



# 9mm 系列塑封式绝缘轴旋转电位器

## 9mm SERIES INSERT-MOLDING INSULATED SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>RA096G - V</p>		<p style="font-size: small;">SHAFT SHOWN IN FULL C.C.W POSITION</p>
<p>RA096G3-V</p>		<p style="font-size: small;">SHAFT SHOWN IN FULL C.C.W POSITION</p>
<p>RA096G4 - V</p>		<p style="font-size: small;">SHAFT SHOWN IN FULL C.C.W POSITION</p>
<p>RA097G4-V</p>		<p style="font-size: small;">SHAFT SHOWN IN FULL C.C.W POSITION</p>
<p>RA097G6-V</p>		<p style="font-size: small;">SHAFT SHOWN IN FULL C.C.W POSITION</p>



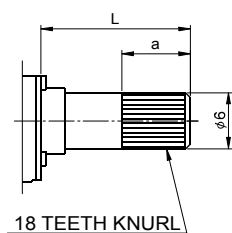
# 9mm 系列塑封式绝缘轴旋转电位器

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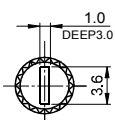
### RA096/7 系列绝缘轴类型及尺寸 INSULATED SHAFT TYPE & DIMENSIONS

UNIT : mm

#### Y Shaft Type



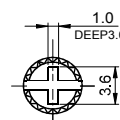
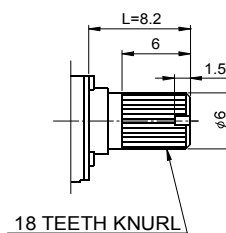
L	10	15	
a	7	7	



颜色类别	Colour type
黑色	白色
Black	White

18 TEETH KNURL

#### P Shaft Type



颜色类别	Colour type
黑色	白色
Black	White

18 TEETH KNURL

### RA096/7 系列规格参数 SPECIFICATIONS

#### ■ 机械特性 MECHANICAL SPECIFICATION

全旋转角度 Total Rotational Angle	300° ± 10°
旋转力矩 Rotational Torque	20 ~ 100gf. cm
止档强度 Shaft Stop Strength	≤ 3kgf. cm
轴推拉强度 Push & Pull Strength	≥ 5kgf. cm
轴摆动 Shaft Wobble (mm p-p)	Within (0.7x L/20)mm p-p L=Shaft Length

#### ■ 电气特性 ELECTRICAL SPECIFICATION

总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ± 20%, 1KΩ ≥ R ≥ 1MΩ ± 30%
电阻特性曲线 Resistance Taper	Refer to P. 58
负载功率 Power Rating	≤ 0.05W
最大工作电压 Max. Operating Voltage	50V AC 20V DC
残留电阻 Residual Resistance	R <sub>1~2</sub> Less than 10Ω; R <sub>2~3</sub> Less than 20Ω;
旋转杂音 Rotational Noise	≤ 100mV
同步误差 Tracking Error	≤ ± 3dB at -40~0dB
绝缘电阻 Insulation Resistance	100MΩ min at 250V DC
耐电压 Withstanding Voltage	1 minute at 250V AC

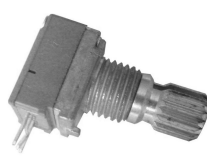
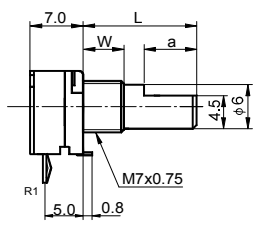
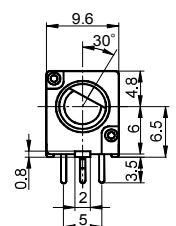
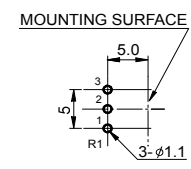
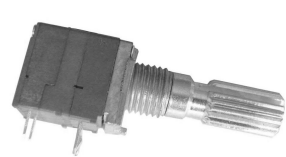
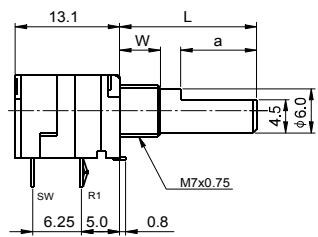
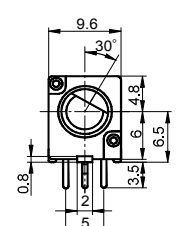
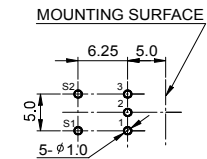

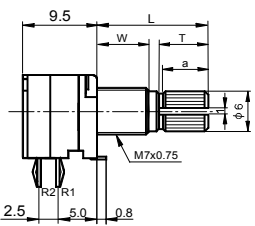
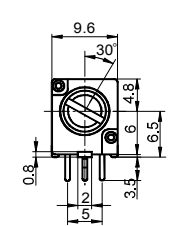
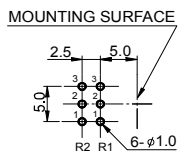

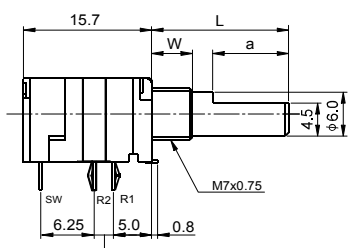
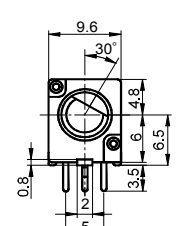
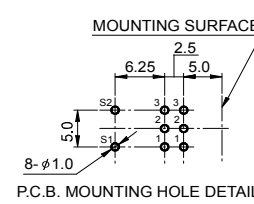

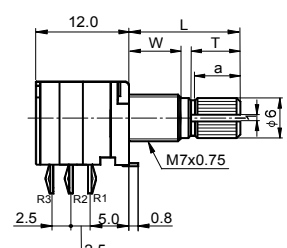
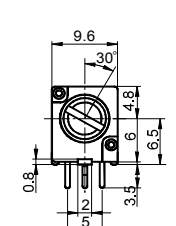
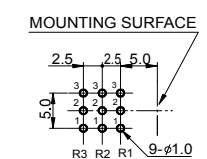
#### ■ 耐久性能 ENDURANCE

旋转寿命 Rotational Life	≥ 10,000 cycles
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# 9mm 系列塑封式金属轴旋转电位器

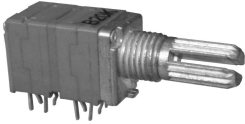
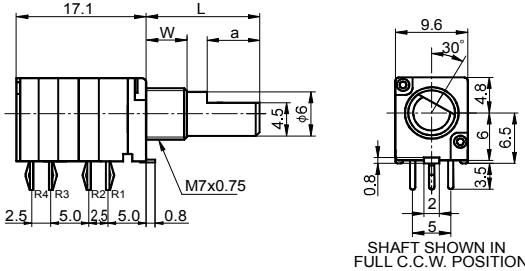
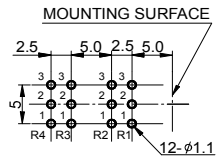
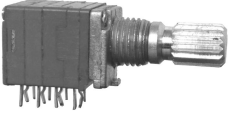
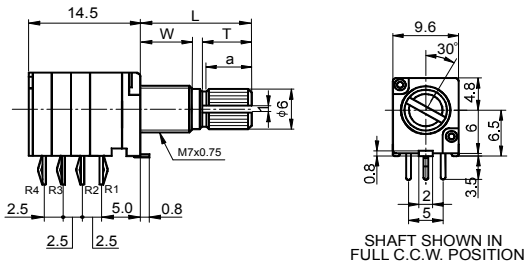
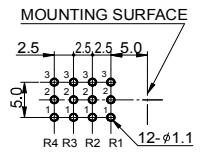
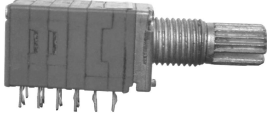
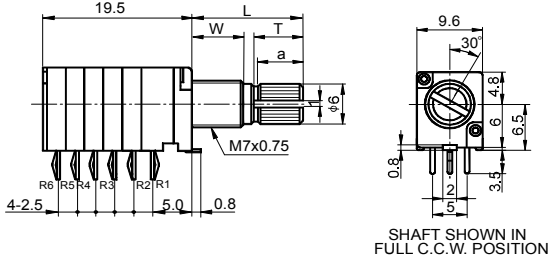
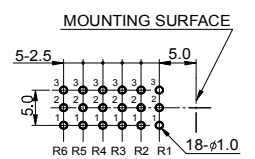
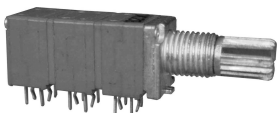
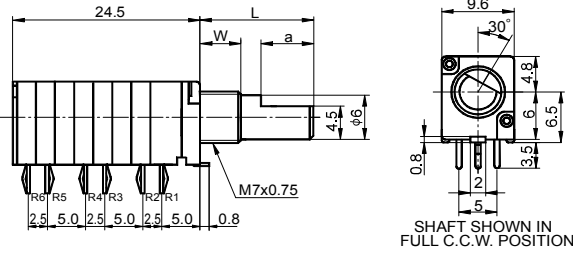
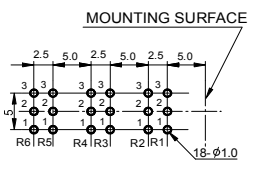
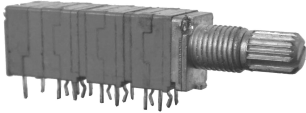
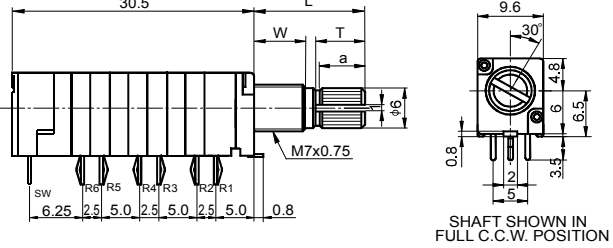
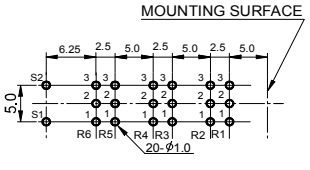
## 9mm SERIES INSERT-MOLDING METAL SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
RD097N - V	    <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	
RD097NS - V	    <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	
RD097G - V	    <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	
RD097GS - V	    <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	
RD097G3 - V	    <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	



# 9mm 系列塑封式金属轴旋转电位器

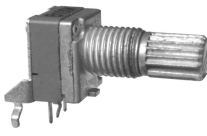
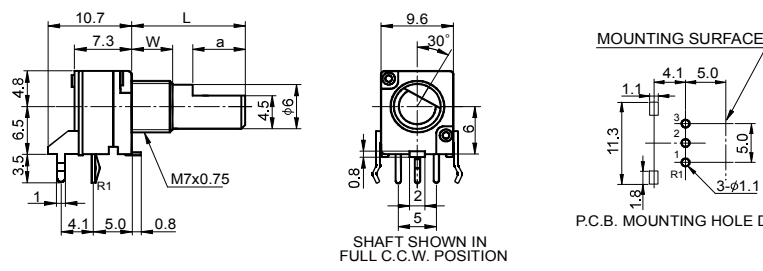
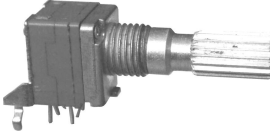
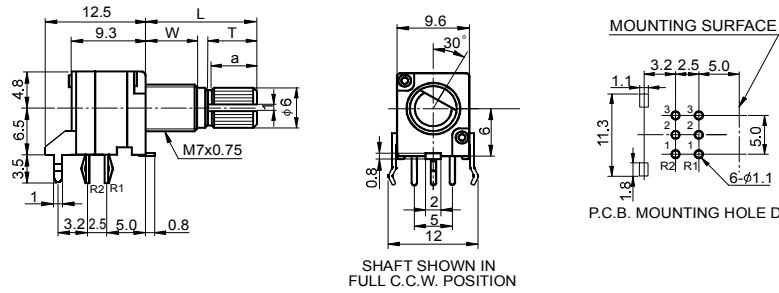
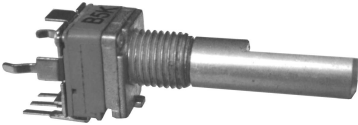
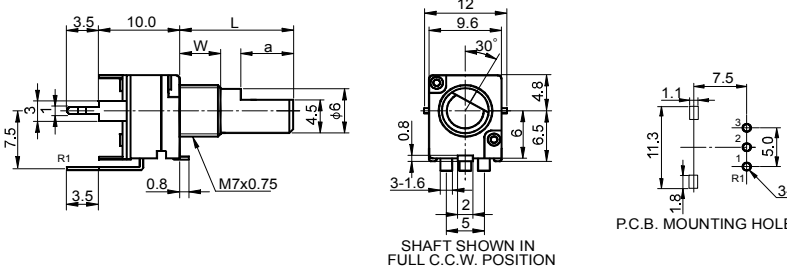
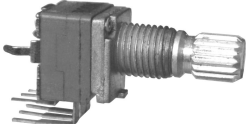
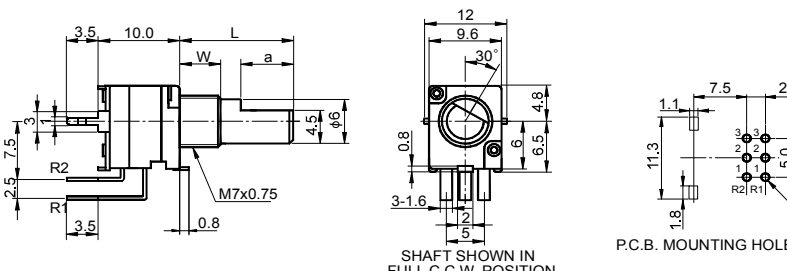
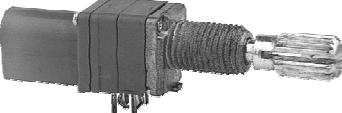
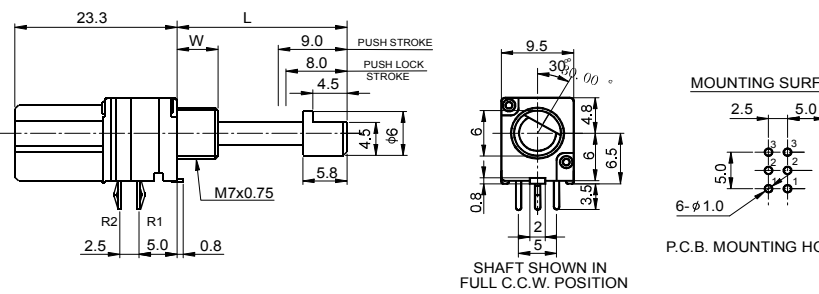
## 9mm SERIES INSERT-MOLDING METAL SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>RD097G4 - V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RD096G4-V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RD096G6 - V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RD097G6-V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RD097G6S-V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>



## 9mm 系列塑封式金属轴旋转电位器

### 9mm SERIES INSERT-MOLDING METAL SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
RD097N - VA	  <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	
RD097G-VA	  <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	
RD097N - HA	  <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	
RD097G-HA	  <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	
RD098G-V	  <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	



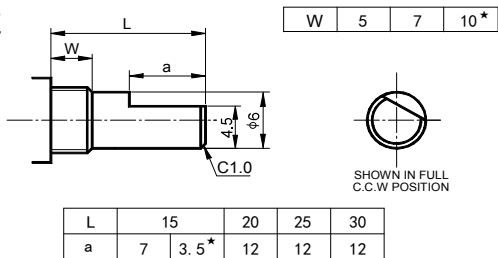
# 9mm 系列塑封式金属轴旋转电位器

## 9mm SERIES INSERT-MOLDING METAL SHAFT ROTARY POTENTIOMETERS

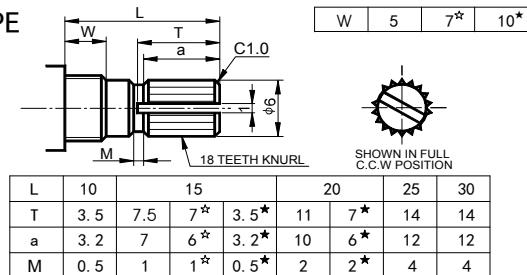
### RD09 系列绝缘轴类型及尺寸 INSULATED SHAFT TYPE & DIMENSINOS

UNIT:mm

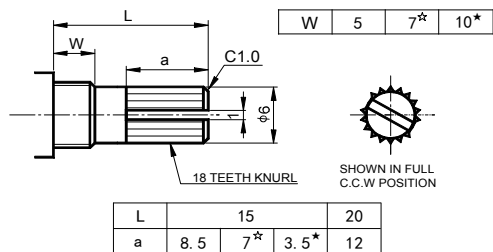
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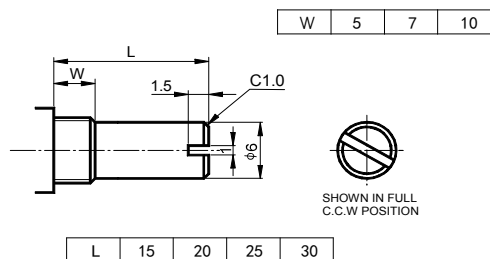
#### K TYPE



#### Y TYPE



#### R TYPE



### RD09 系列规格参数 SPECIFICATIONS

#### ■ 机械特性 MECHANICAL SPECIFICATION

全旋转角度 Total Rotational Angle	300°±10°
旋转力矩 Rotational Torque	20~120gf.cm
定位位置 Click Position	Center click or 41 click
定位推动力 Click Slip Out Force	30~150gf.cm
开关工作角度 Switch Working Angle	≤50° (rotary power switch)
开关工作动力 Switch Working Torque	≤1kgf.cm (rotary power switch)
止档强度 Shaft Stop Strength	≤4kgf.cm
轴推拉强度 Push & Pull Strength	≥8kgf.cm

#### ■ 电气特性 ELECTRICAL SPECIFICATION

总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ±20%, 1KΩ ≥ R ≥ 1MΩ ±30%
电阻特性曲线 Resistance Taper	Refer to P. 58
负载功率 Power Rating	≤0.05W
最大工作电压 Max. Operating Voltage	50V AC
残留电阻 Residual Resistance	R <sub>1~2</sub> Less than 10Ω; R <sub>2~3</sub> Less than 20Ω;
旋转杂音 Rotational Noise	≤100mV
同步误差 Tracking Error	≤±3dB at -40~0dB
开关接触电阻 Switch Contact Resistance	0.5Ω Less than
开关承受负载 Switch Power Rating	12V DC 1A Max
绝缘电阻 Insulation Resistance	50MΩ min at 250V DC
耐电压 Withstanding Voltage	1 minute at 250V AC

