

# LOCK SWITCH

## RAL LOCK SWITCH WITH A MAINSWITCH MODULE

### ELECTRICAL & MECHANICAL SPECIFICATION

<b>Switch Rating:</b>	4/80A @ 250V ac/dc	<b>Life:</b>	>10,000 Cycles
<b>Proof Voltage:</b>	1,000V ac (Initial)	<b>Operating Temperature:</b>	-30°C to +85°C
<b>Insulation Resistance:</b>	>999 MΩ at 500V dc (Initial)	<b>Operating Torque (nominal):</b>	7.2Nm
<b>Contact Resistance</b>	<20 mΩ (Initial)	<b>End Stop Torque (nominal):</b>	1.2Nm
<b>Contact/Terminal Material:</b>	Brass CZ108 Ag Plated	<b>Lock Housing Material:</b>	Zinc Alloy Bright Cr Plated
<b>Wafer Material:</b>	Polyphenylene Sulphide (PPS)	<b>Keys Material:</b>	Mild Steel Ni Plated

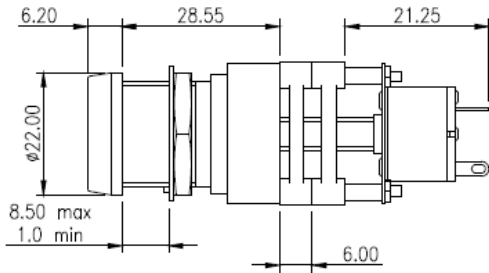
### FEATURES

Multi-wafer switch	2 keys per switch as standard	Non-shorting BBM (break before make) or Shorting MBB (make before break)	Two stage assembly: lock inserted from the inside and the lock bezel screws on from the front to secure the assembly
Up to 6 poles per switch	Lock movement 60° or 90°		
Solder terminals	30°, 45°, 60° or 90° module indexing		
Silver contacts			
Made in the UK	Common or differ keys		
	Master key system available		

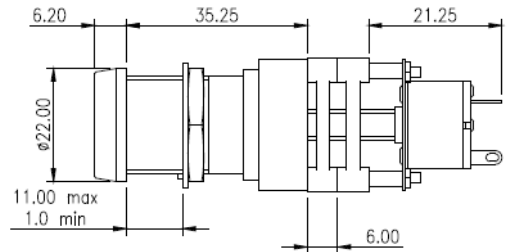
  

		<b>5RAL</b>	<b>8RAL</b>
Max panel thickness		8.5 mm	11.0mm
Lock type:		5 disc	8 disc
Differs		200	2000
Max. wafers		6 or 2 plus 2 pole mains switch	

### MULTI- WAFER RAL LOCKSWITCHES WITH MAINS MODULE

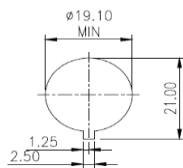


5-RAL-001 (Keys free at 90° intervals)  
5-RAL-002 (Keys free at 60° intervals)

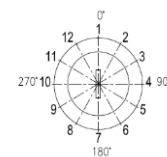


8-RAL-001 (Keys free at 90° intervals)  
8-RAL-002 (Keys free at 60° intervals)

