

CK ROTARY SWITCH

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	150mA@250V ac/dc resistive load
Current Carrying Capacity	5A non switching
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	1,500Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20 mΩ (initial)
Operating Torque (nominal)	Standard 8.6 ± 1 cNm Light Action 3.5 ± 0.5 cNm
End Stop Torque (nominal):	0.80 Nm
Moulding Material:	Polyamide 6.6 G.F.
Contact/Terminal Material:	Brass CZ108 Ag Plated

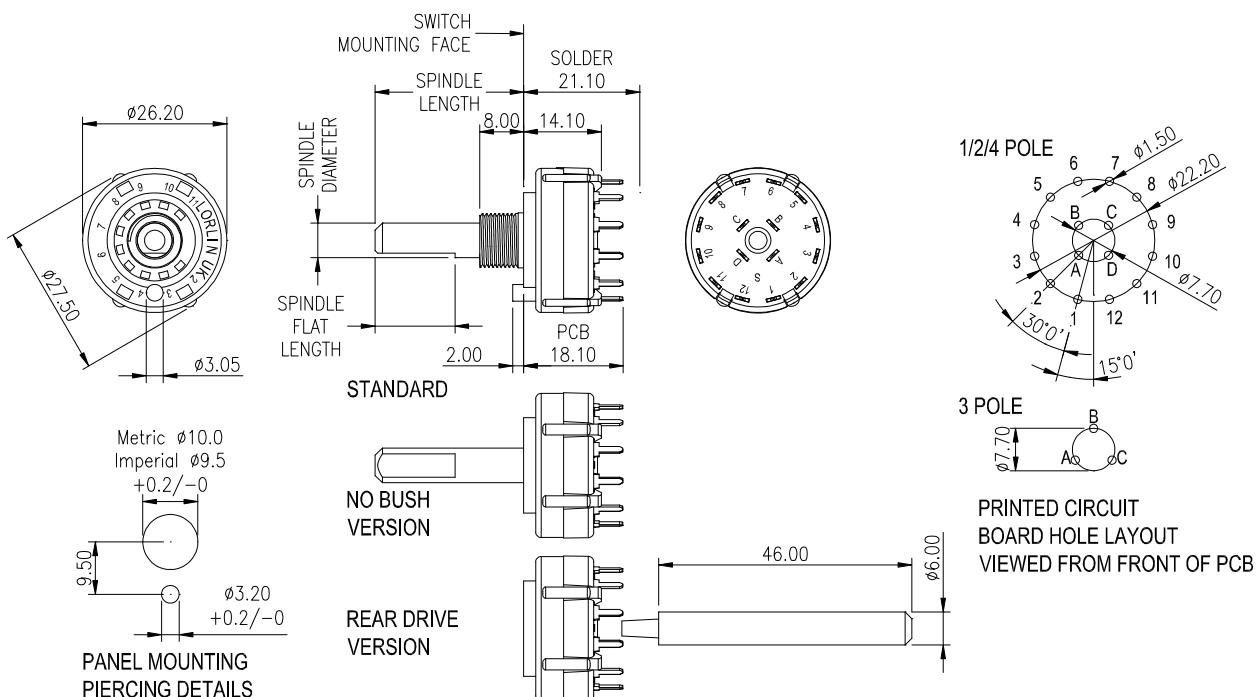
RoHS COMPLIANT



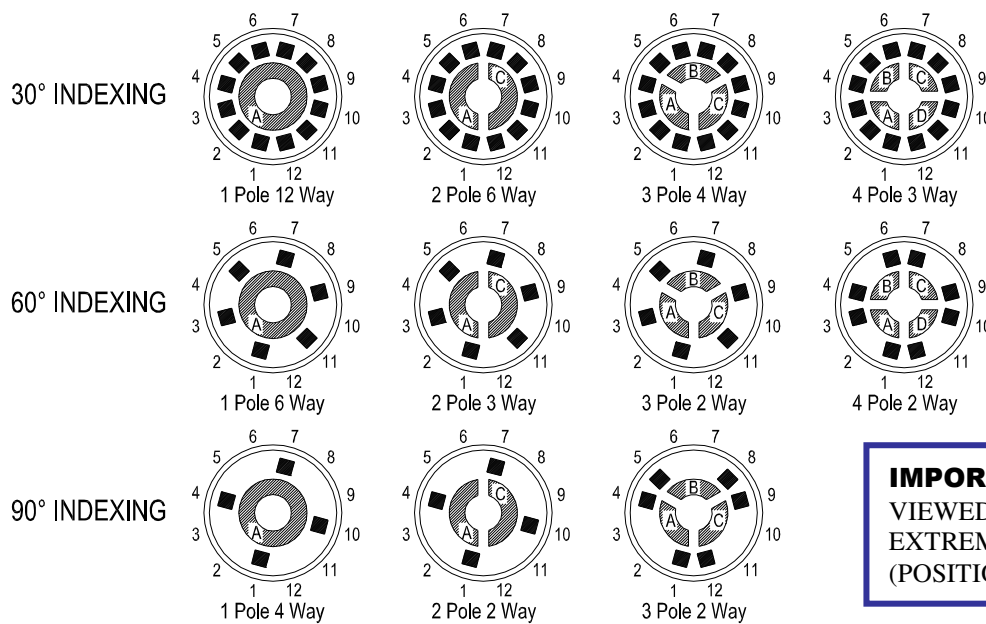
GENERAL FEATURES & OPTIONS

- Made in UK
- Cost effective single wafer switch
- Moulded 27.5mm diameter
- Standard 30° indexing
- Solder or Printed Circuit Board Terminals
- Up to 4 poles per switch
- Maximum 12 positions
- Shorting (make before break 30° indexing only) or non shorting (break before make) contacts.
- Adjustable stop to restrict number of positions
- Special options: 60° or 90° indexing, continuous rotation,
- Optional reinforcement ring.
- Fixed stop, UL-V0 rated material, gold flashed or gold plated contacts, and spindles with special flats, slots or knurls.
- No Bush versions available
- Rear Drive versions available
- Sealed PCB Termination available

CK ROTARY SWITCH SPECIFICATION SHEET



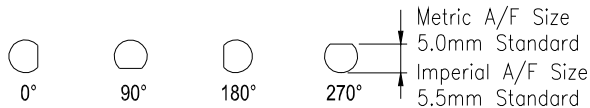
CK ROTARY SWITCH



IMPORTANT WAFERS FLATS & SLOTS VIEWED FROM THE FRONT OF SWITCH IN EXTREME ANTICLOCKWISE POSITION (POSITION 1)

SPINDLE FLAT ANGLE - AVAILABLE IN 15° INCREMENTS

SCREWDRIVER SLOT - AVAILABLE IN 45° INCREMENTS



ORDERING CODE FOR NON-STANDARD SWITCHES

C	K								
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SPINDLE LENGTH
FMF IN FULL MM

Index Angles & NO. OF POLES			NO OF WAYS (POSITIONS)			MBB or BBM	Contact Type	Contact Plating		SPINDLE DIAM.	SPINDLE FLAT DEPTH	BUSH DIAM.	LENGTH OF SPINDLE FLAT				ANGLE OF FLAT (°)			
A	30°	1Pole	A	2	A	BBM	Solder	SILVER	A	6mm	Nil	M10	A	2	N	15	A	0	N	195
B		2	B	3	B	MBB	Solder		B	6mm	5mm	M10	B	3	O	No Flat	B	15	O	
C		3	C	4	C	BBM	PCB		C	6.35mm	Nil	9.52 mm	C	4	P	16	C	30	P	210
D		4	D	5	D	MBB	PCB		D	6.35mm	5.5mm	9.52 mm	D	5	Q	17	D	45	Q	225
E	60°	1Pole	E	6	E	BBM	Solder	GOLD PLATE	E	6mm	Nil	M10	E	6	R	18	E	60	R	240
F		2	F	7	F	MBB	Solder		F	6mm	5mm	M10	F	7	S	19	F	75	S	255
G		3	G	8	G	BBM	PCB		G	6.35mm	Nil	9.52 mm	G	8	T	20	G	90	T	270
H		4	H	9	H	MBB	PCB		H	6.35mm	5.5mm	9.52 mm	H	9	U	21	H	105	U	285
I	90°	1Pole	I	10	I	BBM	Solder	GOLD FLASH	I	6mm	Nil	M10	I	10	V	22	I	120	V	300
J		2	J	11	J	MBB	Solder		J	6mm	5mm	M10	J	11	W	23	J	135	W	315
K		3	K	12	K	BBM	PCB		K	6.35mm	Nil	9.52 mm	K	12	X	24	K	150	X	330
			Z	No Stop	L	MBB	PCB		L	6.35mm	5.5mm	9.52 mm	L	13	Y	25	L	165	Y	345
									M	6.35mm	5.5mm	9.52 mm	M	14	Z	Full	M	180		

PLEASE COMPLETE THE SPECIFICATION DRAWING IF YOUR REQUIREMENTS CANNOT BE FULLFILLED BY USING THE ORDERING CODE

CK ROTARY SWITCH

STANDARD PART NUMBERS

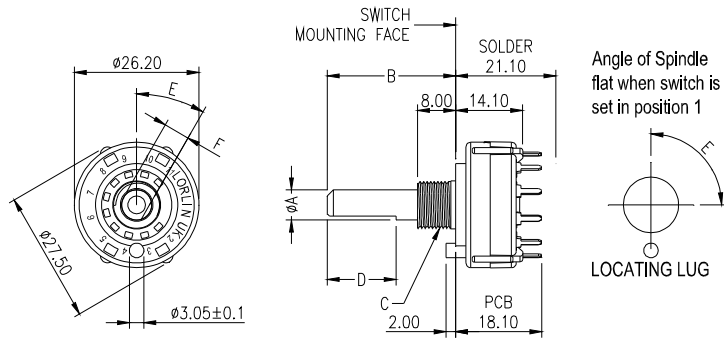
BASIC TYPES	SPINDLE DIAMETER	SPINDLE LENGTH FROM MOUNTING FACE	8mm LONG BUSH	SPINDLE FLAT LENGTH	ANGLE OF SPINDLE FLAT	SPINDLE FLAT THICKNESS
IMPERIAL	6.35mm	38mm	9.52 x 32TPI	30mm	90°	5.5mm
METRIC	6.00mm	50mm	M10 x 0.75	No Flat	---	---

CIRCUITRY AT 30° INDEXING	PLATING FINISH	STANDARD METRIC		STANDARD IMPERIAL	
		Shorting (MBB)	Non-Shorting (BBM)	Shorting (MBB)	Non-Shorting (BBM)
1 POLE 12 POSITION		STOP INCLUDED			
Solder Tag	Silver	CK1039	CK1029	CK1034	CK1024
	Gold Flash	CK1508	CK1503	CK1516	CK1520
	Gold Plate	CK2444	CK1672	CK2458	CK2459
Printed Circuit	Silver	CK1059	CK1049	CK1054	CK1044
	Gold Flash	CK1512	CK1506	CK1524	CK1528
	Gold Plate	CK1475	CK1312	CK2460	CK2461
1 POLE 12 POSITION		NO STOP CONTINUOUS ROTATION			
Solder Tag	Silver	CK1038	CK1028	CK1033	CK1023
	Gold Flash	CK1533	CK1537	CK1541	CK1545
	Gold Plate	CK2445	CK2446	CK2462	CK2463
Printed Circuit	Silver	CK1058	CK1048	CK1053	CK1043
	Gold Flash	CK1534	CK1538	CK1542	CK1546
	Gold Plate	CK2447	CK2448	CK2464	CK2465
2 POLE 6 POSITION		STOP INCLUDED			
Solder Tag	Silver	CK1040	CK1030	CK1035	CK1025
	Gold Flash	CK1509	CK1496	CK1517	CK1521
	Gold Plate	CK2449	CK1726	CK2466	CK2467
Printed Circuit	Silver	CK1060	CK1050	CK1055	CK1045
	Gold Flash	CK1513	CK1473	CK1525	CK1529
	Gold Plate	CK2450	CK1850	CK2468	CK2469
2 POLE 6 POSITION		NO STOP CONTINUOUS ROTATION			
Solder Tag	Silver	CK1114	CK1118	CK1120	CK1121
	Gold Flash	CK1535	CK1539	CK1543	CK1547
	Gold Plate	CK2451	CK2452	CK2470	CK2471
Printed Circuit	Silver	CK1119	CK1113	CK1122	CK1089
	Gold Flash	CK1536	CK1540	CK1544	CK1548
	Gold Plate	CK2453	CK2454	CK2472	CK2473
3 POLE 4 POSITION		STOP INCLUDED			
Solder Tag	Silver	CK1041	CK1031	CK1036	CK1026
	Gold Flash	CK1510	CK1504	CK1518	CK1522
	Gold Plate	CK2455	CK1577	CK2474	CK2475
Printed Circuit	Silver	CK1061	CK1051	CK1056	CK1046
	Gold Flash	CK1514	CK1500	CK1526	CK1530
	Gold Plate	CK2456	CK1952	CK2476	CK2477
4 POLE 3 POSITION		STOP INCLUDED			
Solder Tag	Silver	CK1042	CK1032	CK1037	CK1027
	Gold Flash	CK1511	CK1505	CK1519	CK1523
	Gold Plate	CK1673	CK1822	CK2478	CK2479
Printed Circuit	Silver	CK1062	CK1052	CK1057	CK1047
	Gold Flash	CK1515	CK1507	CK1527	CK1531
	Gold Plate	CK2457	CK1953	CK2480	CK2481

CK ROTARY SWITCH

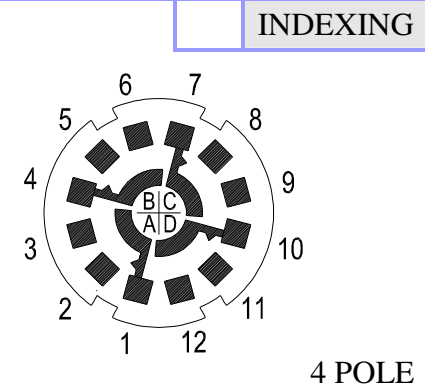
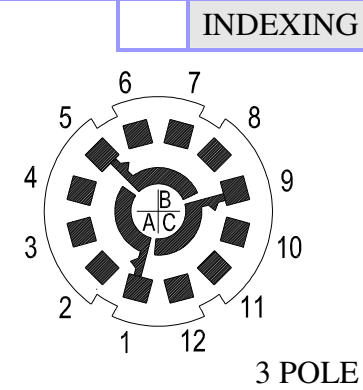
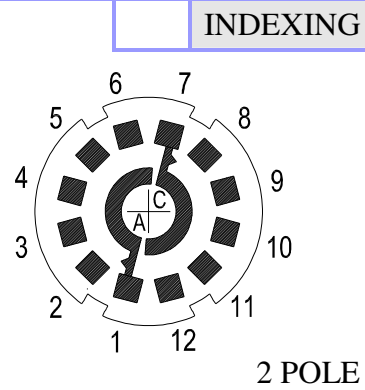
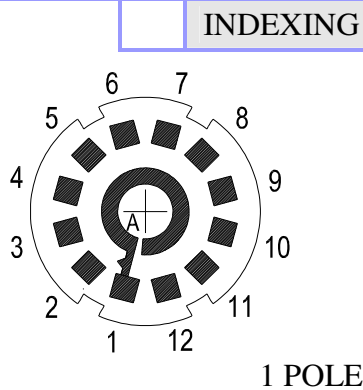
SPECIFICATION SHEET

CUSTOMER TO COMPLETE OR DELETE AS REQUIRED



	A	B	C
IMPERIAL	Ø6.35		Ø9.52 x 32TPI
METRIC	Ø6.00		M10 x 0.75

	D	E	F
IMPERIAL			
METRIC			



POSITIONS					POSITIONS					POSITIONS					POSITIONS								
MBB		BBM		SOL		PCB		MBB		BBM		SOL		PCB		MBB		BBM		SOL		PCB	

IMPORTANT! WAFERS FLATS & SLOTS VIEWED FROM THE FRONT OF SWITCH IN EXTREME ANTICLOCKWISE POSITION (POSITION 1)

SPECIAL REQUIREMENTS

OPTIONS Stops are adjustable 2-12 positions. Continuous rotation (No Stops) available. Make before break (MBB) or Break before Make (BBM) rotors available. Solder Tag (SOL) or PCB pin (PCB) – indicate on wafer.

CUSTOMER:

DATE:

CUSTOMER REFERENCE NUMBER:

IP67 CKS SEALED ROTARY SWITCH

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	150mA@250V ac/dc resistive load 1A @ 24V dc
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	1,500Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20 mΩ (initial)
Operating Torque (nominal)	Standard 10.5 ± 1 N cm Light Action 5.5 ± 0.5 N cm
End Stop Torque (nominal):	0.80 Nm
Moulding Material:	Polyamide 6.6 G.F. V0 RATED
Contact/Terminal Material:	Brass CZ108 Ag Plated

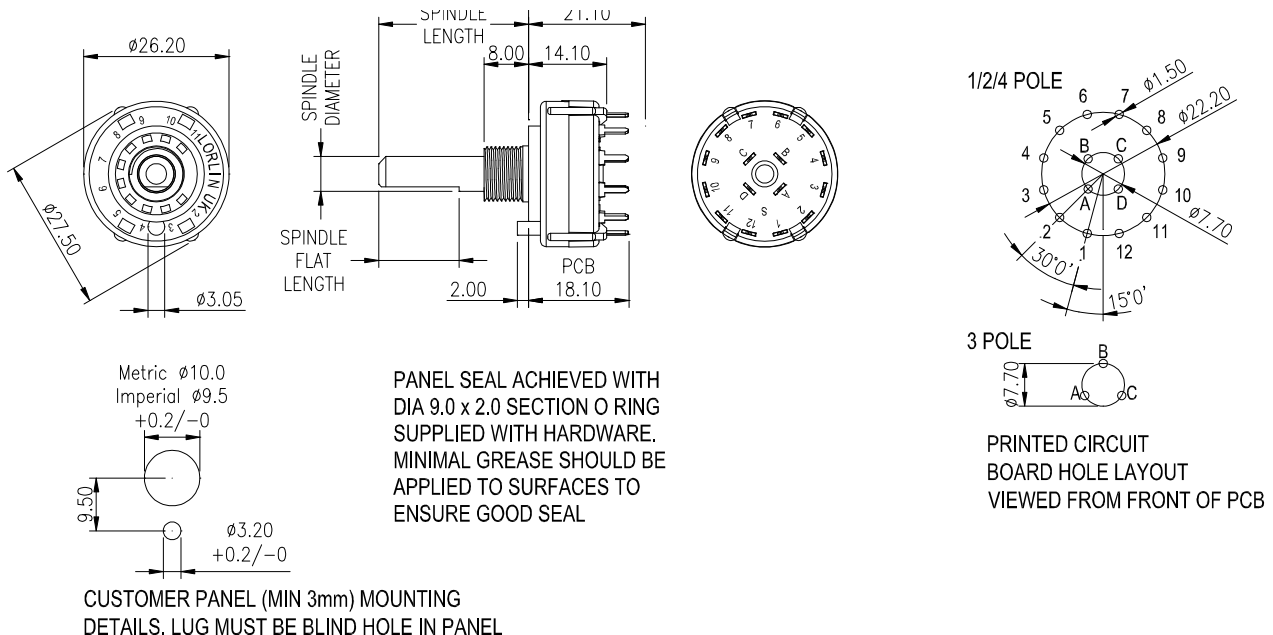
RoHS COMPLIANT



GENERAL FEATURES & OPTIONS

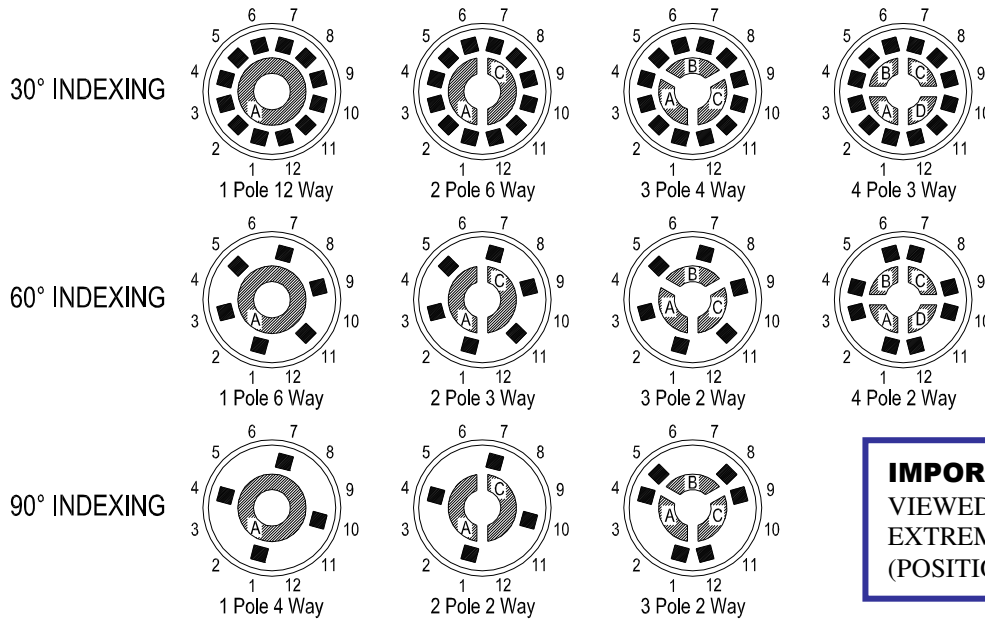
- Made in UK
- Cost effective single wafer switch
- Moulded 27.5mm diameter
- Standard 30° indexing
- Solder or Printed Circuit Board Terminals
- Up to 4 poles per switch
- Maximum 12 positions
- Moulded in UL94 V0 material.
- Optional reinforcement ring.
- Shorting (make before break 30° indexing only) or non shorting (break before make) contacts.
- Special options: 60° or 90° indexing, continuous rotation. Fixed stop, gold flash or gold plated contacts, and spindles with special flats.
- CKS same form, fit & function to the CK range
- Dampened indexing & reduced shaft play gives smooth feel.
- Front panel sealed to IP66 – protected against powerful water jets
- Front panel sealed to IP67 – protected against the effects of temporary immersion in 1 meter of water. (ancillaries required)

CKS ROTARY SWITCH SPECIFICATION SHEET



BASIC TYPES	SPINDLE DIAMETER	SPINDLE LENGTH FROM MOUNTING FACE	8mm LONG BUSH	SPINDLE FLAT LENGTH	ANGLE OF SPINDLE FLAT	SPINDLE FLAT THICKNESS
IMPERIAL	6.35mm	38mm	9.52 x 32TPI	30mm	90°	5.5mm
METRIC	6.00mm	50mm	M10 x 0.75	No Flat	---	---

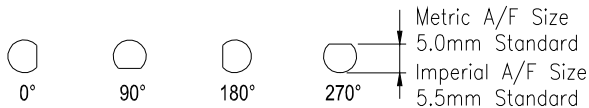
CKS ROTARY SWITCH



IMPORTANT WAFERS FLATS & SLOTS VIEWED FROM THE FRONT OF SWITCH IN EXTREME ANTICLOCKWISE POSITION (POSITION 1)

SPINDLE FLAT ANGLE - AVAILABLE IN 15° INCREMENTS

SCREWDRIVER SLOT - AVAILABLE IN 45° INCREMENTS



ORDERING CODE FOR NON-STANDARD SWITCHES

EXISTING CK PARTS MAY BE ORDERED AS SEALED TYPE BY CHANGING PART NUMBER TO START WITH CKS

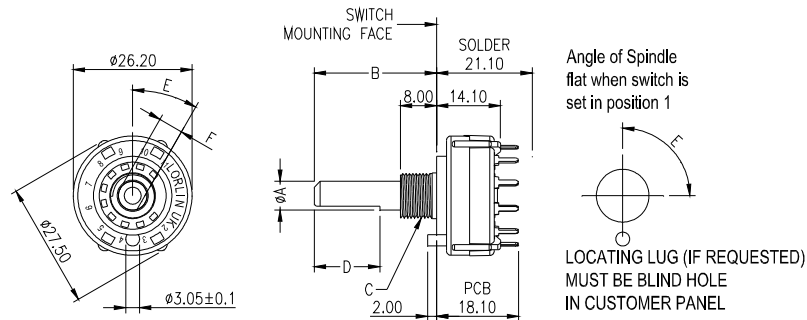
C		K		S																		
SPINDLE LENGTH FMF IN FULL MM																						
Index Angles & NO. OF POLES			NO OF WAYS (POSITIONS)		MBB or BBM		Contact Type	Contact Plating	SPINDLE DIAM.				SPINDLE FLAT DEPTH	BUSH DIAM.	LENGTH OF SPINDLE FLAT				ANGLE OF FLAT (°)			
A	30°	1Pole	A	2	A	BBM	Solder	SILVER	A	6mm	Nil	M10	A	2	N	15	A	0	N	195		
B		2	B	3	B	MBB	Solder		B	6mm	5mm	M10	B	3	O	No Flat	B	15	O			
C		3	C	4	C	BBM	PCB		C	6.35mm	Nil	9.52 mm	C	4	P	16	C	30	P	210		
D		4	D	5	D	MBB	PCB		D	6.35mm	5.5mm	9.52 mm	D	5	Q	17	D	45	Q	225		
E	60°	1Pole	E	6	E	BBM	Solder	GOLD PLATE	E				E	6	R	18	E	60	R	240		
F		2	F	7	F	MBB	Solder		F				F	7	S	19	F	75	S	255		
G		3	G	8	G	BBM	PCB		G				G	8	T	20	G	90	T	270		
H		4	H	9	H	MBB	PCB		H				H	9	U	21	H	105	U	285		
I	90°	1Pole	I	10	I	BBM	Solder	GOLD FLASH	I				I	10	V	22	I	120	V	300		
J		2	J	11	J	MBB	Solder		J				J	11	W	23	J	135	W	315		
K		3	K	12	K	BBM	PCB		K				K	12	X	24	K	150	X	330		
Z		No Stop	L	No Stop	L	MBB	PCB		L				L	13	Y	25	L	165	Y	345		
													M	14	Z	Full	M	180				

PLEASE COMPLETE THE SPECIFICATION DRAWING IF YOUR DETAILS CANNOT BE FULLFILLED BY USING THE ORDERING CODE & CONFIRM WITH LORLIN SALES BEFORE ORDERING. TOOLING CHARGES CAN APPLY FOR SPINDLES THAT DO NOT HAVE FLATS THAT RUN THE FULL SPINDLE LENGTH

CKS ROTARY SWITCH

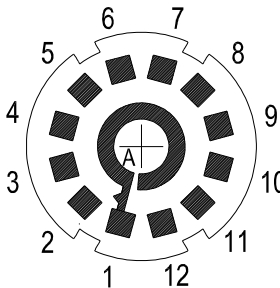
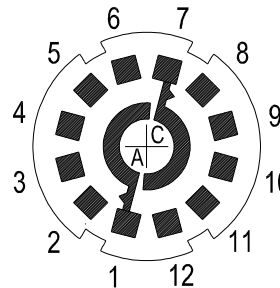
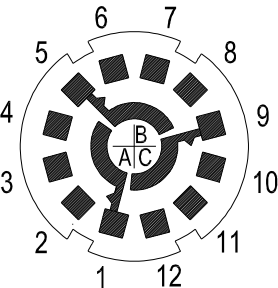
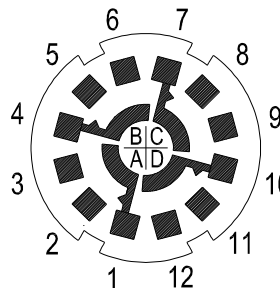
SPECIFICATION SHEET

CUSTOMER TO COMPLETE OR DELETE AS REQUIRED



	A	B	C
IMPERIAL	Ø6.35		Ø9.52 x 32TPI
METRIC	Ø6.00		M10 x 0.75

	D	E	F
IMPERIAL			
METRIC			

INDEXING				INDEXING				INDEXING				INDEXING																			
				1 POLE								2 POLE								3 POLE								4 POLE			
POSITIONS				POSITIONS				POSITIONS				POSITIONS				POSITIONS															
MBB	BBM	SOL	PCB	MBB	BBM	SOL	PCB	MBB	BBM	SOL	PCB	MBB	BBM	SOL	PCB	MBB	BBM	SOL	PCB												

IMPORTANT! WAFERS FLATS & SLOTS VIEWED FROM THE FRONT OF SWITCH IN EXTREME ANTICLOCKWISE POSITION (POSITION 1)

SPECIAL REQUIREMENTS

OPTIONS Stops are adjustable 2-12 positions. Continuous rotation (No Stops) available. Make before break (MBB) or Break before Make (BBM) rotors available. Solder Tag (SOL) or PCB pin (PCB) – indicate on wafer.