#### ■ 耐久性能 ENDURANCE

旋转寿命 Rotational Life	≥10,000 cycles
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# 13mm 系列塑封式金属轴旋转电位器

## 13mm SERIES INSERT-MOLDING METAL SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm						
RD137NS - V1 RD137NS - V2  	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RD137NS - V1</td> <td>10.0</td> </tr> <tr> <td>RD137NS - V2</td> <td>12.5</td> </tr> </tbody> </table> <p style="text-align: center;">MOUNTING SURFACE</p> <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	型号 MODEL	H	RD137NS - V1	10.0	RD137NS - V2	12.5
型号 MODEL	H							
RD137NS - V1	10.0							
RD137NS - V2	12.5							
RD137G - V1 RD137G - V2  	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RD137G - V1</td> <td>10.0</td> </tr> <tr> <td>RD137G - V2</td> <td>12.5</td> </tr> </tbody> </table> <p style="text-align: center;">MOUNTING SURFACE</p> <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	型号 MODEL	H	RD137G - V1	10.0	RD137G - V2	12.5
型号 MODEL	H							
RD137G - V1	10.0							
RD137G - V2	12.5							
RD137GS - V1 RD137GS - V2  	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RD137GS - V1</td> <td>10.0</td> </tr> <tr> <td>RD137GS - V2</td> <td>12.5</td> </tr> </tbody> </table> <p style="text-align: center;">MOUNTING SURFACE</p> <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	型号 MODEL	H	RD137GS - V1	10.0	RD137GS - V2	12.5
型号 MODEL	H							
RD137GS - V1	10.0							
RD137GS - V2	12.5							
RD137G4 - V1 RD137G4 - V2  	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RD137G4 - V1</td> <td>10.0</td> </tr> <tr> <td>RD137G4 - V2</td> <td>12.5</td> </tr> </tbody> </table> <p style="text-align: center;">MOUNTING SURFACE</p> <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	型号 MODEL	H	RD137G4 - V1	10.0	RD137G4 - V2	12.5
型号 MODEL	H							
RD137G4 - V1	10.0							
RD137G4 - V2	12.5							
RD137G6 - V1 RD137G6 - V2  	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RD137G6 - V1</td> <td>10.0</td> </tr> <tr> <td>RD137G6 - V2</td> <td>12.5</td> </tr> </tbody> </table> <p style="text-align: center;">MOUNTING SURFACE</p> <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	型号 MODEL	H	RD137G6 - V1	10.0	RD137G6 - V2	12.5
型号 MODEL	H							
RD137G6 - V1	10.0							
RD137G6 - V2	12.5							



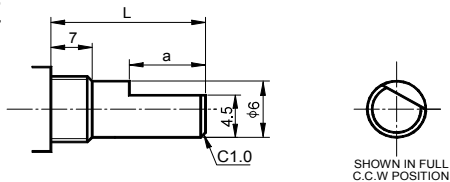
# 13mm 系列塑封式金属轴旋转电位器

## 13mm SERIES INSERT-MOLDING METAL SHAFT ROTARY POTENTIOMETERS

### RD137 系列绝缘轴类型及尺寸 INSULATED SHAFT TYPE & DIMENSIONS

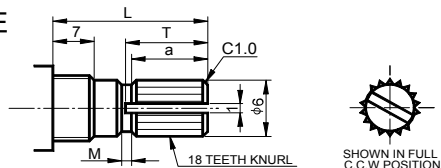
UNIT: mm

#### F TYPE



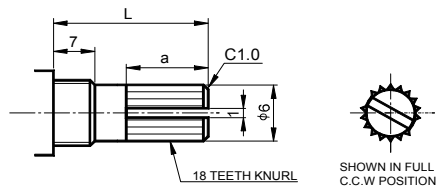
L	15	20	25	30	
a	7	12	12	12	

#### K TYPE



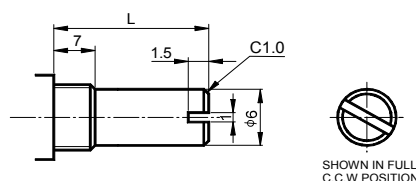
L	12	15	20	25	30	
T	3.5	7	11	14	14	
a	3.2	6	10	12	12	
M	0.5	1	2	4	4	

#### Y TYPE



L	15	20		
a	7	12		

#### R TYPE



L	15	20	25	30
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### RD137 系列规格参数 SPECIFICATIONS

#### ■ 机械特性 MECHANICAL SPECIFICATION

全旋转角度 Total Rotational Angle	300° ± 10°
旋转力矩 Rotational Torque	20 ~ 200gf.cm
定位位置 Click Position	Center click
定位推动力 Click Slip Out Force	30 ~ 150gf.cm
开关工作角度 Switch Working Angle	≤ 50° (rotary power switch)
开关工作动力 Switch Working Torque	≤ 1kgf.cm (rotary power switch)
止档强度 Shaft Stop Strength	≤ 4kgf.cm
轴推拉强度 Push & Pull Strength	≥ 8kgf.cm

#### ■ 电气特性 ELECTRICAL SPECIFICATION

总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ± 20%, 1KΩ ≥ R ≥ 1MΩ ± 30%
电阻特性曲线 Resistance Taper	Refer to P. 58
负载功率 Power Rating	≤ 0.05W
最大工作电压 Max. Operating Voltage	150V AC
残留电阻 Residual Resistance	R <sub>1~2</sub> Less than 10Ω; R <sub>2~3</sub> Less than 20Ω;
旋转杂音 Rotational Noise	≤ 100mV
同步误差 Tracking Error	≤ ± 3dB at -40 ~ 0dB
开关接触电阻 Switch Contact Resistance	0.5Ω Less than
开关承受负载 Switch Power Rating	12V DC 1A Max
绝缘电阻 Insulation Resistance	50MΩ min at 250V DC
耐电压 Withstanding Voltage	1 minute at 250V AC

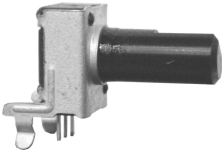
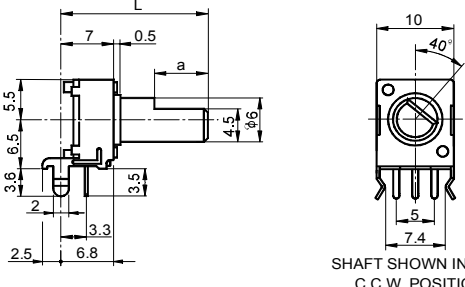
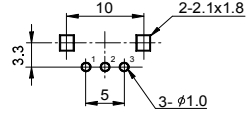
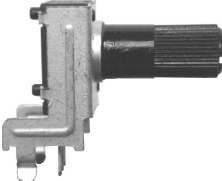
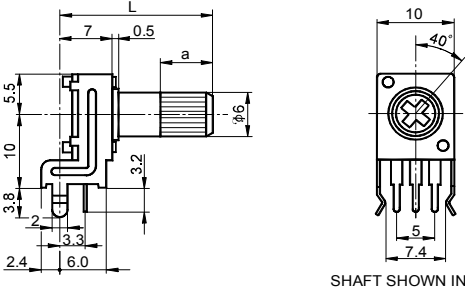
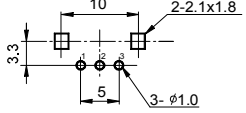
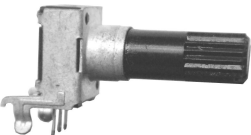
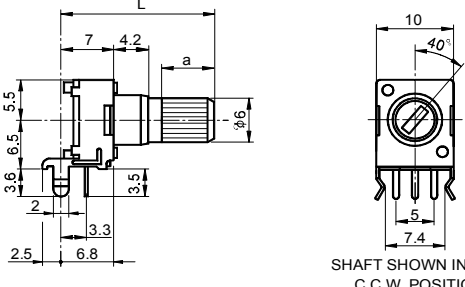
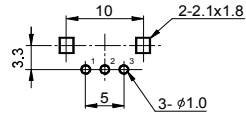
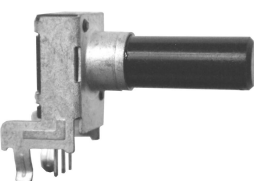
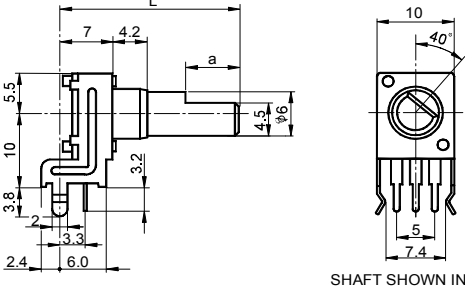
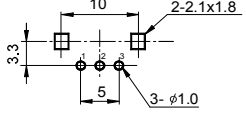
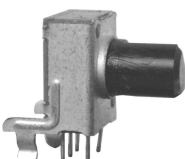
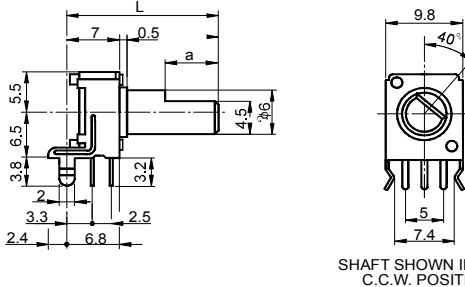
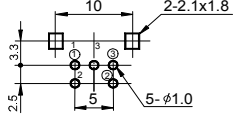
#### ■ 耐久性能 ENDURANCE

旋转寿命 Rotational Life	≥ 10,000 cycles
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# 9mm 系列塑封式绝缘轴旋转电位器

## 9mm SERIES INSERT-MOLDING INSULATED SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>RA091N - V1</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RA091N-V2</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RA092N - V1</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RA092N-V2</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RA091GA-V1</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>



# 9mm 系列塑封式绝缘轴旋转电位器

## 9mm SERIES INSERT-MOLDING INSULATED SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>RA091N - H</p>	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RA092N-H</p>	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RA093N-H</p>	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RA094N-H</p>	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RA091GA-H</p>	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>

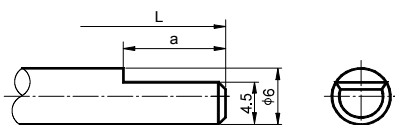


# 9mm 系列塑封式绝缘轴旋转电位器

## 9mm SERIES INSERT-MOLDING INSULATED SHAFT ROTARY POTENTIOMETERS

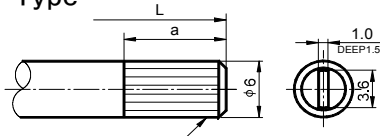
### RA091/2/3/4 系列绝缘轴类型及尺寸 INSULATED SHAFT TYPE & DIMENSIONS UNIT: mm

#### F Type



L	15	20	25	30	35
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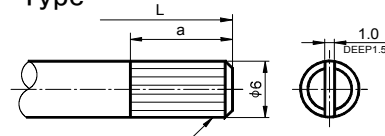
#### Y Type



18 TEETH KNURL

L	15	20	25	30
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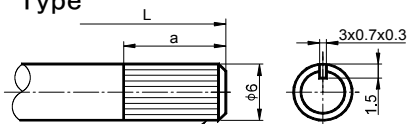
#### K Type



18 TEETH KNURL

L	15	20	25*	30*
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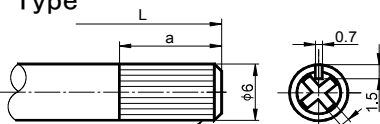
#### T Type



40 TEETH KNURL

L	15	20			
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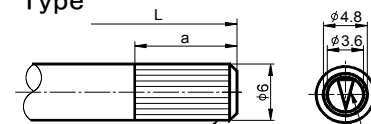
#### P Type



40 TEETH KNURL

L	10*	15	20		
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#### V Type

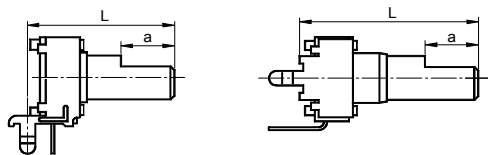


40 TEETH KNURL

DEEP1.5

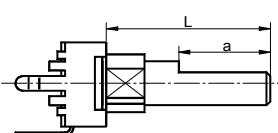
L	15	20			
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#### 不带轴套 with out bushing



L	10*	15	20	25	30	35
a	—	7	7	7*	12	12

#### 带轴套 with bushing



L	11.5	16.5	21.5	26.5	
a	7	7*	12	12	

### RA091/2/3/4 系列规格参数 SPECIFICATIONS

#### ■ 机械特性 MECHANICAL SPECIFICATION

全旋转角度 Total Rotational Angle	280° ± 10°	300° ± 10°
旋转力矩 Rotational Torque	10 ~ 100gf.cm	
定位位置 Click Position	Center click or 21 click	
定位推动力 Click Slip Out Force	30 ~ 150gf.cm	
止档强度 Shaft Stop Strength	≤ 3kgf.cm	
轴推拉强度 Push & Pull Strength	≥ 3kgf.cm	

#### ■ 电气特性 ELECTRICAL SPECIFICATION

总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ± 20%, 1KΩ ≥ R ≥ 1MΩ ± 30%	
电阻特性曲线 Resistance Taper	Refer to P. 58	
负载功率 Power Rating	≤ 0.05W	
最大工作电压 Max. Operating Voltage	50V AC 20V DC	
残留电阻 Residual Resistance	R <sub>1~2</sub> Less than 10Ω; R <sub>2~3</sub> Less than 20Ω;	
旋转杂音 Rotational Noise	≤ 100mV	
同步误差 Tracking Error	≤ ± 3dB at -40 ~ 0dB	
绝缘电阻 Insulation Resistance	100MΩ min at 250V DC	
耐电压 Withstanding Voltage	1 minute at 250V AC	

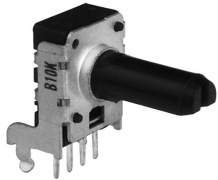
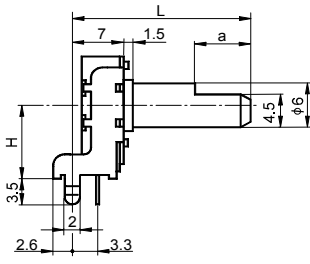
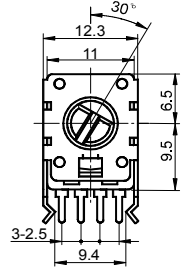
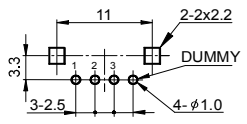
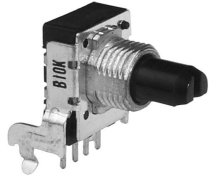
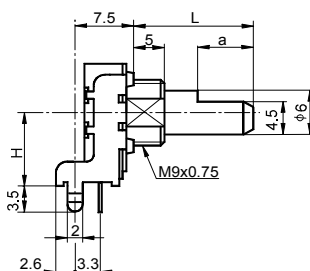
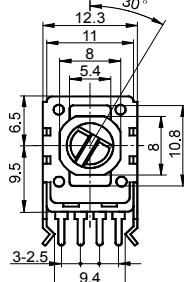
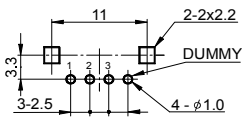

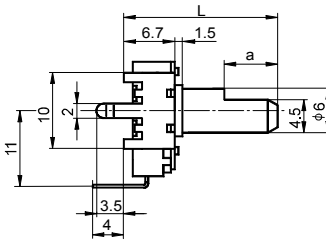
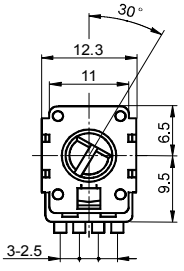
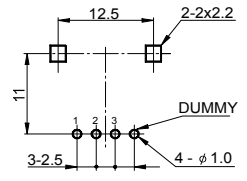
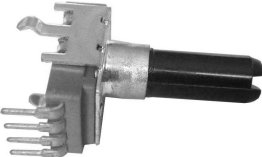
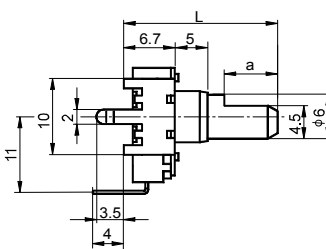
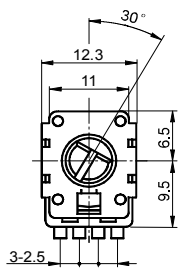
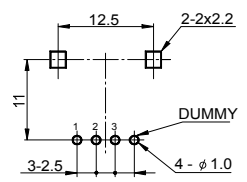
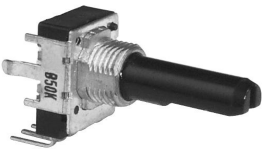
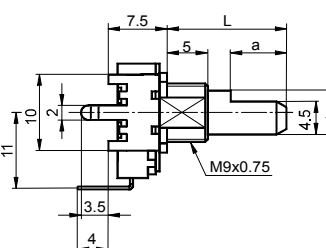
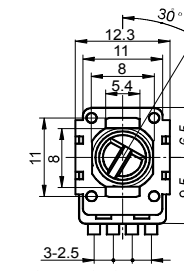
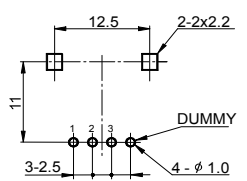
#### ■ 耐久性能 ENDURANCE

旋转寿命 Rotational Life	≥ 10,000 cycles
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# 11mm 系列塑封式绝缘轴旋转电位器

