

Fortress Interlocks

BMR & BMSR

Modular Bolt Lock with Rotary Switch

Description

The **BMR** is a robust, modular mechanical bolt interlock complete with rotary switch(es) that is used to interface with power breakers, valves, earth switches etc, where hazards need to be indirectly interlocked (often with the use of levers and cams). This product is also available in full stainless steel as the **BMSR**. The **BMR** and **BMSR** can be fitted with 20A, 32A, 63A or 150A switches. The 20A and 32A switches can be fitted behind each module. The 63A and 150A switches must not have any switch fitted behind the immediately adjacent module(s)

Features and Benefits

- No product handling issues
- Horizontal and vertical mounting
- Multiple lock versions eliminate the need for separate key exchange boxes
- 16mm Diameter bolt with 16mm of travel
- Variable bolt length
- Front, top or bottom fixing
- Lock Tested to over 1,000,000 operations
- Switches tested to 75,000 operations
- Durable plated bodies (BMR), Stainless Steel Bodies (BMSR)
- Patented sequencing system with up to 39,000 different sequences in a BMR10
- Easy to configure
- Sequential or non sequential key operation
- Extend or trim-down units and use surplus modules elsewhere
- Minimal maintenance
- Slim and attractive design
- Switch(es) sealed behind panel

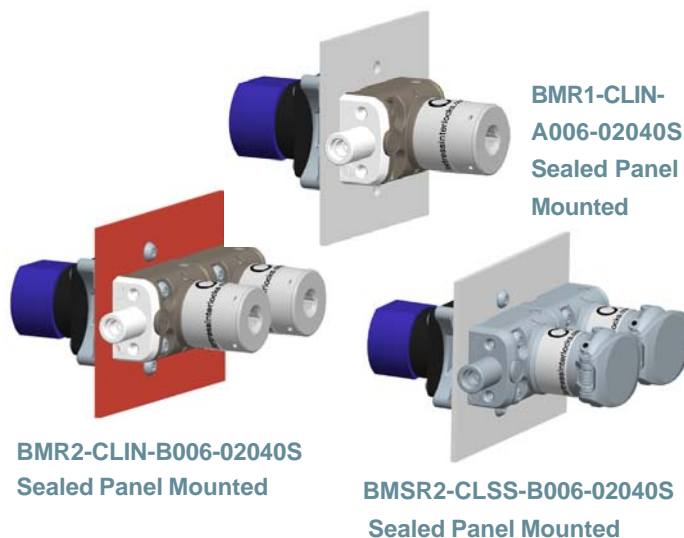
Application

Part of an interlock system, deadbolts are usually used to lock energy sources in the OFF position or lock devices in a required position.

Operation

BMR1 Single Module - With the key free the bolt is usually in the extended position. To retract the bolt the key must be inserted and trapped (reverse sequence is available upon request). The operation of the key extends or withdraws the bolt which in turn changes the contacts on the switch.

Product Data Sheet



BMR2-CLIN-B006-02040S
Sealed Panel Mounted

BMSR2-CLSS-B006-02040S
Sealed Panel Mounted

The bolt may be used to interface with the mechanical linkages e.g. levers or cams on proprietary switchgear applications. Mounting kits must be either fabricated to suit or some are available from switchgear manufacturers.

BMR2-10 Multiple Modules - With the primary key free the bolt is usually in the extended position. To retract the bolt the primary key must be inserted, turned and trapped in the primary lock, and the secondary key turned and removed from the secondary lock (other sequences available on request). The operation of the key extends or withdraws the bolt which in turn changes the contacts on the switch. The bolt may be used to interface with the mechanical linkages e.g. levers or cams on proprietary switchgear applications.

Construction BMR

Body Housing: Die-cast zinc body with pearl bronze finish.

Internals: All stainless steel contact components.

Bolt: All stainless steel.

Lock Mechanism: CL or ML lock types are of die-cast zinc body with stainless steel operating mechanism.

Key: Stainless steel.



CL & ML Keys
are sold separately

Construction BMSR

Body Housing: Full stainless steel

Internals: Full stainless steel

Bolt: All stainless steel.

Lock Mechanism: CLS or MLS lock types are of all stainless steel.

Key: Stainless steel.

Spring Loaded Dustcover: Stainless steel.