CUSTOMER:

DATE:

CUSTOMER REFERENCE NUMBER:

CK LOCK SWITCHES

RoHS COMPLIANT

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	150mA @ 250V ac/dc resistive load
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	1,500Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20mΩ (initial)
Housing Material:	Polycarbonate
Wafer Material:	Polyamide 6.6 G.F. V0 Rated
Contact/Terminal Material:	Brass CZ108 Ag Plated
Lock Housing:	Zinc Alloy Bright Cr Plated
Keys:	Mild Steel Ni plated

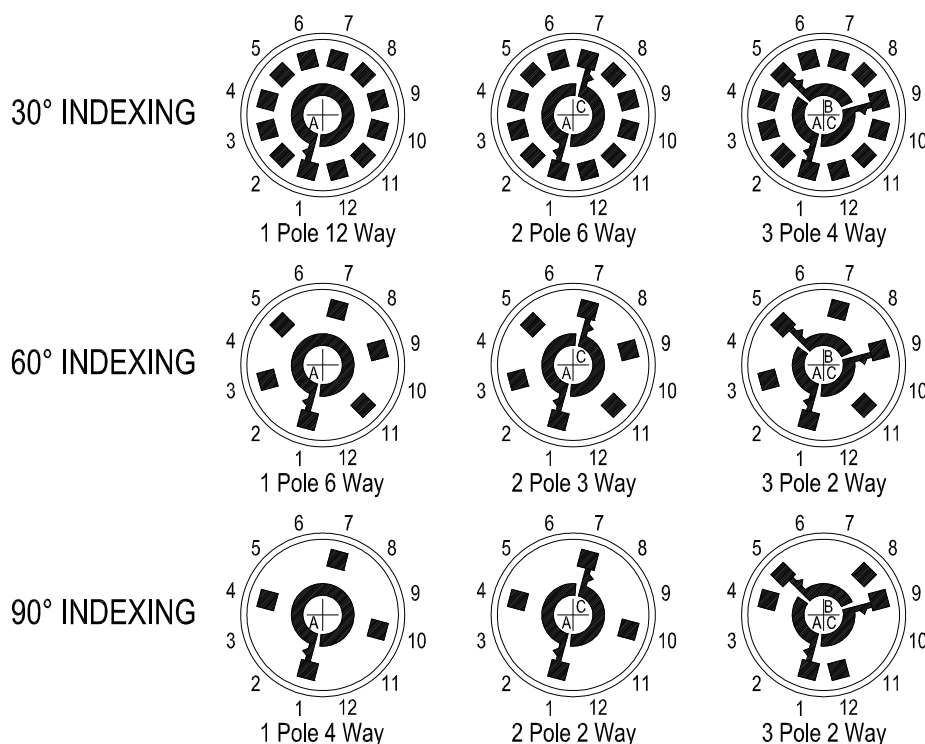


GENERAL FEATURES

- Made in UK.
- Moulded Single Wafer Lock switch.
- Two part construction. The lock is inserted into the panel from the front. The CK module either bracketed or snap-on, from the rear of the panel.
- Switch indexed 30°, 60° or 90°.
- All contacts are non-shorting (BBM).
- Solder or printed circuit terminals.
- Keys removable at 60° or 90° angles.
- Two keys per lock. Additional keys to order.
- Keys to pass (common combination) or differ (different combinations)

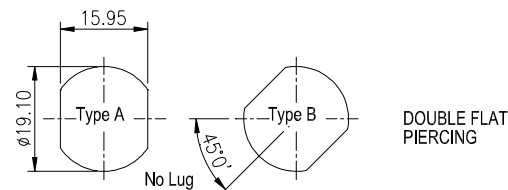
CK LOCK SWITCH MODULE TERMINAL LAYOUTS

(VIEWED FROM THE KEY) POSITION1

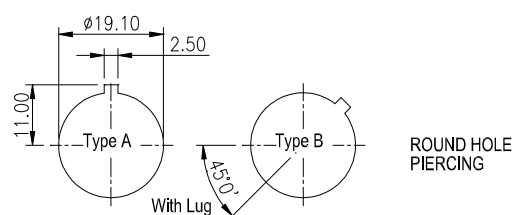


MOUNTING DETAILS

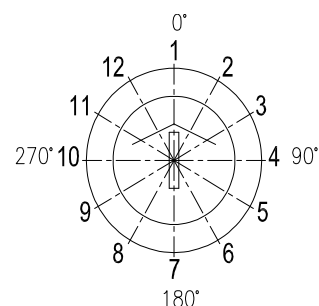
CK LOCK SWITCHES



ALTERNATE MOUNTING DETAILS FOR BRACKETED CKL, CKIS LOCK SWITCHES

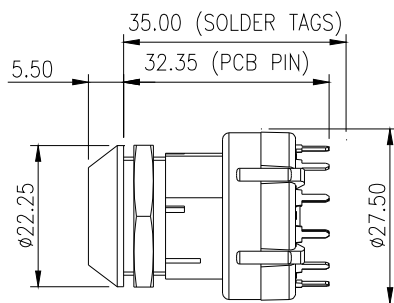


LOCK MOVEMENT



CK LOCK SWITCHES

CKL5 Lock switch with Snap on CK Module



KEY CODE
S = Same
D = Differs

CONTACT
B = BBM
M = MBB (30° Index Only)

SWITCH POSITIONS
02 = 2 Positions
03 = 3 Positions
12 = 12 Positions
13 = Continuous Rotation

CONTACT PLATING
S = Silver (Standard)
G = Gold
F = Gold Flash

DESCRIPTION

LOCK TYPE: 5 Disc

LOCK MOVEMENT: 60° or 90° Steps.

LOCK COMBINATIONS: 200 differs or all to pass (same key for all locks).

KEY TYPE: Flat, single entry (key can be inserted into the lock only one way up).

MASTER KEY SYSTEM AVAILABLE: Yes.

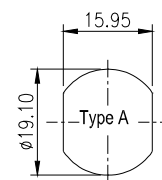
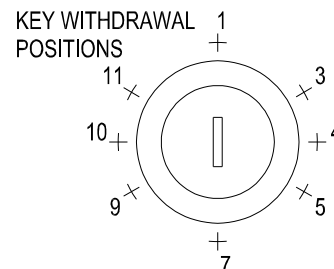
MAXIMUM PANEL THICKNESS: 3.4mm.

MODULE TYPE: Snap-on

MODULE INDEXING ANGLES: 30°, 60°, 90° (keys can be inserted/withdrawn at 60° or 90° angles).

ORDERING CODE

Build your part number by filling in the empty boxes with the appropriate numbers and letter



CKL5

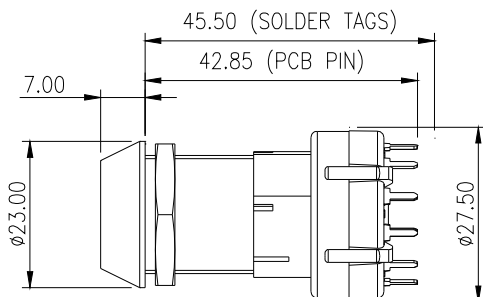
TOTAL LOCK MOVEMENT	KEY WITHDRAW POSITION	TOTAL LOCK MOVEMENT	KEY WITHDRAW POSITION
A = 90°	1	G = 180°	1,3,5,7
B = 90°	1,4	H = 60°	1,3
C = 180°	1,7	J = 240°	1,3,5,7,9
D = 180°	1,4,7	K = 120°	1,3,5
E = 360°	1,4,7,10	L = 270°	1,4,7,10
F = 360°	1,3,5,7,9,11	M = 300°	1,3,5,7,9,11

SWITCH INDEX ANGLE
3 = 30°
6 = 60°
9 = 90°

NUMBER OF SWITCH POLES
1 = 1 POLE
2 = 2 POLE
3 = 3 POLE
4 = 4 POLE

TERMINATION
S = SOLDER
P = PCB

CKL8 Lock switch with Snap on CK Module



KEY CODE
S = Same
D = Differs

CONTACT
B = BBM
M = MBB (30° Index Only)

SWITCH POSITIONS
02 = 2 Positions
03 = 3 Positions
12 = 12 Positions
13 = Continuous Rotation

CONTACT PLATING
S = Silver (Standard)
G = Gold
F = Gold Flash

DESCRIPTION

LOCK TYPE: 8 Disc

LOCK MOVEMENT: 90° Steps.

LOCK COMBINATIONS: 2000 differs or all to pass (same key for all locks).

KEY TYPE: Flat, double entry (key can be inserted into the lock either way up).

MASTER KEY SYSTEM AVAILABLE: Yes.

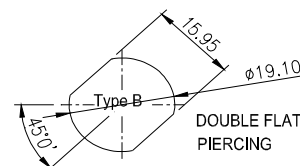
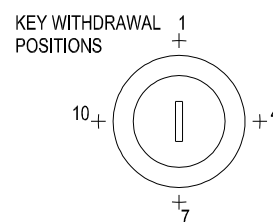
MAXIMUM PANEL THICKNESS: 13.9mm.

MODULE TYPE: Snap-on

MODULE INDEXING ANGLES: 30°, 60°, 90° (but keys can only be inserted/withdrawn at 90° angles).

ORDERING CODE

Build your part number by filling in the empty boxes with the appropriate numbers and letter



CKL8

TOTAL LOCK MOVEMENT	KEY WITHDRAW POSITION	PANEL PIERCING 'A'	TOTAL LOCK MOVEMENT	KEY WITHDRAW POSITION	PANEL PIERCING 'B'
A = 30°	1		H = 90°	1+4	
B = 60°	1		J = 120°	1+4	
C = 90°	1		K = 150°	1+4	
D = 120°	1		L = 180°	1+4+7	
E = 150°	1		M = 270°	1+4+7+10	
F = 180°	1+7		N = 260°	1+4+7+10	
G = 360°	1+7				

SWITCH INDEX ANGLE
3 = 30°
6 = 60°
9 = 90°

NUMBER OF SWITCH POLES
1 = 1 POLE
2 = 2 POLE
3 = 3 POLE
4 = 4 POLE

TERMINATION
S = SOLDER
P = PCB

CKF SEALED ROTARY SWITCH

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	150mA @ 250V ac/dc resistive load 1A @ 24V dc resistive load
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	1,500Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20 mΩ (initial)
Operating Torque (nominal)	Standard 10.5 ± 1 N cm Light Action 5.5 ± 0.5 N cm
End Stop Torque (nominal):	0.80 Nm
Moulding Material:	Polyamide 6.6 G.F. V0 RATED
Contact/Terminal Material:	Brass CZ108 Ag Plated

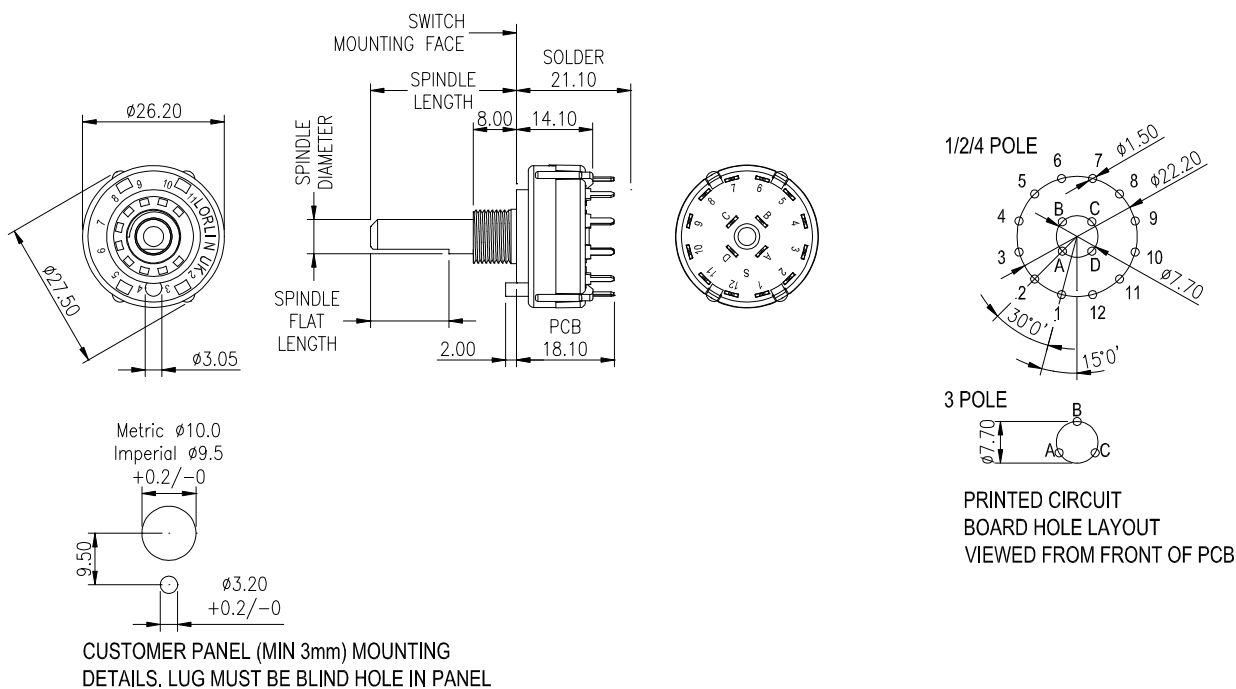
RoHS COMPLIANT



GENERAL FEATURES & OPTIONS

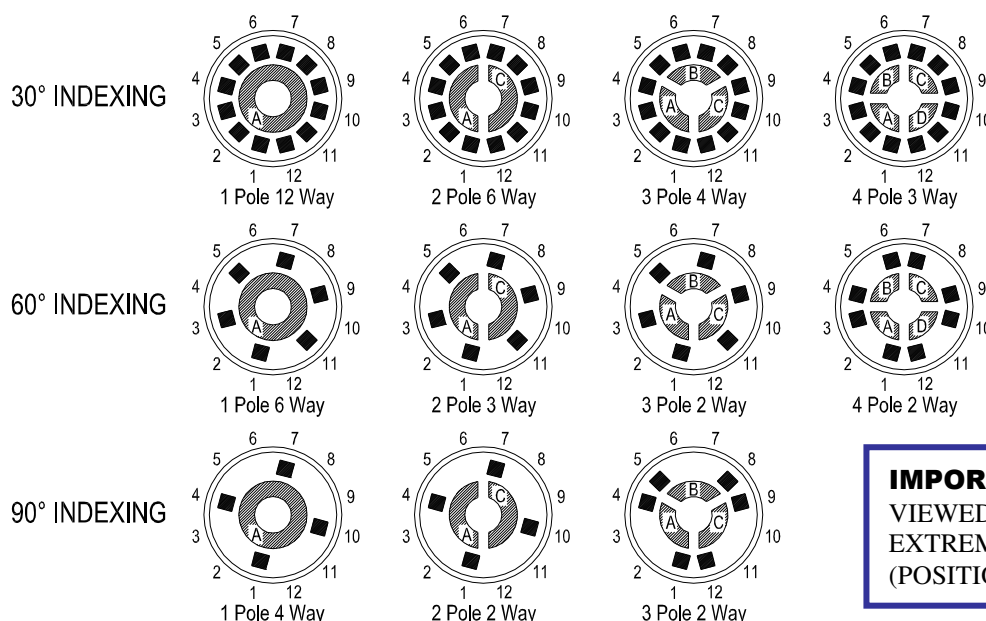
- Made in UK
- Cost effective single wafer switch
- Moulded 27.5mm diameter
- Standard 30° indexing
- Solder or Printed Circuit Board Terminals
- Up to 4 poles per switch
- Maximum 12 positions
- Moulded in UL94 V0 material.
- Optional reinforcement ring.
- Shorting (make before break 30° indexing only) or non shorting (break before make) contacts.
- Special options: 60° or 90° indexing, continuous rotation. Fixed stop, gold flash or gold plated contacts, and spindles with special flats.
- CKF same form, fit & function to the CK range
- Dampened indexing & reduced shaft play gives smooth feel.
- Front panel sealed to IP65

CKF ROTARY SWITCH SPECIFICATION SHEET



BASIC TYPES	SPINDLE DIAMETER	SPINDLE LENGTH FROM MOUNTING FACE	8mm LONG BUSH	SPINDLE FLAT LENGTH	ANGLE OF SPINDLE FLAT	SPINDLE FLAT THICKNESS
IMPERIAL	6.35mm	38mm	9.52 x 32TPI	30mm	90°	5.5mm
METRIC	6.00mm	50mm	M10 x 0.75	No Flat	---	---

CKF ROTARY SWITCH



SPINDLE FLAT ANGLE - AVAILABLE IN 15° INCREMENTS

SCREWDRIVER SLOT - AVAILABLE IN 45° INCREMENTS

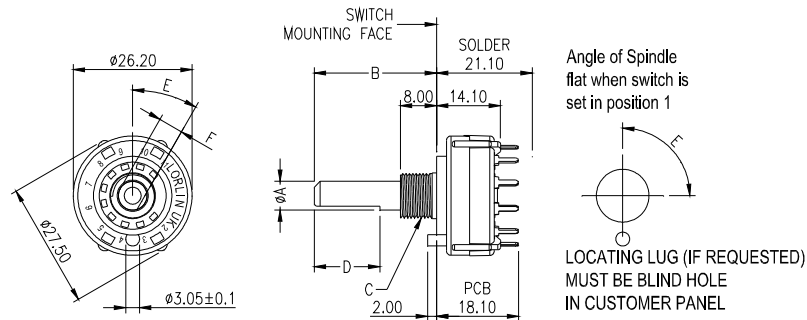


ORDERING CODE FOR NON-STANDARD SWITCHES

EXISTING CK PARTS MAY BE ORDERED AS CKF TYPE BY CHANGING PART NUMBER TO START WITH CKF

C			K			F																									
												SPINDLE LENGTH FMF IN FULL MM																			
Index Angles & NO. OF POLES				NO OF WAYS (POSITIONS)						MBB or BBM		Contact Type		Contact Plating		SPINDLE DIAM.				SPINDLE FLAT DEPTH		BUSH DIAM.		LENGTH OF SPINDLE FLAT				ANGLE OF FLAT (°)			
A	30°	1Pole		A	2			A	BBM	Solder	SILVER		A	6mm	Nil	M10	A	2	N	15	A	0	N	195							
B		2		B	3			B	MBB	Solder			B	6mm	5mm	M10	B	3	O	No Flat	B	15	O								
C		3		C	4			C	BBM	PCB			C	6.35mm	Nil	9.52 mm	C	4	P	16	C	30	P	210							
D		4		D	5			D	MBB	PCB			D	6.35mm	5.5mm	9.52 mm	D	5	Q	17	D	45	Q	225							
E	60°	1Pole		E	6			E	BBM	Solder	GOLD PLATE		E	6mm	Nil	M10	E	6	R	18	E	60	R	240							
F		2		F	7			F	MBB	Solder			F	6mm	5mm	M10	F	7	S	19	F	75	S	255							
G		3		G	8			G	BBM	PCB			G	6.35mm	Nil	9.52 mm	G	8	T	20	G	90	T	270							
H		4		H	9			H	MBB	PCB			H	6.35mm	5.5mm	9.52 mm	H	9	U	21	H	105	U	285							
I	90°	1Pole		I	10			I	BBM	Solder	GOLD FLASH		I	6mm	Nil	M10	I	10	V	22	I	120	V	300							
J		2		J	11			J	MBB	Solder			J	6.35mm	5.5mm	9.52 mm	J	11	W	23	J	135	W	315							
K		3		K	12			K	BBM	PCB			K	6.35mm	5.5mm	9.52 mm	K	12	X	24	K	150	X	330							
				Z	No Stop			L	MBB	PCB			L	6.35mm	5.5mm	9.52 mm	L	13	Y	25	L	165	Y	345							
														SPINDLE LENGTH FMF IN FULL MM																	

PLEASE COMPLETE THE SPECIFICATION DRAWING IF YOUR DETAILS CANNOT BE FULLFILLED BY USING THE ORDERING CODE & CONFIRM WITH LORLIN SALES BEFORE ORDERING. TOOLING CHARGES CAN APPLY FOR SPINDLES THAT DO NOT HAVE FLATS THAT RUN THE FULL SPINDLE LENGTH

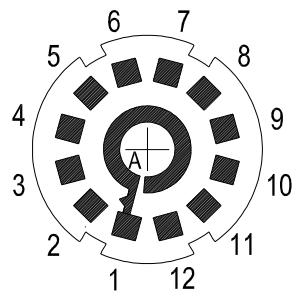


CUSTOMER TO COMPLETE OR DELETE AS REQUIRED

	A	B	C
IMPERIAL	Ø6.35		Ø9.52 x 32TPI
METRIC	Ø6.00		M10 x 0.75

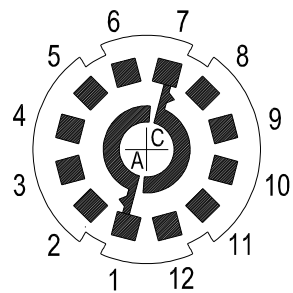
	D	E	F
IMPERIAL			
METRIC			

INDEXING



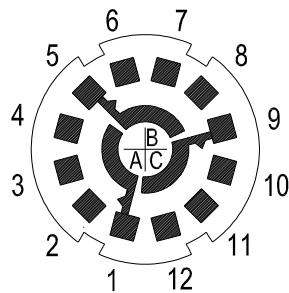
1 POLE

INDEXING



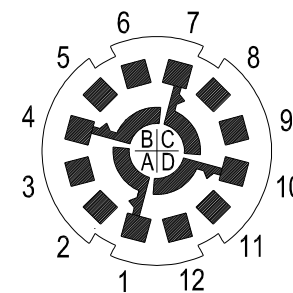
2 POLE

INDEXING



3 POLE

INDEXING



4 POLE

POSITIONS

MBB

BBM

SOL

PCB

POSITIONS

MBB

BBM

SOL

PCB

POSITIONS

MBB

BBM

SOL

PCB

POSITIONS

MBB

BBM

SOL

PCB

IMPORTANT! WAFERS FLATS & SLOTS VIEWED FROM THE FRONT OF SWITCH IN EXTREME ANTICLOCKWISE POSITION (POSITION 1)

SPECIAL REQUIREMENTS

OPTIONS Stops are adjustable 2-12 positions. Continuous rotation (No Stops) available. Make before break (MBB) or Break before Make (BBM) rotors available. Solder Tag (SOL) or PCB pin (PCB) – indicate on wafer.

CUSTOMER:

DATE:

CUSTOMER REFERENCE NUMBER:

GCK GRAY CODED ROTARY SWITCH

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

RoHS COMPLIANT



Switch Rating:	150mA @ 50Vac/dc resistive load
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	250Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<50 mΩ (Initial)
Operating Torque (nominal)	Standard 4.7 ± 0.5 cNm
End Stop Torque (nominal):	0.8 Nm
Moulding Material:	Polyamide 6.6 G.F.
Contact/Terminal Material:	Brass CZ108 Ag Plated

GENERAL FEATURES

- Made in UK
- Gray code Standard and complementary versions.
- Moulded 27.5mm diameter single wafer switch.
- Standard 22.5° indexing 4-Bit
- Standard 45° indexing 3-Bit
- Printed Circuit Terminals.
- Special options include UL-V0 rated material, gold flashed or gold plated (2.5 microns gold over 2 microns nickel) contacts, spindles with special flats or slots.

STANDARD PART NUMBER

BASIC TYPES	SPINDLE DIAMETER	SPINDLE LENGTH FROM MOUNTING FACE	8mm LONG BUSH	SPINDLE FLAT LENGTH	ANGLE OF SPINDLE FLAT	SPINDLE FLAT THICKNESS
IMPERIAL	6.35mm	38mm	9.52 x 32TPI	30mm	90°	5.5mm
METRIC	6.00mm	50mm	M10 x 0.75	No Flat	---	---

	STANDARD METRIC		STANDARD IMPERIAL	
	Stop	No Stop	Stop	No Stop
4-Bit Gray – Standard Spindle	GCK 1016	GCK 1017	GCK1018	GCK1019
4-Bit Gray Comp – Standard Spindle	GCK 1020	GCK1021	GCK1022	GCK1023
3-Bit Gray – Standard Spindle	GCK 1024	GCK1025	GCK1026	GCK1027
3-Bit Gray Comp – Standard Spindle	GCK 1028	GCK1029	GCK1030	GCK1031

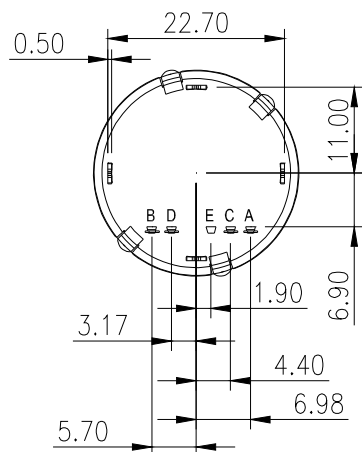
COMMON E Connection to Terminals				
DIAL	A	B	C	D
0				
1				•
2			•	•
3			•	
4		•	•	
5		•	•	•
6		•		•
7		•		
8	•	•		
9	•	•		•
A	•	•	•	•
B	•	•	•	
C	•		•	
D	•		•	•
E	•			•
F	•			

LORLIN GRAY CODED COMMON –4-BIT

COMMON E Connection			
DIAL	A	B	C
1			
2			•
3		•	•
4		•	
5	•	•	
6	•	•	•
7	•		•
8	•		

LORLIN GRAY CODED COMMON –3-BIT

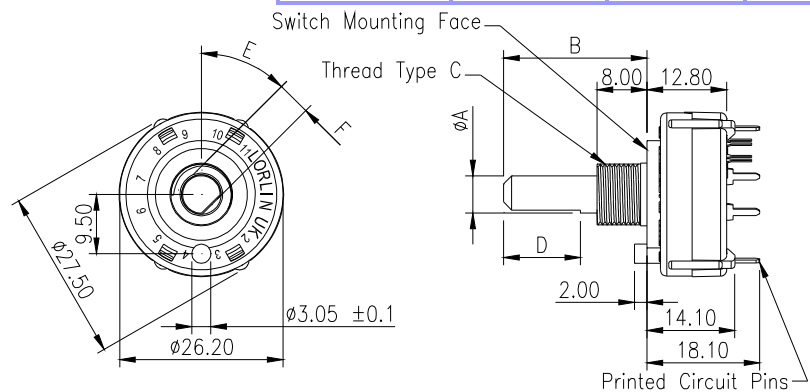
GCK GRAY CODED ROTARY SWITCH



CUSTOMER TO COMPLETE OR DELETE AS REQUIRED

	A	B	C
IMPERIAL	Ø6.35		Ø9.52 x 32TPI
METRIC	Ø6.00		M10 x 0.75

	D	E	F
IMPERIAL			
METRIC			



STANDARD SPINDLE DETAILS

	A	B	C	D	E	F
BASIC TYPES	SPINDLE DIAMETER	SPINDLE LENGTH FROM MOUNTING FACE	8mm LONG BUSH	SPINDLE FLAT LENGTH	ANGLE OF SPINDLE FLAT	SPINDLE FLAT DEPTH
IMPERIAL	6.35mm	38mm	9.52 x 32TPI	30mm	90°	5.5mm
METRIC	6.00mm	50mm	M10 x 0.75	No Flat	---	---

STANDARD ANGLES OF SCREWDRIVER SLOTS

Standard screwdriver slots are 1.2mm wide and 1.5mm deep.



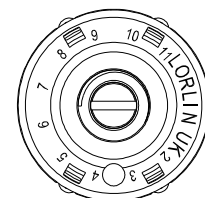
TYPICAL SPINDLE DETAILS



Orientation with location lug in position shown.