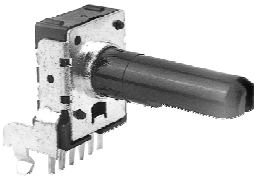
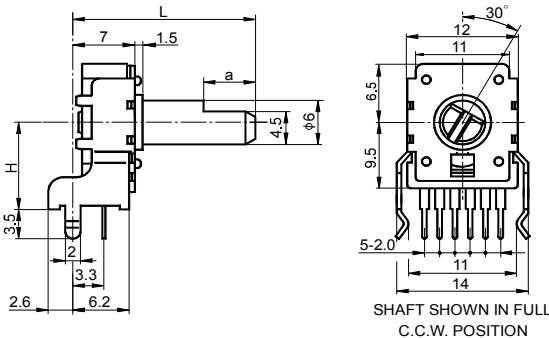
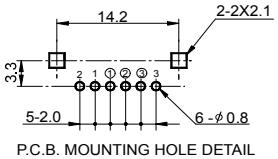
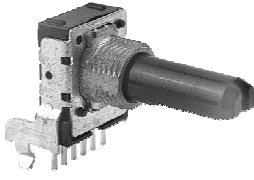
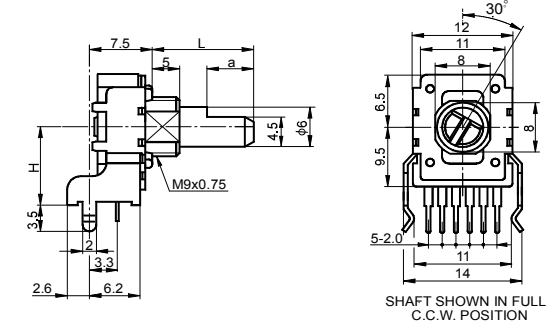
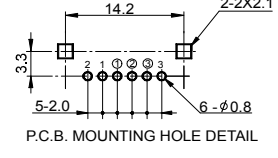
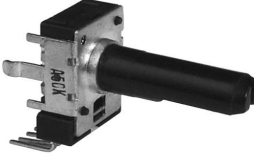
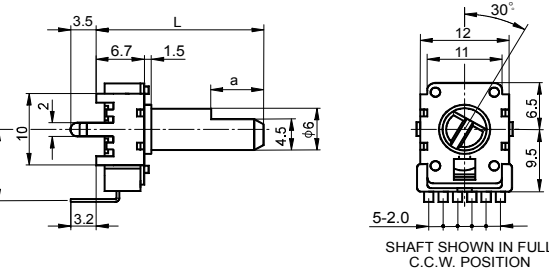
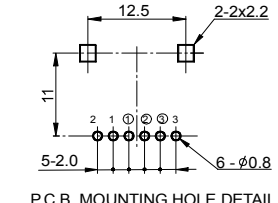
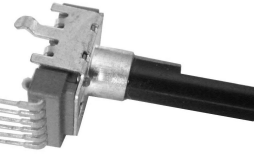
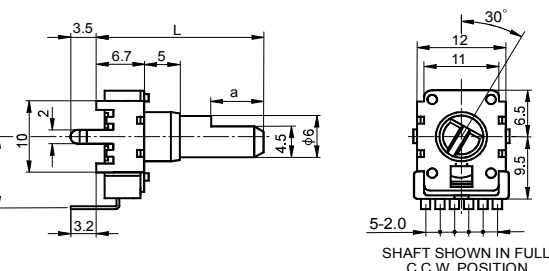
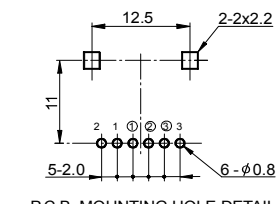
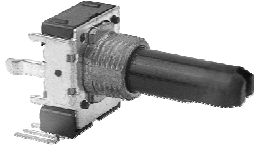
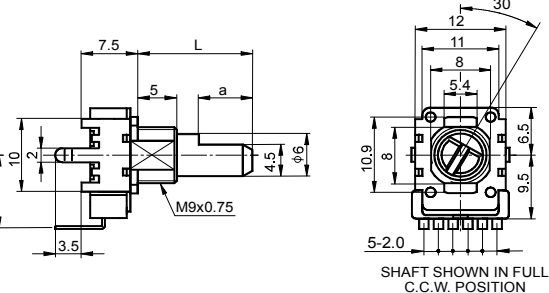
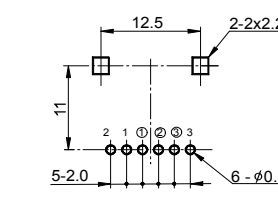
## 11mm SERIES INSERT-MOLDING INSULATED SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm						
RA111N - V1 RA111N - V2  	  SHAFT SHOWN IN FULL C.C.W. POSITION	<table border="1" style="margin-bottom: 10px;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RA113N - V1</td> <td>10.0</td> </tr> <tr> <td>RA113N - V2</td> <td>12.5</td> </tr> </tbody> </table>  P.C.B. MOUNTING HOLE DETAIL	型号 MODEL	H	RA113N - V1	10.0	RA113N - V2	12.5
型号 MODEL	H							
RA113N - V1	10.0							
RA113N - V2	12.5							
RA113N-V1 RA113N-V2  	  SHAFT SHOWN IN FULL C.C.W. POSITION	<table border="1" style="margin-bottom: 10px;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RA113N - V1</td> <td>10.0</td> </tr> <tr> <td>RA113N - V2</td> <td>12.5</td> </tr> </tbody> </table>  P.C.B. MOUNTING HOLE DETAIL	型号 MODEL	H	RA113N - V1	10.0	RA113N - V2	12.5
型号 MODEL	H							
RA113N - V1	10.0							
RA113N - V2	12.5							
RA111N - H  	  SHAFT SHOWN IN FULL C.C.W. POSITION	 P.C.B. MOUNTING HOLE DETAIL						
RA112N-H  	  SHAFT SHOWN IN FULL C.C.W. POSITION	 P.C.B. MOUNTING HOLE DETAIL						
RA113N-H  	  SHAFT SHOWN IN FULL C.C.W. POSITION	 P.C.B. MOUNTING HOLE DETAIL						



# 11mm 系列塑封式绝缘轴旋转电位器

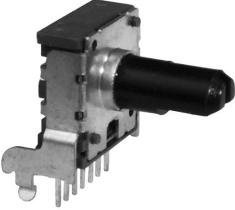
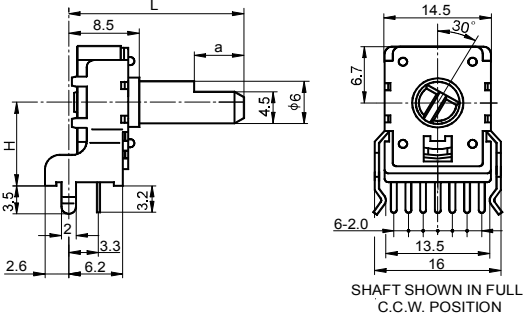
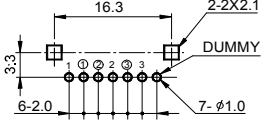
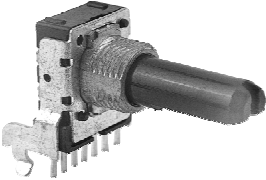
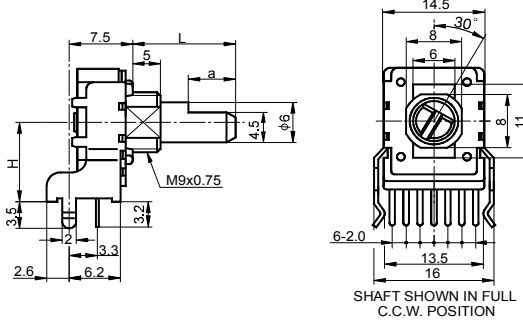
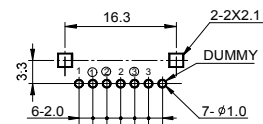
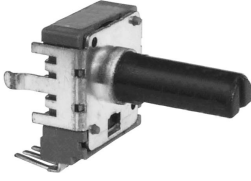
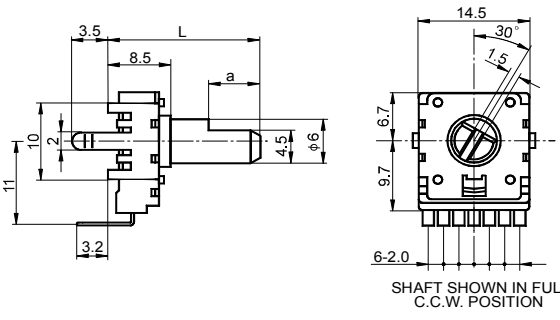
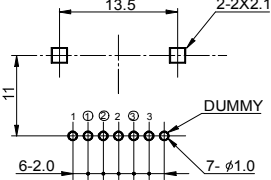
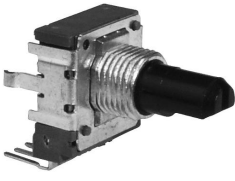
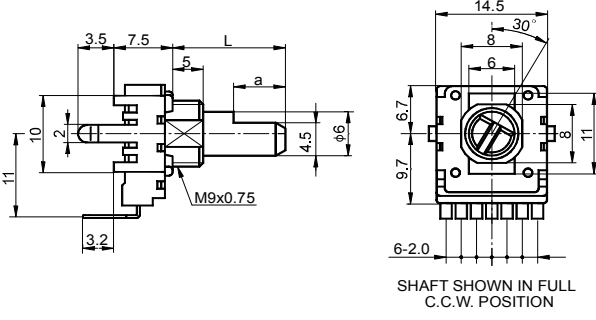
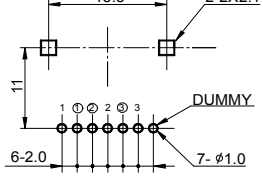
## 11mm SERIES INSERT-MOLDING INSULATED SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm						
RA111G - V1 RA111G - V2  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RA111G - V1</td> <td>10.0</td> </tr> <tr> <td>RA111G - V2</td> <td>12.5</td> </tr> </tbody> </table>	型号 MODEL	H	RA111G - V1	10.0	RA111G - V2	12.5
型号 MODEL	H							
RA111G - V1	10.0							
RA111G - V2	12.5							
RA113G-V1 RA113G-V2  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RA113G - V1</td> <td>10.0</td> </tr> <tr> <td>RA113G - V2</td> <td>12.5</td> </tr> </tbody> </table>	型号 MODEL	H	RA113G - V1	10.0	RA113G - V2	12.5
型号 MODEL	H							
RA113G - V1	10.0							
RA113G - V2	12.5							
RA111G - H  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>						
RA112G-H  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>						
RA113G-H  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>						



# 14mm 系列塑封式绝缘轴旋转电位器

## 14mm SERIES INSERT-MOLDING INSULATED SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm						
RA141G - V1 RA141G - V2  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RA141G - V1</td> <td>10.0</td> </tr> <tr> <td>RA141G - V2</td> <td>12.5</td> </tr> </tbody> </table>	型号 MODEL	H	RA141G - V1	10.0	RA141G - V2	12.5
型号 MODEL	H							
RA141G - V1	10.0							
RA141G - V2	12.5							
RA143G - V1 RA143G - V2  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RA143G - V1</td> <td>10.0</td> </tr> <tr> <td>RA143G - V2</td> <td>12.5</td> </tr> </tbody> </table>	型号 MODEL	H	RA143G - V1	10.0	RA143G - V2	12.5
型号 MODEL	H							
RA143G - V1	10.0							
RA143G - V2	12.5							
RA141G - H  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>						
RA143G - H  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>						

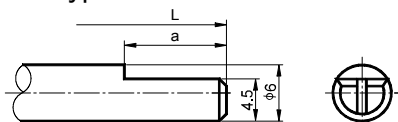


# 11&14mm 系列塑封式绝缘轴旋转电位器

## 11&14mm SERIES INSERT-MOLDING INSULATED SHAFT ROTARY POTENTIOMETERS

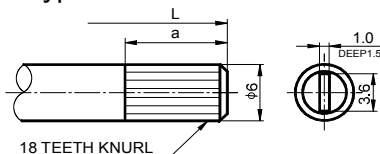
### RA11&14 系列绝缘轴类型及尺寸 INSULATED SHAFT TYPE & DIMENSINOS UNIT : mm

#### F Type



L	15	20	22.5	25	27.5	30	35
---	----	----	------	----	------	----	----

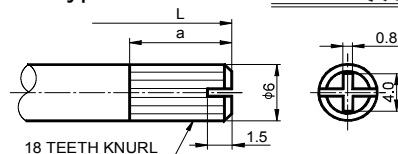
#### Y Type



L	15	20	22.5	25	27.5	30
---	----	----	------	----	------	----

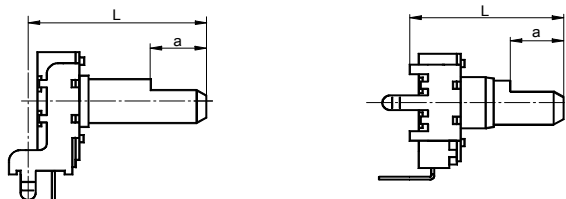
#### P Type

RA11 专用



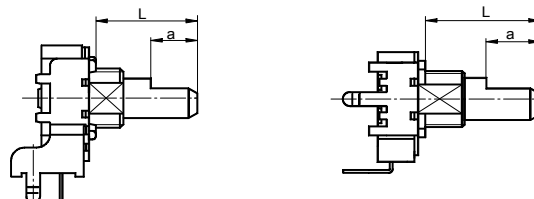
L	15	20	22.5	25	27.5	30
---	----	----	------	----	------	----

#### 不带轴套 with out bushing



L	15	20	22.5	25	27.5	30	35
a	4.5	7	7	7	12	12	12

#### 带轴套 with bushing



L	12.5	15	17.5	20	22.5	25	27.5	
a	7	7	12	12	12	12	12	

### RA11 & 14 系列规格参数 SPECIFICATIONS

#### ■ 机械特性 MECHANICAL SPECIFICATION

全旋转角度 Total Rotational Angle	300° ± 10°
旋转力矩 Rotational Torque	20~200gf.cm
定位位置 Click Position	Center click
定位推动力 Click Slip Out Force	30~250gf.cm
止档强度 Shaft Stop Strength	≤ 3kgf.cm
轴推拉强度 Push & Pull Strength	≥ 3kgf.cm

#### ■ 电气特性 ELECTRICAL SPECIFICATION

总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ± 20%, 1KΩ ≥ R ≥ 1MΩ ± 30%
电阻特性曲线 Resistance Taper	Refer to P. 58
负载功率 Power Rating	≤ 0.05W
最大工作电压 Max. Operating Voltage	50V AC 20V DC
残留电阻 Residual Resistance	R <sub>1~2</sub> Less than 10Ω; R <sub>2~3</sub> Less than 20Ω;
旋转杂音 Rotational Noise	≤ 100mV
同步误差 Tracking Error	≤ ± 3dB at -40~0dB
绝缘电阻 Insulation Resistance	100MΩ min at 250V DC
耐电压 Withstanding Voltage	1 minute at 250V AC


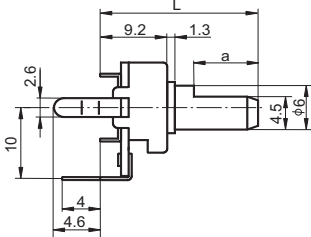
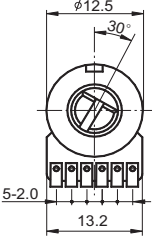
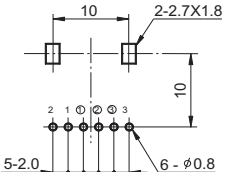
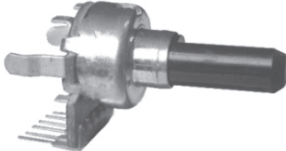
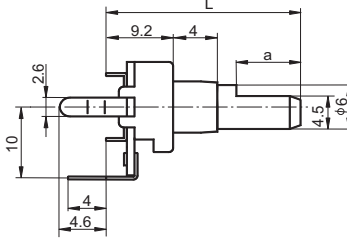
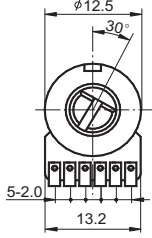
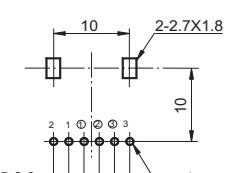
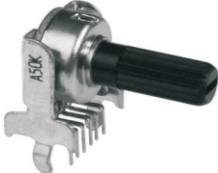
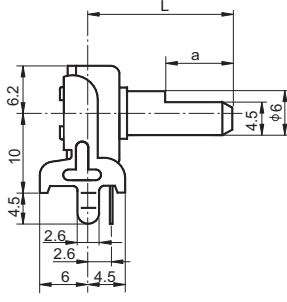
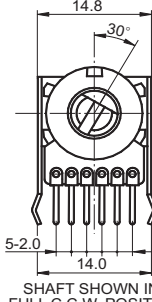
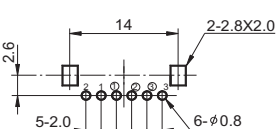
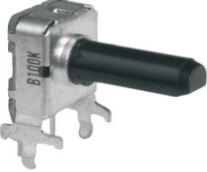
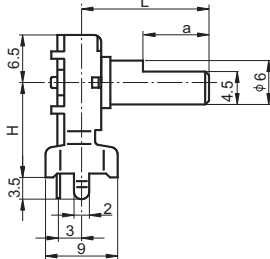
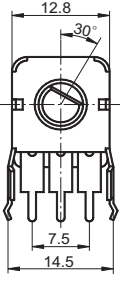
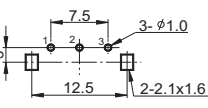
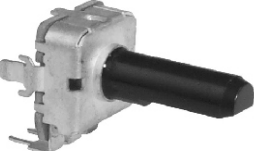
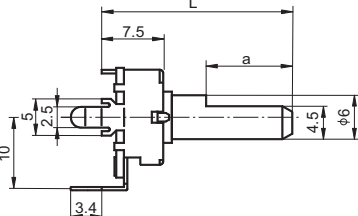
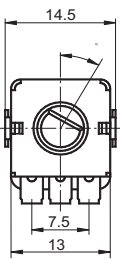
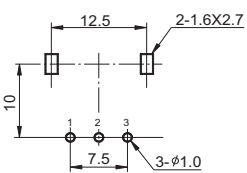
#### ■ 耐久性能 ENDURANCE

旋转寿命 Rotational Life	≥ 10,000 cycles
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# 12mm 系列绝缘轴旋转电位器


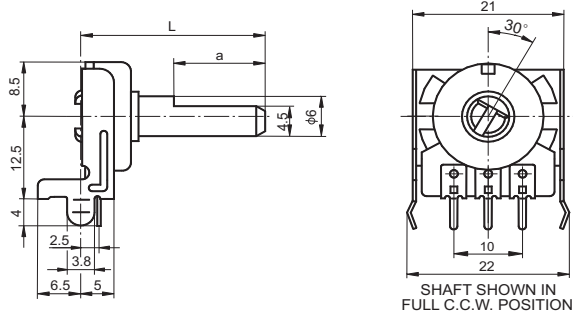
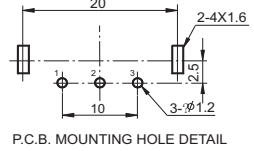
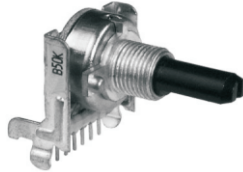
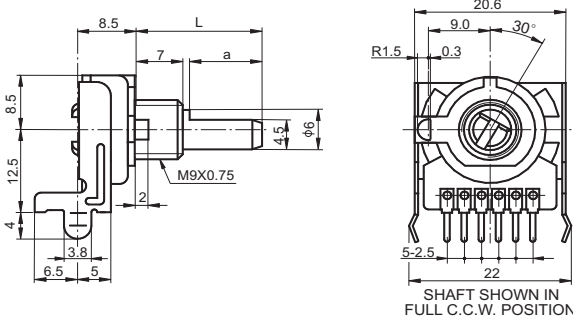
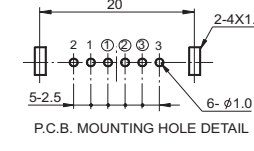

