



## ELECTRICAL LOCKS

Example for a Multitop PRO lock, series 19225

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

### 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 latchbolt
Grade B:	100 000 test cycles	No load on latchbolt
Grade C:	200 000 test cycles	No load on latchbolt
Grade F:	50 000 test cycles	10 N load on latchbolt
Grade G:	100 000 test cycles	10 N load on latchbolt
Grade H:	200 000 test cycles	10 N load on 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
Grade Y:	200 000 test cycles	250 N load on latchbolt

### 3 Door mass and closing force

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/smoke doors

- Grade 0: Not intended for use on smoke/fire door assemblies
- Grade A: Suitable for use on smoke door assemblies - based solely on the requirements of the relevant product standard
- Grade B: Suitable for use on smoke/fire door assemblies: with a classification time of: 15 min
- Grade C: Suitable for use on smoke/fire door assemblies: with a minimum classification time of: 30 min
- Grade D: Suitable for use on smoke/fire door assemblies: with a minimum classification time of: 60 min
- Grade E: Suitable for use on smoke/fire door assemblies: with a minimum classification time of: 90 min
- Grade F: Suitable for use on smoke/fire door assemblies: with a classification time of: 120 minor grater

### 5 Safety

- Grade 0: No safety requirement

### 6 Environmental suitability

Grade 0:	No defined resistance	No defined resistance	No defined resistance
Grade A:	No defined resistance	No defined resistance	+40 °C with initial relative humidity of 95 %
Grade B:	No defined resistance	No defined resistance	+55 °C with initial relative humidity of 95 %
Grade C:	Low resistance (24 h)	+5 °C to +55 °C	+40 °C with initial relative humidity of 95 %
Grade D:	Moderate resistance (48 h)	+5 °C to +55 °C	+40 °C with initial relative humidity of 95 %
Grade E:	High resistance (96 h)	+5 °C to +55 °C	+40 °C with initial relative humidity of 95 %
Grade F:	Very high resistance (240 h)	+5 °C to +55 °C	+40 °C with initial relative humidity of 95 %
Grade G:	Moderate resistance (48 h)	-10 °C to +55 °C	+40 °C with initial relative humidity of 95 %
Grade H:	High resistance (96 h)	-10 °C to +55 °C	+40 °C with initial relative humidity of 95 %
Grade J:	Very high resistance (240 h)	-10 °C to +55 °C	+40 °C with initial relative humidity of 95 %
Grade K:	Moderate resistance (48 h)	-25 °C to +70 °C	+55 °C with initial relative humidity of 95 %
Grade L:	High resistance (96 h)	-25 °C to +70 °C	+55 °C with initial relative humidity of 95 %
Grade M:	Very high resistance (240 h)	-25 °C to +70 °C	+55 °C with initial relative humidity of 95 %
Grade N:	No defined resistance	-25 °C to +70 °C	+40 °C with initial relative humidity of 95 %
Grade P:	No defined resistance	-25 °C to +70 °C	+55 °C with initial relative humidity of 95 %

### 7 Security and drill resistance

Grade	Side force on deadbolt	Disengaging force	Deadbolt projection	In case of hook, resistance for pulling of antiseperation bolt	In case of hook, resistance to forcing of antilifting 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: 1kN = 100 kg

### 8 Security - electrical function

- Grade 0: no requirement
- Grade 1: status indication

### 9 Security - electrical manipulation

Grade	Voltage drop protection	Protection against the effect of cutting cables	Protection against the effects of wire manipulation	Resistance to electromagnetic manipulation	Resistance to electrostatic discharge	Resistance to electrostatic manipulation
0						
1					Level 2 (EN 61000-4-2)	
2	yes	yes		yes	Level 4 (EN 61000-4-2)	Level 4 (EN 61000-4-2)
3	yes	yes	yes	yes	Level 4 (EN 61000-4-2)	Level 4 (EN 61000-4-2)