TO ORDER PLEASE SPECIFY:

1. Switching Code
2. Imperial or Metric Spindle Diameter
3. Dimension (B) Spindle length from Mounting Face
4. Thread Required (C)
5. Spindle Flat length if required (D)
6. Angle of Flat (E)
7. Spindle Flat Depth (F)
8. 8 Position or No Stop Version
9. Contact Plating: Silver/Gold Flash/2.5 microns Gold Plate



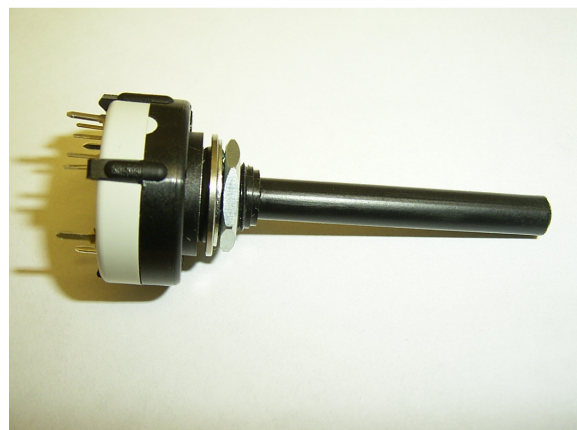
EXAMPLE

Screwdriver slot level with top of threaded fixing bush 1.2mm wide x 1.5mm deep (standard) at 90° (standard)

BCKS BINARY CODED ROTARY SWITCH

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

RoHS COMPLIANT



Switch Rating:	150mA @ 50V ac/dc
	Resistive only
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	250Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<50 mΩ (Initial)
Operating Torque (nominal)	Standard 4.7 ± 0.5 cNm
End Stop Torque (nominal):	0.8 Nm
Moulding Material:	Polyamide 6.6 G.F.
Contact/Terminal Material:	Brass CZ108 Ag Plated

GENERAL FEATURES

- Made in UK
- Binary coded Hexadecimal and complimentary versions.
- Panel Sealed to IP65 rating
- Standard 22.5° indexing
- Printed Circuit Terminals.
- Adjustable stop to restrict number of positions or continuous rotation.
- Special options include UL-V0 rated material, gold flashed or gold plated (2.5 microns gold over 2 microns nickel) contacts, spindles with special flats or slots.

STANDARD PART NUMBER

BASIC TYPES	SPINDLE DIAMETER	SPINDLE LENGTH FROM MOUNTING FACE	8mm LONG BUSH	SPINDLE FLAT LENGTH	ANGLE OF SPINDLE FLAT	SPINDLE FLAT THICKNESS
IMPERIAL	6.35mm	38mm	9.52 x 32TPI	30mm	90°	5.5mm
METRIC	6.00mm	50mm	M10 x 0.75	No Flat	---	---

PANEL SEALED TO IP65 RATING

	STANDARD METRIC		STANDARD IMPERIAL	
	Stop	No Stop	Stop	No Stop
Hex (Code 033) – Standard Spindle	BCKS1002 (no lug)	BCKS1001 (no lug)	BCKS1006 (lug)	BCKS1005 (lug)
Comp (Code 043) – Standard Spindle	BCKS1004 (no lug)	BCKS1003 (no lug)	BCKS1008 (lug)	BCKS1007 (no lug)
Hex (Code 033) – Flush Slot	-	BCKS1009 (lug)	BCKS1014 (lug)	-
Comp (Code 042) – Flush Slot	-	-	BCKS1019 (lug)	BCKS1020 (lug)

(please see drawing detail for lug reference)

COMMON E Connection to Terminals				
DIAL	A	B	C	D
1	•			
2		•		
3	•	•		
4			•	
5	•		•	
6		•	•	
7	•	•	•	
8				•
9	•			•
10		•		•
11	•	•		•
12			•	•
13	•		•	•
14		•	•	•
15	•	•	•	•
16				

LORLIN BINARY CODED HEXADECIMAL
COMPLIMENTARY COMMON –16 POSITIONS

CODE 033

COMMON E Connection to Terminals				
DIAL	A	B	C	D
1				
2				•
3			•	
4			•	•
5		•		
6		•		•
7		•	•	
8		•	•	•
9	•			
10	•			•
11	•		•	
12	•		•	•
13	•	•		
14	•	•		•
15	•	•	•	
16	•	•	•	•

LORLIN BINARY CODED HEXADECIMAL NON
COMPLIMENTARY COMMON –16 POSITIONS

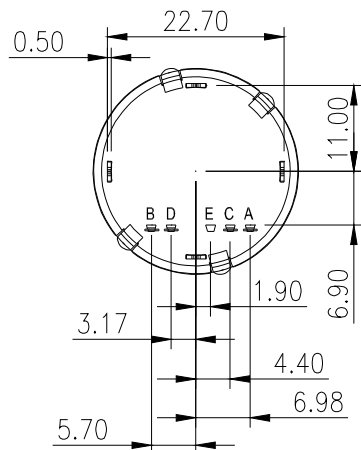
CODE 042

COMMON E Connection to Terminals				
DIAL	A	B	C	D
1	•	•	•	•
2	•	•	•	
3	•	•		•
4	•	•		
5	•		•	•
6	•		•	
7	•			•
8	•			
9		•	•	•
10		•	•	
11		•		•
12		•		
13			•	•
14			•	
15				•
16				

LORLIN BINARY CODED HEXADECIMAL
COMPLIMENTARY COMMON –16 POSITIONS

CODE 043

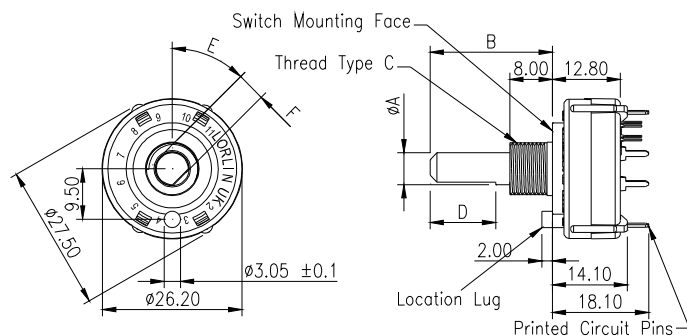
BCKS BINARY CODED ROTARY SWITCH



CUSTOMER TO COMPLETE OR DELETE AS REQUIRED

	A	B	C
IMPERIAL	Ø6.35		Ø9.52 x 32TPI
METRIC	Ø6.00		M10 x 0.75

	D	E	F
IMPERIAL			
METRIC			



STANDARD SPINDLE DETAILS

	A	B	C	D	E	F
BASIC TYPES	SPINDLE DIAMETER	SPINDLE LENGTH FROM MOUNTING FACE	8mm LONG BUSH	SPINDLE FLAT LENGTH	ANGLE OF SPINDLE FLAT	SPINDLE FLAT DEPTH
IMPERIAL	6.35mm	38mm	9.52 x 32TPI	30mm	90°	5.5mm
METRIC	6.00mm	50mm	M10 x 0.75	No Flat	---	---

STANDARD ANGLES OF SCREWDRIVER SLOTS

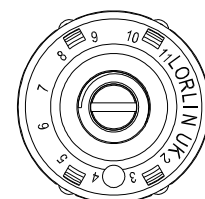
Standard screwdriver slots are 1.2mm wide and 1.5mm deep.



TYPICAL SPINDLE DETAILS



Orientation with location
lug in position shown.



EXAMPLE

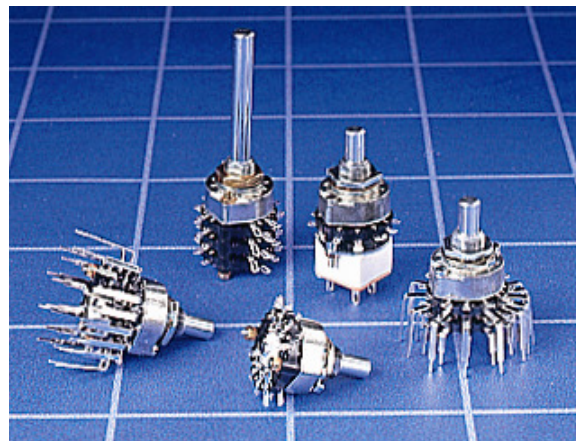
EXAMPLE
Screwdriver slot level with top of threaded fixing
bush 1.2mm wide x 1.5mm deep (standard) at 90°
(standard)

TO ORDER PLEASE SPECIFY:

1. Switching Code
2. Imperial or Metric Spindle Diameter
3. Dimension (B) Spindle length from Mounting Face
4. Thread Required (C)
5. Spindle Flat length if required (D)
6. Angle of Flat (E)
7. Spindle Flat Depth (F)
8. 16 Position or No Stop Version
9. Contact Plating: Silver/Gold Flash/2.5 microns Gold Plate
10. Location Lug if required

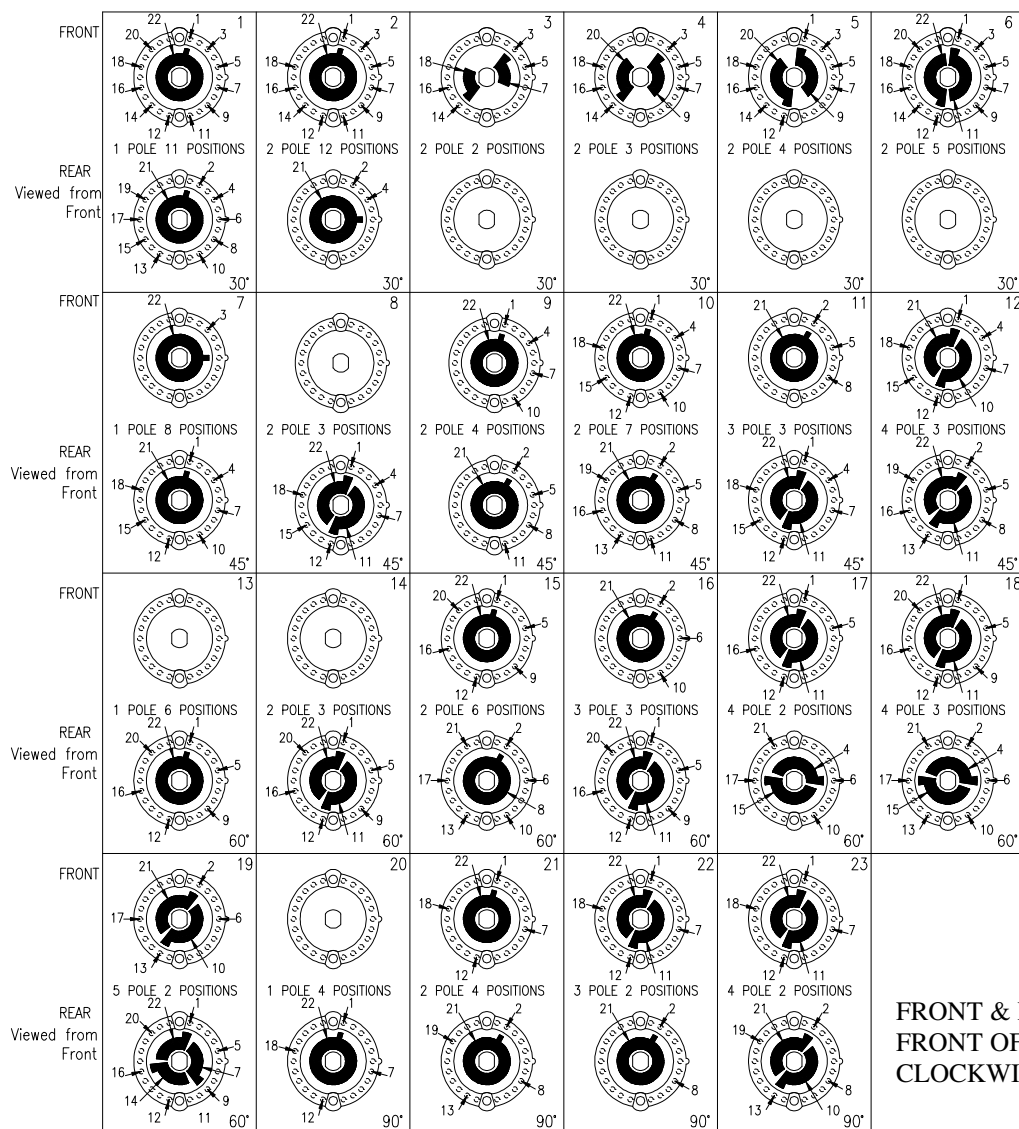
GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	150mA @ 250V ac/dc
(resistive load only)	350mA @ 110V ac/dc
	1A @ 12V ac/dc
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	1,000Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20 mΩ (Initial)
Operating Torque (nominal):	7.2 cNm
End Stop Torque (nominal):	1.2 Nm
Wafer:	Polyphenylene Sulphide (PPS)
Housing:	Zinc Alloy Bright Zinc Plated
Contact/Terminal Material:	Brass CZ108 Ag Plated
Spindle:	Mild Steel Zn Plated and Passivated



TYPICAL WAFER LAYOUTS 30° 45° 60° 90°

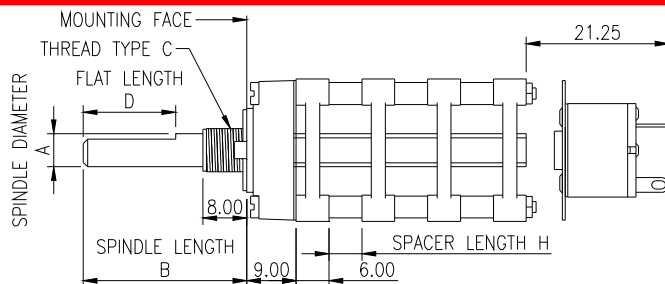
GENERAL FEATURES



- Made in UK
- 25.4mm diameter multi-wafer rotary switch
- Standard 30° Indexing.
- Solder or Printed Circuit Board.
- Shorting (MBB) or non shorting (BBM) contacts.
- Adjustable stop to restrict number of positions
- Standard self-stacking wafers
- P.C. Terminals pitch circle diameter versions
- Special options: 45°, 60° or 90° indexing, Gold Flashed or Gold Plated contacts, rotary mains switch, insulated drive shafts, spindles with special flats, slots or knurls.

FRONT & REAR WAFERS VIEWED FROM FRONT OF SWITCH IN EXTREME COUNTER CLOCKWISE POSITION

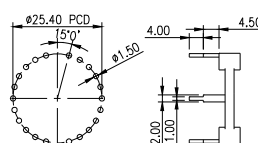
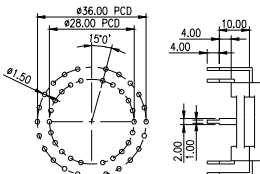
RA ROTARY SWITCH



METRIC ACROSS FLAT SIZE 5.0 STANDARD
IMPERIAL ACROSS FLAT SIZE 5.5 STANDARD



SPINDLE FLAT ANGLE –
AVAILABLE IN 15° INCREMENTS

[illegible]EXTENDED
PC CLIPS FOR
MULTI-BANK
SWITCH

PRINTED CIRCUIT PINS STANDARD PRINTED CIRCUIT CLIPS

ORDERING CODE

CODE	TERMINAL
S	Solder Clips
P	20.5mmØ
A	25.4mmØ
B	28.0mmØ
C	36.0mmØ

CODE	CONTACT PLATING
S	Silver (2μ)
G	Gold Plate (Au 2.5 μ, Ni 2 μ)
F	Gold Flash (0.2 μ)

CODE	SPINDLE/ BUSH
M	6mmØ M10 x 0.75
I	6.35mmØ 9.52 x 32TPI



CODE	No. of Wafers
01	1 wafer
02	2 wafer
03	3 wafer
04	4 wafer
05	5 wafer
06	6 wafer
07	7 wafer
08	8 wafer
09	9 wafer
10	10 wafer

CODE	INDEX ANGLE & No of POLES	
	A	30° 1 Pole
B	30°	2
C	30°	3
D	30°	4
E	30°	5
F	30°	6
G	45°	1
H	45°	2
K	45°	3

CODE	INDEX ANGLE & No of POLES	
L	45°	4 Pole
M	60°	1
N	60°	2
P	60°	3
R	60°	4
S	60°	5
T	90°	1
W	90°	2
X	90°	3
Y	90°	4

MAXIMUM No. of POSITIONS	CODE
1	01
2	02
3	03
4	04
5	05
6	06
7	07
8	08
9	09
10	10
11	11
12	12
No Stop	00

CIRCUITRY	BBM
CODE	M

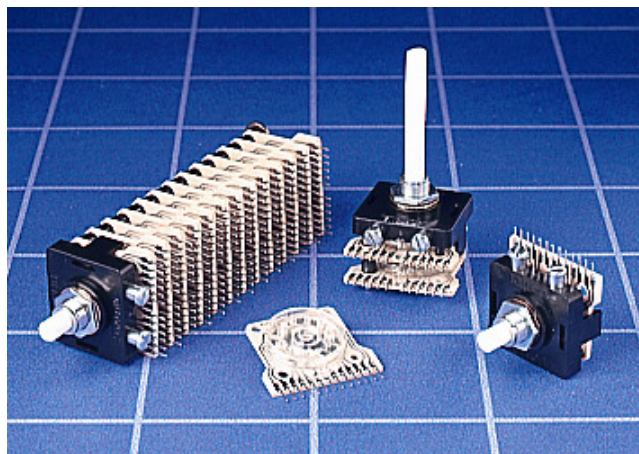
CODE	Spindle Length from Mounting face (including bush length)	
A	14mm	No Flat
B	16	No Flat
C	18	No Flat
D	20	No Flat
E	22	No Flat
F	24	No Flat
G	50	0°/42mm
H	50	90°/42mm
K	50	180°/42mm
L	50	270°/42mm
S	50	No Flat

SPECIAL OPTIONS Mains Switch	O	None
	N	OFF/ON Mains switch
CODE		

CODE	WAFER SPACING
X	Self Stacked
H	3mm
J	6mm
K	8mm
L	10mm

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

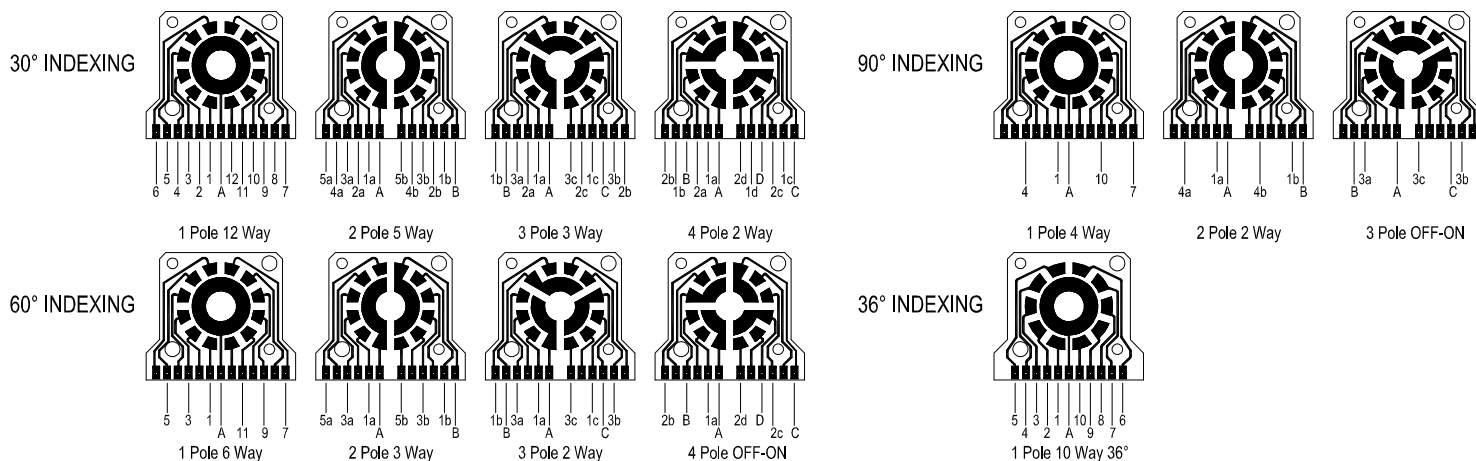
Switch Rating :	500mA@250Vac/dc resistive load
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	1,000Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<50 mΩ (Initial)
Operating Torque (nominal)	Standard 5.6 cNm
End Stop Torque (minimum):	0.80 Nm
Wafer Circuit Board:	Epoxy Glass Fibre
Housing/Bush:	Polyamide 6.6 G.F. V0 Rated
Spindle:	Polyamide 6.6 G.F. V0 Rated
Moving Contact:	Phosphor Bronze Ag Plated
P/C Track:	Copper, Ag Plated
Terminals:	Brass, CZ108, Sn Plated
Contact Carrier:	Polycarbonate



GENERAL FEATURES

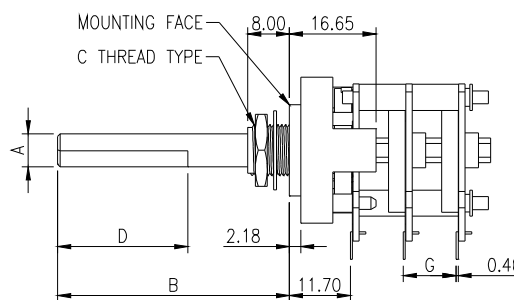
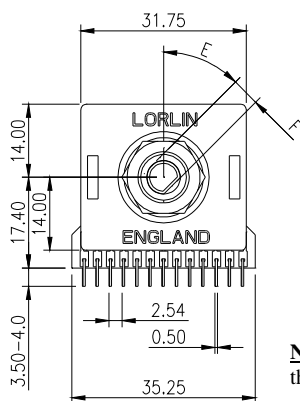
- Made in UK
- Multi wafer PCB switch.
- Standard 30° indexing
- P.C. Terminals on 2.54mm pitch
- Shorting MBB (only 30° indexing or Non Shorting BBM contacts
- Standard insulated spacers (6.35mm/7.63mm/10.16mm)
- **Special options:** 36°, 60° or 90° indexing, gold flashed or gold Plated contacts (2.5 microns gold over 2 microns silver over 2 microns nickel).
- Adjustable stop, base mounting with brass fixing bush, spindles with special flats non-standard wafer spacers.

PC TERMINAL LAYOUTS VIEWED FROM KNOB END OF SPINDLE



No. Of Poles	MAXIMUM NUMBER OF POSITIONS (WAYS) PER WAFER			
	30 ° Index	36 ° Index	60 ° Index	90 ° Index
1	12 No Stops	10	6	4
2	5	-	3	2
3	3	-	2	OFF-ON
4	2	-	OFF-ON	-

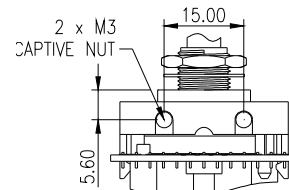
PT ROTARY SWITCH



Note: OPTIONAL SPINDLE FLAT SHOWN. The Angle of the spindle flat is shown when the switch is set in the fully anti-clockwise position (ie position 1) viewed from the knob end on the spindle.

BASE MOUNT OPTION

Base mounting option.
Necessary spacers are supplied when this option is specified.



TO SPECIFY PART NUMBERS FOR SINGLE WAFER SWITCHES

	STANDARD METRIC		STANDARD IMPERIAL	
CIRCUITRY AT 30° INDEXING	Shorting (MBB)	Non Shorting (BBM)	Shorting (MBB)	Non Shorting (BBM)
1 Pole 12 positions	PT6034	PT6003	PT6172	PT6015
1 Pole 12 Positions – No Stop	-	PT6002	-	PT6014
2 Pole 5 Positions	PT6035	PT6004	PT6474	PT6016
3 Pole 3 Positions	-	PT6005	-	PT6017
4 Pole 2 Positions	-	PT6006	-	PT6018
1 Pole 10 Positions (circuitry at 36° indexing)	-	PT6461	-	PT6462

		STANDARD DIMENSIONS						
		A	B	C	D	E	F	G
		SPINDLE DIAMETER	SPINDLE LENGTH	BUSH THREAD	SPINDLE FLAT LTH	SPINDLE ANGLE	SPINDLE FLAT DP	SPACER LENGTH
IMPERIAL		6.35mm	50mm	9.52 x 32TPI	No Flat	-	(5.5mm)	-
METRIC		6.0mm	50mm	M10 x 0.75	No Flat	-	(5.0mm)	-

ORDERING CODE FOR NON-STANDARD SWITCHES



BASE MOUNTING
HARDWARE
B = Fitted
O = Not Required

Moulded Spacers
Between Wafers
B=6.35mm C=7.63mm
D=10.16mm

Spindle
Length(B) FMF
Full mm ≤50mm

No. of WAFERS			
A	1	M	11
B	2	N	12
C	3	P	13
D	4	R	14
E	5	S	15
F	6	T	16
G	7	U	17
H	8	V	18
K	9	W	19
L	10		

INDEX ANGLE & No of POLES		
A	30°	1 Pole
B		2
C		3
D		4
E	60°	1 Pole
F		2
G		3
H		4
I	90°	1 Pole
J		2
K		3
L	36°	1 Pole

No of WAYS (POSITIONS)	
A	2
B	3
C	4
D	5
E	6
F	7
G	8
H	9
I	10
J	11
K	12
L	OFF/ON

MBB OR BBM	CONTACT PLATING
A BBM	SILVER
B MBB	PLATE
C BBM	GOLD
D MBB	PLATE
E BBM	GOLD
F MBB	FLASH

Spindle Ø (mm)	Spindle Depth	Bush Ø (mm)
A 6.0	Nil	M10
B 6.0	5.0mm	M10
C 6.35	Nil	9.52
D 6.35	5.5	9.52

LENGTH OF SPINDLE FLAT (mm)			
A 3	N	16	
B 4	P	17	
C 5	Q	18	
D 6	R	19	
E 7	S	20	
F 8	T	21	
G 9	U	22	
H 10	V	23	
I 11	W	24	
J 12	X	No Flat	
K 13			
L 14	Z	Full	
M 15		Flat	

ANGLE OF FLAT		
A 0°	N	195°
B 15°	P	210°
C 30°	Q	225°
D 45°	R	240°
E 60°	S	255°
F 75°	T	270°
G 90°	U	285°
H 105°	V	300°
I 120°	W	315°
J 135°	X	No Flat
K 150°	Y	330°
L 165°	Z	345°
M 180°		

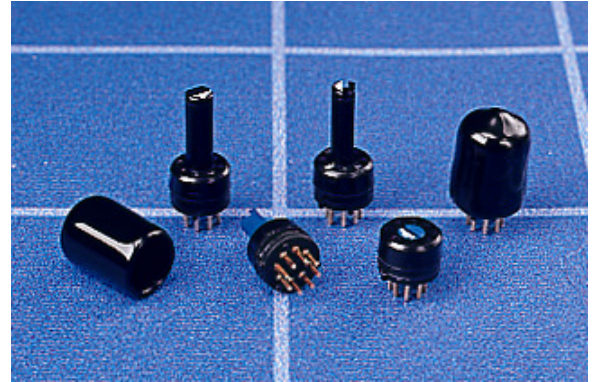
Please send drawing if your requirements cannot be fulfilled by using the ordering code
Special circuitry can be developed if required.

MT SUBMINIATURE ROTARY SWITCH

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Ratings:	500mA @ 24Vac/dc
Life:	>5,000 Cycles
Operating Temperature:	-30°C to +65 °C
Proof Voltage:	500Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<50 mΩ (Initial) <100 mΩ after operating life
Indexing Angle:	45° position – 8 position max.
Rotational Torque:	3.2+/-0.5 cNm (nominal)
End Stop Torque:	14 cNm (nominal)
Switching Base/Index:	Polyester G.F. (PBT) V0 Rated
Spindle:	Acetal Homopolymer
Rotor Contact:	Brass CZ108 Au Plated
Common Ring Terminal:	Phosphor Bronze Au Plated
Selected Terminals:	Copper Alloy Au Plated

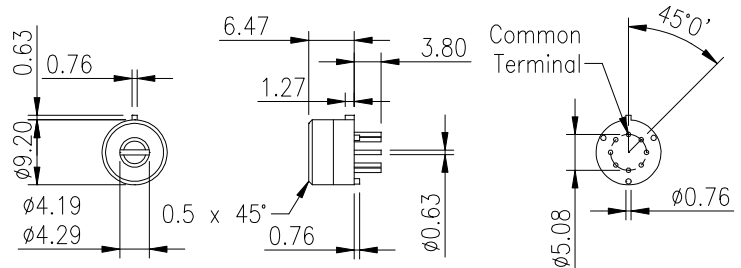
RoHS COMPLIANT



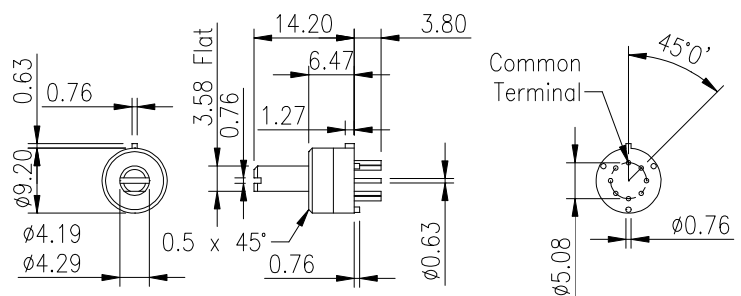
GENERAL FEATURES

- Moulded 9.2mm diameter TO-5 Rotary Switch.
- 45° Indexing, positive action
- 1 Pole up to 7 break-before-make positions + "OFF"
- 6.4mm mounted height above PCB.
- Screwdriver operating slot flush with top of housing.
- Also available with 7.75mm long x 3.58mm diameter spindle with full length flat and screwdriver slot.
- Stops available as required from 2 to 8 positions.
- Optional protective cover (MT10-0084/0020).