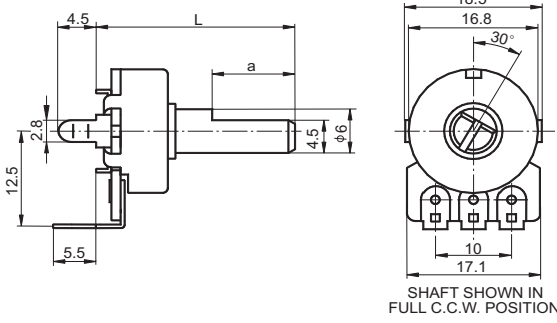
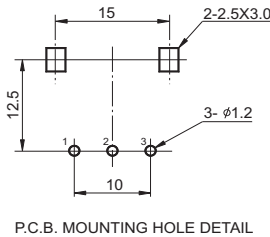

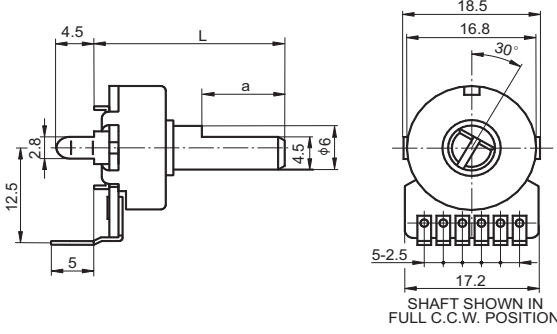
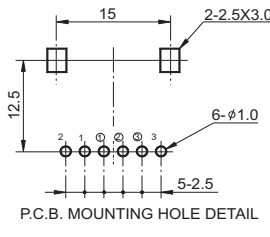

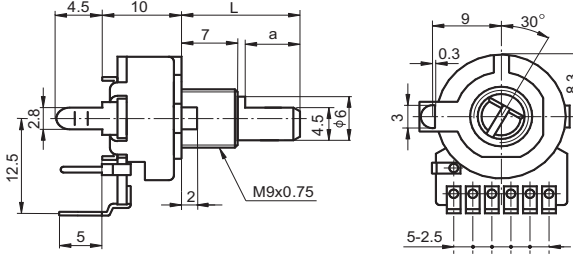
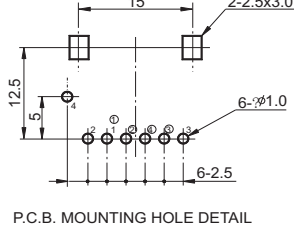
## 12mm SERIES INSULATED SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm						
<p>RB121G - H</p> 	   <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p>P.C.B. MOUNTING HOLE DETAIL</p>						
<p>RB122G-H</p> 	   <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p>P.C.B. MOUNTING HOLE DETAIL</p>						
<p>RB121G - V1</p> 	   <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p>P.C.B. MOUNTING HOLE DETAIL</p>						
<p>RB123N-V1 RB123N-V2</p> 	  <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RB123N - V1</td> <td>10.0</td> </tr> <tr> <td>RB123N - V2</td> <td>12.5</td> </tr> </tbody> </table>  <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	型号 MODEL	H	RB123N - V1	10.0	RB123N - V2	12.5	<p>P.C.B. MOUNTING HOLE DETAIL</p>
型号 MODEL	H							
RB123N - V1	10.0							
RB123N - V2	12.5							
<p>RB123N-H</p> 	   <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p>P.C.B. MOUNTING HOLE DETAIL</p>						



# 16mm 系列绝缘轴旋转电位器

## 16mm SERIES INSULATED SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>RB161N - V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RB163G - V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RB161N - H</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RB161G - H</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p>RB163GT - H</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>



# 12/16mm 系列绝缘轴旋转电位器

## 12/16mm SERIES INSULATED SHAFT ROTARY POTENTIOMETERS

### RB12&16 系列绝缘轴类型及尺寸 INSULATED SHAFT TYPE & DIMENSIONS UNIT: mm

F Type	Y Type																																
 <table border="1" style="margin: auto;"> <tr><td>L</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td><td></td><td></td></tr> </table>	L	15	20	25	30	35			 <table border="1" style="margin: auto;"> <tr><td>L</td><td>15</td><td>20</td><td>25</td><td>30</td><td></td><td></td><td></td></tr> </table>	L	15	20	25	30																			
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L	15	20	25	30																													
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a	7	12	12																														

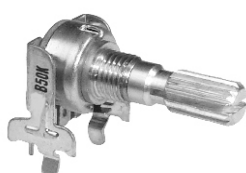
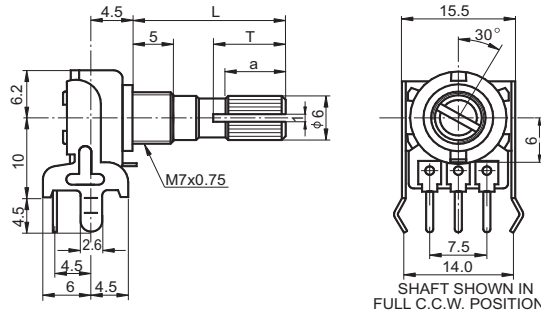
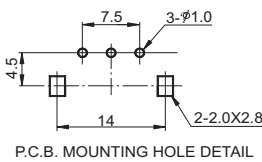

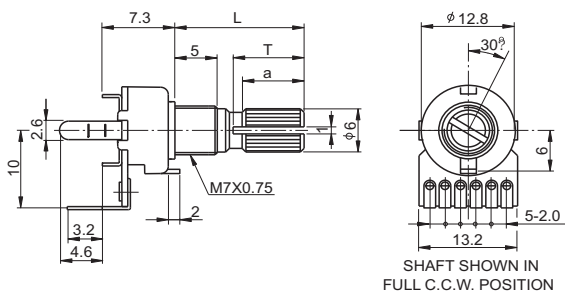
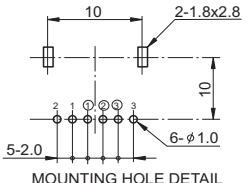
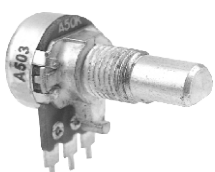
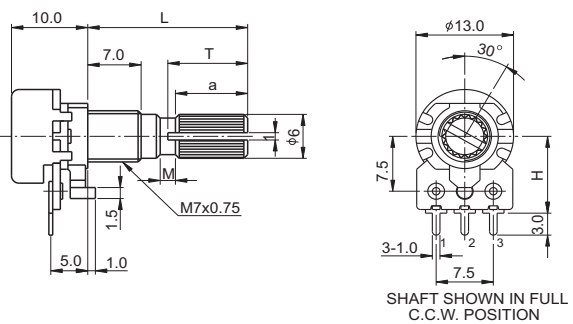
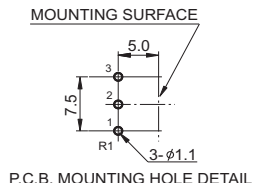
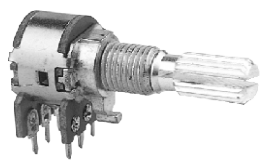
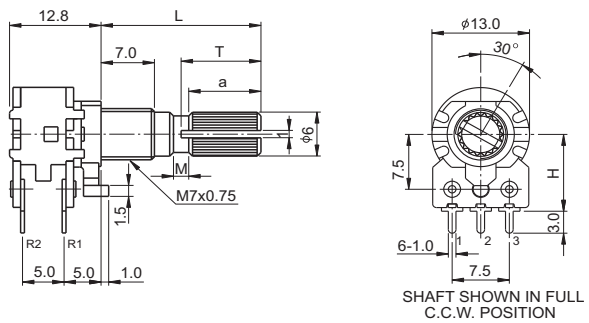
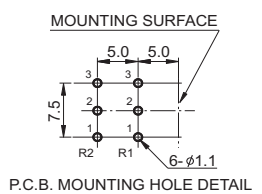
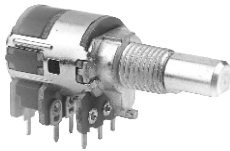
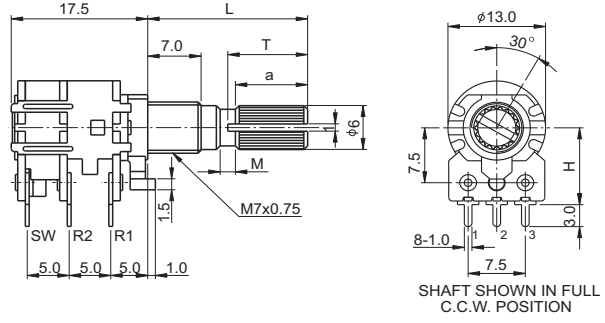
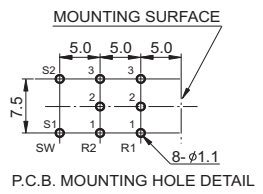
### RB12 & 16 系列规格参数 SPECIFICATIONS

■ 机械特性 MECHANICAL SPECIFICATION	RB12	RB16
全旋转角度 Total Rotational Angle	300° ± 10°	
旋转力矩 Rotational Torque	20 ~ 200gf.cm	
定位位置 Click Position	Center click	
定位推动力 Click Slip Out Force	30 ~ 250gf.cm	
止档强度 Shaft Stop Strength	≤ 2.5kgf.cm	≤ 6kgf.cm
轴推拉强度 Push & Pull Strength	≥ 5kgf.cm	≥ 5kgf.cm
<b>■ 电气特性 ELECTRICAL SPECIFICATION</b>		
总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ± 20%, 1KΩ ≥ R ≥ 1MΩ ± 30%	
电阻特性曲线 Resistance Taper	Refer to P. 58	
负载功率 Power Rating	≤ 0.05W	Linear taper B: 0.2W Other taper : 0.1W
最大工作电压 Max. Operating Voltage	50V AC 20V DC	
残留电阻 Residual Resistance	R <sub>1~2</sub> Less than 10Ω; R <sub>2~3</sub> Less than 20Ω;	
旋转杂音 Rotational Noise	≤ 100mV	
同步误差 Tracking Error	≤ ± 3dB at -40 ~ 0dB	
绝缘电阻 Insulation Resistance	100MΩ min at 500V DC	
耐电压 Withstanding Voltage	1 minute at 500V AC	
<b>■ 耐久性能 ENDURANCE</b>		
旋转寿命 Rotational Life	≥ 10,000 cycles	



# 12mm 系列金属轴旋转电位器

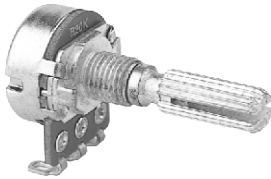
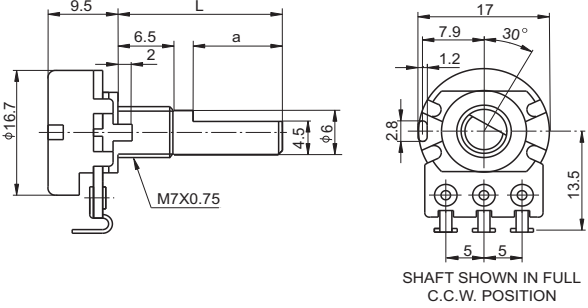
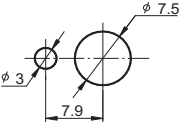
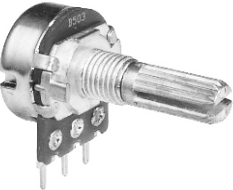
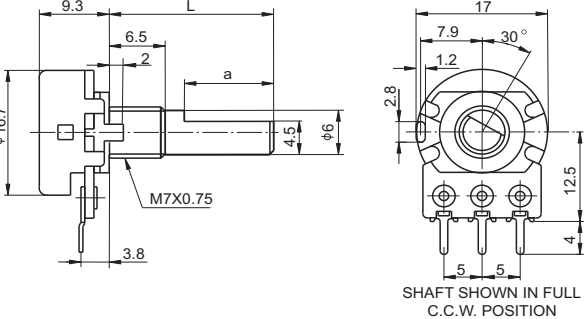
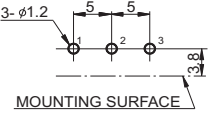
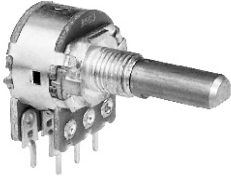
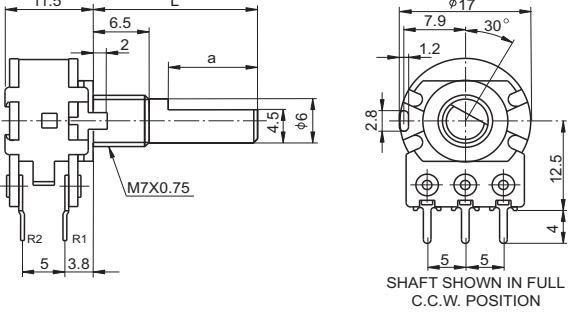
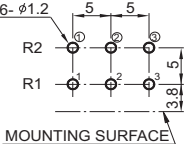
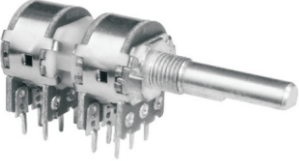
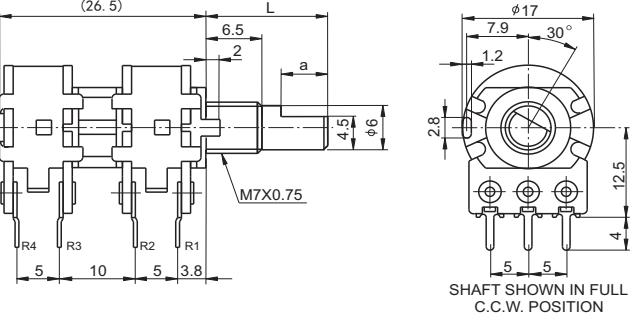
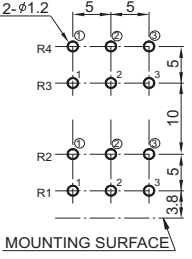
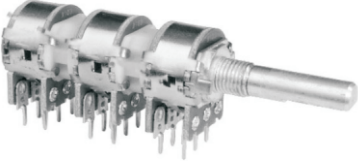
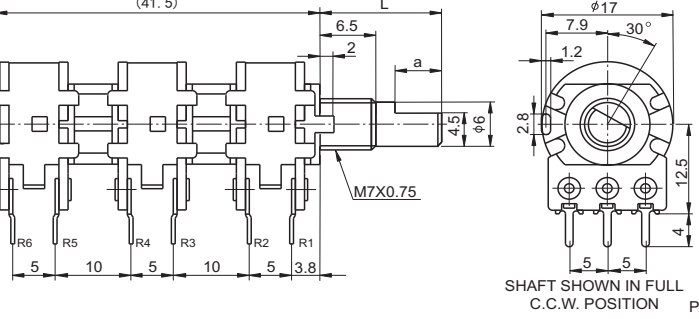
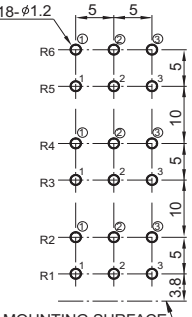
## 12mm SERIES METAL SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm						
RD121N - V  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>						
RD121G - V  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">MOUNTING HOLE DETAIL</p>						
RD122N - V1 RD122N - V2  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<table border="1" style="margin-bottom: 10px;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RD122N - V1</td> <td>10.0</td> </tr> <tr> <td>RD122N - V2</td> <td>12.5</td> </tr> </tbody> </table>  <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	型号 MODEL	H	RD122N - V1	10.0	RD122N - V2	12.5
型号 MODEL	H							
RD122N - V1	10.0							
RD122N - V2	12.5							
RD122G - V1 RD122G - V2  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<table border="1" style="margin-bottom: 10px;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RD122G - V1</td> <td>10.0</td> </tr> <tr> <td>RD122G - V2</td> <td>12.5</td> </tr> </tbody> </table>  <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	型号 MODEL	H	RD122G - V1	10.0	RD122G - V2	12.5
型号 MODEL	H							
RD122G - V1	10.0							
RD122G - V2	12.5							
RD122GS - V1 RD122GS - V2  	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<table border="1" style="margin-bottom: 10px;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RD122GS - V1</td> <td>10.0</td> </tr> <tr> <td>RD122GS - V2</td> <td>12.5</td> </tr> </tbody> </table>  <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	型号 MODEL	H	RD122GS - V1	10.0	RD122GS - V2	12.5
型号 MODEL	H							
RD122GS - V1	10.0							
RD122GS - V2	12.5							



