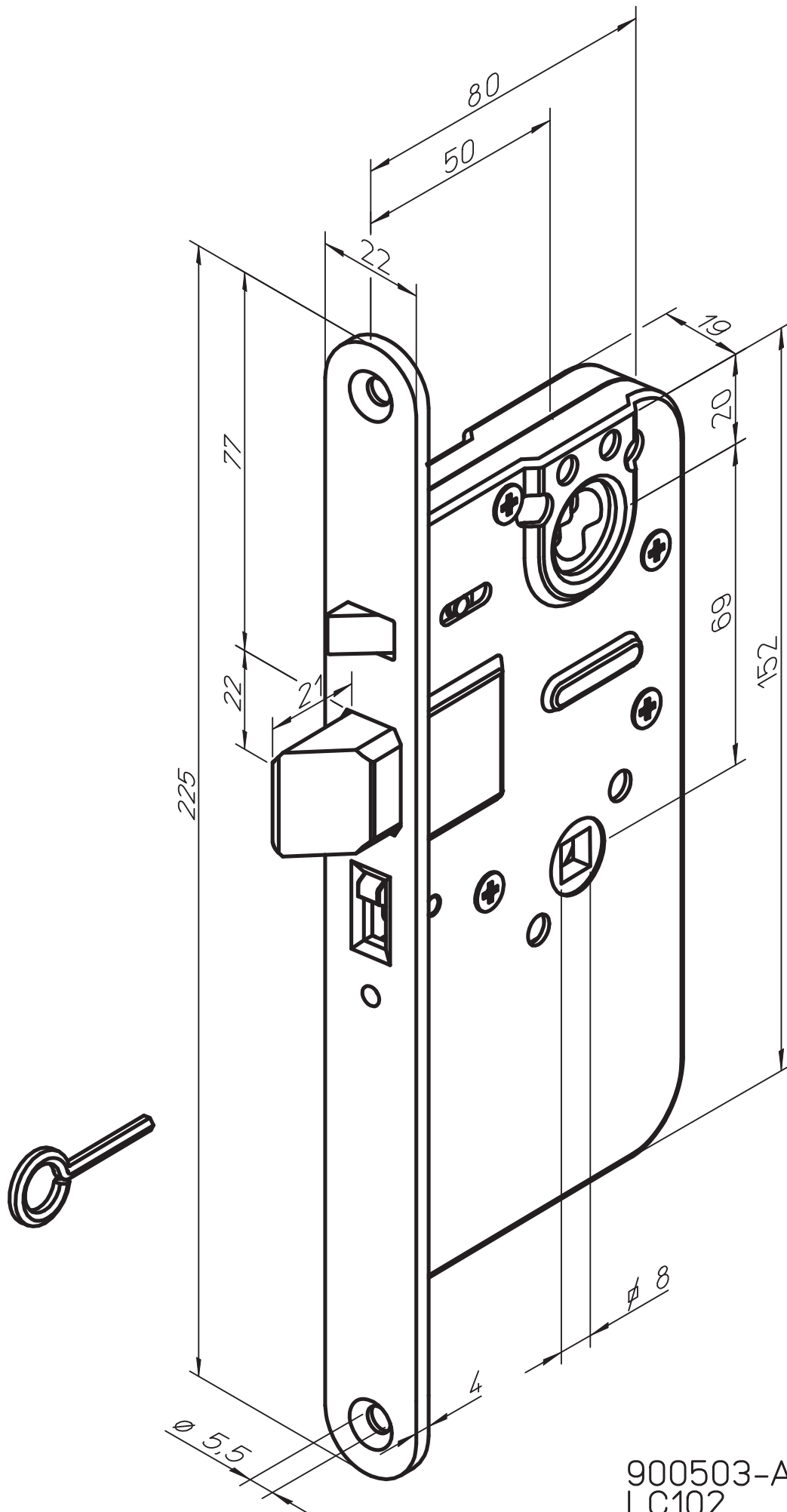
Signed for and on behalf of Abloy Oy



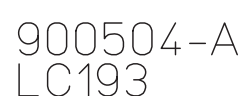