FLUSH SCREWDRIVER SLOT OPERATING VERSION



SPINDLE OPERATED VERSION



ORDERING CODES

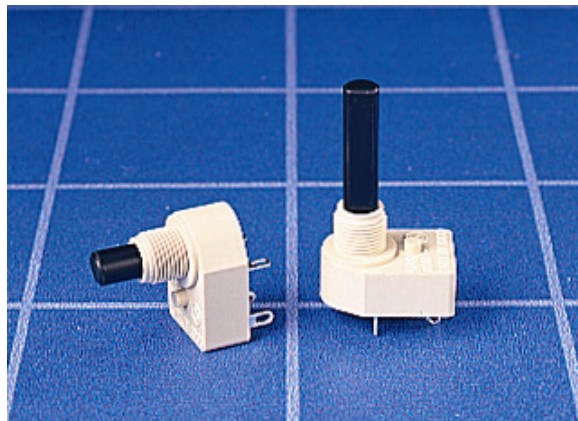
ROTATION	NUMBER OF POSITIONS	TRAVEL	PART NUMBER (FLUSH SLOT)	PART NUMBER (WITH SPINDLE)
No Stop Continuous Rotation	OFF, 1,2,3,4,5,6,7	360°	MT-11-10	MT-21-10
"OFF" In Extreme Anti-Clockwise Position (Position 1)	OFF, 1,2,3,4,5,6	270°	MT-11-70	MT-21-70

RMS ROTARY MAINS SWITCH

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	4/80A @ 250Vac. R/C 10A @ 12Vdc
Life:	>15,000 Cycles
Operating Temperature:	-25°C to +85°C
Proof Voltage:	3 KVac (Initial)
Insulation Resistance:	>999MΩ @ 500Vdc (Initial)
Contact Resistance:	<20 mΩ (Initial)
Contact Gap:	3mm (min)
Switch Contacts:	Silver Cadmium Oxide
Switch Chamber:	Polyamide 6.6 G.F. V0 Rated
Tag Panel:	SRBP
Terminals:	Brass CZ108, Ag plated

RoHS COMPLIANT

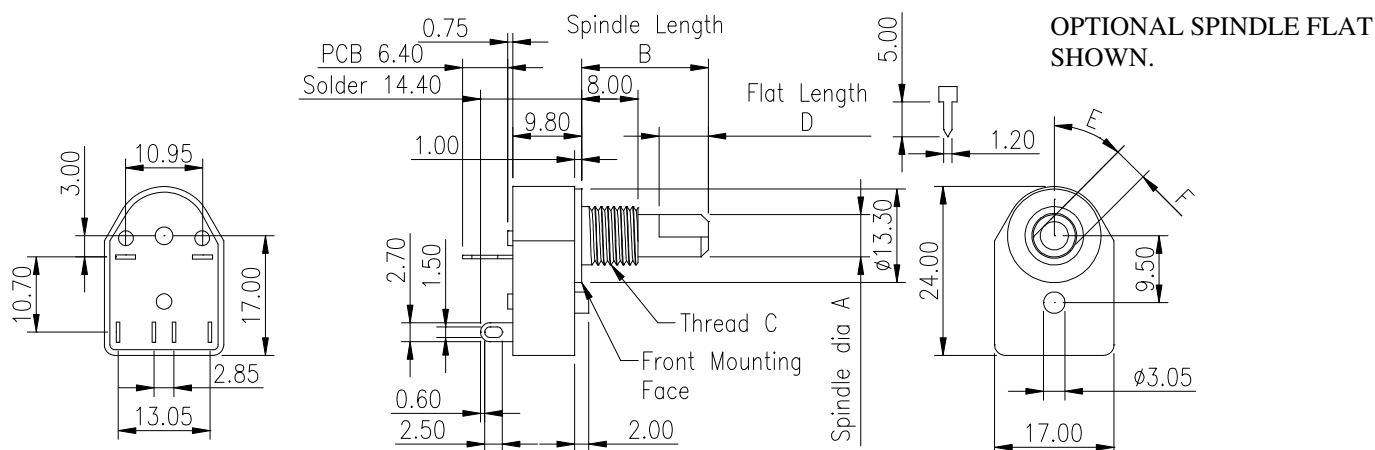


APPROVED TO EN61058 ENEC (VDE)
Note: CHANGEOVER TYPE HAS NO APPROVALS.

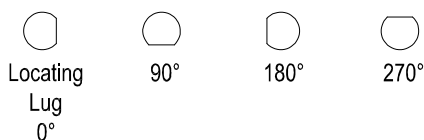
GENERAL FEATURES

- Made in UK.
- 45° Index Angle.
- Double Pole single throw basic circuitry.
- Solder or Printed Circuit Terminals.
- Spindle flats (optional)

TERMINAL LAYOUT



OPTIONAL SPINDLE FLATS



NOTE: The angle of the spindle flat is shown with the locating lug at the bottom of the switch, when the switch is set in the fully anticlockwise position (i.e. position 1) viewed from the knob end of the spindle.

STANDARD PART NUMBERS

BASIC TYPES	A	B	C	D	E	F
	Spindle Diameter	Spindle Length	Bush Thread	Spindle Flat Lgth	Spindle Angle	Spindle Flat
IMPERIAL	6.35mm	55mm	9.52 x 32TPI	No Flat	N/a	N/a
METRIC	6.0mm	38mm	M10 x 0.75	No Flat	N/a	N/a

CIRCUITRY	TERMINAL LAYOUT VIEWED FROM REAR OF SWITCH	TERMINAL TYPE	STANDARD METRIC SWITCHES	STANDARD IMPERIAL SWITCHES
2 POLE OFF-ON		SOLDER	RMS1035	RMS1100
		PCB	RMS1130	RMS1159

CIRCUITRY	TERMINAL LAYOUT VIEWED FROM REAR OF SWITCH	TERMINAL TYPE	STANDARD METRIC SWITCHES	STANDARD IMPERIAL SWITCHES
2 POLE CHANGEOVER (Not approved)		SOLDER	RMS1089	RMS1101
		PCB	RMS1153	RMS1128

WRLCK LOCK SWITCHES

RoHS COMPLIANT

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	150mA @ 250V ac/dc resistive load
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	1,500Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20mΩ (initial)
Housing Material:	Polycarbonate
Wafer Material:	Polyamide 6.6 G.F. V0 Rated
Contact/Terminal Material:	Brass CZ108 Ag Plated
Lock Housing:	Zinc Alloy Bright Cr Plated
Lock Type:	5 Disc
Std. Qty. of Keys per lock:	2 Brass - Ni Plated



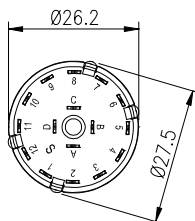
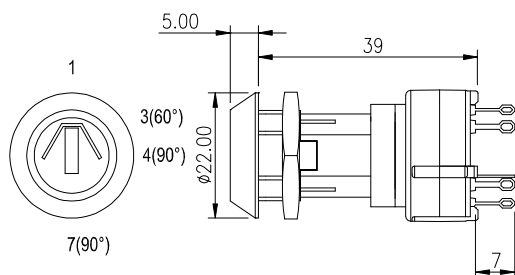
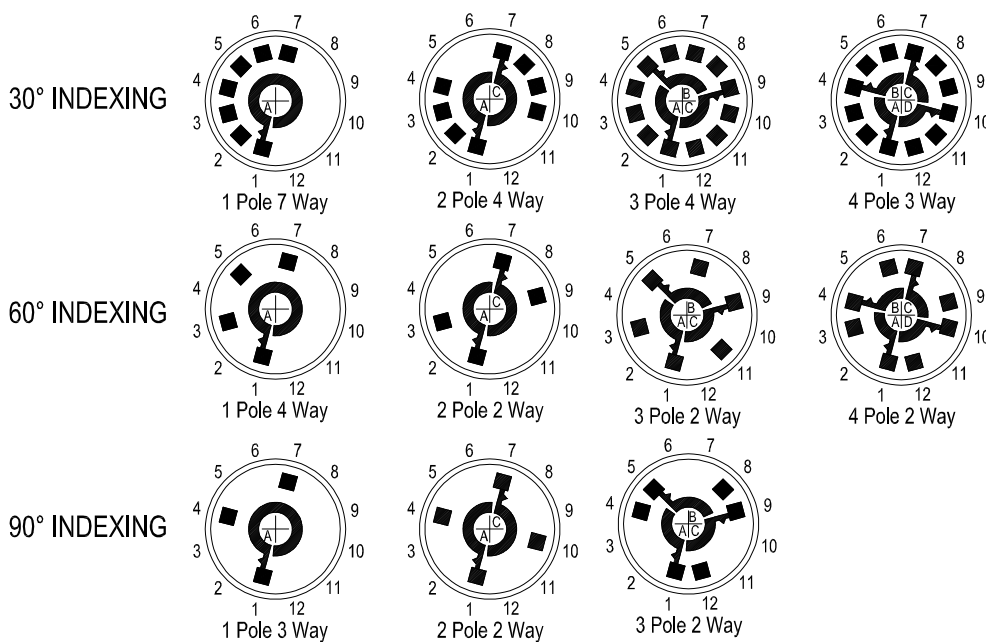
IP67 INGRESS PROTECTION

GENERAL FEATURES

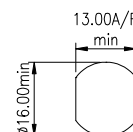
- Made in UK.
- Moulded Single Wafer Lock switch.
- Two part construction. The lock is inserted into the panel from the front. The CK module snap-on, from the rear of the panel.
- All contacts are non-shorting (BBM).
- Solder or printed circuit terminals.
- Keys removable at 60° or 90° angles
- Max panel thickness 3mm.
- Switch indexed 30°, 60° or 90°.
- Two keys per lock. Additional keys to order.
- Keys to pass (common combination) or 200 differ (different combinations)
- Key type flat, double entry (key can be inserted into the lock either way up)

CK LOCK SWITCH MODULE TERMINAL LAYOUTS

(VIEWED FROM THE KEY) POSITION 1



PANEL PIERCING DETAILS



WRLCK LOCK SWITCHES

BASIC PART No.	SWITCH POLES	SWITCH OUTPUTS	TOTAL MOVEMENT	MODULE INDEXING	KEY WITHDRAWAL POSITIONS
WRLCK-30-13-*-A	1	3	60°	30°	1 ONLY
WRLCK-30-13-*-B	1	3	60°	30°	1 , 3
WRLCK-30-23-*-A	2	3	60°	30°	1 ONLY
WRLCK-30-23-*-B	2	3	60°	30°	1 , 3
WRLCK-30-33-*-A	3	3	60°	30°	1 ONLY
WRLCK-30-33-*-B	3	3	60°	30°	1 , 3
WRLCK-30-43-*-A	4	3	60°	30°	1 ONLY
WRLCK-30-43-*-B	4	3	60°	30°	1 , 3
WRLCK-30-14-*-A	1	4	90°	30°	1 ONLY
WRLCK-30-14-*-C	1	4	90°	30°	1 , 4
WRLCK-30-24-*-A	2	4	90°	30°	1 ONLY
WRLCK-30-24-*-C	2	4	90°	30°	1 , 4
WRLCK-30-34-*-A	3	4	90°	30°	1 ONLY
WRLCK-30-34-*-C	3	4	90°	30°	1 , 4
WRLCK-30-17-*-A	1	7	180°	30°	1 ONLY
WRLCK-30-17-*-C	1	7	180°	30°	1 , 4
WRLCK-30-17-*-D	1	7	180°	30°	1 , 4 , 7
WRLCK-60-12-*-A	1	2	60°	60°	1 ONLY
WRLCK-60-12-*-B	1	2	60°	60°	1 , 3
WRLCK-60-22-*-A	2	2	60°	60°	1 ONLY
WRLCK-60-22-*-B	2	2	60°	60°	1 , 3
WRLCK-60-32-*-A	3	2	60°	60°	1 ONLY
WRLCK-60-32-*-B	3	2	60°	60°	1 , 3
WRLCK-60-42-*-A	4	2	60°	60°	1 ONLY
WRLCK-60-42-*-B	4	2	60°	60°	1 , 3
WRLCK-60-14-*-A	1	4	180°	60°	1 ONLY
WRLCK-60-14-*-E	1	4	180°	60°	1 , 7
WRLCK-90-12-*-A	1	2	90°	90°	1 ONLY
WRLCK-90-12-*-C	1	2	90°	90°	1 , 4
WRLCK-90-22-*-A	2	2	90°	90°	1 ONLY
WRLCK-90-22-*-C	2	2	90°	90°	1 , 4
WRLCK-90-32-*-A	3	2	90°	90°	1 ONLY
WRLCK-90-32-*-C	3	2	90°	90°	1 , 4
WRLCK-90-13-*-A	1	3	180°	90°	1 ONLY
WRLCK-90-13-*-D	1	3	180°	90°	1 , 4 , 7

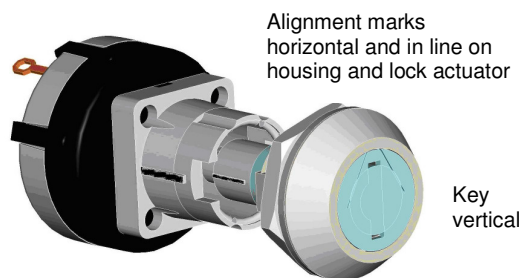
★	MBB or BBM	Contact Type	Contact Plating
A	BBM	Solder	SILVER
B	MBB	Solder	
C	BBM	PCB	
D	MBB	PCB	
E	BBM	Solder	GOLD PLATE
F	MBB	Solder	
G	BBM	PCB	
H	MBB	PCB	
I	BBM	Solder	GOLD FLASH
J	MBB	Solder	
K	BBM	PCB	
L	MBB	PCB	

REPLACE * IN BASIC CODE WITH LETTER FROM ABOVE TABLE. MBB ONLY IN 30°

SAME KEY NUMBER 901 IS SUPPLIED AS STANDARD.

TO REQUEST DIFFER KEY PLEASE ADD 'D' TO END OF PART NUMBER. i.e. SRLCKB-90-13-A-D-D

ASSEMBLY ALIGNMENT DETAILS



GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	1A @ 230Vac
(Switching Resistive load):	5A @ 115Vac
No Mains Isolation	3A @ 50Vdc
Current Carrying Capacity	5A non switching
Life:	>10,000 Cycles
Operating Temperature:	-20°C to +65 °C
Proof Voltage:	750 Vdc (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20 mΩ (Initial)
Lock Type:	5 Disc
Std. Qty. of Keys per Lock:	2 Mild Steel Ni Plated
Contact Material:	Brass CZ108 Ag Plated
Moulding Material:	Polyamide 6.6 G.F. V0 Rated
Lock Housing:	Zinc Alloy Bright Cr Plated

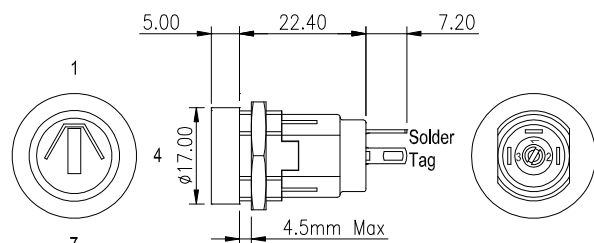


GENERAL FEATURES

- Made in UK.
- Miniature key-operated Lock switch.
- Single or Double pole
- Up to 200 key combinations – keys to differ.
- Common keys available – keys to pass.
- Keys are double entry (they can be inserted into the lock either way up).
- Occupies small panel area.
- Easily assembled through front of equipment panel.
- Rear projection less than 30mm from panel.
- Optional Extras :
 - Moulded bezel for parallel lock headed versions (SRL 02101).

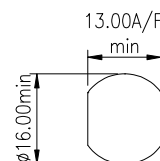
SINGLE POLE LOCK SWITCH

Parallel Lock Head 90° Indexing



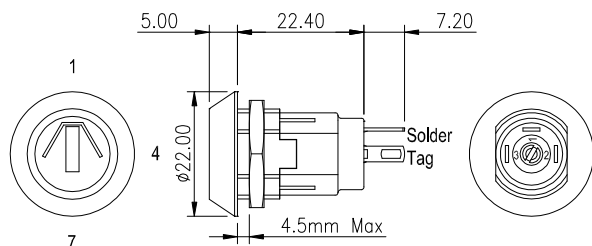
Key Withdrawal Positions

PANEL PIERCING DETAILS



SINGLE POLE LOCK SWITCH

Tapered Lock Head 90° Indexing



Key Withdrawal Positions

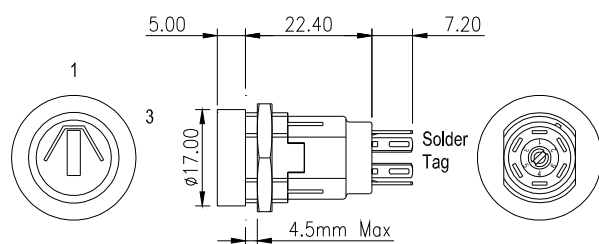
BASIC PART No.	TOTAL MOVEMENT	INDEXING	KEY WITHDRAWAL POSITIONS	SWITCH CONFIGURATION
SRL-5-A	90°	90°	1,4	
SRL-5-B	90°	90°	1 ONLY	
SRL-5-C	180°	90°	1,4,7	
SRL-5-N	180°	90°	1,4,7	

BASIC PART No.	TOTAL MOVEMENT	INDEXING	KEY WITHDRAWAL POSITIONS	SWITCH CONFIGURATION
SRL-5-D	90°	90°	1,4	
SRL-5-E	90°	90°	1 ONLY	
SRL-5-F	180°	90°	1,4,7	
SRL-5-P	180°	90°	1,4,7	

SRL LOCK SWITCHES

DOUBLE POLE LOCK SWITCH

Parallel Lock Head 60° Indexing

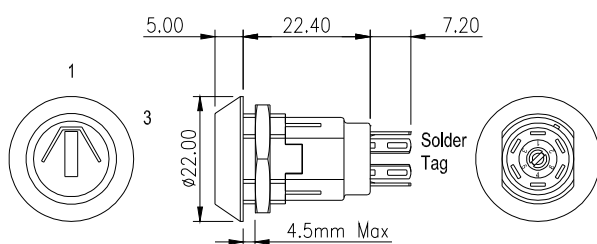


Key Withdrawal
Positions

BASIC PART No.	TOTAL MOVEMENT	INDEXING	KEY WITHDRAWAL POSITIONS	SWITCH CONFIGURATION
SRL-5-J	60°	60°	1,3	1—2 3—5
SRL-5-K	60°	60°	1 ONLY	4—5 6—6

DOUBLE POLE LOCK SWITCH

Tapered Lock Head 60° Indexing

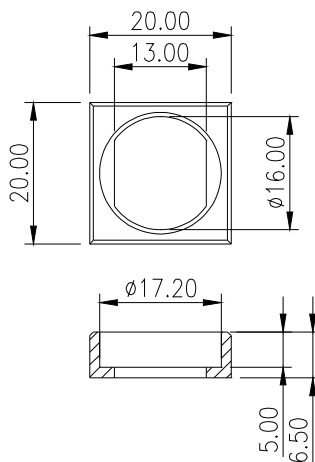


Key Withdrawal
Positions

BASIC PART No.	TOTAL MOVEMENT	INDEXING	KEY WITHDRAWAL POSITIONS	SWITCH CONFIGURATION
SRL-5-L	60°	60°	1,3	1—2 3—5
SRL-5-M	60°	60°	1 ONLY	4—5 6—6

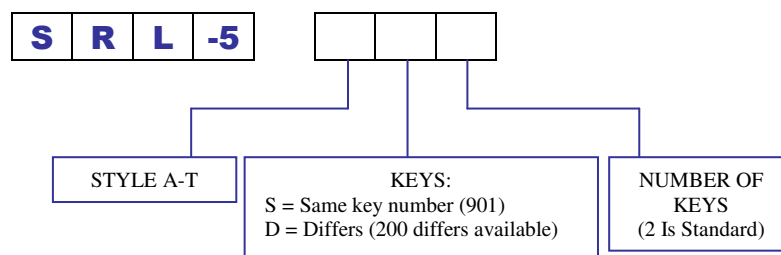
OPTIONAL EXTRAS

Moulded Bezel for Parallel Lock Headed Versions



SUPPLIED LOOSE: ORDERING CODE SRL 02101

SRL LOCK SWITCH ORDER CODE



DSL SPRING RETURN LOCK SWITCHES

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	5A/115VAC 3A/30VDC
Life:	>10,000 Cycles
Operating Temperature:	-25°C to +85 °C
Proof Voltage:	1kV min. (Initial)
Contact Resistance:	<20 MΩ (Initial)
Flame Retardency:	UL94 V0
Lock Housing:	Brass - Chrome or Nickel Plated
Keys:	Nickel Silver

RoHS COMPLIANT



Switch Module approved to UL/CSA

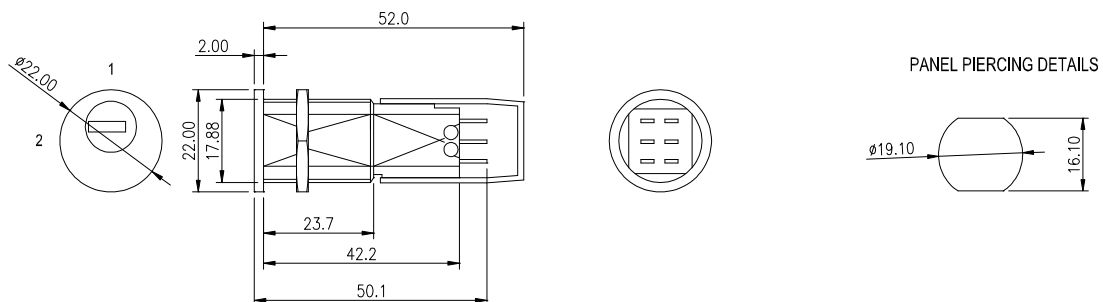
CIRCUITRY	TERMINAL LAYOUT VIEWED FROM REAR OF SWITCH	KEY WITHDRAWAL POSITIONS
2 POLE C/O		

GENERAL FEATURES

- Over 15000 key combinations – keys to differ
- Key –operated Lock with dimpled 6 pin lock
- Lock and switch mounted from front of panel
- Common keys available – keys to pass
- Solder terminals
- Two keys per lock. Additional keys to order.
- Supplied with removable plastic shroud over switch terminals

DSL-6 ORDER CODES			
SWITCH	KEY	POSITION IN WHICH KEY FREE	ORDER CODES
2 POLE C/O	DIFFERS	POSITION 2	DSL-6-S-D
2 POLE C/O	SAME	POSITION 2	DSL-6-S-S

LOCK TYPE: BRASS Lock 6 pin – low profile or with decorative panel ring.
LOCK MOVEMENT: 90° Step
LOCK COMBINATIONS: Over 15000 differ or all pass (same key for all locks).
KEY TYPE: Flat, double entry (key can be inserted into the lock either way up).
MASTER KEY SYSTEM AVAILABLE: No
MAXIMUM PANEL THICKNESS: 15mm.
ASSEMBLY WEIGHT: 90 grams



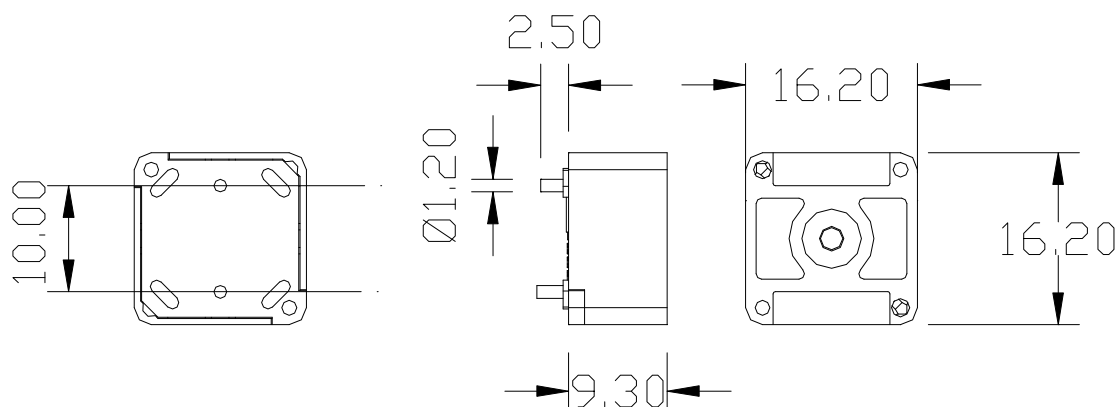
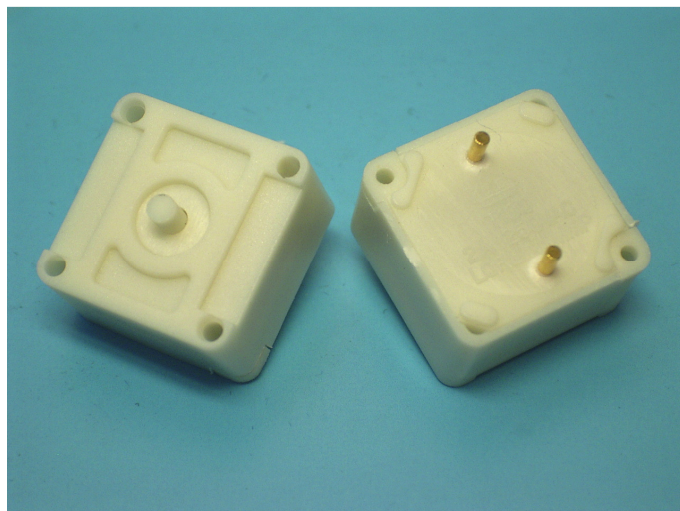
DSL LOCKSWITCH WITH MICRO-SWITCH

1745-SIGNAL PUSH TO MAKE SWITCH - MOMENTARY

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Rating: Momentary	1.0mA @ 24V DC
Life:	>500,000 Cycles
Operating Temperature:	-25 ° C to +100 ° C
Insulation Resistance:	>999 Megohms at 500V DC (Initial)
Contact Momentary	Push to Make
Switch Housing:	Polyamide 6.6 G.F. V0 Rated
Switch Wafer:	Polyamide 6.6 G.F. V0 Rated
Switch Plunger:	Polyamide 6.6 G.F. V0 Rated
Contacts: Momentary	Silver Cadmium Ox + Gold plate
Terminals	Brass CZ108 Sn Plated

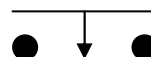
ROHS COMPLAINT



SWITCH MODULE MOMENTARY MAKE

ORDERING CODE

	ORDERING CODE	SWITCH CONFIGURATION	
		TERMINAL	TERMINAL CONFIG
MOMENTARY PUSH TO MAKE	1745-533SAL	PINS	

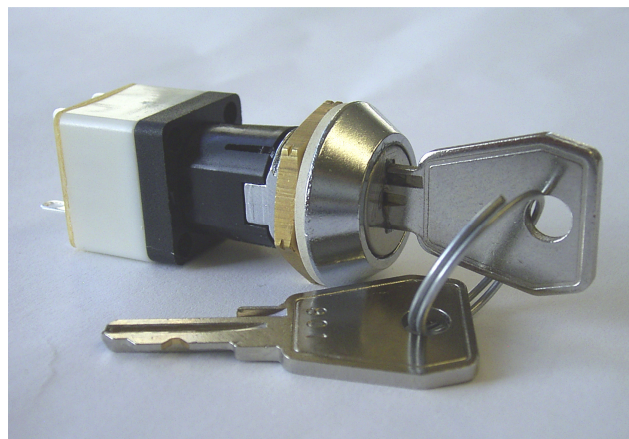


WRLM MAINS LOCK SWITCHES

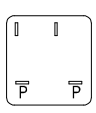
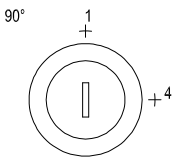
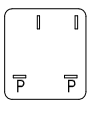
GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	4/80A @250V ac. R/C
Life:	>15,000 Cycles
Operating Temperature:	-25°C to +85 °C
Proof Voltage:	3kV min. (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20 MΩ (Initial)
Flame Retardency:	UL94 V0
Switch contacts:	Silver Cadmium Oxide
Switch Chamber:	Polyamide 6.6 GF V0 Rated
Tag Panel:	SRBP
Terminals:	Brass CZ108 Ag Plated
Lock Housing:	Zinc Alloy Bright Chrome Plated
Keys per lock:	2 off - Brass Ni Plated

RoHS COMPLIANT



Switch Module ENEC approved to EN61058 by DEMKO
ASSEMBLY IP66 / IP67 RATED

CIRCUITRY	TERMINAL LAYOUT VIEWED FROM REAR OF SWITCH	KEY WITHDRAWAL POSITIONS
2 POLE OFF-ON		
2 POLE ON-OFF (NORMALLY CLOSED)		

GENERAL FEATURES

- Made in UK.
- Miniature key –operated Lock
- Up to 200 key combinations - keys to differ
- Common keys available – keys to pass
- Two part construction. The lock is inserted into the panel from the front. The mains switch module snaps-on, from the rear of the panel.
- Standard solder terminals (Printed circuit terminals optional – add /P to part number).
- For continued exterior use lubricate lock regularly
- Snap on switch module
- M16 earth tag available as an optional extra

WRLM ORDER CODES			
SWITCH	KEY	POSITION IN WHICH KEY FREE	Tapered lock Head Order-codes
2 POLE OFF – ON	DIFFERS DIFFERS	0° and 90° (1+4) 0° only (1)	WRLM -5-Q-D WRLM -5-S-D
2 POLE OFF –ON	SAME SAME	0° and 90° (1+4) 0° only (1)	WRLM -5-Q-S WRLM -5-S-S
2 POLE ON-OFF	DIFFERS DIFFERS	0° and 90° (1+4) 0° only (1)	WRLM -5-R-D WRLM -5-T-D
2 POLE ON-OFF	SAME SAME	0° and 90° (1+4) 0° only (1)	WRLM -5-R-S WRLM -5-T-S

LOCK TYPE: 5 Disc.