# 16mm 系列金属轴旋转电位器

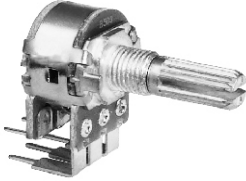
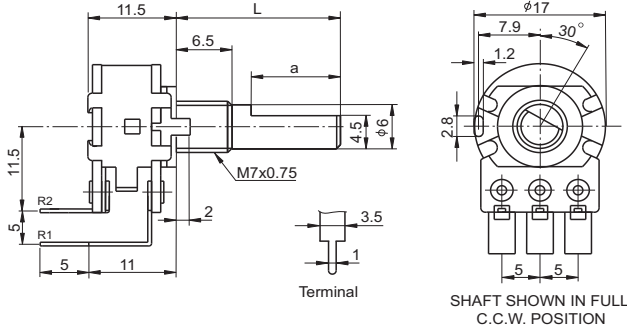
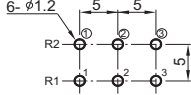
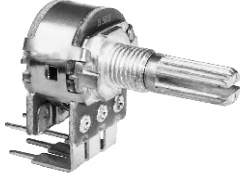
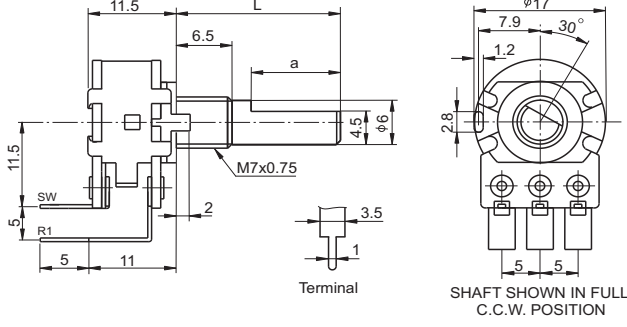
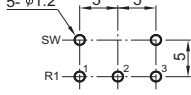
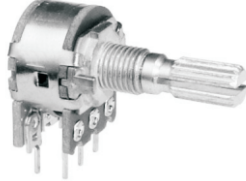
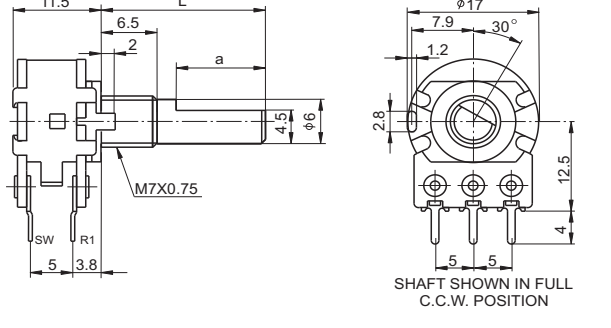
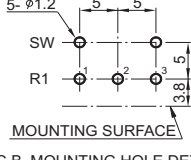
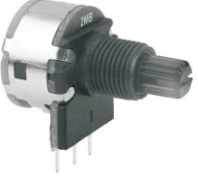
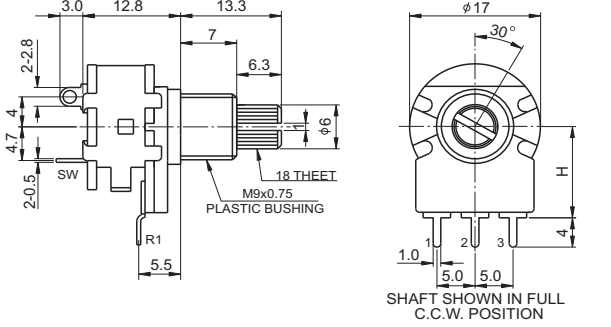
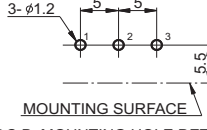
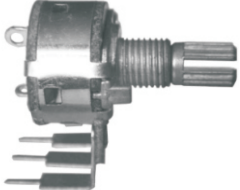
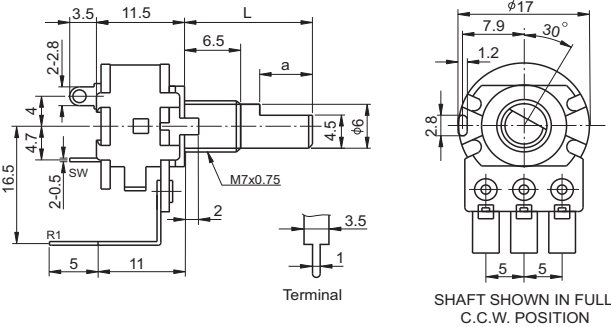
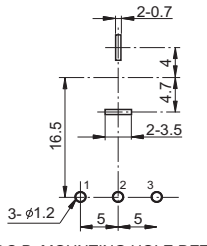
## 16mm SERIES METAL SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>RD161N - W</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>  <p style="text-align: center;">MOUNTING HOLE DETAIL</p>	
<p>RD161N - V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>  <p style="text-align: center;">MOUNTING SURFACE P.C.B. MOUNTING HOLE DETAIL</p>	
<p>RD161G - V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>  <p style="text-align: center;">MOUNTING SURFACE P.C.B. MOUNTING HOLE DETAIL</p>	
<p>RD161G4 - V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>  <p style="text-align: center;">MOUNTING SURFACE P.C.B. MOUNTING HOLE DETAIL</p>	
<p>RD161G6 - V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>  <p style="text-align: center;">MOUNTING SURFACE P.C.B. MOUNTING HOLE DETAIL</p>	



# 16mm 系列金属轴旋转电位器

## 16mm SERIES METAL SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p><b>RD161G - H</b></p> 	 <p style="text-align: center;">Terminal</p> <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p><b>RD161NS - H</b></p> 	 <p style="text-align: center;">Terminal</p> <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p><b>RD161NS - V</b></p> 	 <p style="text-align: center;">Terminal</p> <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p><b>RD164NS - V</b></p> 	 <p style="text-align: center;">Terminal</p> <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>
<p><b>RD162NS - H</b></p> 	 <p style="text-align: center;">Terminal</p> <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>



12/16mm 系列金属轴旋转电位器  
12/16mm SERIES METAL SHAFT ROTARY POTENTIOMETERS


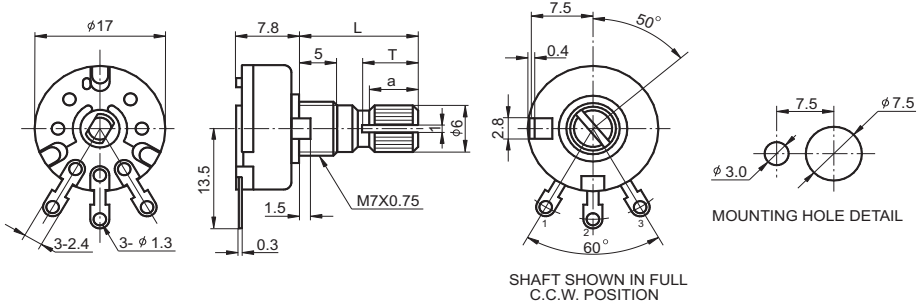

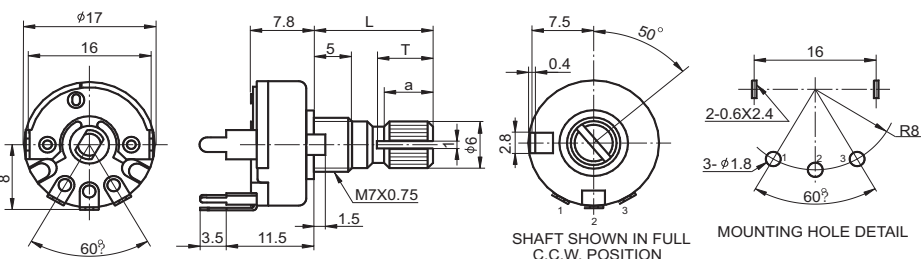

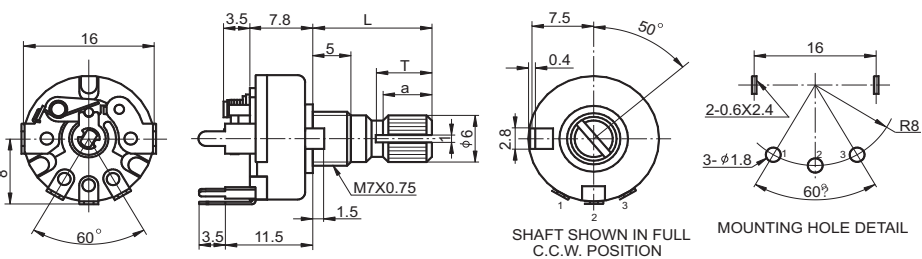
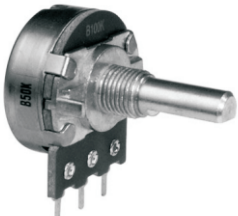
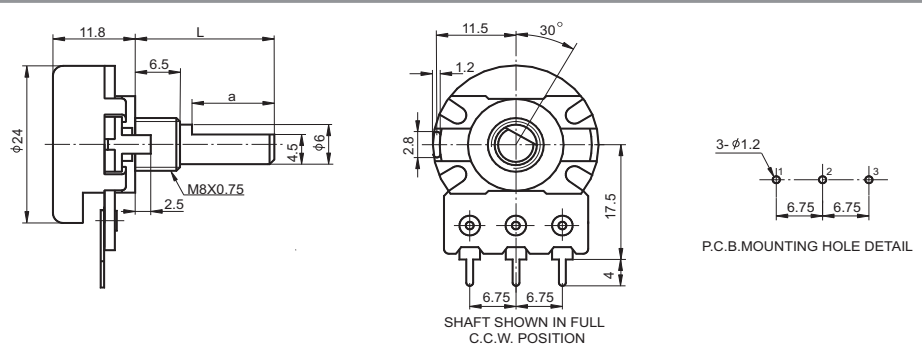
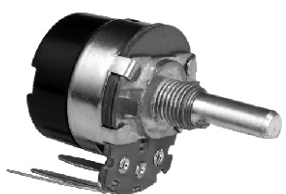
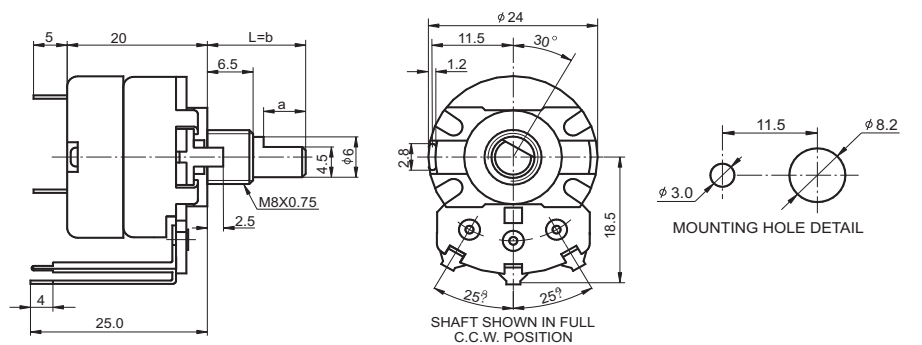
RD12/16 系列规格参数 SPECIFICATIONS

■ 机械特性 MECHANICAL SPECIFICATION	RD12 SERIES	RD16 SERIES
全旋转角度 Total Rotational Angle	300°±10°	
旋转力矩 Rotational Torque	20~200gf.cm	
定位位置 Click Position	Center click	Center click 41 click
定位推动力 Click Slip Out Force	50~300gf.cm	
开关工作角度 Switch Working Angle	30°±10°	50°±10°
开关工作动力 Switch Working Torque	50~250gf.cm	50~450gf.cm
止档强度 Shaft Stop Strength	≤3kgf.cm	≤6kgf.cm
轴推拉强度 Push & Pull Strength	≥6kgf.cm	
<b>■ 电气特性 ELECTRICAL SPECIFICATION</b>		
总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ±20%, 1KΩ ≥ R ≥ 1MΩ ±30%	
电阻特性曲线 Resistance Taper	Refer to P. 58	
负载功率 Power Rating	Linear taper B:0.08W	Linear taper B:0.2W
	Other taper 0.05W	Other taper 0.1W
最大工作电压 Max. Operating Voltage	100V AC	150V AC
残留电阻 Residual Resistance	R <sub>1~2</sub> Less than 10Ω; R <sub>2~3</sub> Less than 20Ω;	
旋转杂音 Rotational Noise	≤100mV	
同步误差 Tracking Error	≤±3dB at -40~0dB	
开关接触电阻 Switch Contact Resistance	0.5Ω Less than	
开关承受负载 Switch Power Rating	12V DC 1A Max	
绝缘电阻 Insulation Resistance	100MΩ min at 500V DC	
耐电压 Withstanding Voltage	1 minute at 500V AC	
<b>■ 耐久性能 ENDURANCE</b>		
旋转寿命 Rotational Life	≥10,000 cycles	



# 17/24mm 系列金属轴旋转电位器

## 17/24mm SERIES METAL SHAFT ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>RD171NS - W</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	
<p>RD171N - H</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	
<p>RD171NS - H</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p>	
<p>RD241N - V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	
<p>RD243NS - V</p> 	 <p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: center;">MOUNTING HOLE DETAIL</p>	



17/24mm 系列金属轴旋转电位器  
17/24mm SERIES METAL SHAFT ROTARY POTENTIOMETERS

RD17/24 系列规格参数 SPECIFICATIONS

■ 机械特性 MECHANICAL SPECIFICATION	RD17 SERIES	RD24 SERIES
全旋转角度 Total Rotational Angle	260°±10°	300°±10°
旋转力矩 Rotational Torque	20~200gf.cm	
定位位置 Click Position	/	
定位推动力 Click Slip Out Force		
开关工作角度 Switch Working Angle	40°±10°	50°±10°
开关工作动力 Switch Working Torque	70~400gf.cm	300~800gf.cm
止档强度 Shaft Stop Strength	≤3kgf.cm	≤6kgf.cm
轴推拉强度 Push & Pull Strength	≥6kgf.cm	
■ 电气特性 ELECTRICAL SPECIFICATION		
总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ±20%, 1KΩ ≥ R ≥ 1MΩ ±30%	
电阻特性曲线 Resistance Taper	Refer to P. 58	
负载功率 Power Rating	Linear taper B:0.1W	Linear taper B:0.5W
	Other taper 0.05W	Other taper 0.25W
最大工作电压 Max. Operating Voltage	150V AC	
残留电阻 Residual Resistance	R <sub>1~2</sub> Less than 10Ω; R <sub>2~3</sub> Less than 20Ω;	
旋转杂音 Rotational Noise	≤100mV	
开关接触电阻 Switch Contact Resistance	0.5Ω Less than	
开关承受负载 Switch Power Rating	12V DC 1A Max	
绝缘电阻 Insulation Resistance	50MΩ min at 500V DC	100MΩ min at 500V DC
耐电压 Withstanding Voltage	1 minute at 500V AC	
■ 耐久性能 ENDURANCE		
旋转寿命 Rotational Life	≥10,000 cycles	



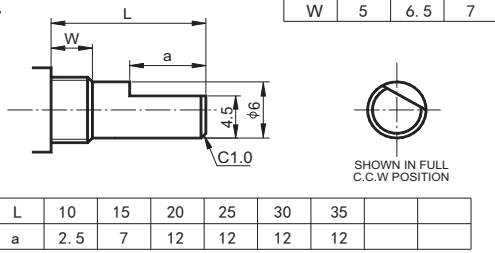
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## RD12/16/17/24 ROTARY SERIES METAL SHAFT TYPE

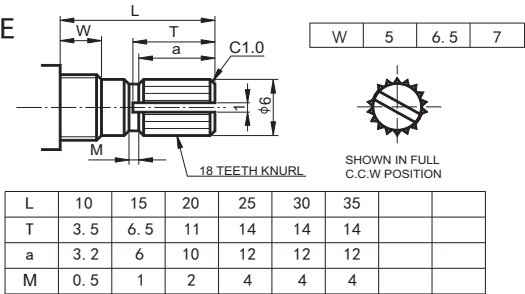
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UNIT: mm

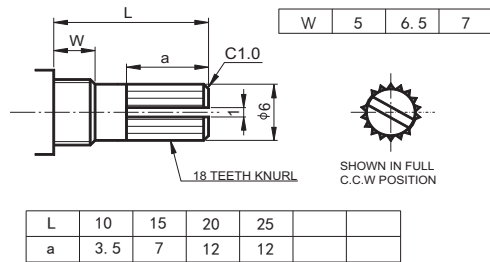
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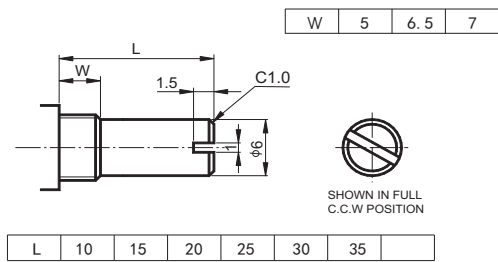
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#### Y TYPE