Jari Kervinen
Director and Head of Innovation, Mechanical Core PU
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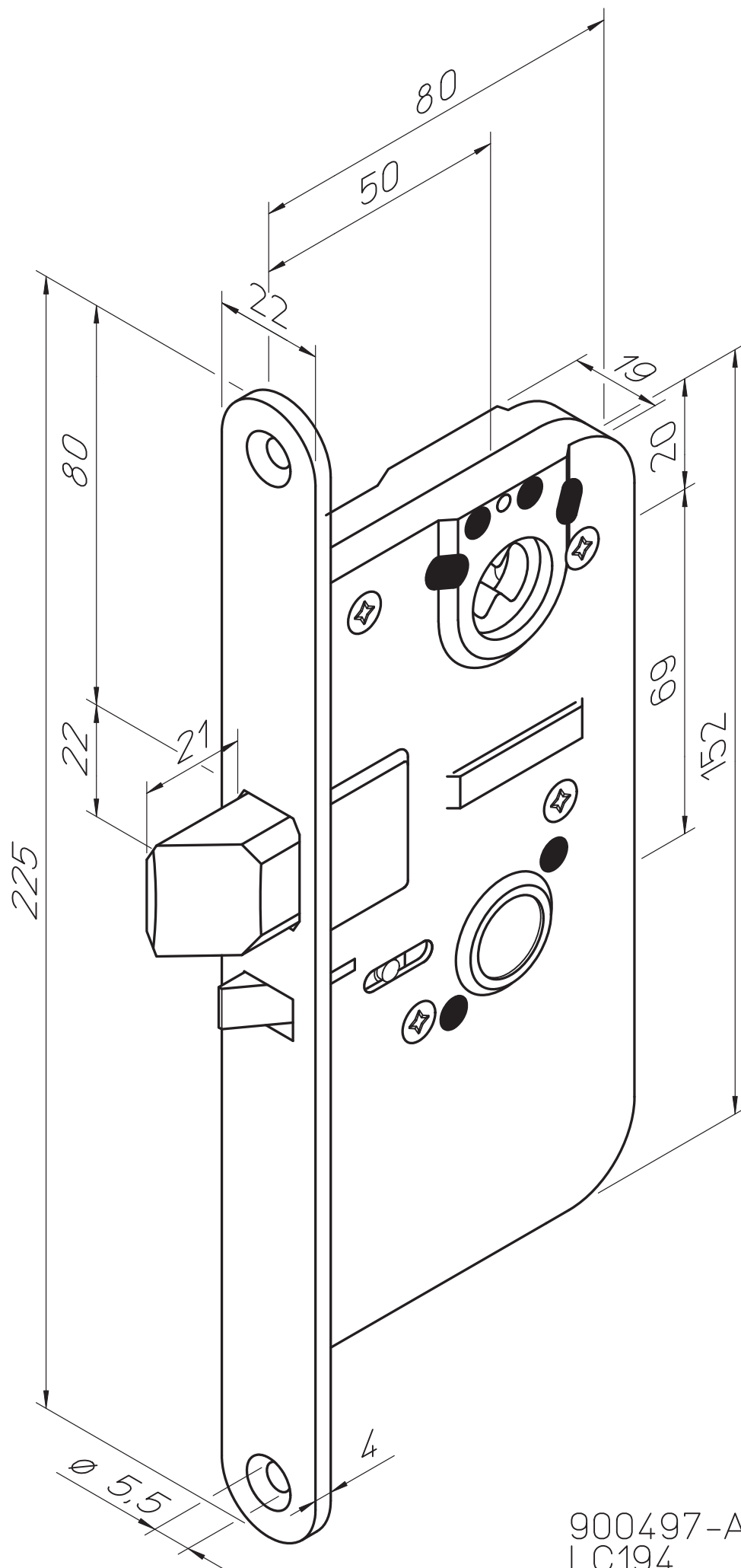
ABLOY® EL581,-3



