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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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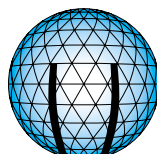




# **PLK & PLR SERIES** **Professional keylock or rotary switches**

## **NEW RANGE**

- Miniature & subminiature
- 2 to 12 positions
- 1 to 4 poles



**A P E M**

# PLK - PLR SERIES

## PROFESSIONAL KEYLOCK OR ROTARY SWITCHES

### Distinctive features

#### PLK SERIES - KEYLOCK SWITCHES

- Tapered lock face
- 2 or 3 positions
- Single or double pole
- Indexing : 90° (single pole) or 60° (double pole)
- Up to 200 different keys
- Double entry keys (can be inserted into the lock either way up)
- 5 disc lock type
- Miniature size, occupy small panel area
- Rear projection less than 30 mm from panel
- Easily assembled through front of panel
- Option : sealed terminals
- *Models with straight lock face available on request*



#### PLR SERIES - MINIATURE ROTARY SWITCHES

- 2 to 12 positions
- 1 to 4 poles
- Indexing : 30° on standard models, 60° or 90° optional
- Models with continuous rotation
- Adjustable stop to restrict number of position
- Shorting (make before break) or non shorting (break before make) contacts
- Solder lugs or PCB pins
- Options available :
  - no bush version
  - rear drive version
  - sealed terminations



#### PLRT SERIES - SUBMINIATURE ROTARY SWITCHES

- Standard TO-5 housing
- 2 to 8 positions
- Single or double pole
- 45° indexing
- Continuous rotation available on 8-position models
- Actuator : spindle
- Option : protective cover
- *Models with screwdriver slot available on request*



**Dimensions** : First dimensions are in mm while inches are shown as bracketted numbers.

**Tolerance** : The general tolerance for dimensions in this brochure is +/- 0,3 (.012).

Dimensions, specifications and data shown in this brochure are subject to change without notice.

# PLK SERIES

## PROFESSIONAL KEYLOCK SWITCHES

### Tapered lock face

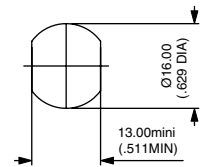
#### GENERAL SPECIFICATIONS

- Max. current/voltage rating (resistive) : 0,5A 30VDC
- Life : 10.000 cycles
- Initial contact resistance : 20 mΩ max.
- Insulation resistance : 100 MΩ min.
- Dielectric strength : 750 Vrms.
- Operating temperature : -20°C to +65°C
- Lock type : 5 disc
- Standard hardware supplied : 1 hex nut

#### MATERIALS

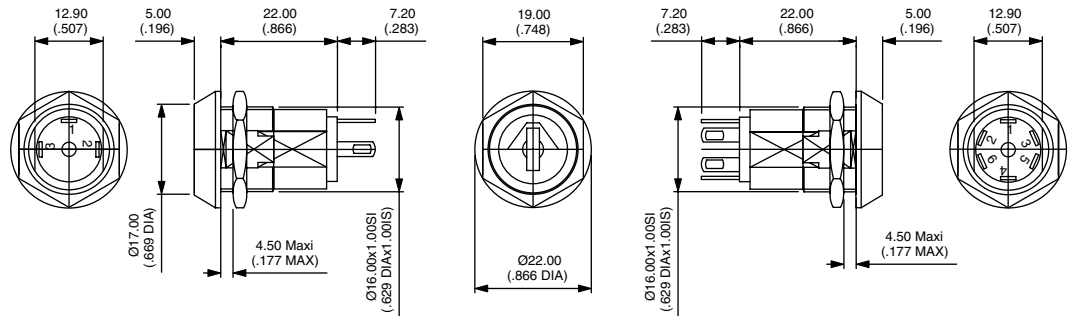
- Case : polyester, glass filled
- Bushing : zinc alloy, chrome plated
- Contacts : brass, silver plated

#### PANEL CUT-OUT



Movement	Number of positions	Number of poles	Key withdrawal position	Indexing	Number of keys	Key sets	MODEL NO	Switching diagram
90°	2	1	1-4	90°	2	same	<b>PLKB3220</b>	
90°	2	1	1-4	90°	2	200 different	<b>PLKB3221</b>	
90°	2	1	1	90°	2	same	<b>PLKB3120</b>	
60°	2	2	1-3	60°	2	same	<b>PLKB4220</b>	
60°	2	2	1	60°	2	same	<b>PLKB4120</b>	
180°	3	1	1-4-7	90°	2	200 different	<b>PLKB8321</b>	