LOCK MOVEMENT: 90°

LOCK COMBINATIONS: 200 differs or all to pass (same key for all locks).

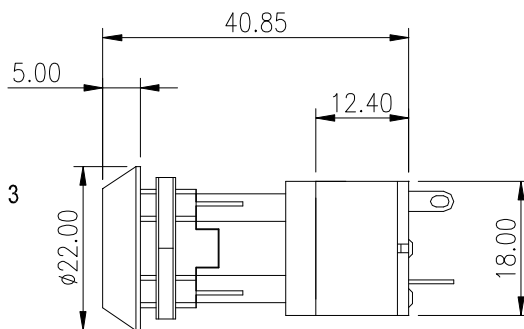
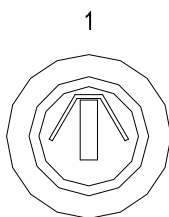
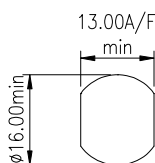
KEY TYPE: Flat, double entry (key can be inserted into the lock either way up).

MASTER KEY SYSTEM AVAILABLE: No

MAXIMUM PANEL THICKNESS: 4.5mm.

NUMBER OF KEYS: 2

PANEL PIERCING DETAILS



TAPERED LOCK HEAD

WRLCKB LOCK SWITCHES

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	150mA @ 250V ac/dc resistive load
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	1,500Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20mΩ (initial)
Housing Material:	Polyamide 6.6 G.F. V0 Rated
Wafer Material:	Polyamide 6.6 G.F. V0 Rated
Contact/Terminal Material:	Brass CZ108 Ag Plated
Lock Housing:	Zinc Alloy Bright Cr Plated
Lock Type:	5 Disc
Std. Qty. of Keys per lock:	2 Brass - Ni Plated



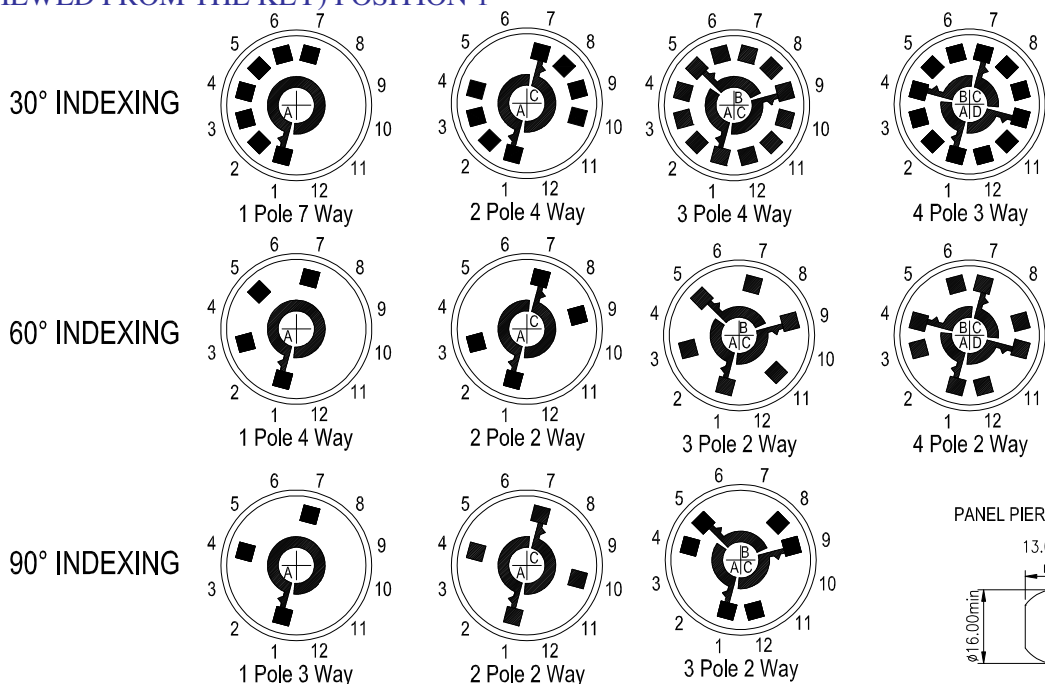
IP67 INGRESS PROTECTION

GENERAL FEATURES

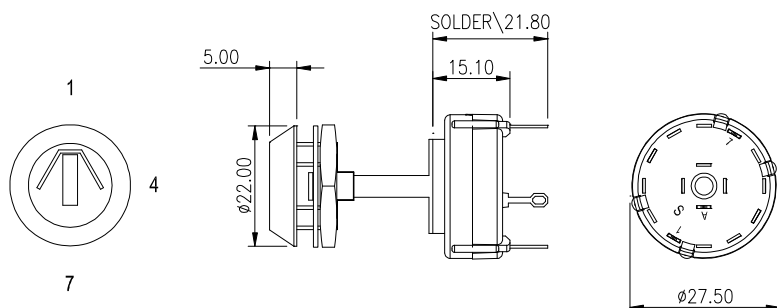
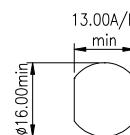
- Made in UK.
- Moulded Single Wafer Lock switch.
- Two part construction. The lock is inserted into the panel from the front. The CK module bracketted, assembled from the rear of the panel.
- All contacts are non-shorting (BBM).
- Solder or printed circuit terminals.
- Keys removable at 60° or 90° angles
- Panel thickness 1-2mm.
- Switch indexed 30°, 60° or 90°.
- Two keys per lock. Additional keys to order.
- Keys to pass (common combination) or 200 differ (different combinations)
- Key type flat, double entry (key can be inserted into the lock either way up)

CK LOCK SWITCH MODULE TERMINAL LAYOUTS

(VIEWED FROM THE KEY) POSITION 1



PANEL PIERCING DETAILS



WRLCKB LOCK SWITCHES

BASIC PART No.	SWITCH POLES	SWITCH OUTPUTS	TOTAL MOVEMENT	MODULE INDEXING	KEY WITHDRAWAL POSITIONS
WRLCKB-30-13-*-A	1	3	60°	30°	1 ONLY
WRLCKB-30-13-*-B	1	3	60°	30°	1 , 3
WRLCKB-30-23-*-A	2	3	60°	30°	1 ONLY
WRLCKB-30-23-*-B	2	3	60°	30°	1 , 3
WRLCKB-30-33-*-A	3	3	60°	30°	1 ONLY
WRLCKB-30-33-*-B	3	3	60°	30°	1 , 3
WRLCKB-30-43-*-A	4	3	60°	30°	1 ONLY
WRLCKB-30-43-*-B	4	3	60°	30°	1 , 3
WRLCKB-30-14-*-A	1	4	90°	30°	1 ONLY
WRLCKB-30-14-*-C	1	4	90°	30°	1 , 4
WRLCKB-30-24-*-A	2	4	90°	30°	1 ONLY
WRLCKB-30-24-*-C	2	4	90°	30°	1 , 4
WRLCKB-30-34-*-A	3	4	90°	30°	1 ONLY
WRLCKB-30-34-*-C	3	4	90°	30°	1 , 4
WRLCKB-30-17-*-A	1	7	180°	30°	1 ONLY
WRLCKB-30-17-*-C	1	7	180°	30°	1 , 4
WRLCKB-30-17-*-D	1	7	180°	30°	1 , 4 , 7
WRLCKB-60-12-*-A	1	2	60°	60°	1 ONLY
WRLCKB-60-12-*-B	1	2	60°	60°	1 , 3
WRLCKB-60-22-*-A	2	2	60°	60°	1 ONLY
WRLCKB-60-22-*-B	2	2	60°	60°	1 , 3
WRLCKB-60-32-*-A	3	2	60°	60°	1 ONLY
WRLCKB-60-32-*-B	3	2	60°	60°	1 , 3
WRLCKB-60-42-*-A	4	2	60°	60°	1 ONLY
WRLCKB-60-42-*-B	4	2	60°	60°	1 , 3
WRLCKB-60-14-*-A	1	4	180°	60°	1 ONLY
WRLCKB-60-14-*-E	1	4	180°	60°	1 , 7
WRLCKB-90-12-*-A	1	2	90°	90°	1 ONLY
WRLCKB-90-12-*-C	1	2	90°	90°	1 , 4
WRLCKB-90-22-*-A	2	2	90°	90°	1 ONLY
WRLCKB-90-22-*-C	2	2	90°	90°	1 , 4
WRLCKB-90-32-*-A	3	2	90°	90°	1 ONLY
WRLCKB-90-32-*-C	3	2	90°	90°	1 , 4
WRLCKB-90-13-*-A	1	3	180°	90°	1 ONLY
WRLCKB-90-13-*-D	1	3	180°	90°	1 , 4 , 7

*	MBB or BBM	Contact Type	Contact Plating
A	BBM	Solder	SILVER
B	MBB	Solder	
C	BBM	PCB	
D	MBB	PCB	
E	BBM	Solder	GOLD PLATE
F	MBB	Solder	
G	BBM	PCB	
H	MBB	PCB	
I	BBM	Solder	GOLD FLASH
J	MBB	Solder	
K	BBM	PCB	
L	MBB	PCB	

REPLACE * IN BASIC CODE WITH LETTER FROM ABOVE TABLE. MBB ONLY IN 30°

SAME KEY NUMBER 901 IS SUPPLIED AS STANDARD.

TO REQUEST DIFFER KEY PLEASE ADD 'D' TO END OF PART NUMBER. i.e.
WRLCKB-90-13-A-D-D

WRL SEALED LOCK SWITCHES

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	1A @ 230Vac
(Switching Resistive load):	5A @ 115Vac
No Mains Isolation	3A @ 50Vdc
Current Carrying Capacity	5A non switching
Life:	>10,000 Cycles
Operating Temperature:	-20°C to +65 °C
Proof Voltage:	750 Vdc (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20 mΩ (Initial)
Lock Type:	5 Disc
Std. Qty. of Keys per Lock:	2 Brass - Ni Plated
Contact Material:	Brass CZ108 Ag Plated
Moulding Material:	Polyamide 6.6 UL94V0 Rated
Lock Housing:	Zinc Alloy Bright Cr Plated

RoHS COMPLIANT

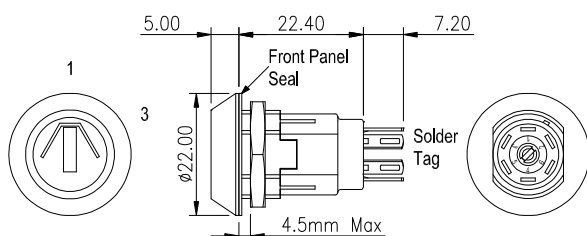


GENERAL FEATURES

- Made in UK.
- Miniature key-operated Lock switch.
- Single or Double pole
- Up to 200 key combinations – keys to differ.
- Common keys available – keys to pass.
- Keys are double entry (they can be inserted into the lock either way up).
- Occupies small panel area.
- Easily assembled through front of equipment panel.
- Rear projection less than 30mm from panel.
- M16 Earthing tag available as an optional extra.
- For continued exterior use lubricate with oil regularly
- Suitable for Marine Environment exposure to Severity 1(EN60068-2-52)

DOUBLE POLE LOCK SWITCH

Tapered Lock Head 60° Indexing



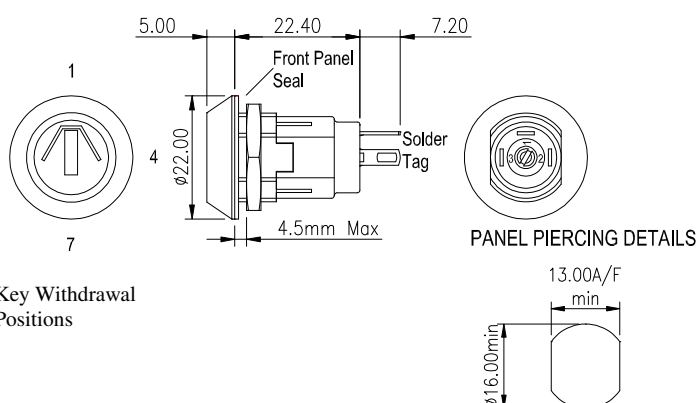
Key Withdrawal Positions

SEVERITY ONE SALT MIST CYCLE TESTED

BASIC PART No.	TOTAL MOVEMENT	INDEXING	KEY WITHDRAWAL POSITIONS	SWITCH CONFIGURATION
WRL-5-L	60°	60°	1,3	1 — 2 3 — 6
WRL-5-M	60°	60°	1 ONLY	4 — 5

SINGLE POLE LOCK SWITCH

Tapered Lock Head 90° Indexing



Key Withdrawal Positions

BASIC PART No.	TOTAL MOVEMENT	INDEXING	KEY WITHDRAWAL POSITIONS	SWITCH CONFIGURATION
WRL-5-D	90°	90°	1,4	1 — 2 3 — 3
WRL-5-E	90°	90°	1 ONLY	1 — 2 3 — 3
WRL-5-F	180°	90°	1,4,7	1 — OFF 2 — 2 3 — 3
WRL-5-P	180°	90°	1,4,7	1 — 2 3 — 3 OFF

W R L -5

STYLE A-T

KEYS:
S = Same key number (901)
D = Differs (200 differs available)

NUMBER OF KEYS
(2 Is Standard)

WRL LOCK SWITCH CODE

SRLM MAINS LOCK SWITCHES

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	4/80A @250V ac. R/C
Life:	>15,000 Cycles
Operating Temperature:	-25°C to +85 °C
Proof Voltage:	3kV min. (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20 MΩ (Initial)
Flame Retardency:	UL94 V0
Switch contacts:	Silver Cadmium Oxide
Switch Chamber:	Polyamide 6.6 G.F. V0 Rated
Tag Panel:	SRBP
Terminals:	Brass CZ108 Ag Plated
Lock Housing:	Zinc Alloy Bright Chrome Plated
Keys:	Mild Steel Ni Plated

RoHS COMPLIANT



Switch Module ENEC approved to EN61058 by VDE

CIRCUITRY	TERMINAL LAYOUT VIEWED FROM REAR OF SWITCH	KEY WITHDRAWAL POSITIONS
2 POLE OFF-ON		
2 POLE ON-OFF (NORMALLY CLOSED)		

GENERAL FEATURES

- Made in UK.
- Miniature key –operated Lock
- Up to 200 key combinations - keys to differ
- Common keys available – keys to pass
- Two part construction. The lock is inserted into the panel from the front. The mains switch module snaps-on, from the rear of the panel.
- Standard solder terminals (Printed circuit terminals optional – add /P to part number).
- Two keys per lock. Additional keys to order.
- Snap on switch module

SRLM ORDER CODES				
SWITCH	KEY	POSITION IN WHICH KEY FREE	Tapered lock Head Order-codes	Parallel lock Head Order-codes
2 POLE OFF – ON	DIFFERS	0° and 90° (1+4)	SRLM -5-Q-D	SRLM -5-U-D
	DIFFERS	0° only (1)	SRLM -5-S-D	SRLM -5-W-D
2 POLE OFF –ON	SAME	0° and 90° (1+4)	SRLM -5-Q-S	SRLM -5-U-S
	SAME	0° only (1)	SRLM -5-S-S	SRLM -5-W-S
2 POLE ON-OFF	DIFFERS	0° and 90° (1+4)	SRLM -5-R-D	SRLM -5-V-D
	DIFFERS	0° only (1)	SRLM -5-T-D	SRLM -5-X-D
2 POLE ON-OFF	SAME	0° and 90° (1+4)	SRLM -5-R-S	SRLM -5-V-S
	SAME	0° only (1)	SRLM -5-T-S	SRLM -5-X-S

LOCK TYPE: 5 Disc.

LOCK MOVEMENT: 90° Steps.

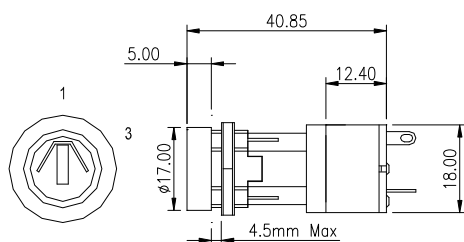
LOCK COMBINATIONS: 200 differs or all to pass (same key for all locks).

KEY TYPE: Flat, double entry (key can be inserted into the lock either way up).

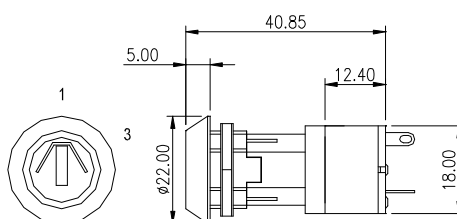
MASTER KEY SYSTEM AVAILABLE: No

MAXIMUM PANEL THICKNESS: 3.4mm.

SRLM LOCKSWITCH WITH SNAP-ON MS MODULE

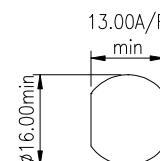


PARALLEL LOCK HEAD



TAPERED LOCK HEAD

PANEL PIERCING DETAILS



SRLCK LOCK SWITCHES

RoHS COMPLIANT

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	150mA @ 250V ac/dc resistive load
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	1,500Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20mΩ (initial)
Housing Material:	Polycarbonate
Wafer Material:	Polyamide 6.6 G.F. V0 Rated
Contact/Terminal Material:	Brass CZ108 Ag Plated
Lock Housing:	Zinc Alloy Bright Cr Plated
Lock Type:	5 Disc
Std. Qty. of Keys per lock:	2 Brass - Ni Plated

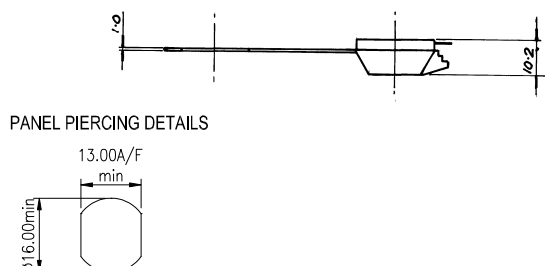
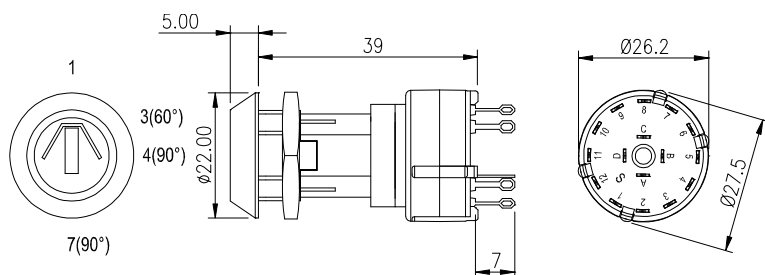
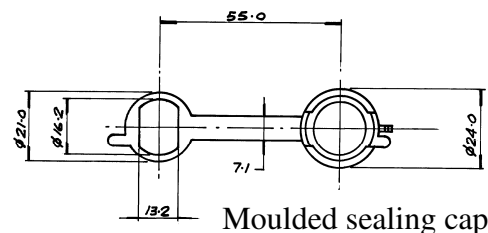
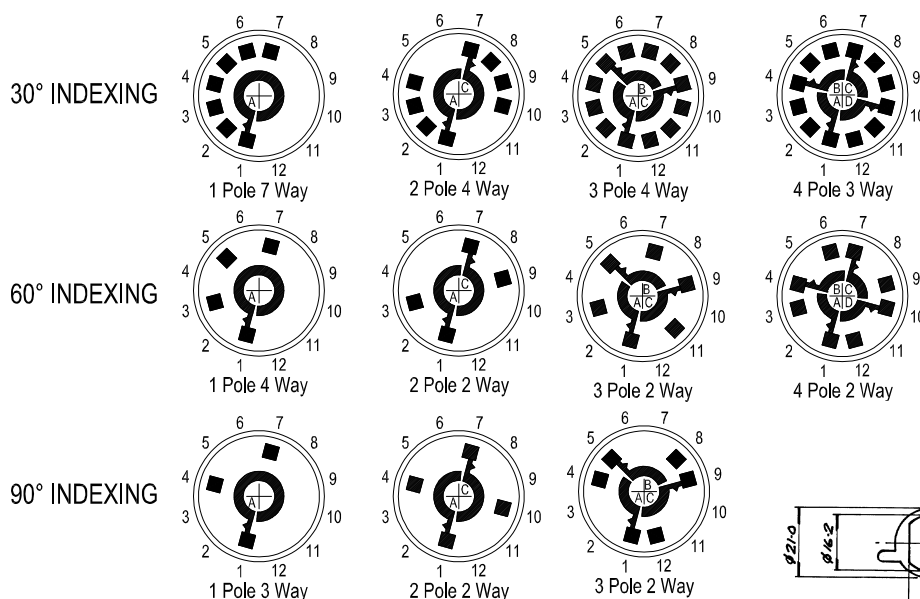


GENERAL FEATURES

- Made in UK.
- Moulded Single Wafer Lock switch.
- Two part construction. The lock is inserted into the panel from the front. The CK module snap-on, from the rear of the panel.
- All contacts are non-shorting (BBM).
- Solder or printed circuit terminals.
- Keys removable at 60° or 90° angles
- Max panel thickness 3mm.
- Switch indexed 30°, 60° or 90°.
- Two keys per lock. Additional keys to order.
- Keys to pass (common combination) or 200 differ (different combinations)
- Key type flat, double entry (key can be inserted into the lock either way up)

CK LOCK SWITCH MODULE TERMINAL LAYOUTS

(VIEWED FROM THE KEY) POSITION 1



SRLCK LOCK SWITCHES

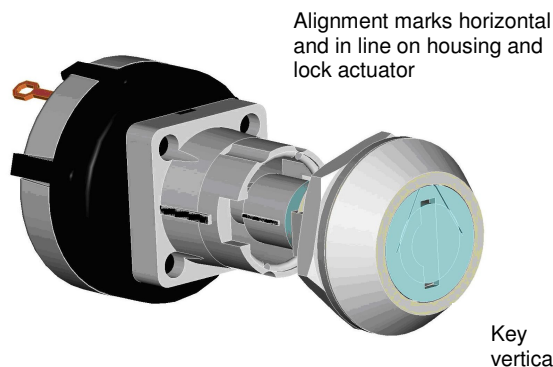
BASIC PART No.	SWITCH POLES	SWITCH OUTPUTS	TOTAL MOVEMENT	MODULE INDEXING	KEY WITHDRAWAL POSITIONS
SRLCK-30-13-*-A	1	3	60°	30°	1 ONLY
SRLCK-30-13-*-B	1	3	60°	30°	1 , 3
SRLCK-30-23-*-A	2	3	60°	30°	1 ONLY
SRLCK-30-23-*-B	2	3	60°	30°	1 , 3
SRLCK-30-33-*-A	3	3	60°	30°	1 ONLY
SRLCK-30-33-*-B	3	3	60°	30°	1 , 3
SRLCK-30-43-*-A	4	3	60°	30°	1 ONLY
SRLCK-30-43-*-B	4	3	60°	30°	1 , 3
SRLCK-30-14-*-A	1	4	90°	30°	1 ONLY
SRLCK-30-14-*-C	1	4	90°	30°	1 , 4
SRLCK-30-24-*-A	2	4	90°	30°	1 ONLY
SRLCK-30-24-*-C	2	4	90°	30°	1 , 4
SRLCK-30-34-*-A	3	4	90°	30°	1 ONLY
SRLCK-30-34-*-C	3	4	90°	30°	1 , 4
SRLCK-30-17-*-A	1	7	180°	30°	1 ONLY
SRLCK-30-17-*-C	1	7	180°	30°	1 , 4
SRLCK-30-17-*-D	1	7	180°	30°	1 , 4 , 7
SRLCK-60-12-*-A	1	2	60°	60°	1 ONLY
SRLCK-60-12-*-B	1	2	60°	60°	1 , 3
SRLCK-60-22-*-A	2	2	60°	60°	1 ONLY
SRLCK-60-22-*-B	2	2	60°	60°	1 , 3
SRLCK-60-32-*-A	3	2	60°	60°	1 ONLY
SRLCK-60-32-*-B	3	2	60°	60°	1 , 3
SRLCK-60-42-*-A	4	2	60°	60°	1 ONLY
SRLCK-60-42-*-B	4	2	60°	60°	1 , 3
SRLCK-60-14-*-A	1	4	180°	60°	1 ONLY
SRLCK-60-14-*-E	1	4	180°	60°	1 , 7
SRLCK-90-12-*-A	1	2	90°	90°	1 ONLY
SRLCK-90-12-*-C	1	2	90°	90°	1 , 4
SRLCK-90-22-*-A	2	2	90°	90°	1 ONLY
SRLCK-90-22-*-C	2	2	90°	90°	1 , 4
SRLCK-90-32-*-A	3	2	90°	90°	1 ONLY
SRLCK-90-32-*-C	3	2	90°	90°	1 , 4
SRLCK-90-13-*-A	1	3	180°	90°	1 ONLY
SRLCK-90-13-*-D	1	3	180°	90°	1 , 4 , 7

*	MBB or BBM	Contact Type	Contact Plating
A	BBM	Solder	SILVER
B	MBB	Solder	
C	BBM	PCB	
D	MBB	PCB	
E	BBM	Solder	GOLD PLATE
F	MBB	Solder	
G	BBM	PCB	
H	MBB	PCB	
I	BBM	Solder	GOLD FLASH
J	MBB	Solder	
K	BBM	PCB	
L	MBB	PCB	

REPLACE * IN BASIC CODE WITH LETTER FROM ABOVE TABLE. MBB ONLY IN 30°

SAME KEY NUMBER 901 IS SUPPLIED AS STANDARD.
TO REQUEST DIFFER KEY PLEASE ADD 'D' TO END OF PART NUMBER. i.e.
SRLCKB-90-13-A-D-D