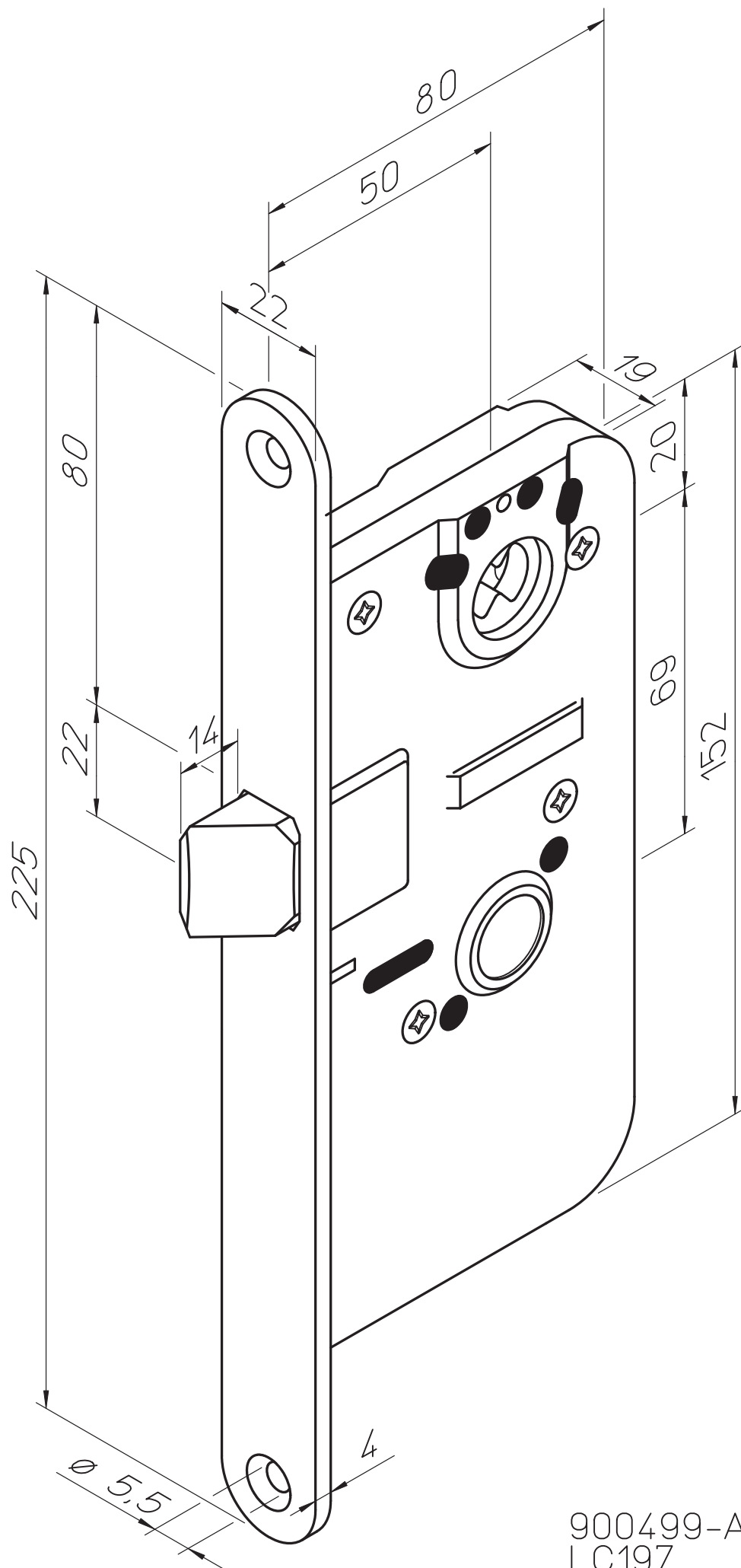


900503-A
LC102

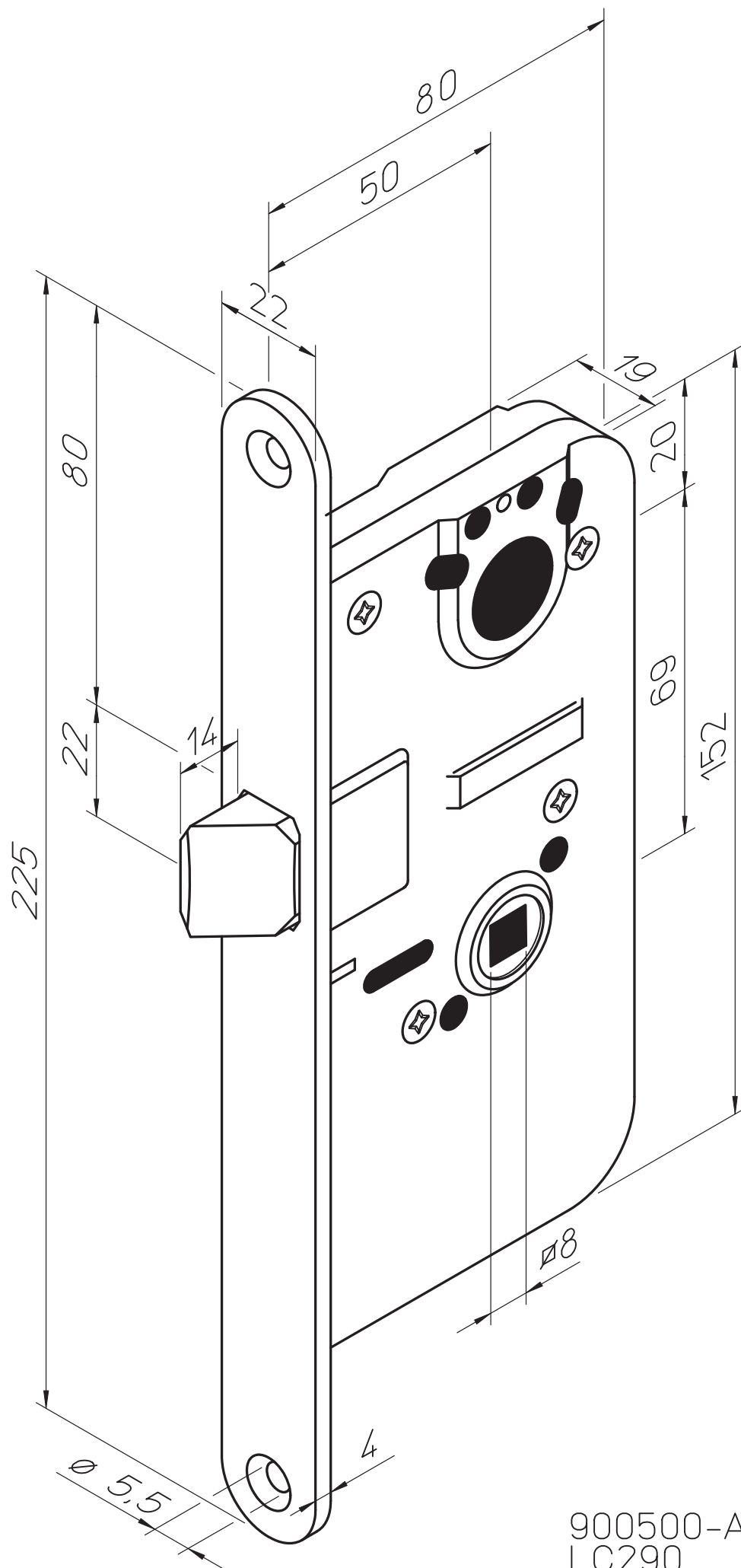