#### Dimensions



# PLR SERIES

## PROFESSIONAL MINIATURE ROTARY SWITCHES

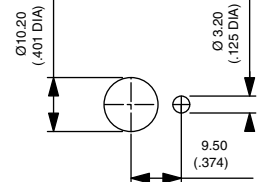
### GENERAL SPECIFICATIONS

- Max. voltage (resistive) : 250V AC/DC
- Max. current : 150mA
- Initial contact resistance : 20 mΩ max.
- Insulation resistance: 1.000 MΩ min.
- Dielectric strength : 1.000 Vrms
- Life : 10.000 cycles
- Operating torque : 8,6 Ncm ±2
- End stop torque : 1,13 Ncm min.
- Fixing torque : 1,1 Ncm max.
- Operating temperature : -30°C to +85°C
- Standard hardware supplied : 1 hex nut and 1 locking ring
- Special accessories (buttons) : see page 7

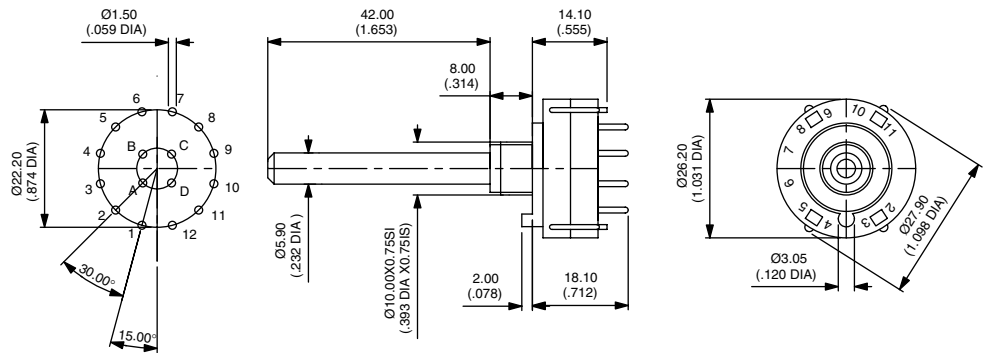
### MATERIALS

- Moulded parts : PA 6/6, glass filled
- Contacts : brass, gold or silver plated, depending on version

### PANEL CUT-OUT

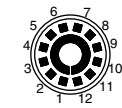


### Dimensions

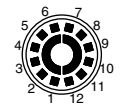


### Available configurations (top view)

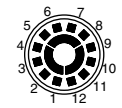
**30° INDEXING (standard)**  
(models listed opposite)



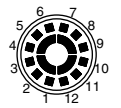
1 pole, 12 pos.



2 poles, 6 pos.

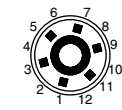


3 poles, 4 pos.

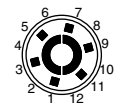


4 poles, 3 pos.

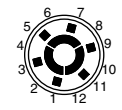
**60° INDEXING**  
(on request)



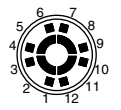
1 pole, 6 pos.



2 poles, 3 pos.

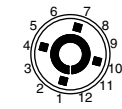


3 poles, 2 pos.

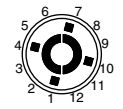


4 poles, 2 pos.

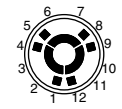
**90° INDEXING**  
(on request)



1 pole, 4 pos.



2 poles, 2 pos.



3 poles, 2 pos.

# PLR SERIES

## PROFESSIONAL MINIATURE ROTARY SWITCHES

### Models with 30° indexing

- Metric type
- Spindle diameter : 6 mm

- Spindle length : 42 mm
- Bushing : L 8 mm, M10 x 0,75

Preferred

DESCRIPTION	Contact material	Shorting	Non-shorting
<b>1 pole, 12 positions</b>			
Solder lugs	Silver plated	PLR3259	PLR3249
	Gold plated	PLR3728	PLR3723
PCB pins	Silver plated	PLR3279	PLR3269
	Gold plated	PLR3732	PLR3726
<b>1 pole, 12 positions, continuous rotation</b>			
Solder lugs	Silver plated	PLR3258	PLR3248
	Gold plated	PLR3753	PLR3757
PCB pins	Silver plated	PLR3278	PLR3268
	Gold plated	PLR3754	PLR3758
<b>2 poles, 6 positions</b>			
Solder lugs	Silver plated	PLR3260	PLR3250
	Gold plated	PLR3729	PLR3716
PCB pins	Silver plated	PLR3280	PLR3270
	Gold plated	PLR3733	PLR3693
<b>2 poles, 6 positions, continuous rotation</b>			
Solder lugs	Silver plated	PLR3334	PLR3338
	Gold plated	PLR3755	PLR3759
PCB pins	Silver plated	PLR3339	PLR3333
	Gold plated	PLR3756	PLR3760
<b>3 poles, 4 positions</b>			
Solder lugs	Silver plated	PLR3261	PLR3251
	Gold plated	PLR3730	PLR3734
PCB pins	Silver plated	PLR3281	PLR3271
	Gold plated	PLR3734	PLR3720
<b>4 poles, 3 positions</b>			
Solder lugs	Silver plated	PLR3262	PLR3252
	Gold plated	PLR3731	PLR3725
PCB pins	Silver plated	PLR3282	PLR3272
	Gold plated	PLR3735	PLR3727