ASSEMBLY ALIGNMENT DETAILS



SRLCKB LOCK SWITCHES

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	150mA @ 250V ac/dc resistive load
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	1,500Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20mΩ (initial)
Housing Material:	Polyamide 6.6 G.F. V0 Rated
Wafer Material:	Polyamide 6.6 G.F. V0 Rated
Contact/Terminal Material:	Brass CZ108 Ag Plated
Lock Housing:	Zinc Alloy Bright Cr Plated
Lock Type:	5 Disc
Std. Qty. of Keys per lock:	2 Brass - Ni Plated

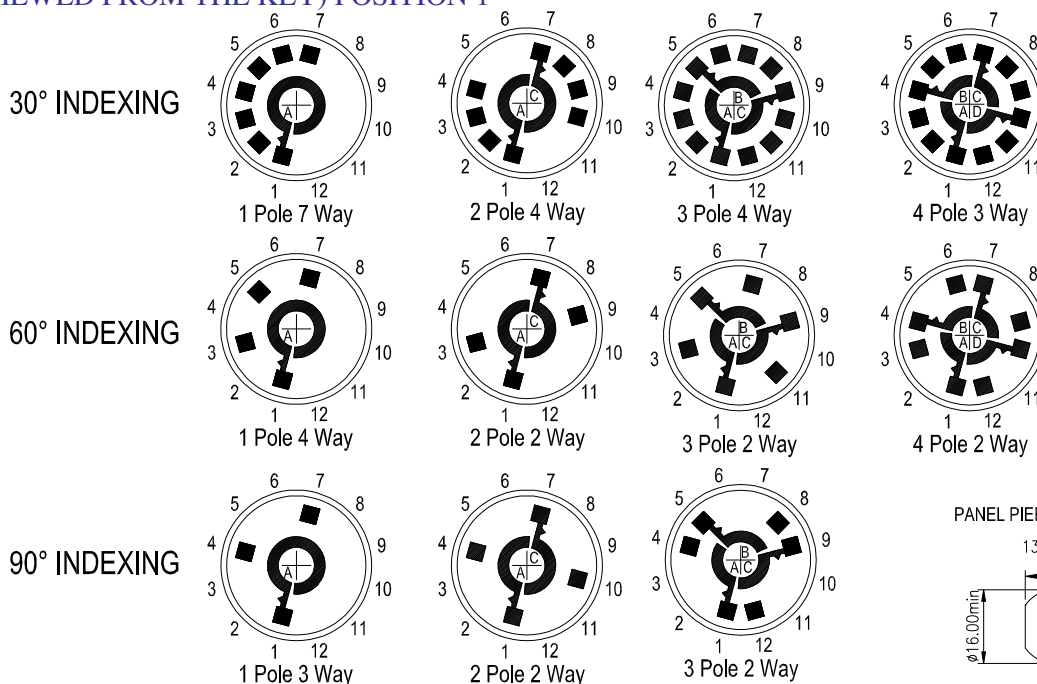


GENERAL FEATURES

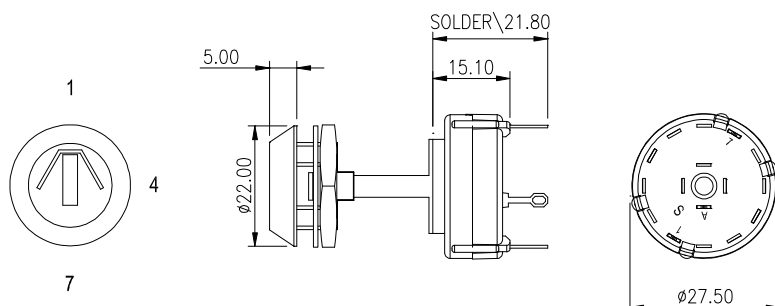
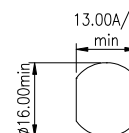
- Made in UK.
- Moulded Single Wafer Lock switch.
- Two part construction. The lock is inserted into the panel from the front. The CK module bracketted, assembled from the rear of the panel.
- All contacts are non-shorting (BBM).
- Solder or printed circuit terminals.
- Keys removable at 60° or 90° angles
- Panel thickness 1-2mm.
- Switch indexed 30°, 60° or 90°.
- Two keys per lock. Additional keys to order.
- Keys to pass (common combination) or 200 differ (different combinations)
- Key type flat, double entry (key can be inserted into the lock either way up)

CK LOCK SWITCH MODULE TERMINAL LAYOUTS

(VIEWED FROM THE KEY) POSITION 1



PANEL PIERCING DETAILS



SRLCKB LOCK SWITCHES

BASIC PART No.	SWITCH POLES	SWITCH OUTPUTS	TOTAL MOVEMENT	MODULE INDEXING	KEY WITHDRAWAL POSITIONS
SRLCKB-30-13-*-A	1	3	60°	30°	1 ONLY
SRLCKB-30-13-*-B	1	3	60°	30°	1 , 3
SRLCKB-30-23-*-A	2	3	60°	30°	1 ONLY
SRLCKB-30-23-*-B	2	3	60°	30°	1 , 3
SRLCKB-30-33-*-A	3	3	60°	30°	1 ONLY
SRLCKB-30-33-*-B	3	3	60°	30°	1 , 3
SRLCKB-30-43-*-A	4	3	60°	30°	1 ONLY
SRLCKB-30-43-*-B	4	3	60°	30°	1 , 3
SRLCKB-30-14-*-A	1	4	90°	30°	1 ONLY
SRLCKB-30-14-*-C	1	4	90°	30°	1 , 4
SRLCKB-30-24-*-A	2	4	90°	30°	1 ONLY
SRLCKB-30-24-*-C	2	4	90°	30°	1 , 4
SRLCKB-30-34-*-A	3	4	90°	30°	1 ONLY
SRLCKB-30-34-*-C	3	4	90°	30°	1 , 4
SRLCKB-30-17-*-A	1	7	180°	30°	1 ONLY
SRLCKB-30-17-*-C	1	7	180°	30°	1 , 4
SRLCKB-30-17-*-D	1	7	180°	30°	1 , 4 , 7
SRLCKB-60-12-*-A	1	2	60°	60°	1 ONLY
SRLCKB-60-12-*-B	1	2	60°	60°	1 , 3
SRLCKB-60-22-*-A	2	2	60°	60°	1 ONLY
SRLCKB-60-22-*-B	2	2	60°	60°	1 , 3
SRLCKB-60-32-*-A	3	2	60°	60°	1 ONLY
SRLCKB-60-32-*-B	3	2	60°	60°	1 , 3
SRLCKB-60-42-*-A	4	2	60°	60°	1 ONLY
SRLCKB-60-42-*-B	4	2	60°	60°	1 , 3
SRLCKB-60-14-*-A	1	4	180°	60°	1 ONLY
SRLCKB-60-14-*-E	1	4	180°	60°	1 , 7
SRLCKB-90-12-*-A	1	2	90°	90°	1 ONLY
SRLCKB-90-12-*-C	1	2	90°	90°	1 , 4
SRLCKB-90-22-*-A	2	2	90°	90°	1 ONLY
SRLCKB-90-22-*-C	2	2	90°	90°	1 , 4
SRLCKB-90-32-*-A	3	2	90°	90°	1 ONLY
SRLCKB-90-32-*-C	3	2	90°	90°	1 , 4
SRLCKB-90-13-*-A	1	3	180°	90°	1 ONLY
SRLCKB-90-13-*-D	1	3	180°	90°	1 , 4 , 7

★	MBB or BBM	Contact Type	Contact Plating
A	BBM	Solder	SILVER
B	MBB	Solder	
C	BBM	PCB	
D	MBB	PCB	
E	BBM	Solder	GOLD PLATE
F	MBB	Solder	
G	BBM	PCB	
H	MBB	PCB	
I	BBM	Solder	GOLD FLASH
J	MBB	Solder	
K	BBM	PCB	
L	MBB	PCB	

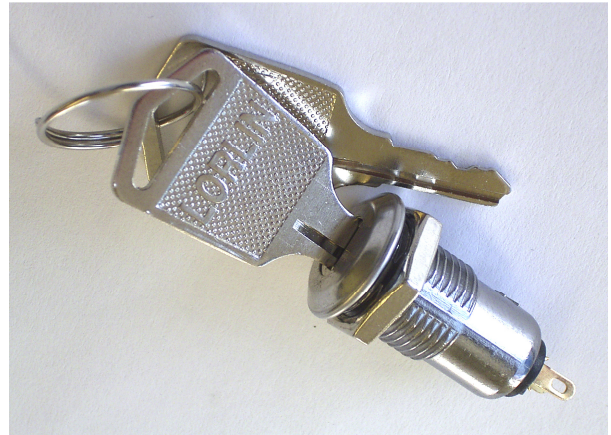
REPLACE * IN BASIC CODE WITH LETTER FROM ABOVE TABLE. MBB ONLY IN 30°

SAME KEY NUMBER 901 IS SUPPLIED AS STANDARD.

TO REQUEST DIFFER KEY PLEASE ADD 'D' TO END OF PART NUMBER. i.e.
SRLCKB-90-13-A-D-D

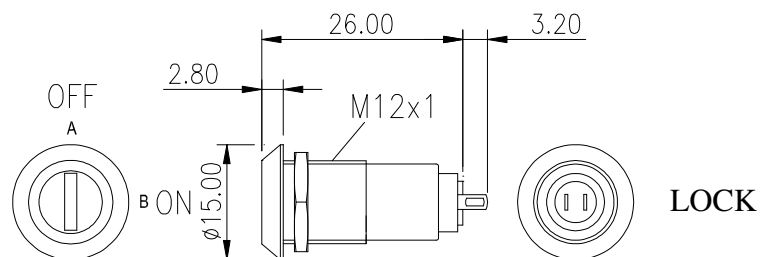
GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating	0.5A @ 24Vac/dc resistive
Life:	>10,000 Cycles
Proof voltage:	1000VAC 1 minute (initial)
Insulation Resistance:	>500M Ω min at 500Vdc(initial)
Contact Resistance:	<20 m Ω max

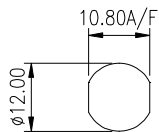


GENERAL FEATURES

- Zinc alloy die cast housing
- Stainless steel capped bezel
- Single pole, single throw lock switch, 90° indexing.
- Bright chrome plated housing
- Brass keys, nickel plated
- Key insertion/removal in both positions as required
- Radial cylinder with 4 pin tumblers.
- Low Security.
- 10 Differ Key Combination



PANEL PIERCING DETAILS



ORDERING CODE	KEY	KEY WITHDRAWAL	KEY TRAVEL	SWITCH OFF - ON
SKL-12-A-S-2	SAME	A & B	90°	
SKL-12-B-S-2	SAME	A ONLY	90°	
SKL-12-A-D-2	DIFFER	A & B	90°	
SKL-12-B-D-2	DIFFER	A ONLY	90°	

Same Key Ref Key 134 (SKL)

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	150mA @ 250V ac/dc
(resistive load only)	350mA @ 110V ac/dc
	1A @ 12V ac/dc
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	1,000Vac (Initial)
Insulation Resistance:	>999MΩ at 500Vdc (Initial)
Contact Resistance:	<20 mΩ (Initial)
Operating Torque (nominal):	7.2 cNm
End Stop Torque (nominal):	1.2 Nm
Wafer:	Polyphenylene Sulphide (PPS)
Lock Housing:	Zinc Alloy Bright Cr Plated
Contact/Terminal Material:	Brass, CZ108 Ag Plated
Keys:	Mild Steel Ni Plated



GENERAL FEATURES

- Made in UK.
- Multi-wafer Lock switch.
- Switch indexed 30°, 45°, 60° or 90°.
- Contacts are non-shorting (BBM) or shorting (MBB).
- Keys removable at 60° or 90° angles.
- Two keys per lock. Additional keys to order.
- Keys to pass (common combination) or differ.
- Solder or printed circuit terminals.
- Two part construction. The lock is inserted into the panel from the rear and secured by screwing on the bezel from the front of the panel.

STANDARD CIRCUITRY AND KEY WITHDRAWAL POSITIONS

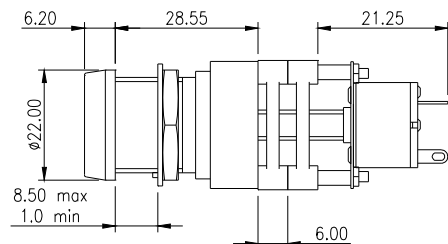
INDEXING ANGLE	STANDARD CIRCUITS NON SHORTING CONTACTS SOLDER TERMINALS						TOTAL SWITCH MOVEMENT	KEY FREE POSITIONS				
	1	2	3	4	5	6		KRA	5-RAL (200 KEY DIFFERS)	4-02	4-01	4-02
	POLE	POLE	POLE	POLE	POLE	POLE		(200 KEY DIFFERS) (KEY FREE 60° STEPS)	(KEY FREE 90° STEPS)	(KEY FREE 60° STEPS)	(KEY FREE 90° STEPS)	(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° NoStop	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° NoStop	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° NoStop	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° NoStop	1+7	1+7/1+4+7+10		1+7/1+4+7+10	

RA LOCK SWITCHES

MULTIWAFAER RAL LOCKSWITCH

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

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



DESCRIPTION

LOCK TYPE: 5 Discs

LOCK MOVEMENT: 60° or 90° Steps.

LOCK COMBINATIONS: 200 differs or all to pass (same key for all locks).

KEY TYPE: Flat, double entry (key can be inserted into the lock only one way up).

MASTER KEY SYSTEM AVAILABLE: Yes.

MAXIMUM PANEL THICKNESS: 8.5mm.

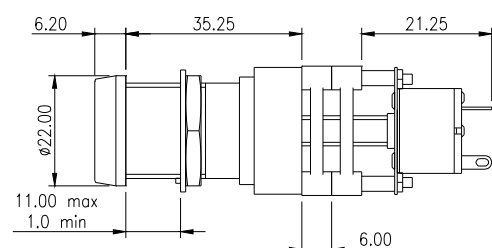
MODULE INDEXING ANGLES: 30°, 45°, 60°, 90°

MAXIMUM NUMBER OF WAFERS: 6 or 2 plus 2 pole mains switch

MULTIWAFAER RAL LOCKSWITCH

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

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



DESCRIPTION

LOCK TYPE: 8 Discs

LOCK MOVEMENT: 60° or 90° Steps.

LOCK COMBINATIONS: 2000 differs or all to pass (same key for all locks).

KEY TYPE: Flat, double entry (key can be inserted into the lock only one way up).

MASTER KEY SYSTEM AVAILABLE: Yes.

MAXIMUM PANEL THICKNESS: 11.0mm.

MODULE INDEXING ANGLES: 30°, 45°, 60°, 90°

MAXIMUM NUMBER OF WAFERS: 6 or 2 plus 2 pole mains switch

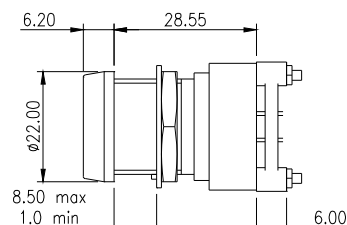
IMPULSION SINGLE WAFER RAL LOCKSWITCH

5-RAL-004

DOUBLE IMPULSION

5-RAL-005

SINGLE IMPULSION



DESCRIPTION

LOCK TYPE: 5 Disc Impulsion

LOCK MOVEMENT: 60°.

LOCK COMBINATIONS: 200 differs or all to pass (same key for all locks).

KEY TYPE: Flat, double entry (key can be inserted into the lock only one way up).

MASTER KEY SYSTEM AVAILABLE: Yes.

MAXIMUM PANEL THICKNESS: 8.5mm.

MAXIMUM NUMBER OF WAFERS: 1

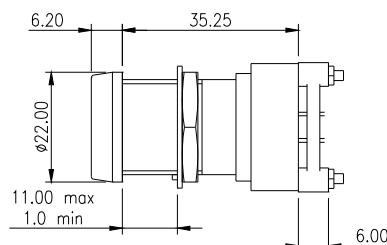
IMPULSION SINGLE WAFER RAL LOCKSWITCH 8 DISC

8-RAL-004

DOUBLE IMPULSION

8-RAL-005

SINGLE IMPULSION



DESCRIPTION

LOCK TYPE: 8 Disc Impulsion

LOCK MOVEMENT: 60°.

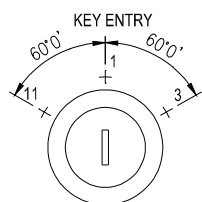
LOCK COMBINATIONS: 2000 differs or all to pass (same key for all locks).

KEY TYPE: Flat, double entry (key can be inserted into the lock only one way up).

MASTER KEY SYSTEM AVAILABLE: Yes.

MAXIMUM PANEL THICKNESS: 11.0mm.

MAXIMUM NUMBER OF WAFERS: 1



DOUBLE IMPULSION

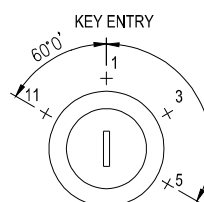
5-RAL-004 8RAL-004

Indexing Movements Available

60° C.W and 60° A.C.W

60° C.W only. 60° A.C.W only

Key Free at key entry only. (PSN1)



SINGLE IMPULSION

5-RAL-005 8RAL-005

Indexing Movements Available

60° A.C.W (Impulsion) and 60° to

240° C.W (Non-Impulsion).

Key Free at positions 1, 3 and 5

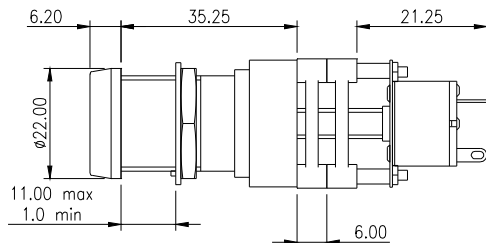
RA LOCK SWITCHES

LIMITED ACCESS IMPULSION SINGLE WAFER

RAL LOCKSWITCH

8-RAL-003

Keys free at Key entry (PSN1)
& Position 'A' (PSN11) only.



DESCRIPTION

LOCK TYPE: 8 Disc

LOCK MOVEMENT: 60°.

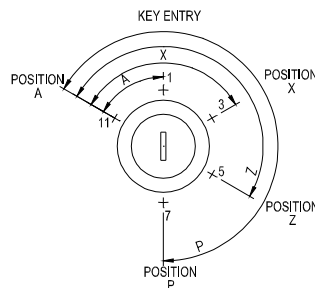
LOCK COMBINATIONS: 50 different sets of 4 keys (A/XZ/P) per lock or 1 set of 4 keys to pass all locks.

KEY TYPE: Flat, double entry (key can be inserted into the lock only one way up).

MASTER KEY SYSTEM AVAILABLE: No.

MAXIMUM PANEL THICKNESS: 11.0mm.

MAXIMUM NUMBER OF WAFERS: 6



LOCK MOVEMENT DETAILS

Key 'A' – Movement 60° ACW from key entry

Key 'X' – Movement 60° ACW and 60° CW from key entry

Key 'Z' – Movement 60° ACW and 120° CW from key entry

Key 'P' – Movement 60° ACW and 180° CW from key entry

Key free available at key entry and Position 'A' only.

LOCK TYPE	KEY FREE INTERVALS	KEY CODE	SWITCH INDEX ANGLE	CONTACT	NUMBER OF WAFERS	TERMINATION	CONTACT PLATING	MASTERED LOCKS
5= 200 Key Differs	1 = 90° (001)	S = Same key for all locks	3 = 30°	B = BBM Non Shorting	1 = 1 WAFERS	S = Solder Terminal	S = Silver Plated	M = Yes
8 = 2000 Key Differs	2 = 60° (002)	D = Keys to differ between locks	4 = 45°	M = MMB shorting	2 = 2 WAFERS	P = PCB terminal	G = Gold Plated	N = No
	3 = 60° (003)		6 = 60°		3 = 3 WAFERS		F = Gold Flash	
	4 = 60° (004)		9 = 90°		4 = 4 WAFERS			
	5 = 60° (005)				5 = 5 WAFERS			
					6 = 6 WAFERS			
					7 = 1+M/S			
					8 = 2+M/S			
					NOTE One wafer only for impulsion			

CODE LETTER	TOTAL LOCK MOVEMENT	KEY WITHDRAW POSITION	KEY FREE INCREMENTS			
			90° (001)	60° (002)	60° (004)	60° (005)
A	0° to 90°	1	X			
B	0° to 90°	1,4	X			
C	0° to 180°	1,7	X			
D	0° to 180°	1,4,7	X			
E	0° to 270°	1,4,7,10	X			
F	0° to 360° NO STOP	1,4,7,10	X			
G	0° to 60°	1,3		X		
H	0° to 120°	1,3,5		X		
J	0° to 180°	1,3,5,7		X		
K	0° to 240°	1,3,5,7,9		X		
L	0° to 360° NO STOP	1,3,5,7,9,11		X		
M	0° to 60°	1		X		
N	0° ← 60°	1			X	
P	300° → 0°	1			X	X
R	300° → 0° ← 60°	1			X	
S	300° → 0° TO 120°	1,3,5				X

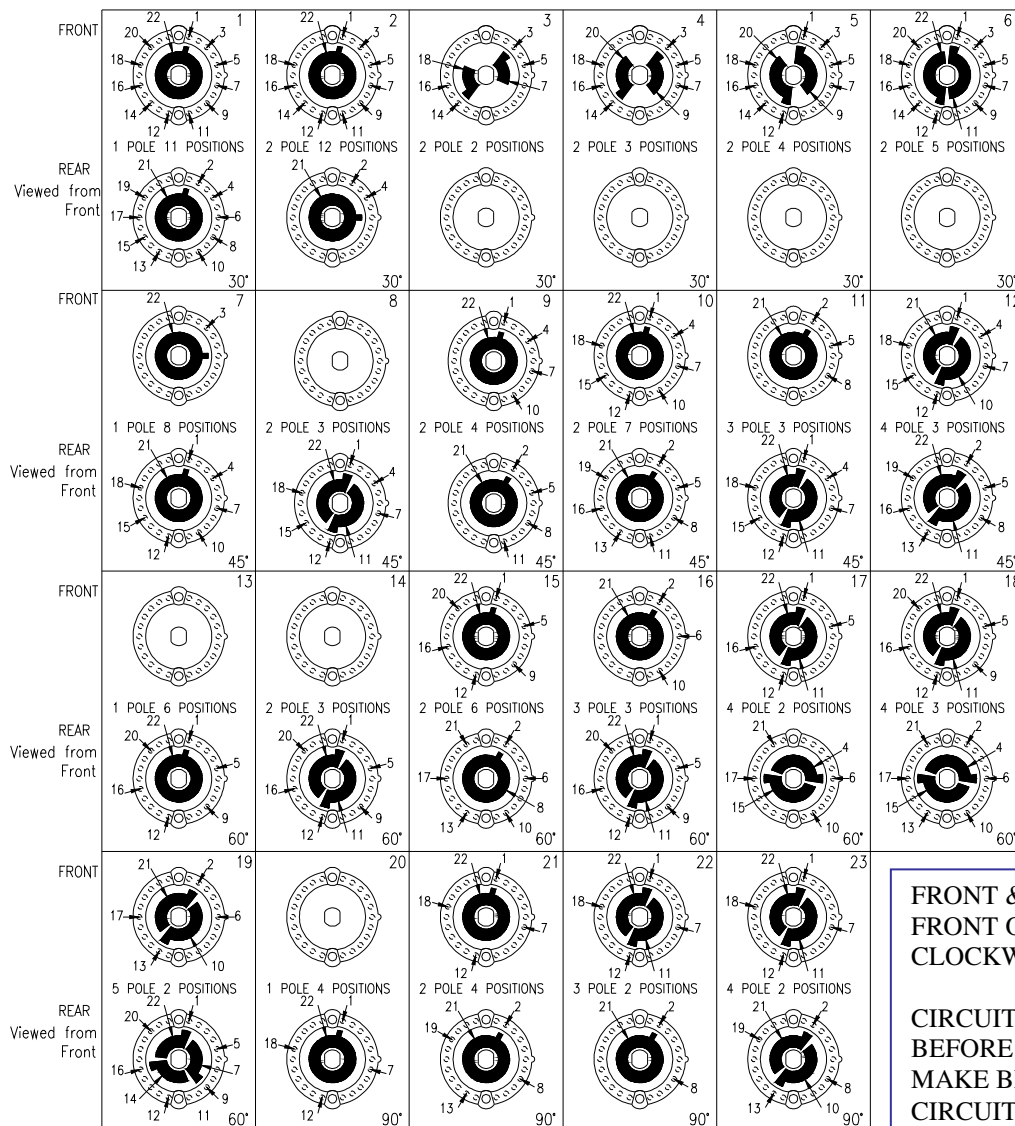
CODE	INDEXING ANGLE	POLES PER WAFER	MAX POS PER WAFER
A	30°	1	12
B	30°	2	09
C	30°	3	05
D	30°	4	04
E	30°	5	03
F	30°	6	02
G	45°	1	08
H	45°	2	07
K	45°	3	03
L	45°	4	03
M	60°	1	06
N	60°	2	06
P	60°	3	03
R	60°	4	03
S	60°	5	02
T	90°	1	04
W	90°	2	04
X	90°	3	02
Y	90°	4	02
Z	To Drawing		To Drawing

ORDERING CODE

Build your part number by filling in the empty boxes with the appropriate numbers and letter

RA LOCK SWITCHES

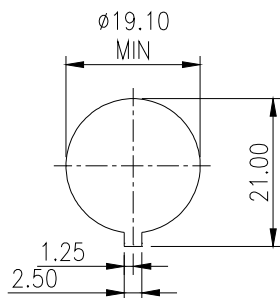
TYPICAL WAFER LAYOUTS 30° 45° 60° 90°



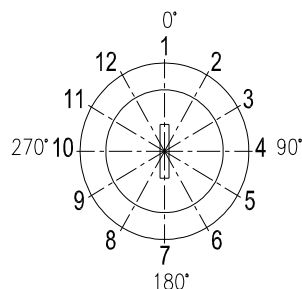
FRONT & REAR WAFERS VIEWED FROM FRONT OF SWITCH IN EXTREME COUNTER CLOCKWISE POSITION.

CIRCUITRY IS SHOWN HERE AS BREAK BEFORE MAKE (BBM – NON-SHORTING) BUT MAKE BEFORE BREAK (MBB- SHORTING) CIRCUITRY MAY ALSO BE SPECIFIED.

TYPICAL PANEL PIERCING DIMENSIONS



LOCK MOVEMENT DESCRIPTION



MSL MAINS LOCK SWITCHES

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	4/80A @ 250Vac R/C
Life:	>15,000 Cycles
Operating Temperature:	-25°C to +85 °C
Proof Voltage:	3kV min. (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20 mΩ (Initial)
Switch contacts:	Silver Cadmium Oxide
Switch Chamber:	Polyamide 6.6 G.F. V0 Rated
Tag Panel:	SRBP
Terminals:	Brass CZ108 Ag Plated
Lock Housing:	Zinc Alloy Bright Cr Plated
Keys:	Mild Steel Ni Plated

RoHS COMPLIANT



SWITCH MODULE IS ENEC APPROVED TO EN61058 BY VDE.

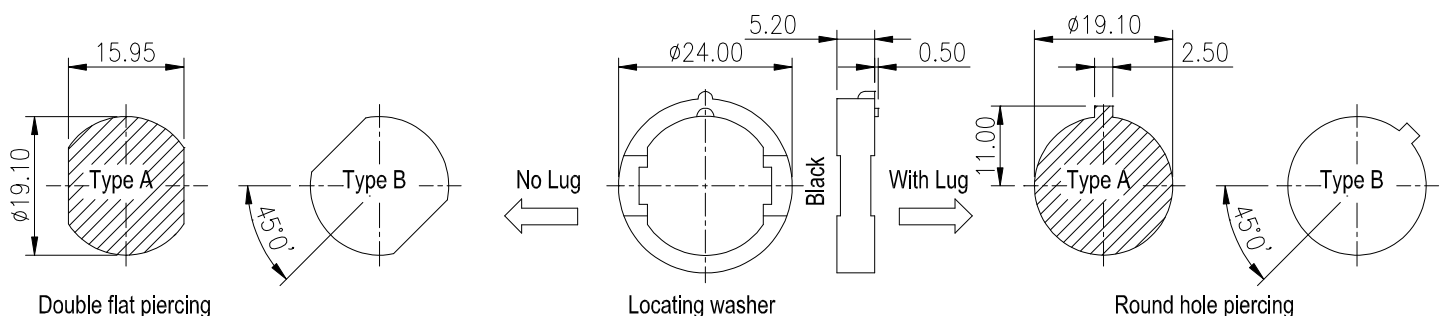
Note: CHANGEOVER TYPE HAS NO APPROVALS.

