

# PT65 SERIES ROTARY DIP SWITCHES

Outside the U.S. and the UK,  
this series is sold as the CR36  
series, with a blue case.

## FEATURES

- 3 + 3 terminal layout.
- Completely sealed for process compatibility.
- 4, 6, 8, 10 or 16 positions w/extensive codings.
- Precision designed detent action.
- Compact size.
- High reliability & long life.
- Clockwise or counterclockwise settable.
- Solder coated terminals.



## MATERIALS

Base	UL94V-O, high temperature thermoplastic
Cover	UL94V-O, high temperature thermoplastic
Actuator	POM
Contacts	Gold over nickel plated bronze
Terminals	Gold over nickel plated bronze
Terminal sealing	Molded-in
Actuator seal	'O'-ring

## GENERAL SPECIFICATIONS

### ELECTRICALS

Operating voltage	24 VDC max.
Contact rating, static	400 mA max.
Contact rating, dynamic	150 mA max.
Switching capacity	1.5 VA max.
Initial contact resistance	< 80 milliohms
Insulation resistance	> 100 megohms

### MECHANICALS, THERMALS

Torque	7.0 inch-oz. min. (0.7 Ncm min.)
Expected life	10,000 switching operations
Contact force	15 grams min.
Operating temperature range	-20°C to 70°C

### SOLDERING RECOMMENDATIONS

Hand soldering	340°C max. for 2 seconds max. (40 watt iron max.)
Wave soldering	260°C max. for 10 seconds max.
Solvent washing	Freons or alcohol. (Do not use chlorinated solvents)
Aqueous cleaning	Deionized water preferred

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

<b>CODE 05 GRAY CODE</b>				
<b>16 Positions</b>				
Dial No.	1	2	4	8
0				
1	●			
2	●	●		
3		●		
4		●	●	
5	●	●	●	
6	●		●	
7			●	
8			●	●
9	●	●	●	●
A	●	●	●	●
B		●	●	●
C		●		●
D	●	●		●
E	●			●
F				●

## CODES

NOTE: For each dial position in tables, Common terminal(s) (C) are connected to terminal number(s) indicated - i.e. - none or combinations of 1, 2, 3, 4 or 8. Each model in this series has 2 Common terminals except codes 11 and 24 which have one.

<b>CODE 11 ON/OFF</b>	
<b>4 Positions</b>	
Dial No.	1
0	
1	●
0	
1	●

<b>CODE 12 BCD</b>		
<b>4 Positions</b>		
Dial No.	1	2
0		
1	●	
2		●
3	●	●

<b>CODE 21 DECIMAL</b>				
<b>4 Positions</b>				
Dial No.	1	2	3	4
1	●			
2		●		
3			●	
0				●

<b>CODES 24 &amp; 25 BCD</b>				
<b>6 Positions</b>				
Dial No.	1	2	4	
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	

<b>CODE 26 OCTAL</b>				
<b>8 Positions</b>				
Dial No.	1	2	4	
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	

<b>CODE 27 OCTAL COMPLEMENT</b>					
<b>8 Positions</b>					
Dial No.	1	2	4	8	
0	●	●	●	●	
1		●	●	●	
2	●		●	●	
3			●	●	
4	●	●		●	
5		●		●	
6	●		●	●	
7			●	●	

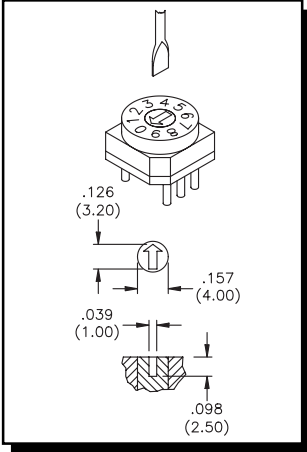
<b>BINARY CODED DECIMAL (01)</b>					
<b>10 Positions</b>					
Dial No.	1	2	4	8	
0					
1	●				
2		●			
3	●	●			
4			●		
5	●		●		
6		●	●		
7	●	●	●		
8				●	
9	●			●	

<b>COMP. OF BINARY CODED DECIMAL (02)</b>					
<b>10 Positions</b>					
Dial No.	1	2	4	8	
0	●	●	●	●	
1		●	●	●	
2	●		●	●	
3		●		●	
4	●	●		●	
5		●	●	●	
6	●			●	
7	●	●		●	
8		●	●	●	
9	●		●	●	