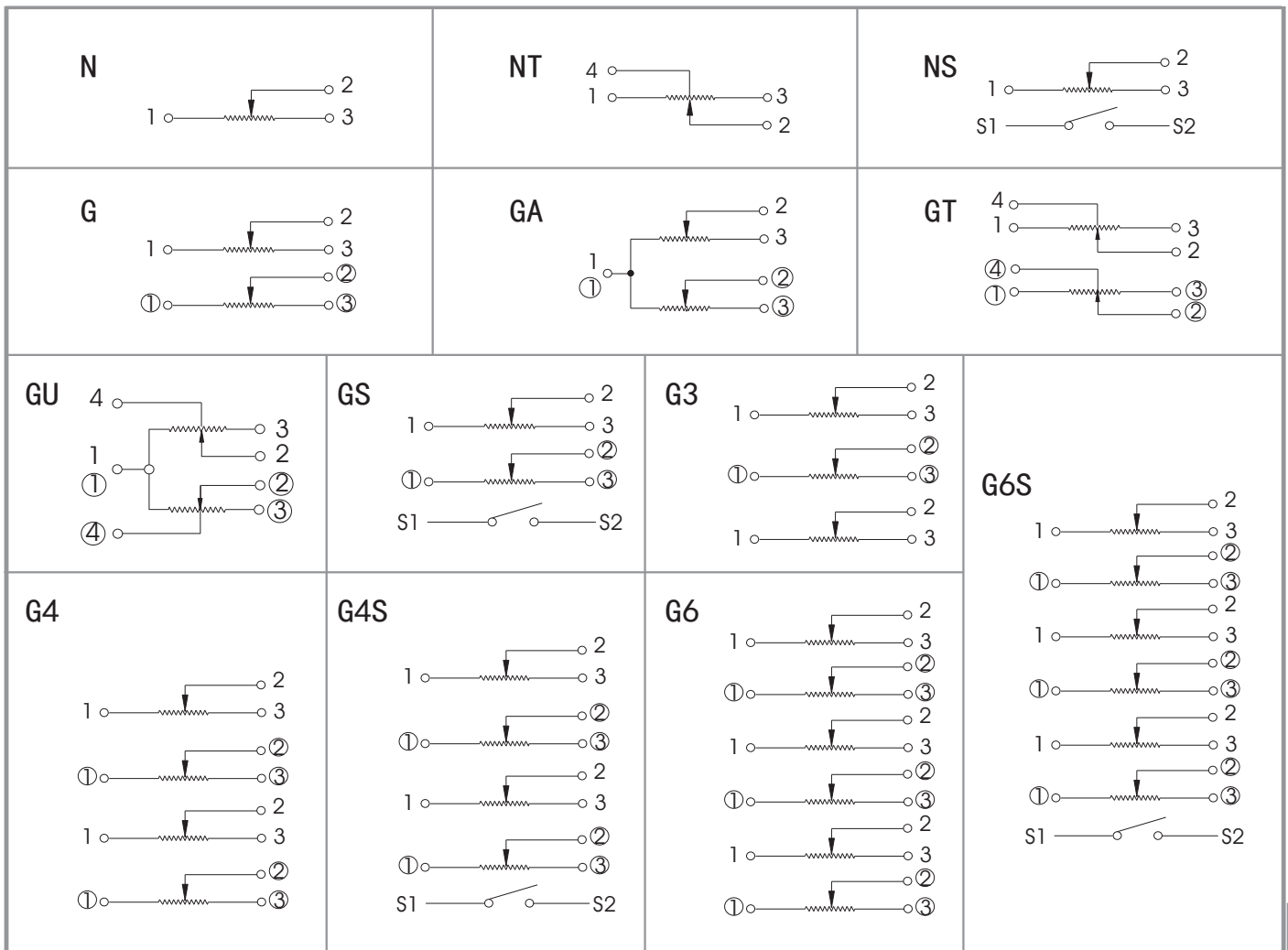


#### R TYPE



### 旋转系列电位器电路图类型

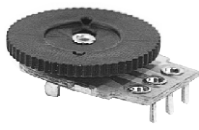
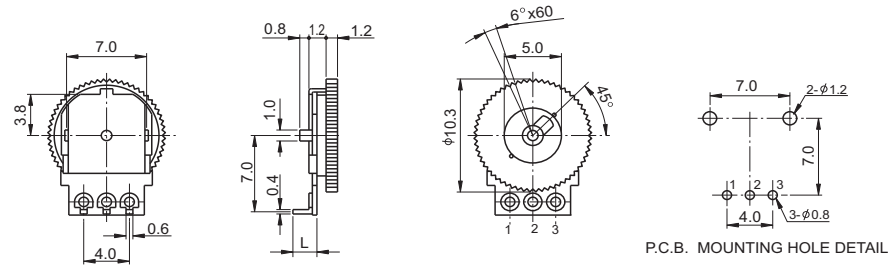
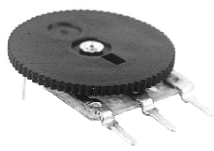
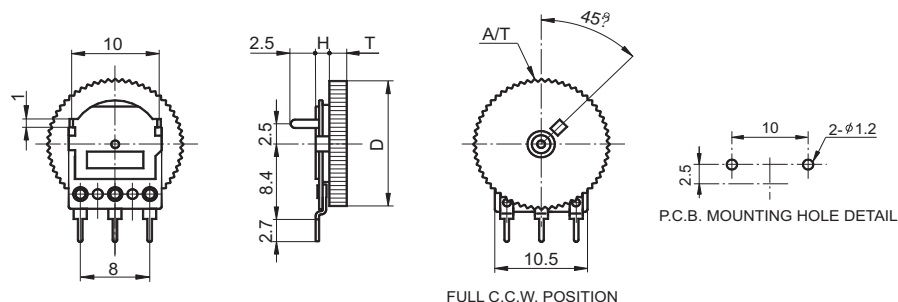
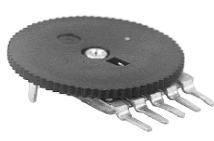
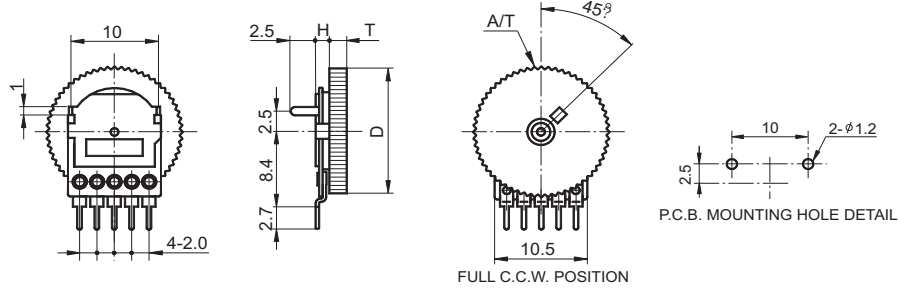
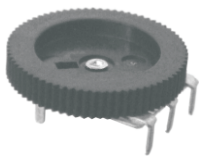
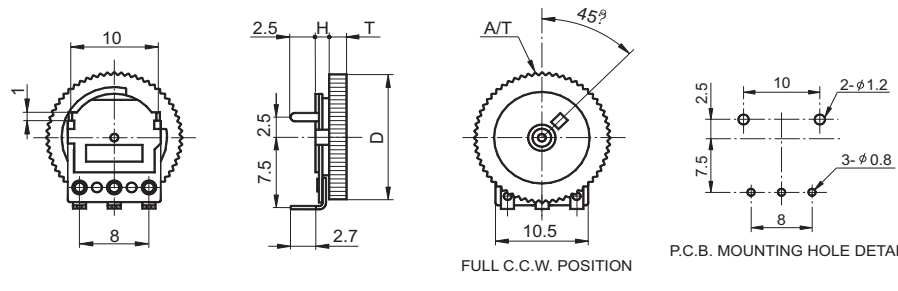

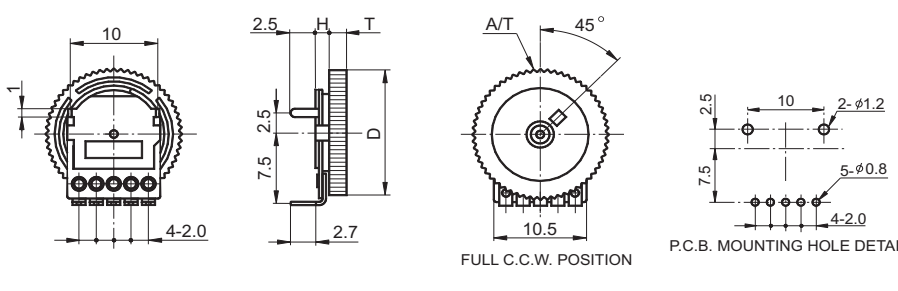
### ROTARY SERIES POTENTIOMETERS CIRCUIT DIAGRAM TYPE





# 薄型旋盘系列电位器

## THIN ROTARY SERIES POTENTIOMETERS

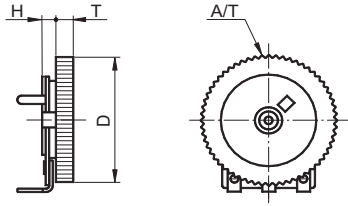
型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>RC101N - H</p> 	 <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	
<p>RC141N-V RC161N-V</p> 	 <p style="text-align: center;">FULL C.C.W. POSITION</p> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	
<p>RC141GA-V RC161GA-V</p> 	 <p style="text-align: center;">FULL C.C.W. POSITION</p> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	
<p>RC141N-H RC161N-H</p> 	 <p style="text-align: center;">FULL C.C.W. POSITION</p> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	
<p>RC141GA-H RC161GA-H</p> 	 <p style="text-align: center;">FULL C.C.W. POSITION</p> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	



# 薄型旋盘系列电位器 THIN ROTARY SERIES POTENTIOMETERS

## 旋盘类型及尺寸 THIN ROTARY TYPE & DIMENSIONS

UNIT: mm



颜色类型 COLOUR			
黑色 BLACK	灰色 GREY	白色 WHITE	

D 直径 DIAMETER	T 厚度 THICKNESS			H 安装高度 HEIGHT		A/T 齿数及角度 TEETHS/ANGLE		
	1.0	2.0	2.8	1.2	1.4	4°×90T	5°×72T	6°×60T
∅14	●	●	●	●	●			●
∅16	●	●	●	●	●	●	●	●
∅18		●	●		●		●	●
∅20			●		●	●		

## RC101/141/161 系列规格参数 SPECIFICATIONS

### ■ 机械特性 MECHANICAL SPECIFICATION

#### RC101 SERIES

#### RC141/161 SERIES

全旋转角度 Total Rotational Angle

250°±10°

270°±10°

旋转力矩 Rotational Torque

10~70gf.cm

止档强度 Shaft Stop Strength

≤0.8kgf.cm

### ■ 电气特性 ELECTRICAL SPECIFICATION

总阻及误差 Total Resistance Range

1KΩ < R < 1MΩ ±20%, 1KΩ ≥ R ≥ 1MΩ ±30%

电阻特性曲线 Resistance Taper

Refer to P. 58

负载功率 Power Rating

Linear taper B:0.02W; Other taper 0.01W

最大工作电压 Max. Operating Voltage

12V DC

残留电阻 Residual Resistance

R<sub>1-2</sub> Less than 10Ω; R<sub>2-3</sub> Less than 20Ω;

旋转杂音 Rotational Noise

≤100mV

同步误差 Tracking Error

≤±3dB at -40~0dB

绝缘电阻 Insulation Resistance

100MΩ min at 100V DC

耐电压 Withstanding Voltage

1 minute at 250V AC

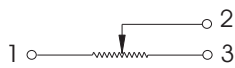
### ■ 耐久性能 ENDURANCE

旋转寿命 Rotational Life

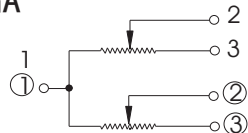
≥10,000 cycles

## RC101/RC141/161 系列电路图 SERIES CIRCUIT DIAGRAM

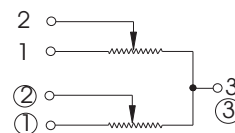
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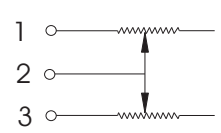
GA



GB



GC





# 10mm 系列电木外壳旋转电位器

## 10mm SERIES MOLDED CASE ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>RC102N - H</p>	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: center;">L   1.0 ~ 5.0</p> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	
<p>RC103N - H</p>	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <p style="text-align: center;">L   1.0 ~ 5.0</p> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	

### RC102/103 系列规格参数 SPECIFICATIONS

#### ■ 机械特性 MECHANICAL SPECIFICATION

全旋转角度 Total Rotational Angle	200°±5°
旋转力矩 Rotational Torque	5~150gf.cm
止档强度 Shaft Stop Strength	≤2kgf.cm
轴推拉强度 Push & Pull Strength	≥1kgf.cm

#### ■ 电气特性 ELECTRICAL SPECIFICATION

总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ±20%, 1KΩ ≥ R ≥ 1MΩ ±30%
电阻特性曲线 Resistance Taper	Refer to P. 58
负载功率 Power Rating	Linear taper B:0.07W; Other taper 0.03W
最大工作电压 Max. Operating Voltage	Linear taper B:100V AC; Other taper 70V AC
残留电阻 Residual Resistance	R <sub>1~2</sub> Less than 10Ω; R <sub>2~3</sub> Less than 20Ω;
旋转杂音 Rotational Noise	≤100mV

#### ■ 耐久性能 ENDURANCE

旋转寿命 Rotational Life	≥10,000 cycles
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# 12/16mm 系列电木外壳旋转电位器

## 12/16mm SERIES MOLDED CASE ROTARY POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm														
<p>RC122N - W</p>	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>0.9</td> <td>1.2</td> <td>2.2</td> <td>6.0</td> </tr> </table> <p style="text-align: right;">P.C.B. SOLDER POINTS</p>	L	0.9	1.2	2.2	6.0										
L	0.9	1.2	2.2	6.0												
<p>RC122NS-P</p>	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>0.9</td> <td>1.2</td> <td>2.2</td> <td>6.0</td> </tr> </table> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	L	0.9	1.2	2.2	6.0										
L	0.9	1.2	2.2	6.0												
<p>RC122NS - H1 RC122NS - H2</p>	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>0.9</td> <td>1.2</td> <td>2.2</td> <td>6.0</td> </tr> </table> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RC121NS - H1</td> <td>3.0</td> </tr> <tr> <td>RC121NS - H2</td> <td>3.9</td> </tr> </tbody> </table> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	L	0.9	1.2	2.2	6.0	型号 MODEL	H	RC121NS - H1	3.0	RC121NS - H2	3.9				
L	0.9	1.2	2.2	6.0												
型号 MODEL	H															
RC121NS - H1	3.0															
RC121NS - H2	3.9															
<p>RC162NS-W</p>	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>1.2</td> <td>2.2</td> <td>5.3</td> <td>6.0</td> </tr> </table> <p style="text-align: right;">P.C.B. SOLDER POINTS</p>	L	1.2	2.2	5.3	6.0										
L	1.2	2.2	5.3	6.0												
<p>RC162NS - H1 RC162NS - H2</p>	<p style="text-align: center;">SHAFT SHOWN IN FULL C.C.W. POSITION</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>1.2</td> <td>2.2</td> <td>5.3</td> <td>6.0</td> </tr> </table> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>RC161NS - H1</td> <td>4</td> <td>8</td> </tr> <tr> <td>RC161NS - H2</td> <td>5</td> <td>9</td> </tr> </tbody> </table> <p style="text-align: right;">P.C.B. MOUNTING HOLE DETAIL</p>	L	1.2	2.2	5.3	6.0	型号 MODEL	H	B	RC161NS - H1	4	8	RC161NS - H2	5	9	
L	1.2	2.2	5.3	6.0												
型号 MODEL	H	B														
RC161NS - H1	4	8														
RC161NS - H2	5	9														



12/16mm 系列电木外壳旋转电位器  
12/16mm SERIES MOLDED CASE ROTARY POTENTIOMETERS

RC122/162 系列规格参数 SPECIFICATIONS

■ 机械特性 MECHANICAL SPECIFICATION	RC122 SERIES	RC162 SERIES
全旋转角度 Total Rotational Angle	230°±10°	260°±10°
旋转力矩 Rotational Torque	20~200gf.cm	
止档强度 Shaft Stop Strength	≤2kgf.cm	
开关工作角度 Switch Working Angle	30°±10°	
开关工作动力 Switch Working Torque	100~350gf.cm	
■ 电气特性 ELECTRICAL SPECIFICATION		
总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ±20%, 1KΩ ≥ R ≥ 1MΩ ±30%	
电阻特性曲线 Resistance Taper	Refer to P. 58	
负载功率 Power Rating	Linear taper B:0.08W	Linear taper B:0.1W
	Other taper 0.04W	Other taper 0.05W
最大工作电压 Max. Operating Voltage	Linear taper B 150V AC	Linear taper B 200V AC
	Other taper 100V AC	Other taper 150V AC
残留电阻 Residual Resistance	R <sub>1~2</sub> Less than 10Ω; R <sub>2~3</sub> Less than 20Ω;	
旋转杂音 Rotational Noise	≤100mV	
开关接触电阻 Switch Contact Resistance	0.5Ω Less than	
开关承受负载 Switch Power Rating	12V DC 1A Max	
绝缘电阻 Insulation Resistance	100MΩ min at 250V DC	
耐电压 Withstanding Voltage	1 minute at 250V AC	
■ 耐久性能 ENDURANCE		
旋转寿命 Rotational Life	≥10,000 cycles	


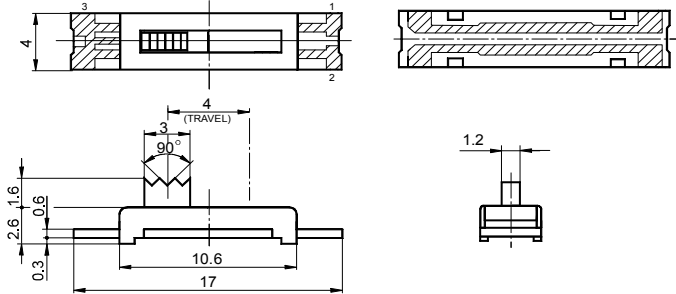

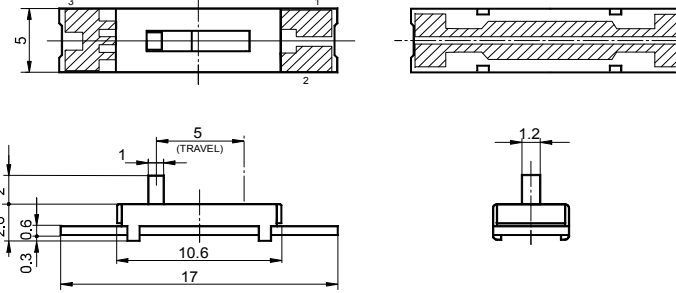
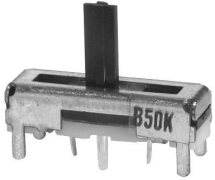
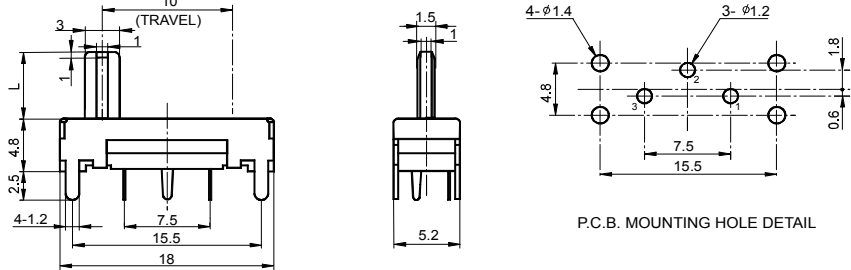
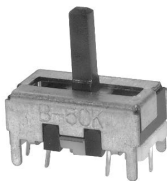
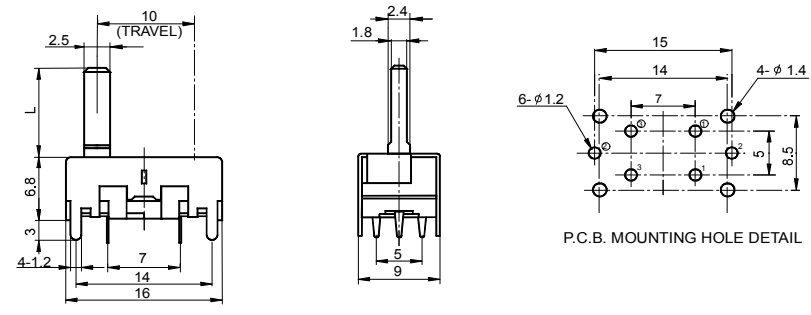
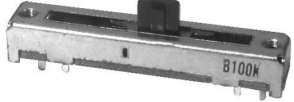
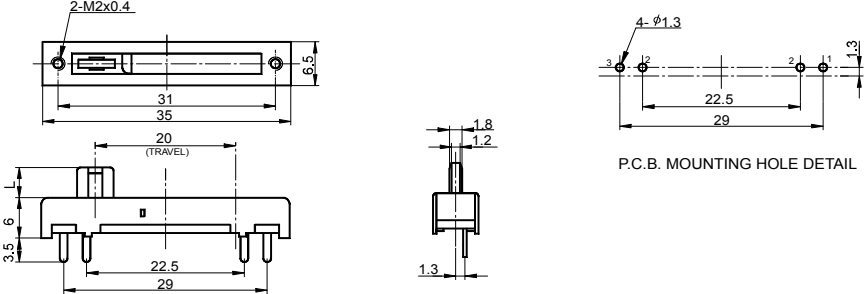
RC122 & RC162 系列电路图 SERIES CIRCUIT DIAGRAM





# SV 系列铁壳型直滑系列电位器

## SV SERIES SLIDE WITH CASE TYPE SERIES POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
SV041NA - W  		
SV051N - W  		
SV101N - H  	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	
SV101G - H  	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	
SV201 - H  	 <p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	