GENERAL FEATURES

- Made in UK.
- Two part construction. The lock is inserted into the panel from the front. The mains switch module either bracketed or snap-on, from the rear of the panel.
- Standard solder terminals (Printed circuit terminals optional – add /P to part number).
- Two keys per lock. Additional keys to order.
- Keys to pass (same key all locks) or differ (different key per lock).

CIRCUITRY	TERMINAL LAYOUT VIEWED FROM REAR OF SWITCH	KEY WITHDRAWAL POSITIONS
2 POLE OFF-ON		
2 POLE 1 OFF 1 ON		
2 POLE ON-OFF (NORMALLY CLOSED)		
2 POLE CHANGEOVER (No approvals)		
NOTE: By externally linking the two pole terminals a 1 pole c/o is made		

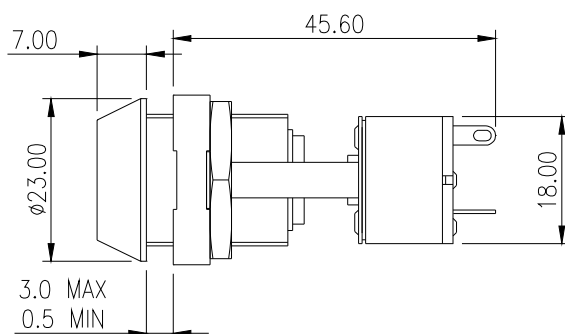
MOUNTING DETAILS FOR BRACKETED MSL, MIS LOCKSWITCHES



MSL MAINS LOCK SWITCHES

MSL

LOCKSWITCH WITH BRACKETED MS MODULE



STANDARD MSL SWITCHES & PART NUMBERS				
2 POLE OFF-ON	2 POLE 1-OFF 1-ON	2 POLE CHANGEOVER	KEY NUMBERS	POSITION IN WHICH KEY FREE
MSL 8601B	MSL 8603B	MSL 8605B	Differs	0° and 90° (1+4)
MSL 8602B	MSL 8604B	MSL 8606B	Same	0° and 90° (1+4)
MSL 8609A	MSL 8611A	MSL 8613A	Differs	0° only (1)
MSL 8610A	MSL 8612A	MSL 8614A	Same	0° only (1)

LOCK TYPE: 8 Disc with built-in anti-pick system.

LOCK MOVEMENT: 90° Steps.

LOCK COMBINATIONS: 2000 differs or all to pass (same key for all locks).

KEY TYPE: Flat, double entry (key can be inserted into the lock either way up).

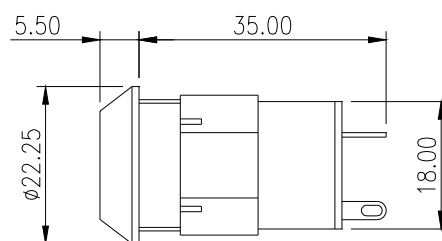
MASTER KEY SYSTEM AVAILABLE: Yes.

MAXIMUM PANEL THICKNESS: 3mm.

MODULE TYPE: Bracketed (the switch module is fitted to a “U” shaped bracket).

MSL5

LOCKSWITCH WITH SNAP-ON MS MODULE



STANDARD MSL5 SWITCHES & PART NUMBERS				
2 POLE OFF-ON	2 POLE 1-OFF 1-ON	2 POLE CHANGEOVER	KEY NUMBERS	POSITION IN WHICH KEY FREE
MSL 8621	MSL 8625	MSL 8629	Differs	0° and 90° (1+4)
MSL 8622	MSL 8626	MSL 8630	Same	0° and 90° (1+4)
MSL 8623	MSL 8627	MSL 8631	Differs	0° only (1)
MSL 8624	MSL 8628	MSL 8632	Same	0° only (1)

LOCK TYPE: 5 Disc.

LOCK MOVEMENT: 90° Steps.

LOCK COMBINATIONS: 200 differs or all to pass (same key for all locks).

KEY TYPE: Flat, double entry (key can be inserted into the lock either way up).

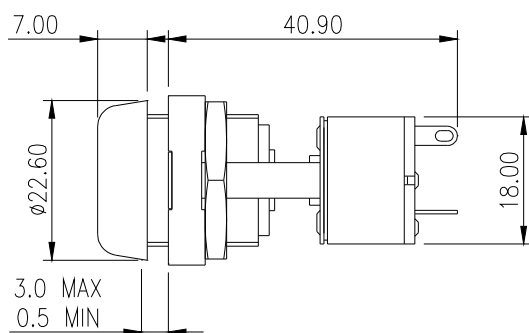
MASTER KEY SYSTEM AVAILABLE: Yes.

MAXIMUM PANEL THICKNESS: 3.4mm.

MODULE TYPE: Snap-on

MIS(Impulsion)

LOCKSWITCH WITH BRACKETED MS MODULE



STANDARD MIS SWITCHES & PART NUMBERS				
2 POLE OFF-ON	2 POLE 1-OFF 1-ON	2 POLE CHANGEOVER	KEY NUMBERS	POSITION IN WHICH KEY FREE
MIS 8659	MIS 8661	MIS 8663	Differs	0° only (1)
MIS 8660	MIS 8662	MIS 8664	Same	0° only (1)

LOCK TYPE: 3 Disc impulsion lock (spring back to position 1)

LOCK MOVEMENT: 90° Steps.

LOCK COMBINATIONS: 2000 differs or all to pass (same key for all locks).

KEY TYPE: Flat, double entry (key can be inserted into the lock either way up).

MASTER KEY SYSTEM AVAILABLE: Yes.

MAXIMUM PANEL THICKNESS: 3mm.

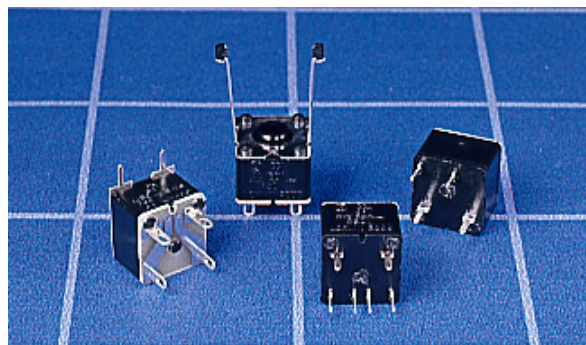
MODULE TYPE: Non-Approved - Bracketed (the switch module is fitted to a “U” shaped bracket).

MS 2000 MAINS SWITCH MODULES

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	4/80A @ 250Vac R/C
Life:	>15,000 Cycles
Operating Temp:	-25°C to +85°C
Proof Voltage:	2.5KV (Initial)
Insulation Resistance:	>999 MΩ @ 500V DC (Initial)
Contact Resistance:	<20 mΩ (Initial)
Contact Gap:	3mm
Switch Contacts:	Silver Cadmium Oxide
Switch Chamber:	Polyamide 6.6 G.F. V0 Rated
Tag Panel:	SRBP
Terminals:	Brass CZ108 Ag Plated

RoHS COMPLIANT



ENEC APPROVED TO EN61058 BY VDE

Note: CHANGEOVER TYPE HAS NO APPROVALS.

2 POLE OFF- ON (NORMALLY OPEN)		
	PLATE	BRACKET
ORDERING CODE	MS2126 60° SOL	MS2071 90° SOL
	MS2074 30° SOL	

2 POLE 1 OFF 1 ON		
	PLATE	BRACKET
ORDERING CODE	MS2145 60° SOL	MS2072 90° SOL
	MS2075 30° SOL	

2 POLE ON-OFF (NORMALLY CLOSED)		
	PLATE	BRACKET
ORDERING CODE	MS2163 60° SOL	MS2078 90° SOL
	MS2133 30° SOL	

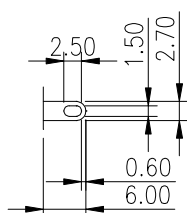
	SPECIAL PLATE	SPECIAL BRACKET
	MS2170 30° PCB	MS2121 30° SOL
By externally linking the two pole terminals a 1 pole c/o is made		

2 POLE CHANGEOVER (Not Approved)		
	PLATE	BRACKET
ORDERING CODE	MS2146 60° SOL	MS2073 90° SOL
	MS2076 30° SOL	

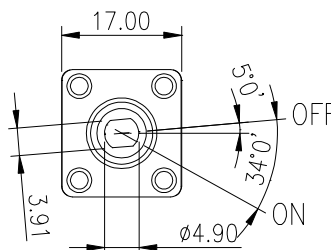
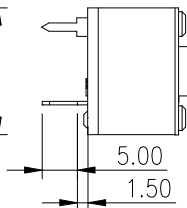
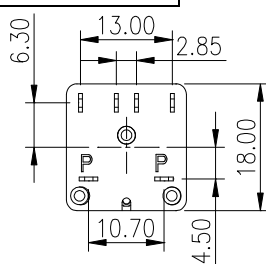
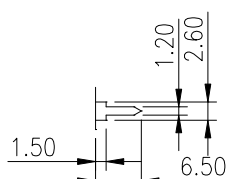
Variants available include Non Bracketed, Bracketed, Plate mounting, Pcb, Solder and with or without stops. Contact our Sales Office with your requirements.

STANDARD SWITCH DETAIL

SOLDER

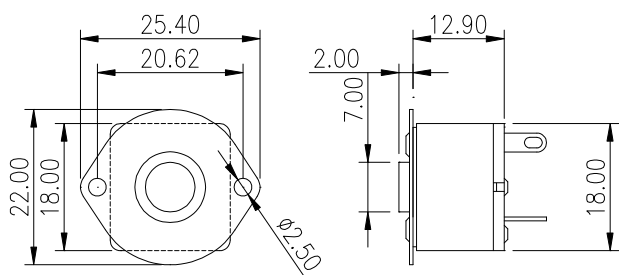


PCB

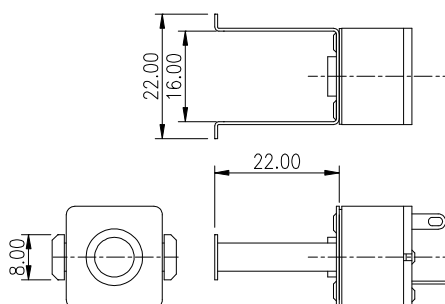


Orientation in OFF-Position
ie Fully anti-Clockwise

PLATE MOUNTING



MOUNTING BRACKET

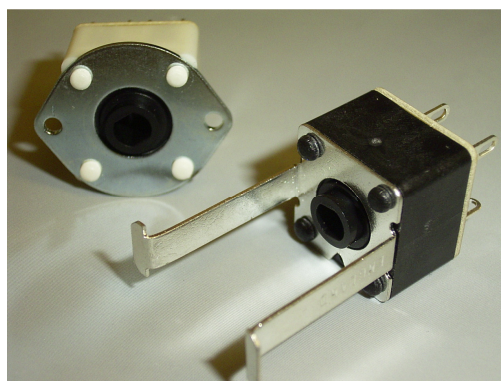


MS 2000 SIGNAL ROTARY SWITCH

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	20mA @ 24V DC
Life:	50,000 Cycles
Operating Temp:	-25°C to +85°C
Proof Voltage:	2.5KV (Initial)
Insulation Resistance:	>999 MΩ @ 500V DC (Initial)
Contact Resistance:	<20 mΩ (Initial)
Contact Gap:	3mm
Switch Contacts:	Ag CdO + Au plated
Switch Chamber:	Polyamide 6.6 G.F. V0 Rated
Tag Panel:	SRBP
Terminals:	Brass CZ108 Ag Plated

RoHS COMPLIANT

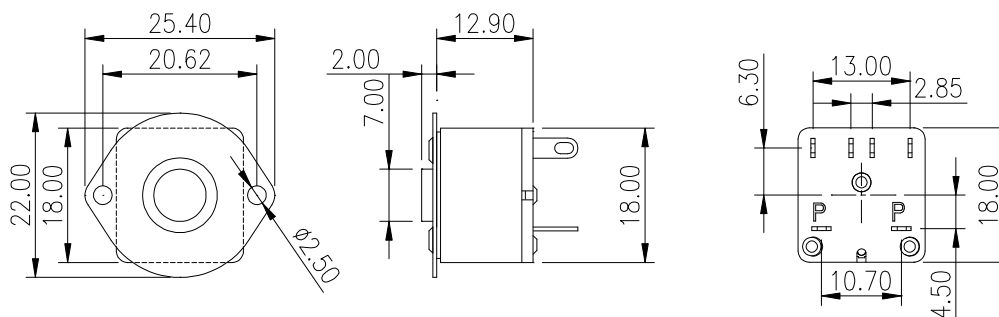
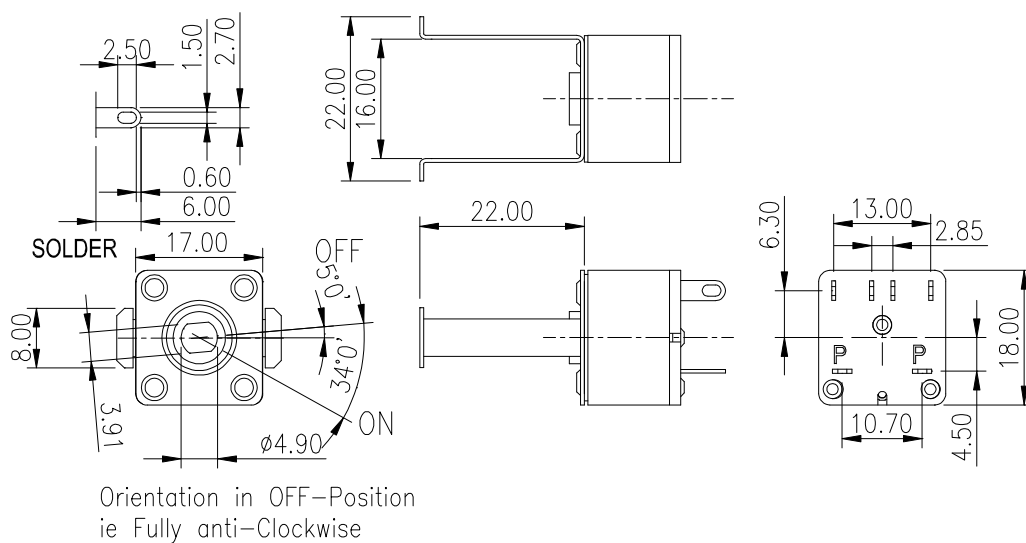


2 POLE OFF- ON (NORMALLY OPEN)		
	PLATE	BRACKET
ORDERING CODE	MS2215 90° SOL	MS2212 90° SOL

2 POLE CHANGEOVER		
	PLATE	BRACKET
ORDERING CODE	MS2214 90° SOL	MS2211 90° SOL

STANDARD SWITCH DETAIL

MOUNTING BRACKET



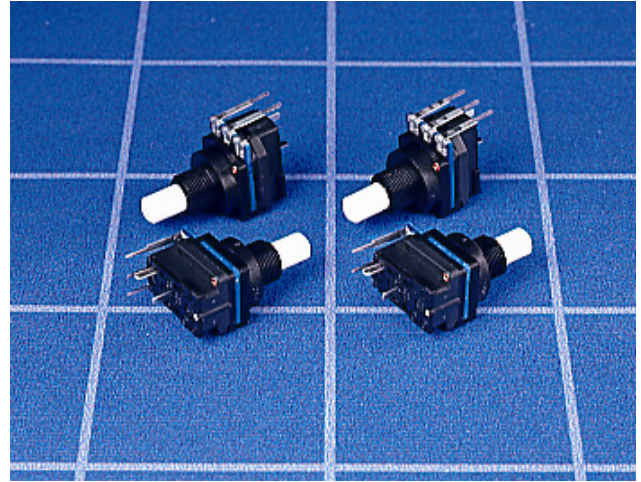
MOUNTING PLATE

MDST ROTARY DIMMER SWITCHES

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	Type 1: 10(2.5)A @ 250Vac R Type 2: 4A/100A @ 250Vac R/C
Surge Rating:	Type 2 only. 100A (10 milliseconds)
Life:	>10,000 Cycles Type 1: >15,000 Cycles 4A/100A Type 2:
Operating Temperature:	-25 °C to +100 °C
Proof Voltage:	2,500Vac (Initial)
Insulation Resistance:	>999MΩ @ 500Vdc (Initial)
Resistance Values:	10K-1.5M Ohm
Track Rating:	0.2W
Resistance Curve:	Linear
Switch Function:	1- pole OFF/ON
Mains Switch On:	Approx 40 ° Rotation
Switch Torque:	3.5 – 7Ncm
End Stop Torque:	40Ncm (minimum)
Perm. Axial Load:	50N (maximum)
Fixing Nut Torque	1.1Nm (maximum)
Potentiometer Rotation:	270°
Potentiometer Torque:	0.2 – 0.6Ncm
Spindle:	Acetal Copolymer (POM)
Housing:	Polyamide 6.6 GF V0 Rated
Terminals:	Switch: Brass CZ108 Sn Plated. Potentiometer : Mild Steel Sn Plated

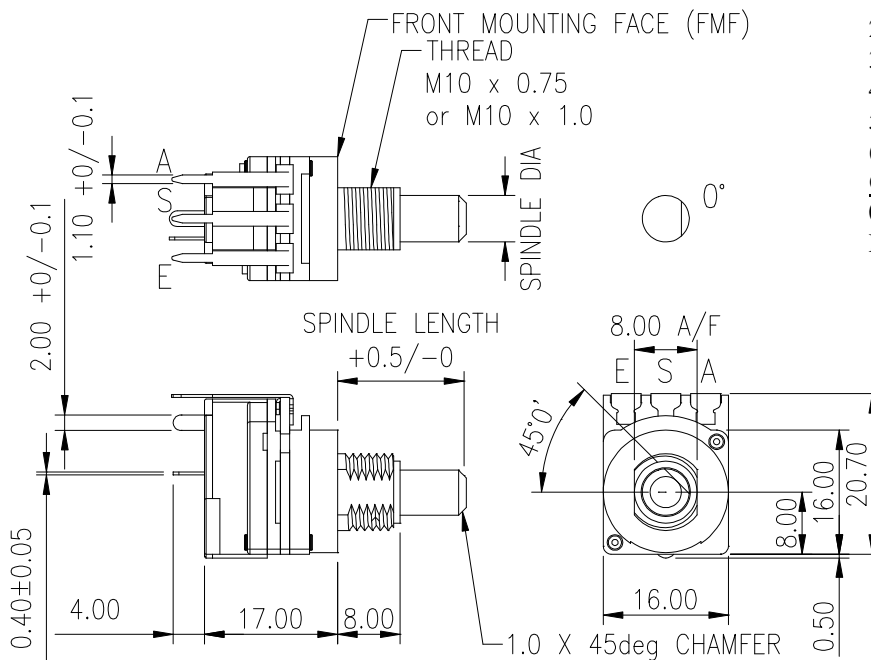
RoHS COMPLIANT



Switch Approved to EN61058 ENEC by VDE

GENERAL FEATURES

- Made in UK.
- Contact Gap >3mm.
- Rotary Switch with rotary potentiometer in common housing
- Solder terminals with or without holes
- Used in lighting dimmer controls
- Wide range of Resistance values available
- **Options also available include:-**
 - Ø4.0 Metal spindle
 - AS & ES Termination available
 - Non-Linear Resistance curve



SPINDLE SIZES AVAILABLE

- 1 = Ø6.0 x 25 to FMF
- 2 = Ø6.0 x 18.5 to FMF x 5.0 A/F @ 0°
- 3 = Ø6.0 x 16.5 to FMF
- 4 = Ø6.3 x 16.5 to FMF x 5.5 A/F @ 45°
- 5 = Ø6.3 x 26 to FMF x 5.5 A/F @ 45°

(Others available on request)

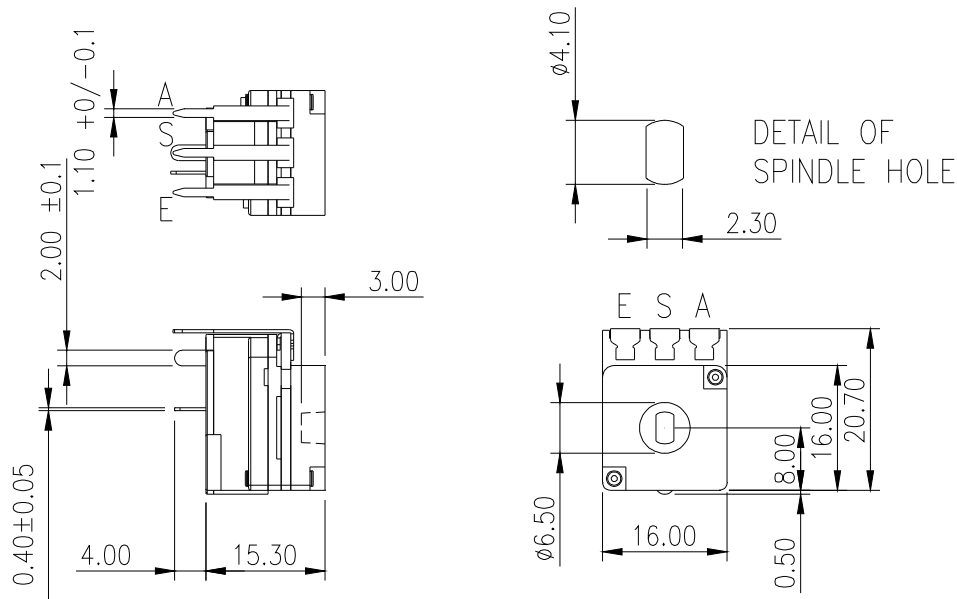
CLOCKWISE ROTATION

0 – max Ohms = AS

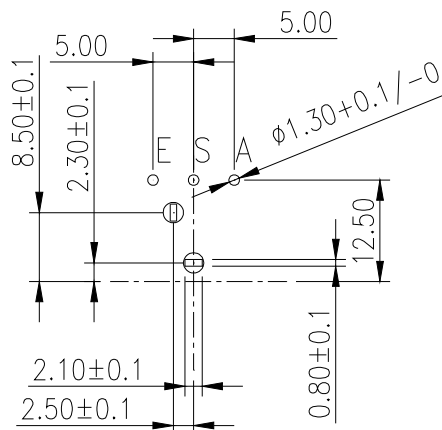
Max – 0 Ohms = ES

MDST ROTARY DIMMER SWITCHES

NO BUSH VERSION



TYPICAL PCB LAYOUT



ORDERING CODE

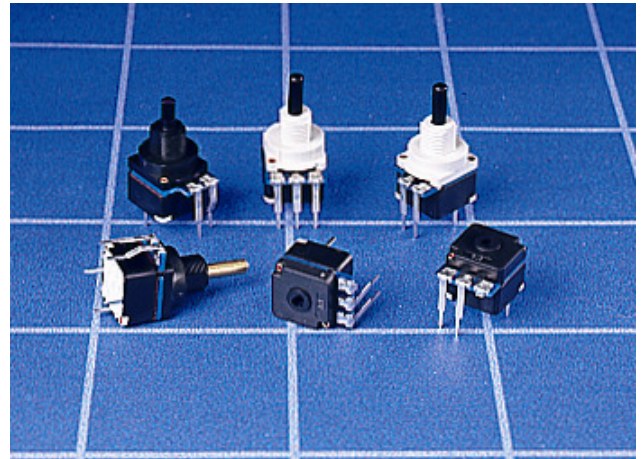
SWITCH RATING	BUSH OPTIONS	POTENTIOMETER TERMINALS	SOLDER TERMINALS	SPINDLE
TYPE 1 (10A) or TYPE 2 (4A)	W= With Bush N= No Bush	A + S, E + S or E+S+A	N= No Hole W= With Hole	1 2 3 4 5
M D S T				
FOR OTHER VARIATIONS PLEASE CONTACT OUR SALES OFFICE	Resistance Values 10K, 22K, 47K, 100k, 220K, 330K, 470K, 500K, 1M,			NUTS REQUIRED (Supplied loose) Y=Yes N=NO

MDSP PUSH-PUSH POTENTIOMETER SWITCH

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	10A @ 250Vac (resistive)
Life:	>25,000 Cycles
Operating Temperature:	-25 ° C to +100 ° C
Proof Voltage:	2,500Vac (Initial)
Insulation Resistance:	>999 M Ω @ 500Vdc (Initial)
Resistance Values:	10K – 1.5M Ω
Track Rating:	0.2W
Resistance Curve:	Linear
Switch Function:	1- pole changeover
Switch Travel:	3mm
Switch Operation Force:	15N (Nominal)
Rotational angle:	270°
Operating Torque:	0.2-0.6Ncm (Standard) 0.8-1.5Ncm (Tactile version)
End Stop Torque:	40Ncm (minimum)
Fixing Nut Torque:	1.1Nm (maximum)
Perm. Axial Load:	50N (maximum)
Spindle:	Polyamide 6.6 G.F. HB Rated
Housing:	Polyamide 6.6 G.F. V0 Rated
Terminals:	Switch: Brass CZ108 Sn Plated. Potentiometer : Mild Steel Sn plated

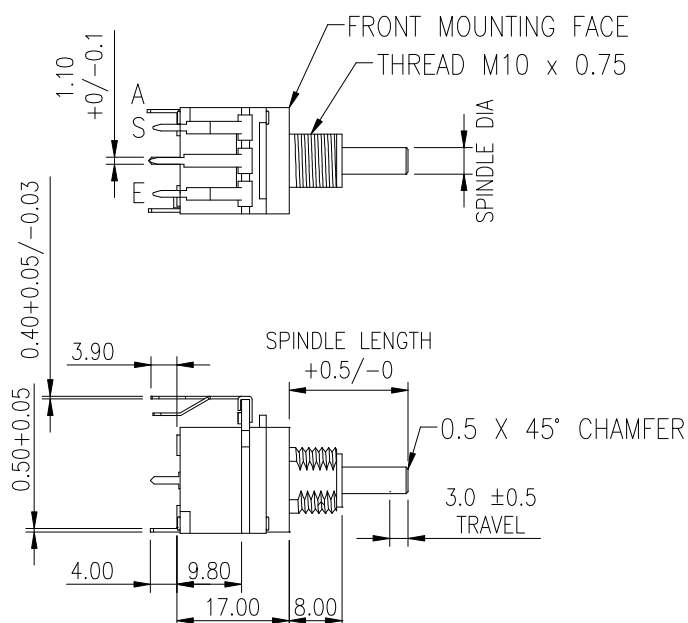
RoHS COMPLIANT



ENEC Approved to EN61058 by VDE

GENERAL FEATURES

- Made in UK.
- Push-Push switches with rotary potentiometer in common housing.
- Printed circuit terminals.
- Used in domestic lighting dimmer controls.
- Moulded components are in UL 94V-0 rated materials.
- Wide range of resistance values available.
- **Options also available include:-**
 - Ø4.0 Metal spindle
 - Tactile Feel version (7.5° Index)
 - Alternate Switch forces available
 - AS & ES Termination available
 - Non-Linear
 - M10 x 1.0mm Bush Thread

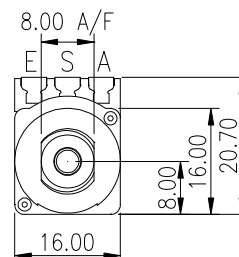


SPINDLE SIZES AVAILABLE

- 1 = Ø4.0 +0/-0.03
- 2 = Ø6.0 +0.00/-0.03

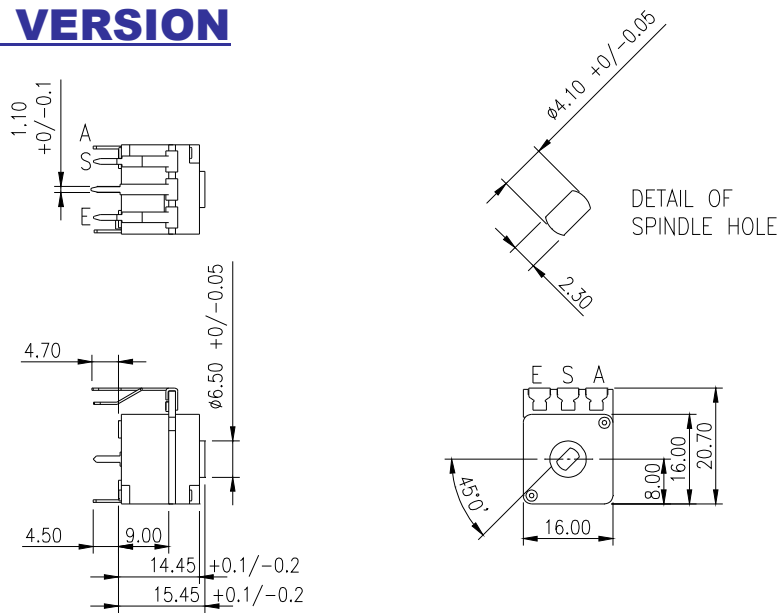
CLOCKWISE ROTATION

- 0 – max Ohms = AS
- Max – 0 Ohms = ES

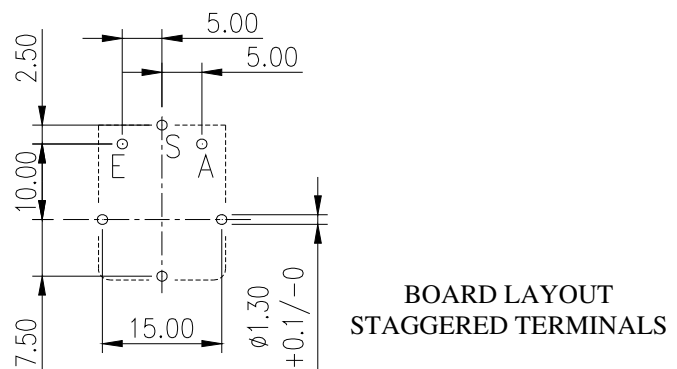
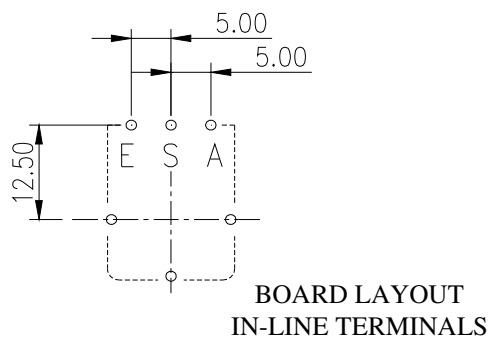


MDSP PUSH BUTTON DIMMER SWITCHES

NO BUSH VERSION



TYPICAL PCB LAYOUT



ORDERING CODE

TRACK RESISTANCE VALUE								POTENTIOMETER TERMINALS				SPINDLE DIAMETER			SPINDLE MATERIAL							
10K, 22K, 47K, 100K, 220K,330K, 470K, 500K, 1M, 1.5M								A + S, E + S or E+S+A				1 2			P - PLASTIC M- METAL							
M	D	S	P	1	0	0	K	Y		E	S	A	S		2		2	2	P	N		
Y = With Detent N = Without Detent								I = In-Line S = Staggered				SPINDLE LENGTH FROM MOUNTING FACE 16-22mm (1mm increments)			NUTS REQUIRED (Supplied loose) Y=Yes N=NO							
FOR OTHER VARIANTS PLEASE CONTACT																						

FOR OTHER VARIANTS PLEASE CONTACT OUR SALES OFFICE.