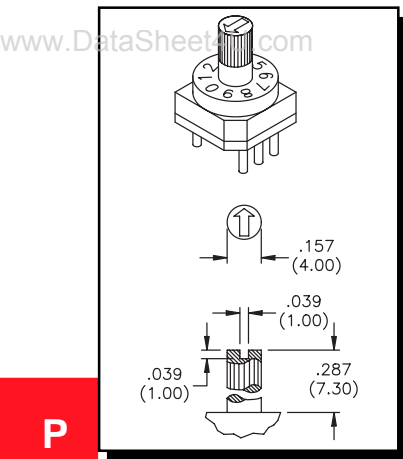
<b>BINARY CODED HEXADECIMAL (03)</b>					
<b>16 Positions</b>					
Dial No.	1	2	4	8	
0					
1	●				
2		●			
3	●	●			
4			●		
5	●		●		
6		●	●		
7	●	●	●		
8				●	
9	●			●	
A		●	●	●	
B	●	●		●	
C			●	●	
D	●		●	●	
E		●	●	●	
F	●	●	●	●	

<b>COMP. OF BINARY CODED HEXADEC. (06)</b>					
<b>16 Positions</b>					
Dial No.	1	2	4	8	
0	●	●	●	●	
1		●	●	●	
2	●		●	●	
3			●	●	
4	●	●		●	
5		●		●	
6	●		●	●	
7			●	●	
8	●	●		●	
9		●	●	●	
A	●		●	●	
B		●		●	
C	●	●		●	
D		●		●	
E	●		●	●	
F			●	●	

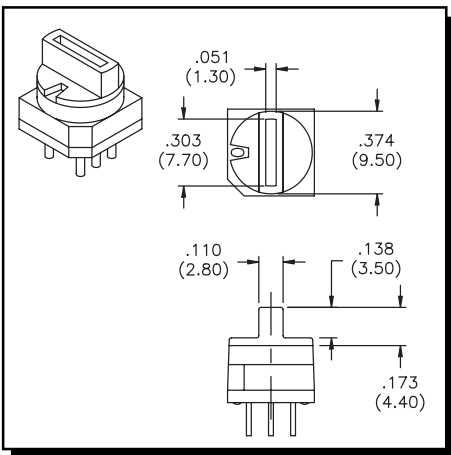
## PT65 SERIES



Arrow shaped slot Actuator Models		Complete Model No. by Terminal Style		
		Straight	Right Angle	
			Pitch	
Code (see truth tables)	Positions	.100" (2,54)	.200" (5,08)	
Binary Coded Decimal	10	<b>PT65101</b>	<b>PT65101L254</b>	<b>PT65101L508</b>
Comp. of Binary Coded Dec.	10	<b>PT65102</b>	<b>PT65102L254</b>	<b>PT65102L508</b>
Binary Coded Hexadecimal	16	<b>PT65103</b>	<b>PT65103L254</b>	<b>PT65103L508</b>
Comp. of Binary Coded Hex.	16	<b>PT65106</b>	<b>PT65106L254</b>	<b>PT65106L508</b>
Code 12, Binary Coded Dec.	4	<b>PT65112</b>	<b>PT65112L254</b>	<b>PT65112L508</b>
Code 21, Decimal	4	<b>PT65121</b>	<b>PT65121L254</b>	<b>PT65121L508</b>
Code 25, Binary Coded Dec.	6	<b>PT65125</b>	<b>PT65125L254</b>	<b>PT65125L508</b>
Code 26, Octal	8	<b>PT65126</b>	<b>PT65126L254</b>	<b>PT65126L508</b>
Code 27, Octal complement	8	<b>PT65127</b>	<b>PT65127L254</b>	<b>PT65127L508</b>