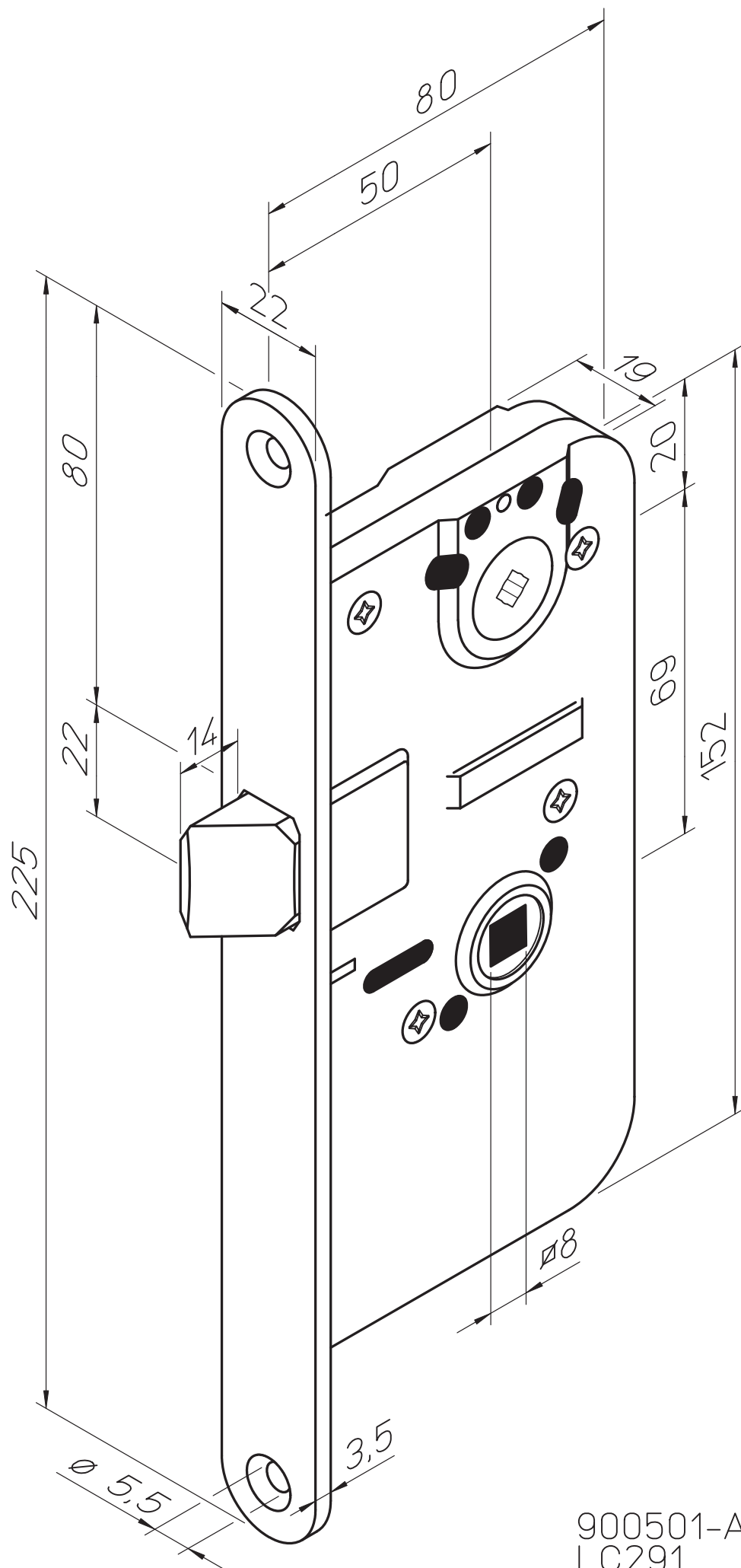
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LC194