LS LOCK SWITCHES

RoHS COMPLIANT

LS300 GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

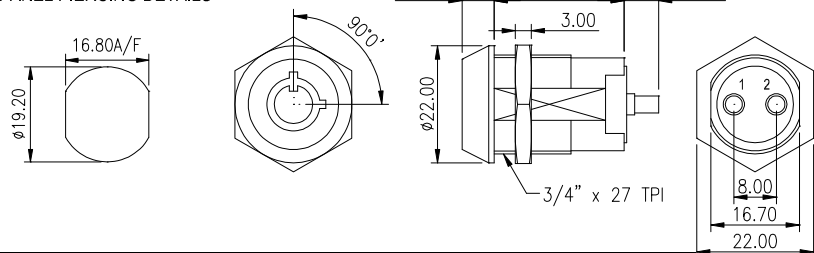
Switch Rating	2A @ 250Vac
(Not mains isolating):	4A @ 125Vac
Life:	>10,000 Cycles
Proof Voltage:	1,500Vac (Initial)
Insulation Resistance:	>999MΩ at 500Vdc(Initial)
Contact Resistance:	<10 mΩ (Initial)



GENERAL FEATURES

- Tapered lock head
- Single pole, single throw lock switch, 90° indexing.
- Chrome plated zinc alloy die cast housing
- Key insertion/removal in both positions
- Radial cylinder with 7 pin tumblers.
- 50,000 key differs range.

PANEL PIERCING DETAILS



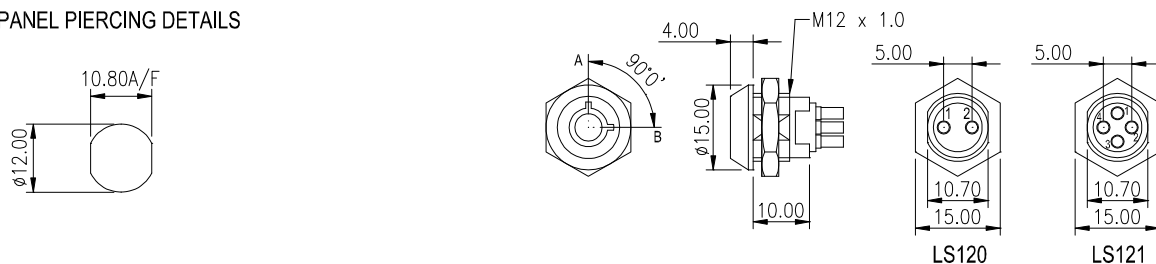
ORDERING CODE	TERMINALS	KEY FREE	KEY TRAVEL	CONTACT POSITION
LS300	2	2	90°	

LS120, LS120B & LS121 GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Contact Rating (Not mains isolating):	1A @ 250V AC
Life:	2A @ 125V AC
Proof Voltage:	>10,000 Cycles
Insulation Resistance:	>1000V AC – 1 minute (Initial)
Contact Resistance:	>500 Megohms at 500V DC (Initial)
	10 Milliohms (max) (Initial)

- LS120 Single Pole
- Tapered lock head, 90° Indexing.
- Radial cylinder with 7 pin tumblers.
- Chrome plated zinc alloy die cast housing
- 2 Keys per lock (common keys only)
- Keys can be withdrawn at both ON and OFF positions.
- LS121 double pole, single throw lock switch.

PANEL PIERCING DETAILS



ORDERING CODE	TERMINALS	KEY FREE	KEY TRAVEL	CONTACT POSITION
LS120A	2	2	90°	
LS120B	2	2	90°	
LS121	4	2	90°	

IRL IMPULSION LOCK SWITCHES

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	1A @ 115Vac resistive load
(Switching Resistive load):	1A @ 24Vdc resistive load
Life:	>10,000 Cycles
Operating Temperature:	-20°C to +65 °C
Proof Voltage:	750 Vdc (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20 mΩ (Initial)
Lock Type:	5 Disc
Std. Qty. of Keys per Lock:	2 Mild Steel Ni Plated
Contact Material:	Brass CZ108 Ag Plated
Moulding Material:	Polyamide 6.6 G.F. V0 Rated
Lock Housing:	Zinc Alloy Bright Cr Plated

RoHS COMPLIANT

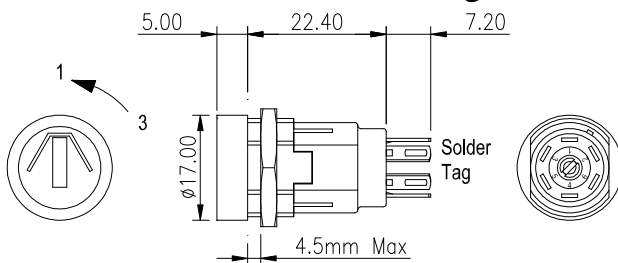


GENERAL FEATURES

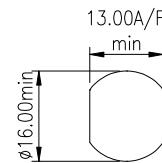
- Made in UK.
- Miniature key-operated Lock switch.
- Double pole
- Up to 200 key combinations – keys to differ. (D reference at end of part no)
- Common keys available – keys to pass.
- Keys are double entry (they can be inserted into the lock either way up).
- Occupies small panel area.
- Easily assembled through front of equipment panel.
- Rear projection less than 30mm from panel.

DOUBLE POLE LOCK SWITCH

Parallel Lock Head 60° Indexing



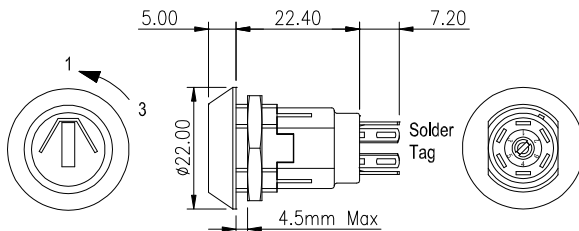
PANEL PIERCING DETAILS



BASIC PART No.	TOTAL MOVEMENT	INDEXING	KEY WITHDRAWAL POSITIONS	SWITCH CONFIGURATION
IRL-5-K-S-2	60°	60°	1 ONLY	1 — 2 3 — 5 4 — 6
IRL-5-K-D-2				

DOUBLE POLE LOCK SWITCH

Tapered Lock Head 60° Indexing



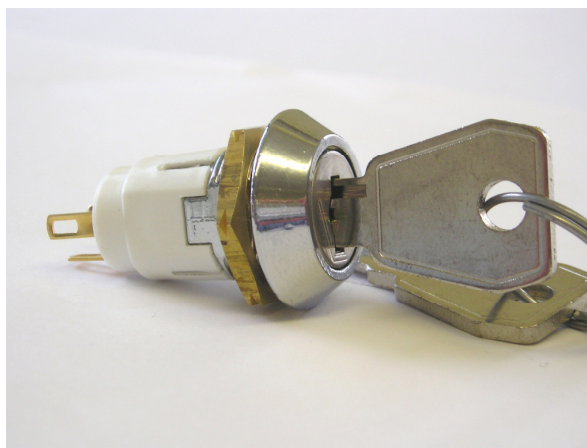
BASIC PART No.	TOTAL MOVEMENT	INDEXING	KEY WITHDRAWAL POSITIONS	SWITCH CONFIGURATION
IRL-5-M-S-2	60°	60°	1 ONLY	1 — 2 3 — 5 4 — 6
IRL-5-M-D-2				

TWO POSITION ONLY SPRING BACK TO POSITION 1. KEY REMOVEABLE IN POSITION 1 ONLY

HRL HIGH RETENTION LOCK SWITCHES

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	1A @ 115Vac resistive load
(Switching Resistive load):	1A @ 24Vdc resistive load
Life:	>10,000 Cycles
Operating Temperature:	-20°C to +65 °C
Proof Voltage:	750 Vdc (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20 mΩ (Initial)
Lock Type:	5 Disc
Std. Qty. of Keys per Lock:	2 Mild Steel Ni Plated
Contact Material:	Brass CZ108 Ag Plated
Moulding Material:	Polyamide 6.6 G.F. V0 Rated
Lock Housing:	Zinc Alloy Bright Cr Plated

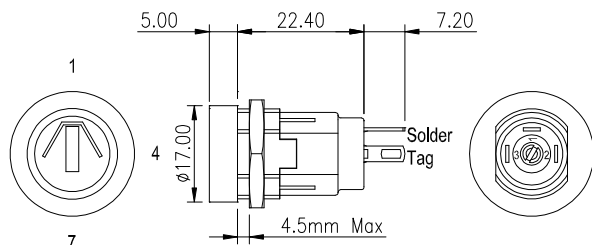


GENERAL FEATURES

- Made in UK.
- Miniature key-operated Lock switch.
- Single or Double pole
- Up to 200 key combinations – keys to differ.
- Common keys available – keys to pass.
- Keys are double entry (they can be inserted into the lock either way up).
- Occupies small panel area.
- Easily assembled through front of equipment panel.
- Rear projection less than 30mm from panel.
- Special high retention module for portable and vehicle applications.

SINGLE POLE LOCK SWITCH

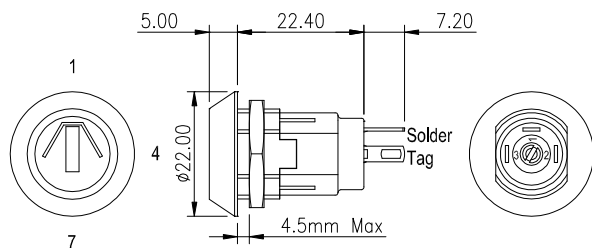
Parallel Lock Head 90° Indexing



Key Withdrawal Positions

SINGLE POLE LOCK SWITCH

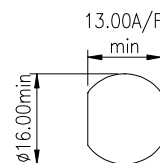
Tapered Lock Head 90° Indexing



Key Withdrawal Positions

RoHS COMPLIANT

PANEL PIERCING DETAILS



BASIC PART No.	TOTAL MOVEMENT	INDEXING	KEY WITHDRAWAL POSITIONS	SWITCH CONFIGURATION
HRL-5-A	90°	90°	1,4	
HRL-5-B	90°	90°	1 ONLY	
HRL-5-C	180°	90°	1,4,7	
HRL-5-N	180°	90°	1,4,7	

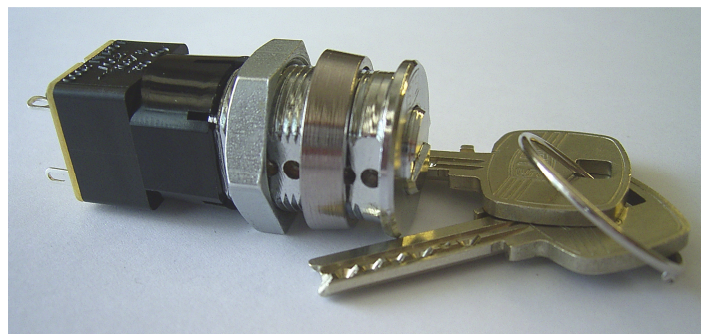
BASIC PART No.	TOTAL MOVEMENT	INDEXING	KEY WITHDRAWAL POSITIONS	SWITCH CONFIGURATION
HRL-5-D	90°	90°	1,4	
HRL-5-E	90°	90°	1 ONLY	
HRL-5-F	180°	90°	1,4,7	
HRL-5-P	180°	90°	1,4,7	

DSL MAINS LOCK SWITCHES

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

Switch Rating:	4/80A @250V ac. R/C
Life:	>15,000 Cycles
Operating Temperature:	-25°C to +85 °C
Proof Voltage:	3kV min. (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<20 MΩ (Initial)
Flame Retardency:	UL94 V0
Switch contacts:	Silver Cadmium Oxide
Switch Chamber:	Polyamide 6.6 G.F. V0 Rated
Tag Panel:	SRBP
Terminals:	Brass CZ108 Ag Plated
Lock Housing:	Brass - Chrome or Nickel Plated
Keys:	Nickel Silver

RoHS COMPLIANT



Switch Module ENEC approved to EN61058 by VDE

CIRCUITRY	TERMINAL LAYOUT VIEWED FROM REAR OF SWITCH	KEY WITHDRAWAL POSITIONS
2 POLE OFF-ON		
2 POLE ON-OFF (NORMALLY CLOSED)		

GENERAL FEATURES

- Over 15000 key combinations – keys to differ
- Key –operated Lock with dimpled 6 pin lock
- Made in UK
- Common keys available – keys to pass
- Two part construction. The lock is inserted into the panel from the front. The mains switch module snaps-on, from the rear of the panel.
- Standard solder terminals (Printed circuit terminals optional – add /P to part number).
- Two keys per lock. Additional keys to order.
- Snap on switch module

DSL-6 ORDER CODES			
SWITCH	KEY	POSITION IN WHICH KEY FREE	ORDER CODES
2 POLE OFF – ON	DIFFERS	0° and 90° (1+4)	DSL-6-A-D
	DIFFERS	0° only (1)	DSL-6-B-D
2 POLE OFF –ON	SAME	0° and 90° (1+4)	DSL-6-C-S
	SAME	0° only (1)	DSL-6-D-S
2 POLE ON-OFF	DIFFERS	0° and 90° (1+4)	DSL-6-E-D
	DIFFERS	0° only (1)	DSL-6-F-D
2 POLE ON-OFF	SAME	0° and 90° (1+4)	DSL-6-G-S
	SAME	0° only (1)	DSL-6-H-S

LOCK TYPE: BRASS Lock 6 pin – low profile or with decorative panel ring.

LOCK MOVEMENT: 90° Step

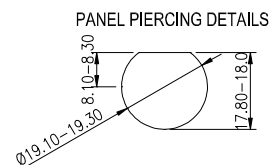
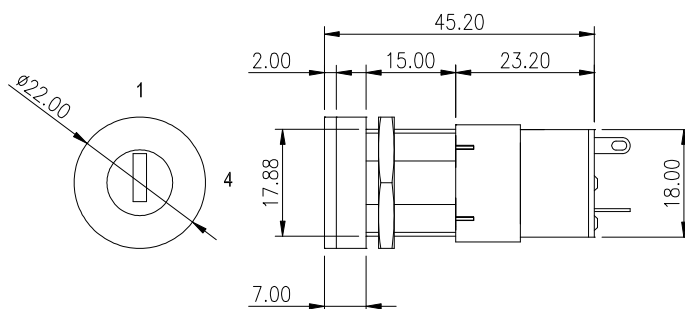
LOCK COMBINATIONS: Over 15000 differ or all pass (same key for all locks).

KEY TYPE: Flat, double entry (key can be inserted into the lock either way up).

MASTER KEY SYSTEM AVAILABLE: No

MAXIMUM PANEL THICKNESS: 15mm.

ASSEMBLY WEIGHT: 90 grams



DSL LOCKSWITCH WITH SNAP-ON MS MODULE

Lorlin Electronics Ltd, Harwood Industrial Estate, Harwood rd, Littlehampton, W. Sussex BN17 7At England
Tel (+44) 01903 725121 Fax (+44) 01903 726808 E-mail sales@lorlin.co.uk / www.lorlin.co.uk

BCK BINARY CODED ROTARY SWITCH

GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

RoHS COMPLIANT

Switch Rating:	150mA@50Vac/dc resistive only
Life:	>10,000 Cycles
Operating Temperature:	-30°C to +85 °C
Proof Voltage:	250Vac (Initial)
Insulation Resistance:	>999 MΩ at 500Vdc (Initial)
Contact Resistance:	<50 mΩ (Initial)
Operating Torque (nominal)	Standard 4.7 ± 0.5 cNm
End Stop Torque (nominal):	0.8 Nm
Moulding Material:	Polyamide 6.6 G.F.
Contact/Terminal Material:	Brass CZ108 Ag Plated



GENERAL FEATURES

- Made in UK
- Binary coded Hexadecimal and complimentary versions.
- Moulded 27.5mm diameter single wafer switch.
- Standard 22.5° indexing
- Printed Circuit Terminals.
- Adjustable stop to restrict number of positions or continuous rotation.
- Special options include UL-V0 rated material, gold flashed or gold plated (2.5 microns gold over 2 microns nickel) contacts, spindles with special flats or slots.

STANDARD PART NUMBER

BASIC TYPES	SPINDLE DIAMETER	SPINDLE LENGTH FROM MOUNTING FACE	8mm LONG BUSH	SPINDLE FLAT LENGTH	ANGLE OF SPINDLE FLAT	SPINDLE FLAT THICKNESS
IMPERIAL	6.35mm	38mm	9.52 x 32TPI	30mm	90°	5.5mm
METRIC	6.00mm	50mm	M10 x 0.75	No Flat	---	---

	STANDARD METRIC		STANDARD IMPERIAL	
	Stop	No Stop	Stop	No Stop
Hex (Code 033) – Standard Spindle	BCK1002 (no lug)	BCK1001 (no lug)	BCK1006 (lug)	BCK1005 (lug)
Comp (Code 043) – Standard Spindle	BCK1004 (no lug)	BCK1003 (no lug)	BCK1008 (lug)	BCK1007 (no lug)
Hex (Code 033) – Flush Slot	-	BCK1009 (lug)	BCK1014 (lug)	-
Comp (Code 042) – Flush Slot	-	-	BCK1019 (lug)	BCK1020 (lug)

(please see drawing detail for lug reference)

COMMON E Connection to Terminals				
DIAL	A	B	C	D
1	•			
2		•		
3	•	•		
4			•	
5	•		•	
6		•	•	
7	•	•	•	
8				•
9	•			•
10		•		•
11	•	•		•
12			•	•
13	•		•	•
14		•	•	•
15	•	•	•	•
16				

LORLIN BINARY CODED HEXADECIMAL
COMPLIMENTARY COMMON –16 POSITIONS

CODE 033

COMMON E Connection to Terminals				
DIAL	A	B	C	D
1				
2				•
3			•	
4			•	•
5		•		
6		•		•
7		•	•	
8		•	•	•
9	•			
10	•			•
11	•		•	
12	•		•	•
13	•	•		
14	•	•		•
15	•	•	•	
16	•	•	•	•

LORLIN BINARY CODED HEXADECIMAL NON
COMPLIMENTARY COMMON –16 POSITIONS

CODE 042

COMMON E Connection to Terminals				
DIAL	A	B	C	D
1	•	•	•	•
2	•	•	•	
3	•	•		•
4	•	•		
5	•		•	•
6	•		•	
7	•			•
8	•			
9		•	•	•
10		•	•	
11		•		•
12		•		
13			•	•
14			•	
15				•
16				

LORLIN BINARY CODED HEXADECIMAL
COMPLIMENTARY COMMON –16 POSITIONS

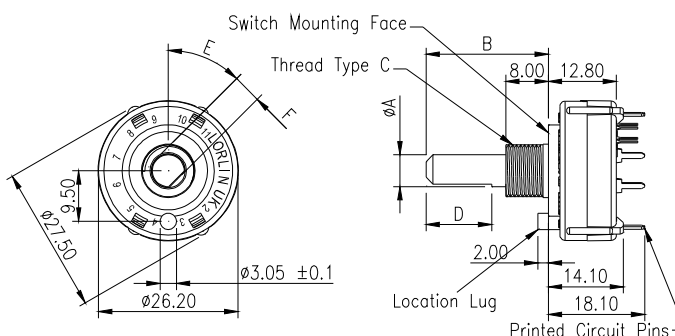
CODE 043

Technical drawing of a circular component with the following dimensions and labels:

- Overall diameter: 22.70
- Radius: 0.50
- Height of the top flange: 11.00
- Height of the main body: 6.90
- Distance from the center to the top flange: 1.90
- Distance from the center to the bottom flange: 4.40
- Distance from the center to the bottom flange (total): 6.98
- Distance from the center to the bottom flange (inner): 3.17
- Labels: B, D, E, C, A

	A	B	C
IMPERIAL	Ø6.35		Ø9.52 x 32TPI
METRIC	Ø6.00		M10 x 0.75

	D	E	F
IMPERIAL			
METRIC			



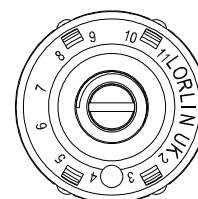
	A	B	C	D	E	F
BASIC TYPES	SPINDLE DIAMETER	SPINDLE LENGTH FROM MOUNTING FACE	8mm LONG BUSH	SPINDLE FLAT LENGTH	ANGLE OF SPINDLE FLAT	SPINDLE FLAT DEPTH
IMPERIAL	6.35mm	38mm	9.52 x 32TPI	30mm	90°	5.5mm
METRIC	6.00mm	50mm	M10 x 0.75	No Flat	---	---

Standard screwdriver slots are 1.2mm wide and 1.5mm deep.



0°
 90°
 180°
 270°

Orientation with location
lug in position shown.



Screwdriver slot level with top of threaded fixing bush 1.2mm wide x 1.5mm deep (standard) at 90° (standard)

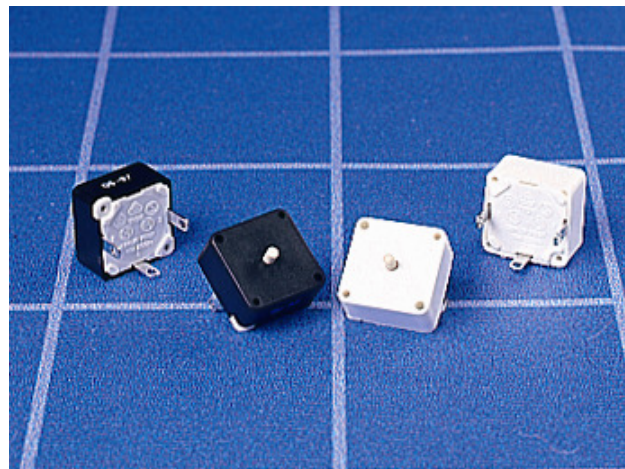
1. Switching Code
2. Imperial or Metric Spindle Diameter
3. Dimension (B) Spindle length from Mounting Face
4. Thread Required (C)
5. Spindle Flat length if required (D)
6. Angle of Flat (E)
7. Spindle Flat Depth (F)
8. 16 Position or No Stop Version
9. Contact Plating: Silver/Gold Flash/2.5 microns Gold Plate
10. Location Lug if required

1745-DIMMER SWITCH MODULE

MDSP SWITCH MODULE GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

RoHS COMPLIANT

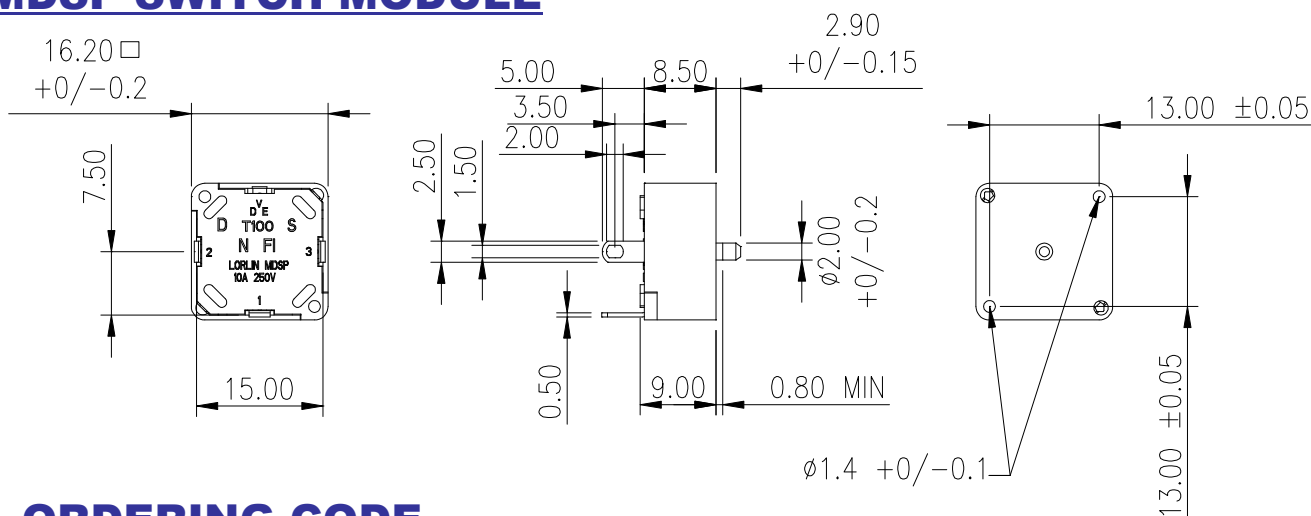
Rating:	10A @ 250Vac (resistive)
Life:	>25,000 Cycles
Operating Temperature:	-25 ° C to +100 ° C
Proof voltage:	2.5KVac (Initial)
Insulation Resistance:	<999MΩ @ 500V dc (Initial)
1 Pole Changeover:	Push on/Push off
Housing:	Polyamide 6.6 G.F. V0 Rated
Wafer:	Polyamide 6.6 G.F. V0 Rated
Plunger:	Polyamide 6.6 G.F. V0 Rated
Contacts:	Silver Cadmium Oxide
Rotor Contacts:	Silver Cadmium Oxide
Terminals	Brass CZ108 Sn Plated



GENERAL FEATURES

- Made in UK.
- Solder Terminals.
- Approved to EN61058 ENEC by VDE

MDSP SWITCH MODULE



ORDERING CODE

ORDERING CODE	SWITCH FORCE	COLOUR IDENTIFICATION		
		HOUSING	WAFER	PLUNGER
1745-501S	7-9 N	BLACK	NATURAL	NATURAL
1745-505S	3.5-4.5 N	NATURAL	NATURAL	NATURAL

