



MECHANICAL LOCKS

Example for a Multitop PRO lock,
series 49225

1 2 3 4 5 6 7 8
| 3 | X | 9 | 0 | 0 | G | 6-7 | 0 |

1 Category of use

- Grade 1: For use by people with a high incentive to exercise care and with a small chance of misuse, e.g. residential doors
- Grade 2: For use by people with some incentive to exercise care but where there is some chance of misuse, e.g. office doors
- Grade 3: For use by the public where there is little incentive to exercise care and where there is a high chance of misuse, e.g. doors in public buildings

2 Durability

- Grade A: 50 000 test cycles no force on latch bolt, or for locks without latchbolt
- Grade B: 100 000 test cycles no force on latch bolt, or for locks without latchbolt
- Grade C: 200 000 test cycles no force on latch bolt, or for locks without latchbolt
- Grade L: 100 000 test cycles 25 N load on latchbolt
- Grade M: 200 000 test cycles 25 N load on latchbolt
- Grade R: 100 000 test cycles 50 N load on latchbolt
- Grade S: 200 000 test cycles 50 N load on latchbolt
- Grade W: 100 000 test cycles 120 N load on latchbolt
- Grade X: 200 000 test cycles 120 N load on latchbolt

3 Door mass and closing force

- Grade 0: Locks without a latchbolt
- Grade 1: Up to 100 kg door mass 50 N maximum closing force
- Grade 2: Up to 200 kg door mass 50 N maximum closing force
- Grade 3: Above 200 kg door mass or as specified by the manufacturer 50 N maximum closing force
- Grade 4: Up to 100 kg door mass 25 N maximum closing force
- Grade 5: Up to 200 kg door mass 25 N maximum closing force
- Grade 6: Above 200 kg door mass or as specified by the manufacturer 25 N maximum closing force
- Grade 7: Up to 100 kg door mass 15 N maximum closing force
- Grade 8: Up to 200 kg door mass 15 N maximum closing force
- Grade 9: Above 200 kg door mass or as specified by the manufacturer 15 N maximum closing force

4 Suitability for use on fire resisting and/or smoke control doorset

- Grade 0: Not verified for use on fire resisting /smoke control doorset assemblies;
- Grade A: For use on smoke control doorset assemblies based on a test in accordance with EN 1634-3 where the lock contributes to the integrity
- Grade B: For use on smoke control and fire resisting doorset assemblies based on a test in accordance with EN 1634-1 or EN 1634-2 where the lock contributes to the integrity;
- Grade N: For use on smoke control and fire resisting doorset assemblies based on tests where the lock does not contribute to keeping the door in a closed position during the fire resisting and/or smoke control test;

5 Safety

- Grade 0: No safety requirement

6 Corrosion Resistance and Temperature

- Grade 0: No defined corrosion resistance, no temperature requirement
- Grade A: Low corrosion resistance (24 h), no temperature requirement
- Grade C: High corrosion resistance (96 h), no temperature requirement
- Grade D: Very high corrosion resistance (240 h), no temperature requirement
- Grade F: High corrosion resistance (96 h), Temperature requirement: -10°C to +60°C
- Grade G: Very high corrosion resistance (240 h), Temperature requirement: -10°C to +60°C

7 Security and drill resistance

Grade	Side force on deadbolt	Disengaging force	Deadbolt projection	In case of hook, resistance for pulling of anti-separation bolt	In case of hook, resistance to forcing of anti-lifting device in sliding door lock	Drill resistance
0	-	-	-	-	-	-
1	1 kN	1 kN	10 mm	1 kN	1 kN	no
2	3 kN	2 kN	12 mm	3 kN	3 kN	no
3	5 kN	4 kN	14 mm	5 kN	3 kN	no
4	7 kN	5 kN	20 mm	7 kN	5 kN	no
5	7 kN	5 kN	20 mm	7 kN	5 kN	yes
6	10 kN	6 kN	20 mm	10 kN	6 kN	no
7	10 kN	6 kN	20 mm	10 kN	6 kN	yes

note: 1 kN = 100 kg

8 Key identification of lever locks

- Grade 0: No requirement
- Grade A: Minimum three detaining elements
- Grade B: Minimum five detaining elements
- Grade C: Minimum five detaining elements, extended number of effective differs
- Grade D: Minimum six detaining elements
- Grade E: Minimum six detaining elements, extended number of effective differs
- Grade F: Minimum seven detaining elements
- Grade G: Minimum seven detaining elements, extended number of effective differs
- Grade H: Minimum eight detaining elements, extended number of effective differs