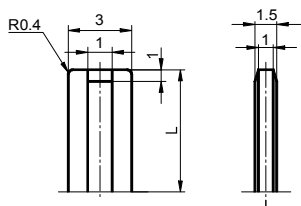
# SV 系列铁壳型直滑系列电位器

## SV SERIES SLIDE WITH CASE TYPE SERIES POTENTIOMETERS

### 滑柄类型及尺寸 LEVER TYPE & DIMENSIONS

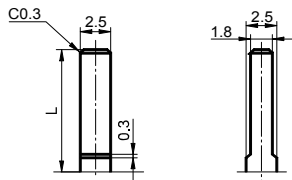
UNIT : mm

#### A Type



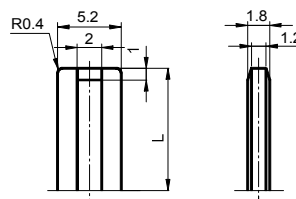
L	2.5	5	10		
---	-----	---	----	--	--

#### B Type



L	5	10	15		
---	---	----	----	--	--

#### C Type



L	4.5				
---	-----	--	--	--	--

### SV 系列规格参数 SPECIFICATIONS

#### ■ 机械特性 MECHANICAL SPECIFICATION

工作推动力 Operating Force	10~200gf.cm
止档强度 Shaft Stop Strength	≤3kgf.cm
滑柄偏摆量 Lever Wobble	1.6mm Max.
定位推动力 Click Force	30~300gf.cm

#### ■ 电气特性 ELECTRICAL SPECIFICATION

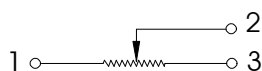
总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ±20%, 1KΩ ≥ R ≥ 1MΩ ±30%				
电阻特性曲线 Resistance Taper	Refer to P. 58				
负载功率 Power Rating	Linear taper B	Single	5mm	10mm	20mm
		Dual	0.005W	0.015W	0.1W
	Other taper	Single	0.015W	0.01W	0.05W
		Dual	0.012W	0.01W	0.01W
最大工作电压 Max. Operating Voltage	Linear taper B	50V AC	100V AC	200V AC	
	Other taper	25V AC	50V AC	150V AC	
残留电阻 Residual Resistance	R <sub>1~2</sub> Less than 10Ω; R <sub>2~3</sub> Less than 20Ω;				
旋转杂音 Rotational Noise	≤100mV				
同步误差 Tracking Error	≤±3dB at -40~0dB				
绝缘电阻 Insulation Resistance	100MΩ min at 250V DC				
耐电压 Withstanding Voltage	1 minute at 100V AC				

#### ■ 耐久性能 ENDURANCE

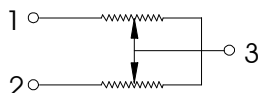
旋转寿命 Rotational Life	≥10,000 cycles
----------------------	----------------

### SV 系列电路图 CIRCUIT DIAGRAM

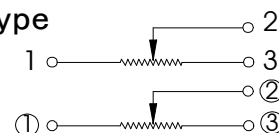
#### N Type



#### NA Type



#### G Type





# SC 系列铁壳型直滑系列电位器

## SC SERIES SLIDE WITH CASE TYPE SERIES POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm																																										
<p>SC304N - H</p>																																												
<p>SC304G - H</p>																																												
<p>SCXX5N - H T</p>	<table border="1" style="margin-top: 10px; width: 100%; text-align: center;"> <thead> <tr> <th>T</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> </tr> </thead> <tbody> <tr> <td>15</td> <td>30</td> <td>26</td> <td>28.5</td> <td>17.8</td> <td>20.2</td> </tr> <tr> <td>20</td> <td>35</td> <td>31</td> <td>33.5</td> <td>22.8</td> <td>25.2</td> </tr> <tr> <td>30</td> <td>45</td> <td>41</td> <td>43.5</td> <td>32.8</td> <td>35.2</td> </tr> <tr> <td>45</td> <td>60</td> <td>56</td> <td>58.5</td> <td>47.8</td> <td>50.2</td> </tr> <tr> <td>60</td> <td>75</td> <td>71</td> <td>73.5</td> <td>62.8</td> <td>65.2</td> </tr> </tbody> </table>	T	A	B	C	D	E	15	30	26	28.5	17.8	20.2	20	35	31	33.5	22.8	25.2	30	45	41	43.5	32.8	35.2	45	60	56	58.5	47.8	50.2	60	75	71	73.5	62.8	65.2							
T	A	B	C	D	E																																							
15	30	26	28.5	17.8	20.2																																							
20	35	31	33.5	22.8	25.2																																							
30	45	41	43.5	32.8	35.2																																							
45	60	56	58.5	47.8	50.2																																							
60	75	71	73.5	62.8	65.2																																							
<p>SCXX5G - H T</p>	<table border="1" style="margin-top: 10px; width: 100%; text-align: center;"> <thead> <tr> <th>T</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> </thead> <tbody> <tr> <td>15</td> <td>30</td> <td>26</td> <td>28.5</td> <td>17.8</td> <td>20.2</td> <td>18</td> </tr> <tr> <td>20</td> <td>35</td> <td>31</td> <td>33.5</td> <td>22.8</td> <td>25.2</td> <td>23</td> </tr> <tr> <td>30</td> <td>45</td> <td>41</td> <td>43.5</td> <td>32.8</td> <td>35.2</td> <td>33</td> </tr> <tr> <td>45</td> <td>60</td> <td>56</td> <td>58.5</td> <td>47.8</td> <td>50.2</td> <td>48</td> </tr> <tr> <td>60</td> <td>75</td> <td>71</td> <td>73.5</td> <td>62.8</td> <td>65.2</td> <td>63</td> </tr> </tbody> </table>	T	A	B	C	D	E	F	15	30	26	28.5	17.8	20.2	18	20	35	31	33.5	22.8	25.2	23	30	45	41	43.5	32.8	35.2	33	45	60	56	58.5	47.8	50.2	48	60	75	71	73.5	62.8	65.2	63	
T	A	B	C	D	E	F																																						
15	30	26	28.5	17.8	20.2	18																																						
20	35	31	33.5	22.8	25.2	23																																						
30	45	41	43.5	32.8	35.2	33																																						
45	60	56	58.5	47.8	50.2	48																																						
60	75	71	73.5	62.8	65.2	63																																						



## SC 系列铁壳型直滑系列电位器 SC SERIES SLIDE WITH CASE TYPE SERIES POTENTIOMETERS

SC 系列滑柄类型及尺寸 LEVER TYPE & DIMENSINOS		UNIT: mm														
<div style="display: flex; justify-content: space-around;"> </div> <p style="text-align: center; font-weight: bold;">D Type</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>5</td> <td>10</td> <td>12.5</td> <td>15</td> <td>20</td> </tr> </table>	L	5	10	12.5	15	20	<div style="display: flex; justify-content: space-around;"> </div> <p style="text-align: center; font-weight: bold;">E Type</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>10</td> <td>15</td> <td>20</td> </tr> <tr> <td>a</td> <td>7</td> <td>10</td> <td>10</td> </tr> </table>	L	10	15	20	a	7	10	10	
L	5	10	12.5	15	20											
L	10	15	20													
a	7	10	10													
<div style="display: flex; justify-content: space-around;"> </div> <p style="text-align: center; font-weight: bold;">F Type</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> <tr> <td>a</td> <td>5</td> <td>7</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>	L	10	15	20	25	a	5	7	15	20	25	<div style="display: flex; justify-content: space-around;"> </div> <p style="text-align: center; font-weight: bold;">G Type</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>10</td> <td>15</td> <td></td> </tr> </table>	L	10	15	
L	10	15	20	25												
a	5	7	15	20	25											
L	10	15														


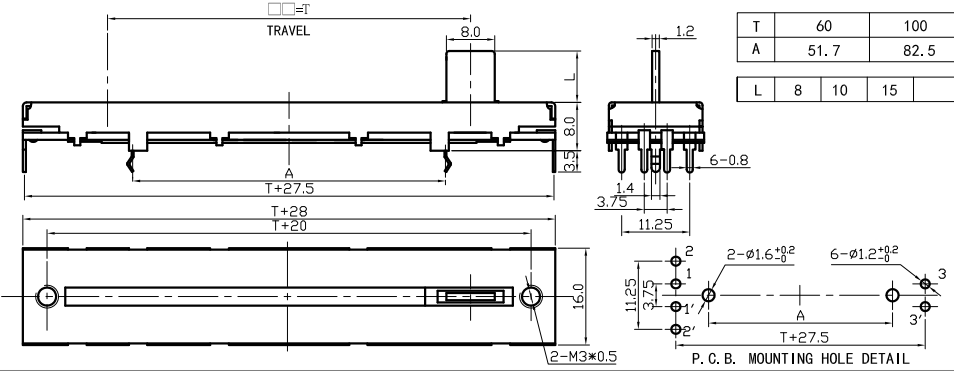

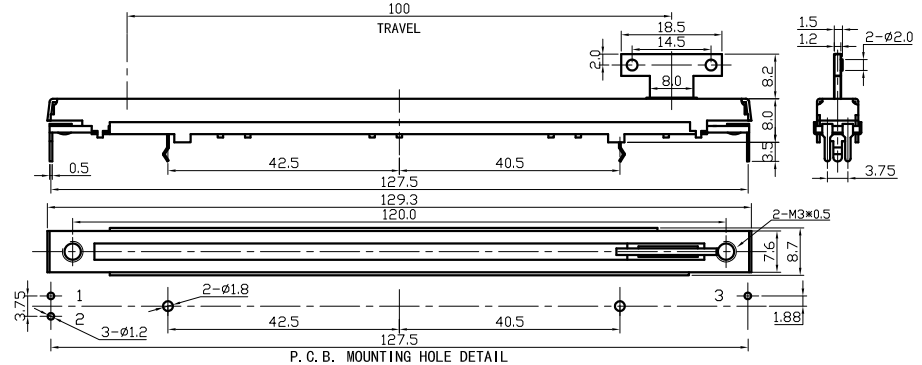

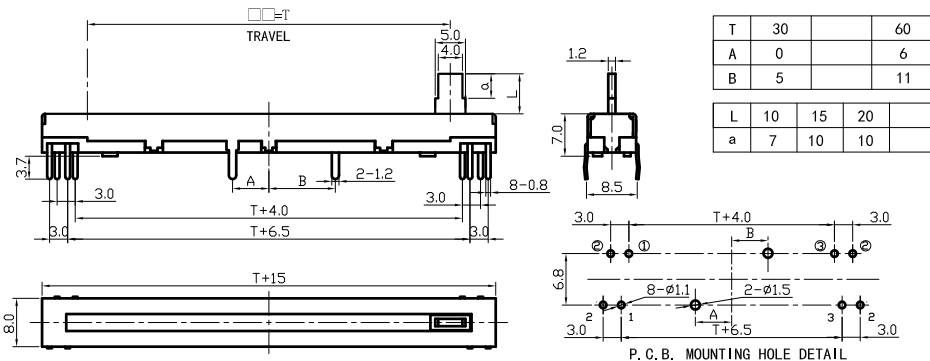
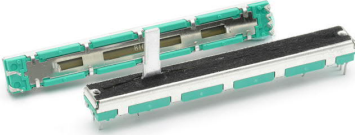
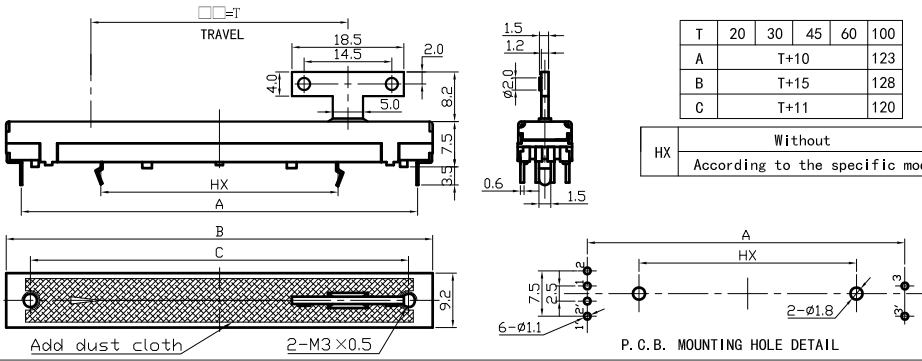

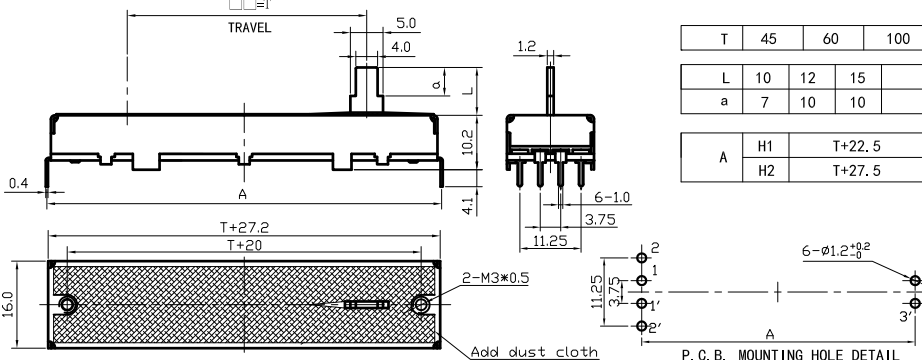
SC 系列规格参数 SPECIFICATIONS																																		
<b>■ 机械特性 MECHANICAL SPECIFICATION</b>																																		
工作推动力 Operating Force	10~150gf.cm																																	
止档强度 Shaft Stop Strength	≤3kgf.cm																																	
滑柄偏摆量 Lever Wobble	2xL/10mm Max. (L:Lever length both side)																																	
定位推动力 Click Force	80~330gf.cm																																	
<b>■ 电气特性 ELECTRICAL SPECIFICATION</b>																																		
总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ± 20%, 1KΩ ≥ R ≥ 1MΩ ± 30%																																	
电阻特性曲线 Resistance Taper	Refer to P. 58																																	
负载功率 Power Rating	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td></td> <td></td> <td>15mm</td> <td>20mm</td> <td>30mm</td> <td>45mm</td> <td>60mm</td> </tr> <tr> <td rowspan="2" style="writing-mode: vertical-rl; font-size: small;">Linear taper B</td> <td>Single</td> <td>0.05W</td> <td>0.1W</td> <td>0.2W</td> <td>0.025W</td> <td>0.2W</td> </tr> <tr> <td>Dual</td> <td>0.025W</td> <td>0.05W</td> <td>0.1W</td> <td>0.125W</td> <td>0.2W</td> </tr> <tr> <td rowspan="2" style="writing-mode: vertical-rl; font-size: small;">Other taper</td> <td>Single</td> <td>0.025W</td> <td>0.05W</td> <td>0.1W</td> <td>0.125W</td> <td>0.1W</td> </tr> <tr> <td>Dual</td> <td>0.012W</td> <td>0.025W</td> <td>0.05W</td> <td>0.06W</td> <td>0.1W</td> </tr> </table>			15mm	20mm	30mm	45mm	60mm	Linear taper B	Single	0.05W	0.1W	0.2W	0.025W	0.2W	Dual	0.025W	0.05W	0.1W	0.125W	0.2W	Other taper	Single	0.025W	0.05W	0.1W	0.125W	0.1W	Dual	0.012W	0.025W	0.05W	0.06W	0.1W
			15mm	20mm	30mm	45mm	60mm																											
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		Dual	0.025W	0.05W	0.1W	0.125W	0.2W																											
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	Dual	0.012W	0.025W	0.05W	0.06W	0.1W																												
最大工作电压 Max. Operating Voltage	Linear taper B	100V AC	200V AC																															
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旋转杂音 Rotational Noise	≤100mV																																	
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绝缘电阻 Insulation Resistance	100MΩ min at 250V DC																																	
耐电压 Withstanding Voltage	1 minute at 300V AC																																	
<b>■ 耐久性能 ENDURANCE</b>																																		
旋转寿命 Rotational Life	≥10,000 cycles																																	

SC 系列电路图 CIRCUIT DIAGRAM	
<p style="font-weight: bold;">N Type</p>	<p style="font-weight: bold;">G Type</p>



# SC/SD系列铁壳型直滑式电位器

## SD/SC SERIES WITH CASE TYPE SLIDE POTENTIOMETERS

型号MODEL	外形尺寸图DIMENSIONS	UNIT : mm																								
SC□□9N/G/GT-H 		<table border="1"> <tr> <td>T</td> <td>60</td> <td>100</td> </tr> <tr> <td>A</td> <td>51.7</td> <td>82.5</td> </tr> </table> <table border="1"> <tr> <td>L</td> <td>8</td> <td>10</td> <td>15</td> </tr> </table>	T	60	100	A	51.7	82.5	L	8	10	15														
T	60	100																								
A	51.7	82.5																								
L	8	10	15																							
SC1004N-H 																										
SD□□6G-H 		<table border="1"> <tr> <td>T</td> <td>30</td> <td>60</td> </tr> <tr> <td>A</td> <td>0</td> <td>6</td> </tr> <tr> <td>B</td> <td>5</td> <td>11</td> </tr> </table> <table border="1"> <tr> <td>L</td> <td>10</td> <td>15</td> <td>20</td> </tr> <tr> <td>a</td> <td>7</td> <td>10</td> <td>10</td> </tr> </table>	T	30	60	A	0	6	B	5	11	L	10	15	20	a	7	10	10							
T	30	60																								
A	0	6																								
B	5	11																								
L	10	15	20																							
a	7	10	10																							
SD□□8G-H 		<table border="1"> <tr> <td>T</td> <td>20</td> <td>30</td> <td>45</td> <td>60</td> <td>100</td> </tr> <tr> <td>A</td> <td colspan="2">T+10</td> <td colspan="3">123</td> </tr> <tr> <td>B</td> <td colspan="2">T+15</td> <td colspan="3">128</td> </tr> <tr> <td>C</td> <td colspan="2">T+11</td> <td colspan="3">120</td> </tr> </table> <p>HX Without According to the specific model</p>	T	20	30	45	60	100	A	T+10		123			B	T+15		128			C	T+11		120		
T	20	30	45	60	100																					
A	T+10		123																							
B	T+15		128																							
C	T+11		120																							
SD□□9N/G-H <b>双导轨</b>  <b>Double stainless steel linear guide</b>		<table border="1"> <tr> <td>T</td> <td>45</td> <td>60</td> <td>100</td> </tr> </table> <table border="1"> <tr> <td>L</td> <td>10</td> <td>12</td> <td>15</td> </tr> <tr> <td>a</td> <td>7</td> <td>10</td> <td>10</td> </tr> </table> <table border="1"> <tr> <td rowspan="2">A</td> <td>H1</td> <td>T+22.5</td> </tr> <tr> <td>H2</td> <td>T+27.5</td> </tr> </table>	T	45	60	100	L	10	12	15	a	7	10	10	A	H1	T+22.5	H2	T+27.5							
T	45	60	100																							
L	10	12	15																							
a	7	10	10																							
A	H1	T+22.5																								
	H2	T+27.5																								