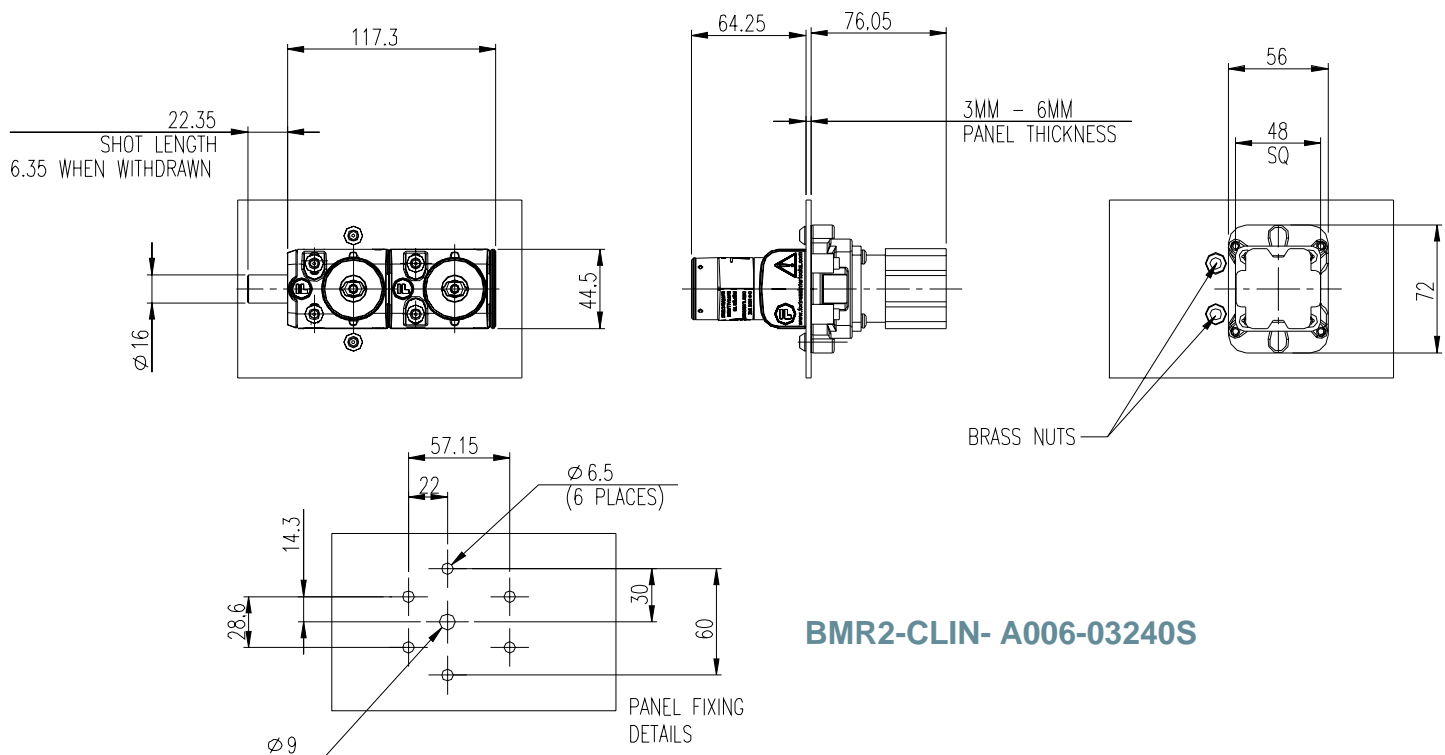
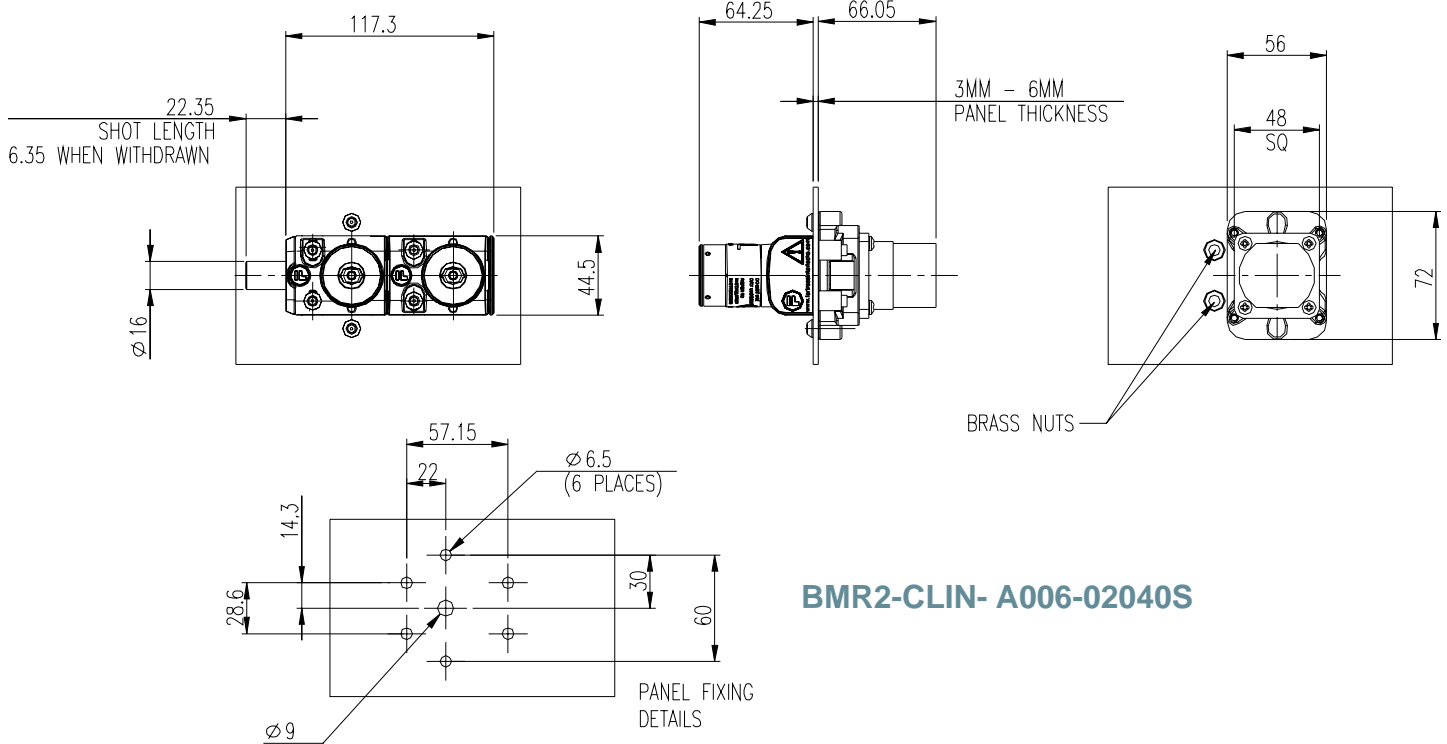
Options BMR and BMSR