#### PANEL PIERCING



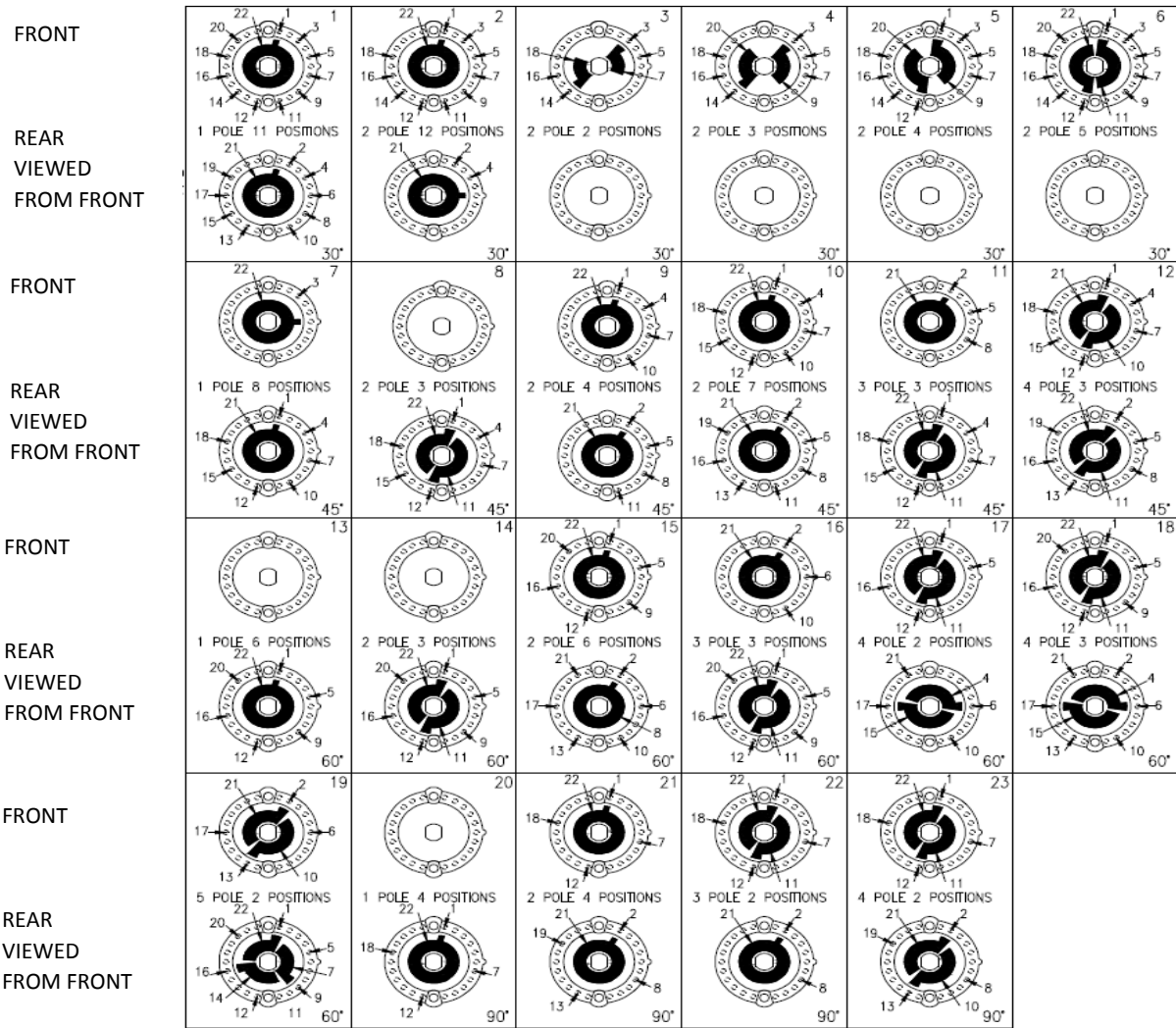
#### LOCK MOVEMENT DESC.