# PLRT SERIES

## PROFESSIONAL SUBMINIATURE ROTARY SWITCHES

### Spindle models

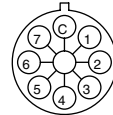
#### GENERAL SPECIFICATIONS

- Max. current/voltage rating (resistive) : 0,5A 24VAC - 0,2A 48VAC - 0,3A 30VDC
- Contact resistance :
  - initial : 50 mΩ max.
  - after 10.000 cycles : 100mΩ max
- Insulation resistance : 1.000 MΩ min at 500VDC
- Dielectric strength : 1.000 Vrms
- Life : 10.000 cycles
- Operating torque : 1,4 to 2,8 Ncm
- Operating temperature : -30°C to +65°C
- Accessory (protective cover) : see page 7.

#### MATERIALS

- Case : polyester, glass filled
- Contacts : brass, gold plated
- Terminals : copper alloy, gold plated

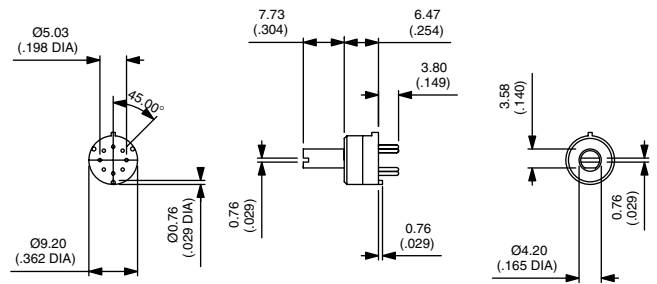
#### DIAGRAM



### Model numbers and dimensions



Movement	Number of positions	MODEL NO
360°	8 Continuous rot.	PLRT842
90°	3	PLRT331
135°	4	PLRT431
180°	5	PLRT531
315°	8	PLRT833

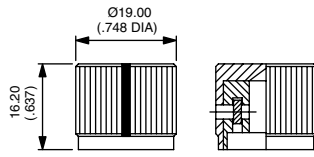




# ACCESSORIES

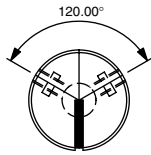
## For PLR and PLRT series

### Straight knurl knob for PLR series

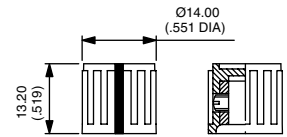


Natural anodized aluminium  
**U6107**

Black anodized aluminium  
**U6106**



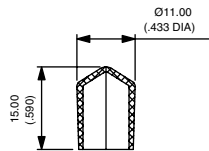
### Ribbed knob for PLR series



Black plastic  
**U6108**



### Protective cover for PLRT series



**U6105**



# The APEM subminiature range



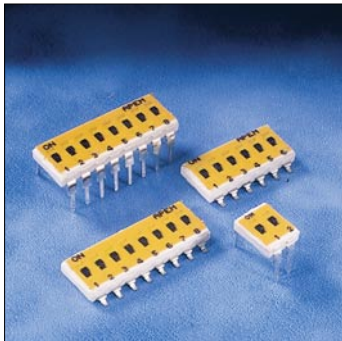
**Z series**



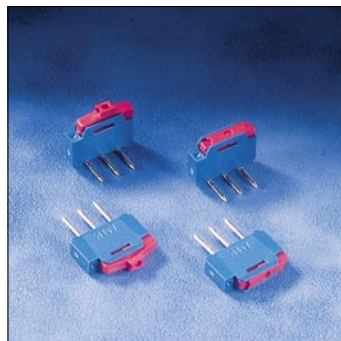
**T series**



**SMT T series**



**IK series**



**NK series**



**PHAP series**



**CR65 series**

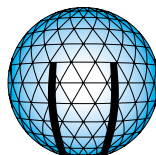


**9000 series**

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**A P E M**

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