Spindle Actuator Models		Complete Model No. by Terminal Style		
		Straight	Right Angle	
			Pitch	
Code (see truth tables)	Positions	.100" (2,54)	.200" (5,08)	
Binary Coded Decimal	10	<b>PT65301</b>	<b>PT65301L254</b>	<b>PT65301L508</b>
Comp. of Binary Coded Dec.	10	<b>PT65302</b>	<b>PT65302L254</b>	<b>PT65302L508</b>
Binary Coded Hexadecimal	16	<b>PT65303</b>	<b>PT65303L254</b>	<b>PT65303L508</b>
Code 12, Binary Coded Dec.	4	<b>PT65312</b>	<b>PT65312L254</b>	<b>PT65312L508</b>
Code 21, Decimal	4	<b>PT65321</b>	<b>PT65321L254</b>	<b>PT65321L508</b>
Code 26, Octal	8	<b>PT65326</b>	<b>PT65326L254</b>	<b>PT65326L508</b>
Code 27, Octal complement	8	<b>PT65327</b>	<b>PT65327L254</b>	<b>PT65327L508</b>



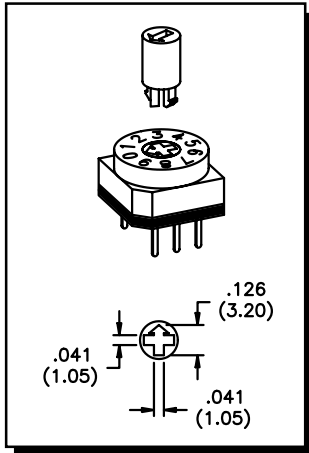
Segment Wheel Actuator Models		Complete Model No. by Terminal Style		
		Straight	Right Angle	
			Pitch	
Code (see truth tables)	Positions	.100" (2,54)	.200" (5,08)	
Binary Coded Decimal	10	<b>PT65501</b>	<b>PT65501L254</b>	<b>PT65501L508</b>
Comp. of Binary Coded Dec.	10	<b>PT65502</b>	<b>PT65502L254</b>	<b>PT65502L508</b>
Binary Coded Hexadecimal	16	<b>PT65503</b>	<b>PT65503L254</b>	<b>PT65503L508</b>
Code 21, Decimal	4	<b>PT65521</b>	<b>PT65521L254</b>	<b>PT65521L508</b>
Code 26, Octal	8	<b>PT65526</b>	<b>PT65526L254</b>	<b>PT65526L508</b>

All models listed on this page have 2 Common terminals except Code 11 and Code 24 which have one.

Other codes are available - consult factory.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

## PT65 SERIES



Cross shaped slot Actuator Models		Complete Model No. by Terminal Style		
		Straight	Right Angle	
			Pitch	
Code (see truth tables)	Positions	.100" (2,54)	.200"(5,08)	
Binary Coded Decimal	10	<b>PT65701</b>	<b>PT65701L254</b>	<b>PT65701L508</b>
Comp. of Binary Coded Dec.	10	<b>PT65702</b>	<b>PT65702L254</b>	<b>PT65702L508</b>
Binary Coded Hexadecimal	16	<b>PT65703</b>	<b>PT65703L254</b>	<b>PT65703L508</b>
Code 05, Gray Code	16	<b>PT65705</b>	<b>PT65705L254</b>	<b>PT65705L508</b>
Comp. of Binary Coded Hex.	16	<b>PT65706</b>	<b>PT65706L254</b>	<b>PT65706L508</b>
Code 11, ON/OFF	4	<b>PT65711</b>	<b>PT65711L254</b>	<b>PT65711L508</b>
Code 12, Hexadecimal	4	<b>PT65712</b>	<b>PT65712L254</b>	<b>PT65712L508</b>
Code 21, Decimal	4	<b>PT65721</b>	<b>PT65721L254</b>	<b>PT65721L508</b>
Code 24, Binary Coded Dec.	6	<b>PT65724</b>	<b>PT65724L254</b>	<b>PT65724L508</b>
Code 25, Binary Coded Dec.	6	<b>PT65725</b>	<b>PT65725L254</b>	<b>PT65725L508</b>
Code 26, Octal	8	<b>PT65726</b>	<b>PT65726L254</b>	<b>PT65726L508</b>
Code 27, Octal complement	8	<b>PT65727</b>	<b>PT65727L254</b>	<b>PT65727L508</b>

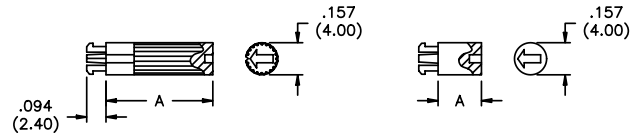
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

**Operating Elements** snap-fit securely into PT65 (& P60A) Series switch models with cross shaped slot actuators. Order separately by Model number shown below and indicate color.