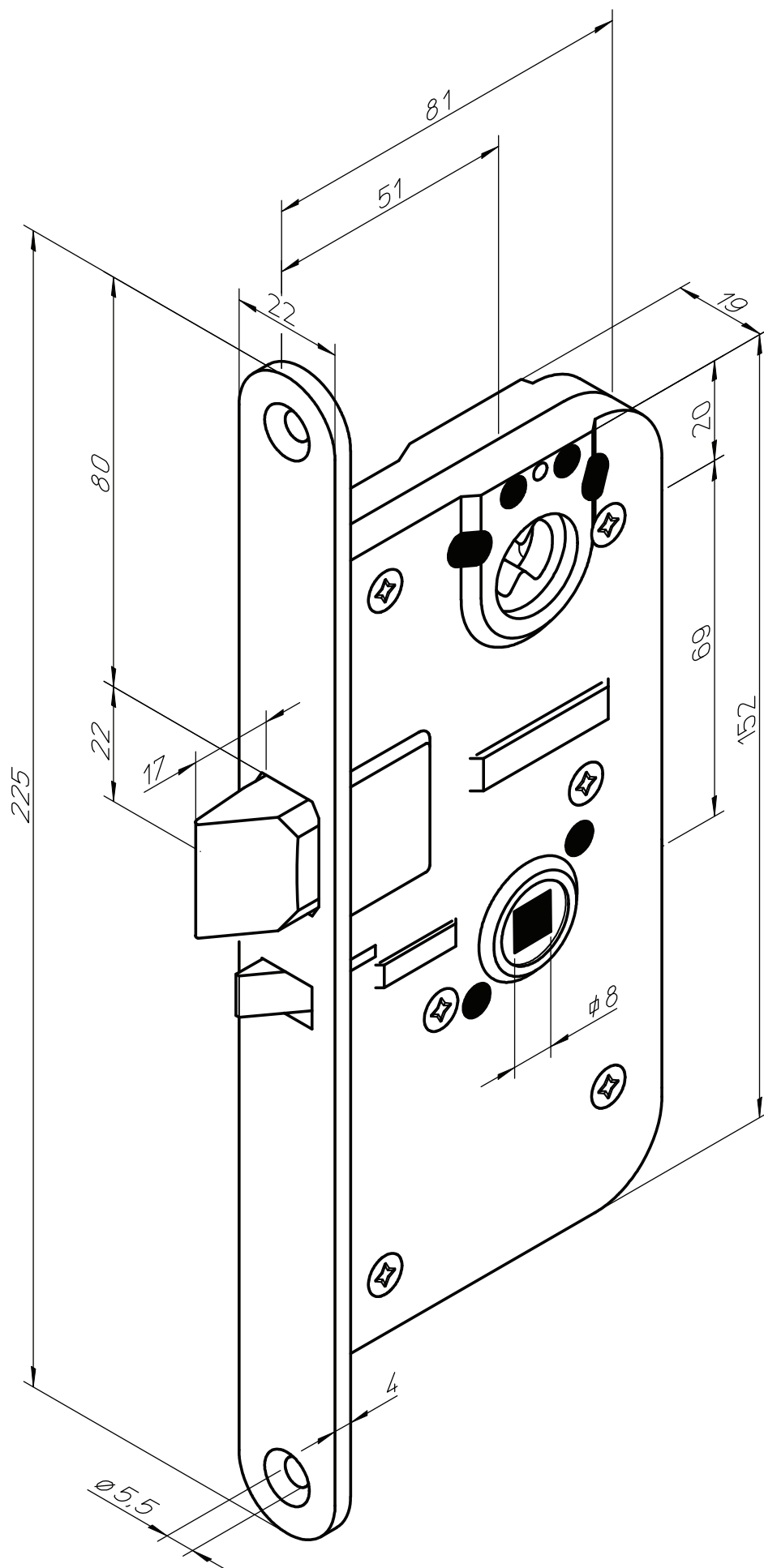
900499-A
LC197



900500-A
LC290



900501-A
LC291



900457
 LE184