

# BS 3621 : 2017

## BS 3621 : 2017 Lock assemblies operated by key from both the inside and outside of the door

Products tested to British and European standards provide greater durability, longer warranty periods, peace of mind and evidence of professional specification.

BS 3621 2017 Specifies the performance requirements and test methods for a thief-resistant mechanically operated single-point lock assembly (including locking plates, fixing screws, fitting instructions, cylinders and protective furniture where appropriate) that:

- a) incorporates a lock conforming to BS EN 12209:2016 that can be locked from both sides with a key thereby only allowing key egress; and
- b) is used in doors, window doors and entrance doors in buildings.

This standard does not cover thief-resistant lock assemblies that provide keyless egress, i.e. lock assemblies that can always be unlocked from the inside without the need for a key, or lock assemblies that provide a secure (no egress) mode in addition to keyless egress.

### Conformity to BS 3621

In order for a lock or cylinder to conform to BS 3621 it must conform to the following classifications in respect of BS EN 12209: 2016 or BS EN 1303:2015.

## Required Classification for locks to EN 12209 : 2016

### Digit 1 - Category of use

**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.

### Digit 2 - Durability

**Grade M:** 200 000 test cycles; 25N 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

### Digit 3 - Door mass and closing force

**Grade 0:** Locks without a latch bolt

**Grade 4:** up to 100 kg door mass; 25N maximum closing force

**Grade 7:** up to 100 kg door mass; 15 N maximum closing force

### Digit 4 - Suitability for use on fire resisting and/or smoke control doorset.

**Grade 0:** not verified for use on fire/smoke resisting door 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 as described in Annex A

**Grade B:** for use on smoke control and fire resisting doorset assemblies based on a test in accordance with EN 1364-1 or EN 1634-2 where the lock contributes to the integrity as described in Annex A

**Grade N:** for use on smoke control and fire resisting doorset assemblies based on a tests where the lock does not contribute to keeping the door in a closed position during the fire resisting and/or smoke control test as described in Annex A.

### Digit 5 - Safety

**Grade 0:** no safety requirement.

### Digit 6 - Corrosion Resistance and temperature

**Grade F:** high corrosion resistance; (96h) temperature requirement: from -10°C to + 60°C

**Grade G:** very high corrosion resistance;(240h) temperature requirement: from -10°C to + 60°C

### Digit 7 - Security and drill resistance

**Grade 7:** Very high security with drill resistance.

### Digit 8 - Key identification of lever locks

**Grade B:** Minimum five detaining elements

## Required Classification for locks to EN 1303 : 2015

### Digit 1 - Category of use

**Grade 1:** Keys shall resist a torque of 2.5Nm and still be usable. This is for use by people with a high incentive to exercise care and with a small chance of misuse.

### Digit 2 - Durability

**Grade 6:** 100,000 cycles.

### Digit 3 - Door mass and closing force

Grade 0 - No requirement.

 [lloydworrall.co.uk](http://lloydworrall.co.uk)

Lloyd Worrall has checked with sources believed to be reliable in their efforts to provide information that is accurate, comprehensive and timely at the date of publication. However, changes can and will occur. Lloyd Worrall expressly disclaims any representation or warranty, expressed or implied, concerning the accuracy, comprehensiveness, or suitability of the information for a particular purpose. Lloyd Worrall has produced this document in good faith and is not responsible for any error, omissions, or results obtained from the use of this document.

# BS 3621 : 2017

## BS 3621 : 2017 Lock assemblies operated by key from both the inside and outside of the door

Products tested to British and European standards provide greater durability, longer warranty periods, peace of mind and evidence of professional specification.

BS 3621 2017 Specifies the performance requirements and test methods for a thief-resistant mechanically operated single-point lock assembly (including locking plates, fixing screws, fitting instructions, cylinders and protective furniture where appropriate) that:

- a) incorporates a lock conforming to BS EN 12209:2016 that can be locked from both sides with a key thereby only allowing key egress; and
- b) is used in doors, window doors and entrance doors in buildings.

This standard does not cover thief-resistant lock assemblies that provide keyless egress, i.e. lock assemblies that can always be unlocked from the inside without the need for a key, or lock assemblies that provide a secure (no egress) mode in addition to keyless egress.

### Conformity to BS 3621

In order for a lock or cylinder to conform to BS 3621 it must conform to the following classifications in respect of BS EN 12209: 2016 or BS EN 1303:2015.

### Digit 4 – Suitability for use on fire resisting and/or smoke control doorset.

**Grade 0:** Not approved for use on fire/smoke door assemblies

**Grade A:** Cylinders shall be subjected to a smoke test in accordance with EN 1634-3 or materials for the parts of the cylinder responsible for preventing any leakage of smoke shall have a melting point not less than 840 °C

**Grade B:** Cylinders shall be fire tested in accordance with current fire test requirements of EN 1634-1 or EN 1634-2 or materials for the parts of the cylinder responsible for preventing the spread of fire shall have a melting point not less than 300 °C

### Digit 5 - Safety

**Grade 0** - No requirement.

### Digit 6 - Corrosion Resistance and temperature

**Grade C:** high corrosion resistance, temperature requirement from to - 25 °C and + 65 °C

### Digit 7 - Key Security

Requirement	Unit		
		5	6
Min number of effective differs	Number	30,000	100,000
Min number of movable retainers	Number	6	6
Max number of identical	%	60	50
Max number of identical adjacent steps	Number	2	2
Direct coding on key	-	No	No
Operation of security mechanism (interpassing) torque	Nm	15	15
Torque resistance of plug/cylinder	Nm	15	15

### Digit 8 – Attack resistance

Requirement	Unit	
		D
Resistance to drilling (nett drilling time)	Minutes	5 to 10
Resistance to chisel attack (number of defined blows)	Number	40
Resistance to twisting attack (no. of defined twists)	Number	30
Resistance to plug/cylinder extraction (force)	kN	15
	minutes	5 to 15
Torque resistance of plug/cylinder (torque)	Nm	No