**Spindle** colors: red, gray or black (consult factory for color codes)

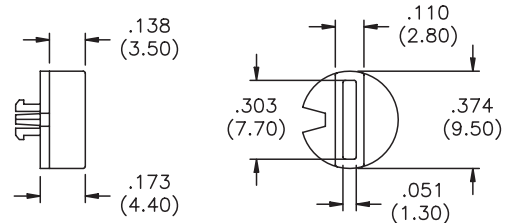
US Model No.	Dim. A	EU Model No.
<b>SAPT65473</b>	.287	N/A
<b>SAPT654116</b>	.457	<b>U4820</b>
<b>SAPT654133</b>	.524	<b>U4830</b>



Short spindle above applies to model SAPT65473 only

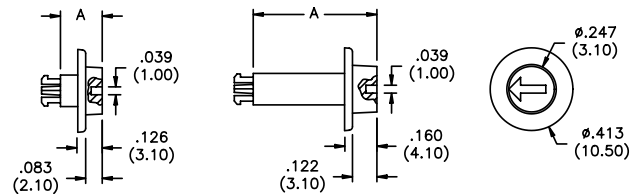
**Segment wheel** colors: yellow, red, green, blue, gray or black (consult factory for color codes)

US Model No.	EU Model No.
<b>SRPT659544</b>	<b>U4940</b>



**Knob** color: red

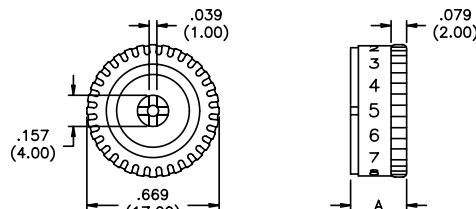
US Model No.	Dim. A	EU Model No.
<b>DKPT6510553</b>	.209	<b>U4906</b>
<b>DKPT65105157</b>	.618	<b>U4916</b>
<b>DKPT65105291</b>	1.146	N/A
<b>DKPT65105344</b>	1.354	N/A



Short knob above applies to model DKPT6510553 only

**Wheel** color: white

US Model No.	Dim. A	EU Model No.
<b>DRPT651772</b>	.283	<b>U4847/1</b>



printing on request  
(fits PT65 models only)

P

# PT65 SERIES

## PT65 SERIES STANDARD OPTIONS :

### Actuators

- 1 Arrow shaped slot
- 3 Spindle
- 5 Segment wheel
- 7 Cross shaped slot

### Codes

- 01 BCD
  - 02 BCD complement
  - 03 Hexadecimal
  - 06 Hexadecimal Comp.
- See other available codes on page G17

### Terminals

- None Straight
- V Crimped
- L254 Rt. angle 2.54 (.100")
- L508 Rt. angle 5.08 (.200")

### ORDER GUIDE:

Make selections from the above table in sequence to specify a complete model number.

Note that 'None' indicates that no option suffix is required.

Example; **PT65101V**  
 Series Actuator Terminals Code

MECHANICAL OUTLINES	
Terminal option suffix*:	Mtg. hole pattern:
<b>NONE</b> Straight terminals 	
<b>V</b> Crimped terminals 	
<b>L254</b> Right angle terminals 	
<b>L508</b> Right angle terminals 	

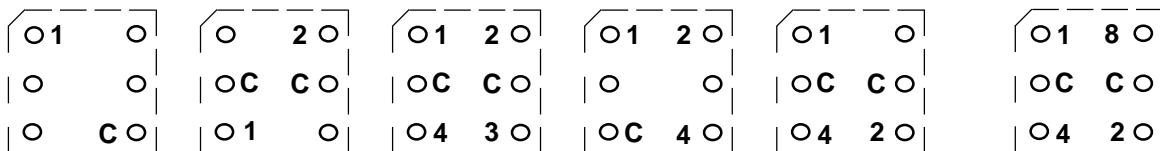
\* 'None' indicates no option suffix is required.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

## TERMINAL IDENTIFICATION FOR ALL MODELS

(viewed from top of switch inserted into printed circuit board).

Refer to TRUTH TABLES on page G17.



Code 11

Code 12

Code 21

Code 24

Codes 25 & 26

Code 27 and  
10 & 16 pos. models