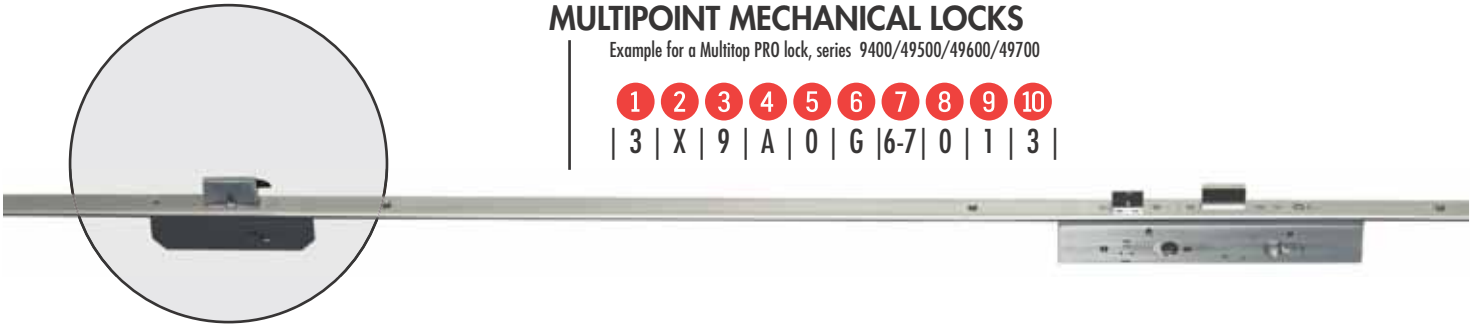


MULTIPOINT MECHANICAL LOCKS

Example for a Multipoint PRO lock, series 9400/49500/49600/49700

1 2 3 4 5 6 7 8 9 10
| 3 | X | 9 | A | 0 | G | 6-7 | 0 | 1 | 3 |



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

3 Door mass and closing force

- Grade 0: Multipoint locks without a latch bolt (latching function)
- 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 50 N maximum closing force as specified by the manufacturer
- 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 25 N maximum closing force as specified by the manufacturer
- 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 15 N maximum closing force as specified by the manufacturer

4 Suitability for use on fire resistance and smoke control doors

- Grade 0: not verified for use on fire resisting /smoke control door set assemblies;
- Grade A: for use on smoke control door set assemblies based on a test in accordance with EN 1634-3 where the multipoint lock contributes to the integrity;
- Grade B: for use on smoke control and fire resisting door set assemblies based on a test in accordance with EN 1634-1 or EN 1634-2 where the multipoint lock contributes to the integrity;
- Grade N: for use on smoke control and fire resisting door set assemblies based on tests where the multipoint 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 for locking points

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: Not applicable;
- 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

9 Security for anti-separation points

Grade	Side force on deadbolt	Disengaging force	Anti-separation point bolt 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	5 mm	1 kN	1 kN	no
2	3 kN	2 kN	5 mm	1 kN	1 kN	no
3	3 kN	2 kN	5 mm	3 kN	3 kN	no
4	5 kN	4 kN	5 mm	5 kN	4 kN	no
5	7 kN	5 kN	5 mm	7 kN	5 kN	yes
6	10 kN	6 kN	5 mm	10 kN	6 kN	no
7	10 kN	6 kN	5 mm	10 kN	6 kN	yes

note: 1 kN = 100 kg

10 Clenching points

- Grade 0: No clenching force requirements
- Grade 1: Clenching force = 10 N
- Grade 2: Clenching force = 25 N
- Grade 3: Clenching force = 50 N
- Grade 4: Clenching force = 120 N