STANDARD CIRCUITRY AND KEY WITHDRAWAL POSITIONS

INDEXING ANGLE	STANDARD CIRCUITS NON SHORTING CONTACTS SOLDER TERMINALS						TOTAL SWITCH MOVEMENT	KEY FREE POSITIONS				
	1 ROLE	2 ROLE	3 ROLE	4 ROLE	5 ROLE	6 ROLE		KRA	5RAL (200KEY DIFFERS)		8RAL (200KEY DIFFERS)	
								(200KEY DIFFERS) (KEY FREE 60° STEPS)	-001 (KEY FREE 90° STEPS)	-002 (KEY FREE 60° STEPS)	-001 (KEY FREE 90° STEPS)	-002 (KEY FREE 60° STEPS)
30°	2 WAY	2 WAY	2 WAY	2 WAY	2 WAY	2 WAY	0°-30°	1	1		1	
	3 WAY	3 WAY	3 WAY	3 WAY	3 WAY		0°-60°	1+3	1	1+3	1	1+3
	4 WAY	4 WAY	4 WAY	4 WAY			0°-90°		1/1+4		1/1+4	
	5 WAY	5 WAY	5 WAY				0°-120°	1+3+5	1/1+4	1+3+5	1/1+4	1+3+5
	6 WAY	6 WAY					0°-150°		1/1+4		1/1+4	
	7 WAY	7 WAY					0°-180°	1+3+5+7	1+7/1+4+7	1+3+5+7	1+7/1+4+7	1+3+5+7
	8 WAY						0°-210°					
	9 WAY						0°-240°	1+3+5+7+9		1+3+5+7+9		1+3+5+7+9
	10 WAY						0°-270°		1+4+7+10		1+4+7+10	
	11 WAY						0°-300°					
	12 WAY						0°-330°					
		12 WAY					0°-360° No Stop	1+3+5+7+9+11	1+7/1+4+7+10	1+3+5+7+9+11	1+7/1+4+7+10	1+3+5+7+9+11
45°	2 WAY	2 WAY	2 WAY	2 WAY			0°-45°		1		1	
	3 WAY	3 WAY	3 WAY	3 WAY			0°-90°		1/1+4		1/1+4	
	4 WAY	4 WAY					0°-135°					
	5 WAY	5 WAY					0°-180°	1+7	1+7/1+4+7		1+7/1+4+7	
	6 WAY	6 WAY					0°-225°					
	7 WAY	7 WAY					0°-270°		1+4+7+10		1+4+7+10	
	8 WAY						0°-315°					
		8 WAY					0°-360° No Stop	1+7	1+4+7+10		1+4+7+10	
60°	2 WAY	2 WAY	2 WAY	2 WAY	2 WAY		0°-60°	1/1+3	1	1+3	1	1+3
	3 WAY	3 WAY	3 WAY	3 WAY			0°-120°	1+3+5	1	1+3+5	1	1+3+5
	4 WAY	4 WAY					0°-180°	1+3+5+7	1+7/1+4+7	1+3+5+7	1+7/1+4+7	1+3+5+7
	5 WAY	5 WAY					0°-240°	1+3+5+7+9		1+3+5+7+9		1+3+5+7+9
	6 WAY	6 WAY					0°-300°					
		6 WAY	6 WAY		2 WAY		0°-360° No Stop	1+3+5+7+9+11	1+7/1+4+7+10	1+3+5+7+9+11	1+7/1+4+7+10	1+3+5+7+9+11
90°	2 WAY	2 WAY	2 WAY				0°-90°		1/1+4		1/1+4	
	3 WAY	3 WAY					0°-180°	1+7	1+7/1+4+7		1+7/1+4+7	
	4 WAY	4 WAY					0°-270°		1+7/1+4+7+10		1+7/1+4+7+10	
		4 WAY	4 WAY				0°-360° No Stop	1+7	1+7/1+4+7+10		1+7/1+4+7+10	

## TYPICAL WAFER LAYOUTS 30°, 45°, 60° AND 90°



WAFERS ABOVE ARE VIEWED FROM THE FRONT OF THE SWITCH IN THE FURTHEST COUNTER CLOCKWISE POSITION.

CIRCUITRY IS SHOWN AS BREAK BEFORE MAKE (BBM) NON-SHORTING.  
MAKE BEFORE BREAK (MBB) OPTIONS ARE ALSO AVAILABLE

### ORDERING CODES

PLEASE CONTACT US WITH YOUR REQUIREMENTS