- Stainless steel spring-loaded dust cover (BMR only standard on BMSR)
- Extended/shortened bolt
- Optional key/bolt sequences
- Lock portions may be CL or ML
- Colour Coding on locks and keys
- 20A, 32A, 63A or 150A switches
- 4NO or 2NO 2NC Switch Contacts
- Back of Board mounting available upon request



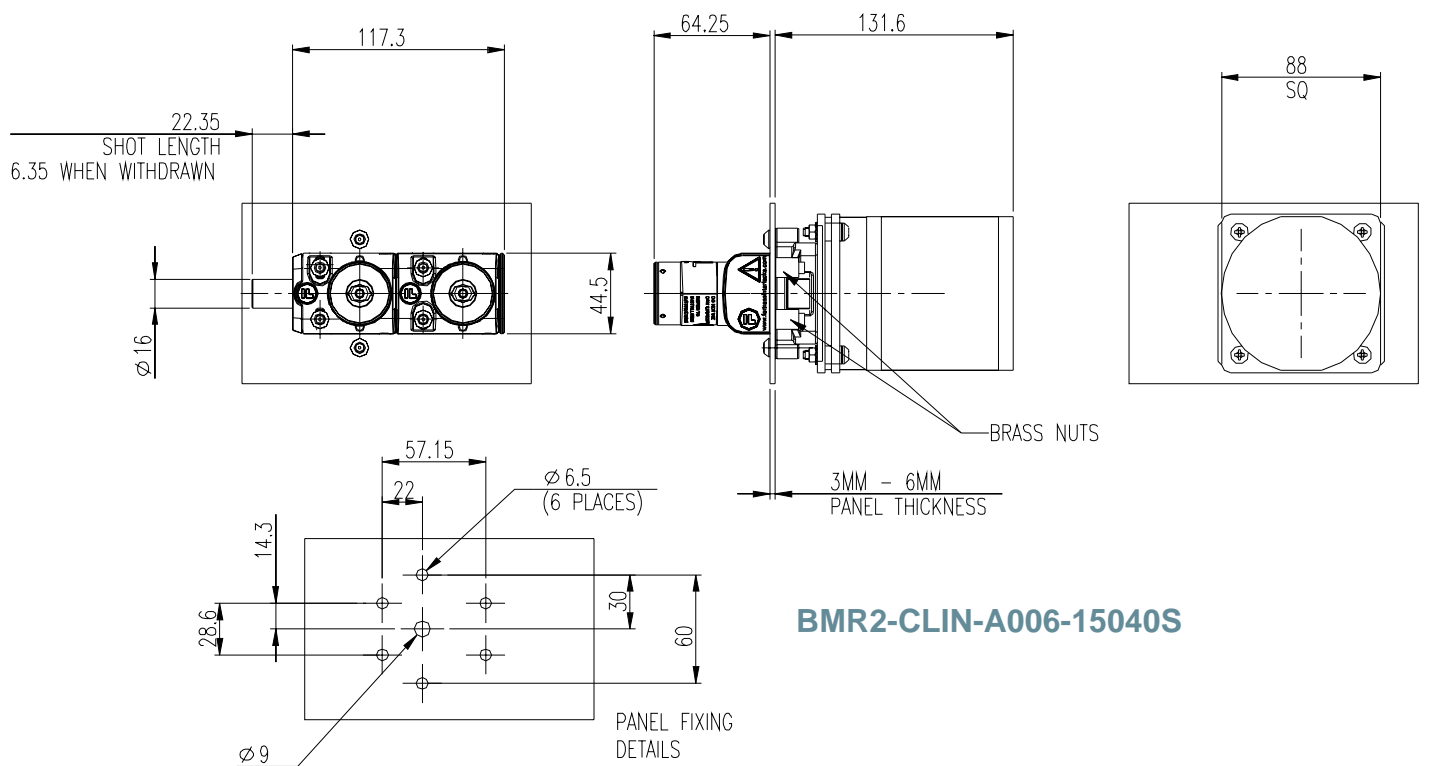
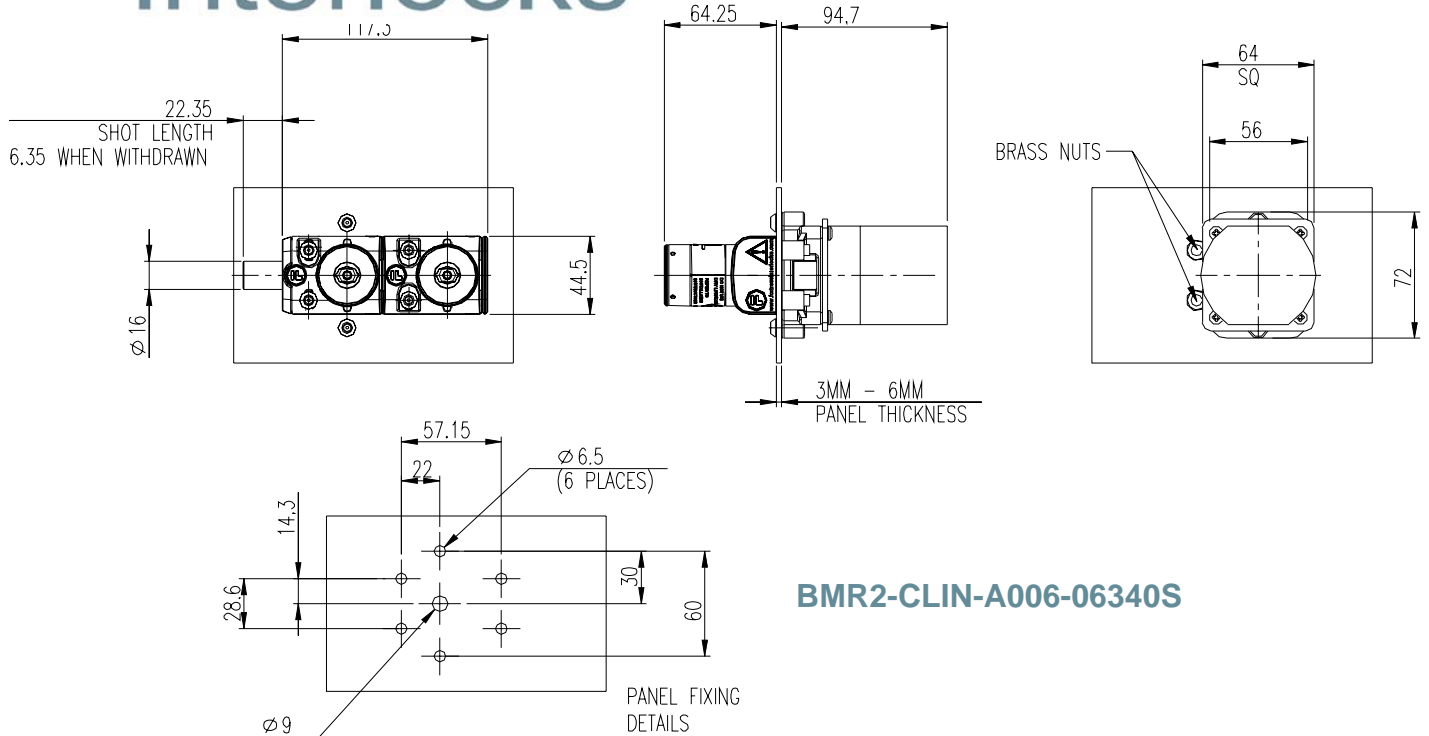
Fortress Interlocks

