

## prEN 15685:2024 – Mechanical multipoint locks

### Classification key



**The classification reached by the product is shown on the product itself or on the minimum packaging and in the certificate issued by an independent body**

#### Category of use (1<sup>st</sup> digit)

- 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)

#### Durability (2<sup>nd</sup> digit)

	Latch bolt		Shared latch action			Deadbolt	
	by handle	Load	by key	by handle	Load	Manual by key	Self-locking
<b>grade A:</b>	50 000 cycles	0 N	12.500 cycles	37.500 cycles	0 N	12.500 cycles	50 000 cycles
<b>grade B:</b>	100 000 cycles	0 N	25.000 cycles	75.000 cycles	0 N	25.000 cycles	100 000 cycles
<b>grade C:</b>	200 000 cycles	0 N	50.000 cycles	150.000 cycles	0 N	50.000 cycles	200 000 cycles
<b>grade G:</b>	100 000 cycles	10 N	25.000 cycles	75.000 cycles	10 N	25.000 cycles	100 000 cycles
<b>grade H:</b>	200 000 cycles	10 N	50.000 cycles	150.000 cycles	10 N	50.000 cycles	200 000 cycles
<b>grade L:</b>	100 000 cycles	25 N	25.000 cycles	75.000 cycles	25 N	25.000 cycles	100 000 cycles
<b>grade M:</b>	200 000 cycles	25 N	50.000 cycles	150.000 cycles	25 N	50.000 cycles	200 000 cycles
<b>grade R:</b>	100 000 cycles	50 N	25.000 cycles	75.000 cycles	50 N	25.000 cycles	100 000 cycles
<b>grade S:</b>	200 000 cycles	50 N	50.000 cycles	150.000 cycles	50 N	50.000 cycles	200 000 cycles
<b>grade W:</b>	100 000 cycles	120 N	25.000 cycles	75.000 cycles	120 N	25.000 cycles	100 000 cycles
<b>grade X:</b>	200 000 cycles	120 N	50.000 cycles	150.000 cycles	120 N	50.000 cycles	200 000 cycles

#### Door mass and closing force (3<sup>rd</sup> digit)

	Door mass	Closing force
<b>grade 0:</b>	Lock without latch bolt	0 ÷ 15 N
<b>grade 1:</b>	≤ 100 kg	25 ÷ 50 N
<b>grade 2:</b>	≤ 200 kg	
<b>grade 3:</b>	≥ 200 kg as specified by the manufacturer	
<b>grade 4:</b>	≤ 100 kg	15 ÷ 25 N
<b>grade 5:</b>	≤ 200 kg	
<b>grade 6:</b>	≥ 200 kg as specified by the manufacturer	
<b>grade 7:</b>	≤ 100 kg	0 ÷ 15 N
<b>grade 8:</b>	≤ 200 kg	
<b>grade 9:</b>	≥ 200 kg as specified by the manufacturer	

#### Suitability for use on fire/smoke doors (4<sup>th</sup> digit)

- grade 0:** not approved for use on fire/smoke resisting door assemblies
- grade A:** for use on smoke door assemblies based on the requirements of prEN15685:2009 Annex A
- grade B:** for use on smoke and fire door assemblies based on a test in accordance with EN 1634-1

#### Safety (5<sup>th</sup> digit)

- grade 0:** No Safety requirements

### Corrosion resistance and temperature (6<sup>th</sup> digit)

	Corrosion resistance	Temperature range
grade 0:	no defined corrosion resistance	no temperature requirement
grade A:	low corrosion resistance (24h NSS)	no temperature requirement
grade B:	moderate corrosion resistance (48h NSS)	no temperature requirement
grade C:	high corrosion resistance (96h NSS)	no temperature requirement
grade D:	very high corrosion resistance (240h NSS)	no temperature requirement
grade F:	high corrosion resistance (96h NSS)	-10 ÷ +60 °C
grade G:	very high corrosion resistance (240h NSS)	-10 ÷ +60 °C

### Security for locking points (7<sup>th</sup> digit)

	side load on locking point	Torque resistance of lockable follower	Min. projection before F5 application	deadbolt before End load	Resulting projection after application	Strong key attack on lever locks
	F4	M5	L1	F5	L2	M6
grade 0:	-	-	-	-	-	-
grade 1:	1 kN	-	10 mm	1 kN	8 mm	-
grade 2:	3 kN	-	12 mm	2 kN	10 mm	-
grade 3:	5 kN	100 Nm	14 mm	4 kN	11 mm	100 Nm
grade 4:	7 kN	150 Nm	20 mm	5 kN	17 mm	100 Nm
grade 5:	7 kN / 3 min. drill	150 Nm	20 mm	5 kN / 3 min. drill	17 mm	100 Nm
grade 6:	10 kN	200 Nm	20 mm	6 kN	17 mm	100 Nm
grade 7:	10 kN / 5 min. drill	200 Nm	20 mm	6 kN / 5 min. drill	17 mm	100 Nm

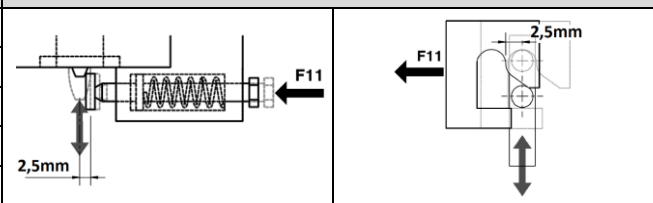
### Key identification of lever locks (8<sup>th</sup> digit)

	Min. nr. of detaining elements	Min. nr. of effective differs	Min. nr. of differing steps height on key	Non interpassing of keys	Coding protection
grade 0:	No requirements (e.g. lock operated by cylinder according to EN1303 or EN15684)				
grade A:	3	100	2	YES	NO
grade B:	5	1.000	3	YES	YES
grade C:	5	10.000	3	YES	YES
grade D:	6	4.000	3	YES	YES
grade E:	6	20.000	3	YES	YES
grade F:	7	6.000	4	YES	YES
grade G:	7	50.000	4	YES	YES
grade H:	8	100.000	4	YES	YES

### Security for anti-separation points (9<sup>th</sup> digit)

	Anti-separation projection		Resistance to disengaging force	Resistance to pulling force	Resistance to forcing anti lifting Sliding doors
	L1	H1	F5	F6	F7
grade 0:	-	-	-	-	-
grade 1:	10 mm	5 mm	1 kN	1 kN	1 kN
grade 2:	10 mm	5 mm	2 kN	2 kN	2 kN
grade 3:	10 mm	5 mm	4 kN	5 kN	5 kN
grade 4:	10 mm	5 mm	5 kN	7 kN	7 kN
grade 5:	10 mm	5 mm	5 kN / 3 min. drill	7 kN / 3 min. drill	7 kN / 3 min. drill
grade 6:	10 mm	5 mm	6 kN	10 kN	10 kN
grade 7:	10 mm	5 mm	6 kN / 5 min. drill	10 kN / 5 min. drill	10 kN / 5 min. drill

### Clenching points (10<sup>th</sup> digit)

Clenching		Extra closing stroke 2,5 mm		Durability of clenching
grade	F11 in opening direction to simulate door gaskets			
grade 0:	-			<p>The number of cycles is 75% of latch action</p>
grade 1:	10 N			
grade 2:	25 N			
grade 3:	50 N			
grade 4:	120 N			