Technical Data Sheet



Fortress Interlocks

Technical Datasheet



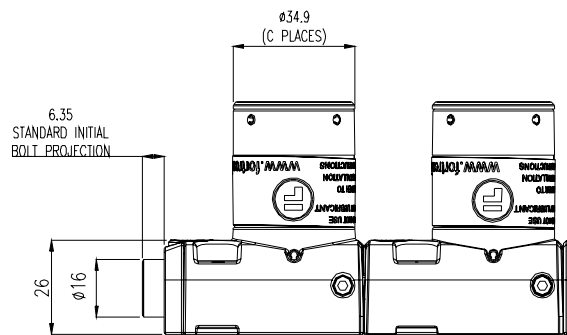
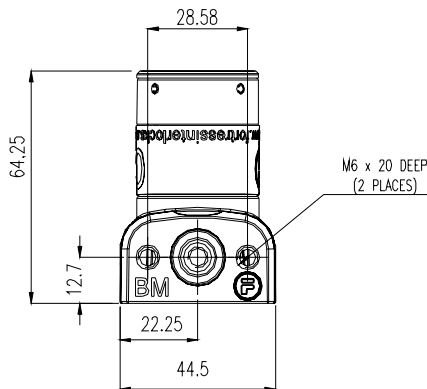
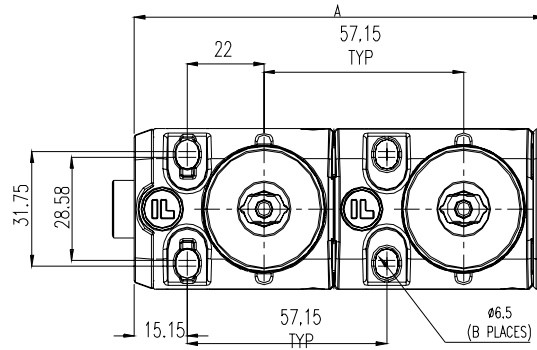


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Technical Data Sheet

PRODUCT	DIM A OVERALL LENGTH	DIM B NO OF SLOTTED HOLES	DIM C NO OF CL LOCKS
BM1	60.15	2	1
BM2	117.3	4	2
BM3	174.45	6	3
BM4	231.6	8	4
BM5	288.75	10	5
BM6	345.9	12	6
BM7	403.05	14	7
BM8	460.2	16	8
BM9	517.35	18	9
BM10	574.5	20	10

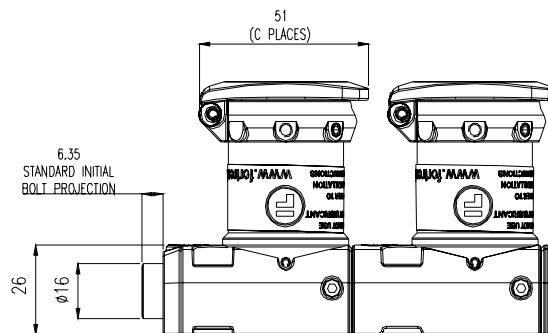
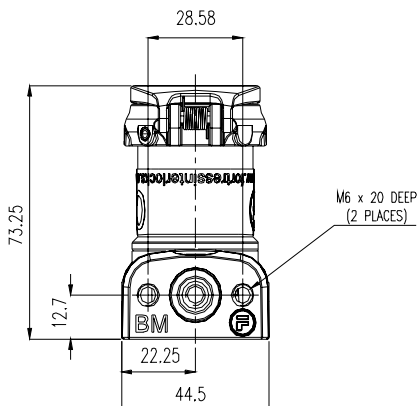
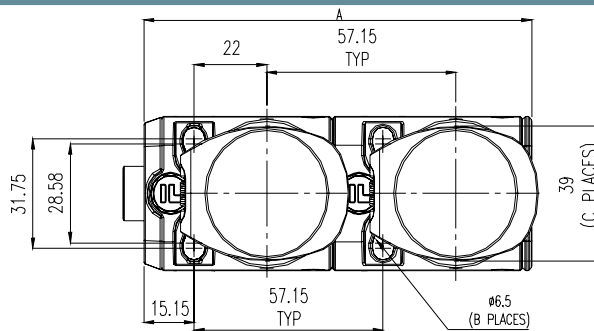
ALL DIMENSIONS ARE NOMINAL AND ARE SUBJECT TO MANUFACTURING TOLERANCES



BOLT TRAVEL IS 16mm.

PRODUCT	DIM A OVERALL LENGTH	DIM B NO OF SLOTTED HOLES	DIM C NO OF CLS LOCKS
BMS1	60.15	2	1
BMS2	117.3	4	2
BMS3	174.45	6	3
BMS4	231.6	8	4
BMS5	288.75	10	5

ALL DIMENSIONS ARE NOMINAL AND ARE SUBJECT TO MANUFACTURING TOLERANCES



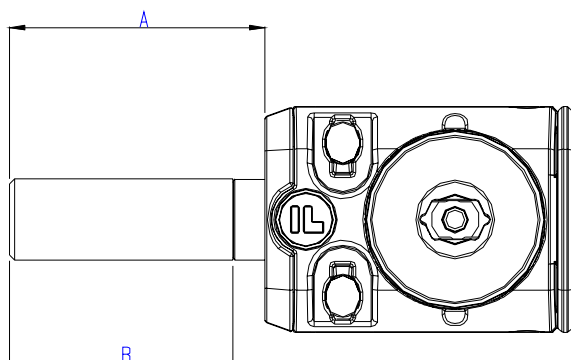
BOLT TRAVEL IS 16mm.



Fortress Interlocks

Technical Data Sheet

Extension Bolt



DIM A INITIAL PROJECTION	DIM B EXTENSION LENGTH
0	SHORTENED BOLT
6.35	NO EXTENSION
50	43.65
150	143.65

OTHER INITIAL BOLT PROJECTIONS BETWEEN 0 AND 150
ARE AVAILABLE UPON REQUEST



XMA

Add-On Module(s)

The XMA module(s) can be added to an existing **BMR** product for system expansion at any stage. XMSA module(s) are available for the BMSR.

Starting from the left and working across select a coloured option for each section heading. This will generate a part number.

Example Part Numbers: BMR3-CLIN-A006-02040S, BMSR3-CLSS-B050-15022S

Part Number

Product	No. of Locks	Lock Type	Lock Material	Dust cover	Sequence	Bolt Length	Switch Current	Switch Contacts		Mounting			
								NO	NC				
BMR	1 -	CL	Stainless steel	None -	A	006 -	020	4	0	S Sealed Panel Mounting			
	2 -	ML			Internals						B	050 -	032
	3 -		C								150 -	063	
	4 -		D										150
	5 -		Full S stainless steel										Stain- less steel -
6 -	BMSR (1 to 5 only)												
7 -													
8 -													
9 -													
10 -													

Sequence Key

Sequence	Explanation
A	Primary Key Free, Secondary Key Trapped, Bolt Shot
B	Primary and Secondary Keys Free, Bolt Shot
C	Primary and Secondary Keys Free, Bolt Withdrawn
D	Primary Key Free, Secondary Key Trapped, Bolt Withdrawn