# SK 系列铁壳型直滑系列电位器

## SK SERIES SLIDE WITH CASE TYPE SERIES POTENTIOMETERS

SK 系列滑柄类型及尺寸 LEVER TYPE & DIMENSINOS		UNIT: mm										
<p style="text-align: center;"><b>F Type</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>8</td> <td>10</td> <td>12</td> <td>15</td> <td>20</td> </tr> </table>	L	8	10	12	15	20	<p style="text-align: center;"><b>P Type</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>15</td> <td>20</td> <td></td> <td></td> </tr> </table>	L	15	20		
L	8	10	12	15	20							
L	15	20										
<p style="text-align: center;"><b>M Type</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>10</td> <td>15</td> <td>20</td> <td></td> <td></td> </tr> </table>	L	10	15	20			<p style="text-align: center;"><b>T Type</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>10</td> <td>12</td> <td></td> <td></td> </tr> </table>	L	10	12		
L	10	15	20									
L	10	12										

SK 系列规格参数 SPECIFICATIONS	
<b>■ 机械特性 MECHANICAL SPECIFICATION</b>	
工作推动力 Operating Force	10~110gf. cm
止档强度 Shaft Stop Strength	≤5kgf. cm
滑柄偏摆量 Lever Wobble	2xL/10mm Max. (L:Lever length both side)
<b>■ 电气特性 ELECTRICAL SPECIFICATION</b>	
总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ±20%, 1KΩ ≥ R ≥ 1MΩ ±30%
电阻特性曲线 Resistance Taper	Refer to P. 58
负载功率 Power Rating	Linear taper B:0.2W ;Other taper:0.1W
最大工作电压 Max. Operating Voltage	Linear taper B:500V DC;Other taper:300V DC
残留电阻 Residual Resistance	R <sub>1~2</sub> Less than 10Ω; R <sub>2~3</sub> Less than 20Ω;
旋转杂音 Rotational Noise	≤100mV
同步误差 Tracking Error	≤±3dB at -40~0dB
绝缘电阻 Insulation Resistance	100MΩ min at 250V DC
耐电压 Withstanding Voltage	1 minute at 300V AC
<b>■ 耐久性能 ENDURANCE</b>	
旋转寿命 Rotational Life	≥10,000 cycles

SK 系列电路图 CIRCUIT DIAGRAM	
<p><b>N Type</b></p>	<p><b>G Type</b></p>



# 06/08mm 系列微调电位器

## 06/08mm SERIES TRIMMER POTENTIOMETERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm						
PA063N - V 		P.C.B. MOUNTING HOLE DETAIL						
PA063N - H 		P.C.B. MOUNTING HOLE DETAIL						
PC063N - V 		P.C.B. MOUNTING HOLE DETAIL						
PC063N - H 		P.C.B. MOUNTING HOLE DETAIL						
PC083N - V1 PC083N - V2 		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>PC083N - V1</td> <td>10.0</td> </tr> <tr> <td>PC083N - V2</td> <td>12.5</td> </tr> </tbody> </table>	型号 MODEL	H	PC083N - V1	10.0	PC083N - V2	12.5
型号 MODEL	H							
PC083N - V1	10.0							
PC083N - V2	12.5							
PC083N - H 		P.C.B. MOUNTING HOLE DETAIL						



## 06/08mm 系列微调电位器 06/08mm SERIES TRIMMER POTENTIOMETERS

### PA063/PC063/083 系列规格参数 SPECIFICATIONS

■ 机械特性 MECHANICAL SPECIFICATION	PA063 SERIES	PC063/083 SERIES
全旋转角度 Total Rotational Angle	210°±20°	260°±20°
旋转力矩 Rotational Torque	20~200gf.cm	80~300gf.cm
止档强度 Shaft Stop Strength	≤0.4kgf.cm	≤1.0kgf.cm
■ 电气特性 ELECTRICAL SPECIFICATION		
总阻及误差 Total Resistance Range	1KΩ < R < 1MΩ ±20%, 1KΩ ≥ R ≥ 1MΩ ±30%	
电阻特性曲线 Resistance Taper	Refer to P. 58	
负载功率 Power Rating	≤0.1W	
最大工作电压 Max. Operating Voltage	50V AC	100V AC
残留电阻 Residual Resistance	R > 1KΩ: 5% Max. , R < 1KΩ: 30% Max.	
■ 耐久性能 ENDURANCE		
旋转寿命 Rotational Life	≥50 cycles	

### 电位器标称阻值代码表 ABBREVIATION OF NOMINAL RATED RESISTANCE

标称阻值 RATED RESISTANCE	代码 MARKING	标称阻值 RATED RESISTANCE	代码 MARKING	标称阻值 RATED RESISTANCE	代码 MARKING	标称阻值 RATED RESISTANCE	代码 MARKING
100 Ω	101	2K Ω	202	20K Ω	203	200K Ω	204
200 Ω	201	4.7K Ω	472	47K Ω	473	250K Ω	254
500 Ω	501	5K Ω	502	50K Ω	503	500K Ω	504
1K Ω	102	10K Ω	103	100K Ω	104	1M Ω	105

### 电位器的线性与阻值比率关系 RESISTANCE TAPERS AND VOLTAGE RATE AT MEASURING POSITION

阻值曲线类型 Resistance Tapers Type	测试点 Test Point Rotation (%)	$\frac{V1-2}{V1-3} \times 100$ (%)	$\frac{V2-3}{V1-3} \times 100$ (%)
A (15A)	50	10 ~ 25	——
B	50	40 ~ 60	——
C (15C)	50 (started from 3T)	——	10 ~ 25
D (10A)	50	6 ~ 15	——
E (25C)	50	——	18 ~ 34
W	30 (±5-degree)	5 ~ 15	——
	50	40 ~ 60	——
	70 (±5-degree)	85 ~ 95	——



## 10mm 系列编码器 10mm SERIES ENCODER

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm										
<p>EC101 - V0</p>												
<p>EC101 - V X H</p>		<table border="1" style="margin-bottom: 10px;"> <tr> <td>X</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>H</td> <td>7</td> <td>9</td> <td>11</td> <td>13</td> </tr> </table>	X	1	2	3	4	H	7	9	11	13
X	1	2	3	4								
H	7	9	11	13								

### EC10 系列规格参数 SPECIFICATIONS

#### ■ 机械特性 MECHANICAL SPECIFICATION

全旋转角度 Total Rotational Angle	360°
旋转力矩 Rotational Torque	20~100gf.cm
轴推拉强度 Push & Pull Strength	≥0.5kgf.cm

#### ■ 电气特性 ELECTRICAL SPECIFICATION

负载功率 Power Rating	DC 5V 1mA
绝缘电阻 Insulation Resistance	50MΩ min at 50V DC
耐电压 Withstanding Voltage	1 minute at 50V AC

#### 分解能力及信号的输出形式 Resolution & Output signal formal

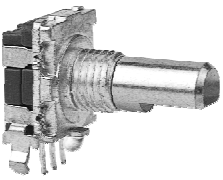
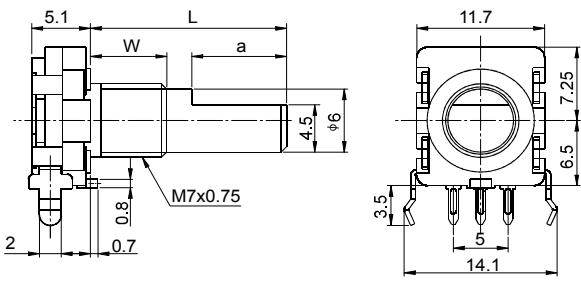
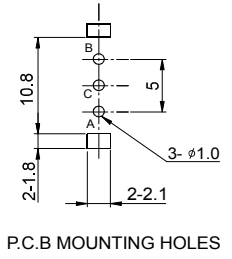
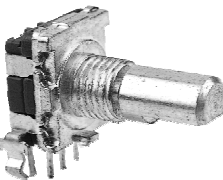
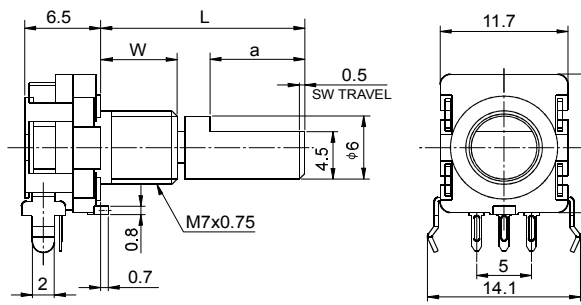
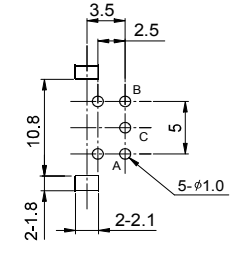
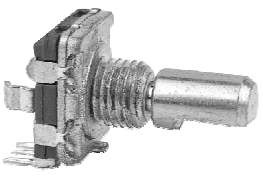
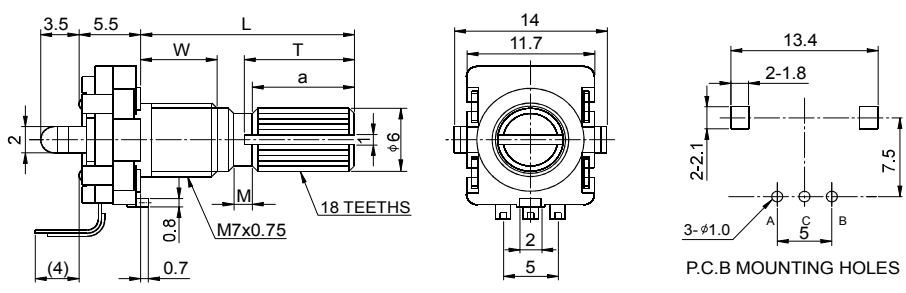
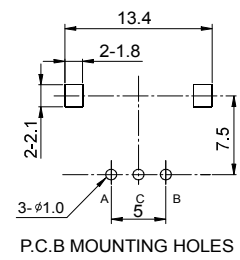
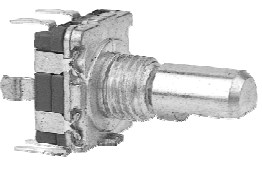
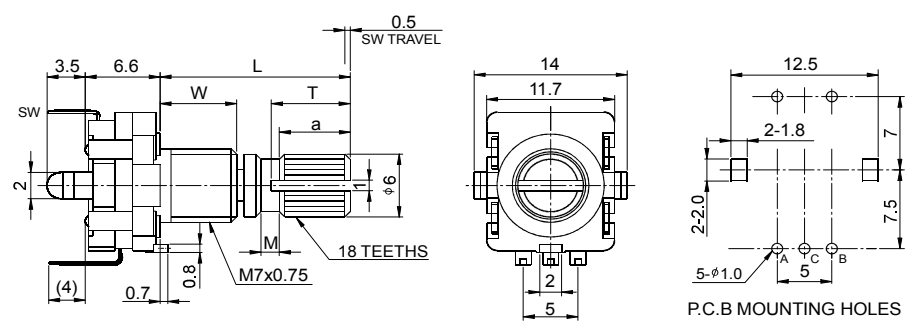
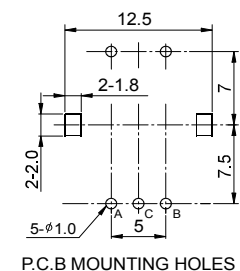
分解能力 RESOLUTION	定位 DETENT	相位差 PHASE-DIFFERENCE	旋转方向 ROTATION DIRECTION	信号 SIGNAL	输出波形 OUTPUT PHASE
12P	12		C. W	A(Terminal A-C)	OFF ON OFF ON
	24			B(Terminal B-C)	OFF ON OFF ON

#### ■ 耐久性能 ENDURANCE

旋转寿命 Rotational Life	≥100,000 cycles
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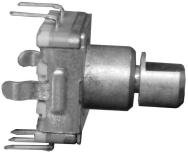
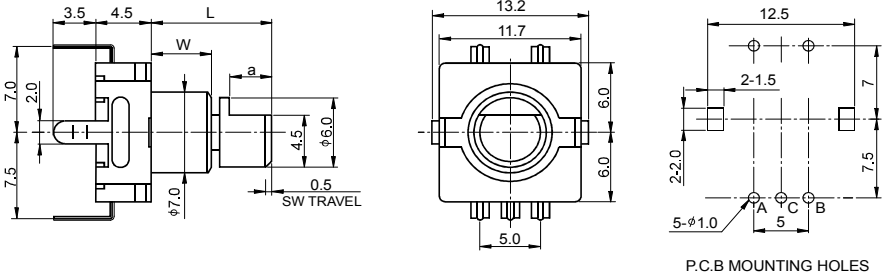
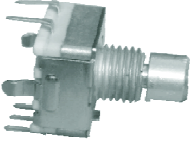
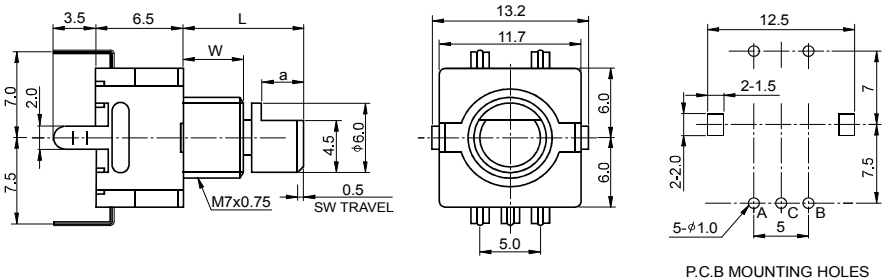


# 11mm 系列金属轴编码器 11mm SERIES METAL SHAFT ENCODERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>EC1110 - V</p> 		 <p>P.C.B MOUNTING HOLES</p>
<p>EC111S - V</p> 		 <p>P.C.B MOUNTING HOLES</p>
<p>EC1110 - H</p> 		 <p>P.C.B MOUNTING HOLES</p>
<p>EC111S - H</p> 		 <p>P.C.B MOUNTING HOLES</p>



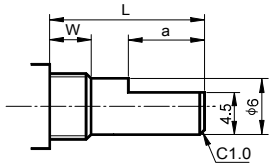
# 11mm 系列金属轴编码器 11mm SERIES METAL SHAFT ENCODERS

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>EC112S - H</p> 		
<p>EC113S - H</p> 		

## EC11 系列金属轴类型 SERIES METAL SHAFT TYPE

F-TYPE

W 5 7

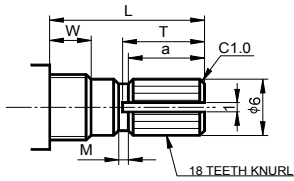


L	10	11	11.5	13	15	16	
a	4	5	5	5	5	6	7

L	17	17.5	18.5	20	25	30	
a	7	10	7	12	6.5	12	12

K-TYPE

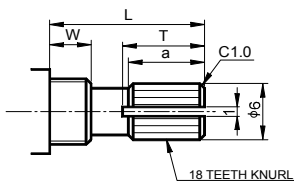
W 5 7



L	10	10	11.5	12	13	15	20	30
T	3.5			4.5	7	7	12	13
a	3	4	6	4	6	6	10	12
M	0.5	0.3	1	1	1	1	2	2

Y-TYPE

W 5 7



L	10	11	11.5	12.5	13			
T	4	4	5	5.5	6			
a	3	3.5	4	5	5			



# 11mm 系列金属轴编码器 11mm SERIES METAL SHAFT ENCODERS

## EC11 系列规格参数 SPECIFICATIONS

### ■ 机械特性 MECHANICAL SPECIFICATION

全旋转角度 Total Rotational Angle	360°
旋转力矩 Rotational Torque	30~200gf.cm(5°C~35°C)
轴推拉强度 Push & Pull Strength	≥5kgf.cm

### ■ 电气特性 ELECTRICAL SPECIFICATION

负载功率 Power Rating	DC 5V 10mA
绝缘电阻 Insulation Resistance	100MΩ min at 300V DC
耐电压 Withstanding Voltage	1 minute at 300V AC

#### 分解能力及信号的输出形式 Resolution & Output signal formal

分解能力 RESOLUTION	定位 DETENT	相位差 PHASE-DIFFERENCE	旋转方向 ROTATION DIRECTION	信号 SIGNAL	输出波形 OUTPUT PHASE
15P	30		C. W	A(Terminal A-C)	OFF ON OFF ON OFF ON OFF ON
				B(Terminal B-C)	OFF ON OFF ON OFF ON OFF ON
20P	20		C. W	A(Terminal A-C)	OFF ON OFF ON OFF ON OFF ON
				B(Terminal B-C)	OFF ON OFF ON OFF ON OFF ON

### ■ 推动开关特性 PUSH-ON SWITCH SPECIFICATION

开关工作行程 Switch Travel	0.5mm
开关作动力 Switch Operating Force	600gf.cm
开关额定功率 Switch Power Rating	DC 16V 10mA
开关接触阻抗 Switch Contact Resistance	第一个周期 \First period:100mΩ 在有效的寿命范围结束后 \after the end of useful life is reached:200mΩ.
开关寿命 Switch Life	≥20,000 cycles

### ■ 耐久性能 ENDURANCE

旋转寿命 Rotational Life	≥30,000 cycles
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## 12mm 系列绝缘轴旋转编码器 12mm SERIES INSULATED SHAFT ROTARY ENCODERS

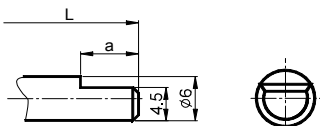
型号 MODEL	外形尺寸图 DIMENSIONS		UNIT : mm
<p>EC1210 - V</p>			P.C.B MOUNTING HOLES
<p>EC121S-V</p>			P.C.B MOUNTING HOLES
<p>EC1210 - H</p>			P.C.B MOUNTING HOLES
<p>EC121S - H</p>			P.C.B MOUNTING HOLES

### EC12 系列塑料轴类型 SERIES INSULATED SHAFT TYPE

UNIT:mm

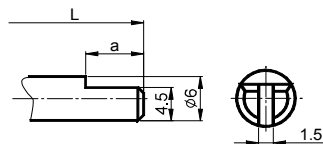
F TYPE

L	17.5	20	22.5	25
a	5	7	7	12



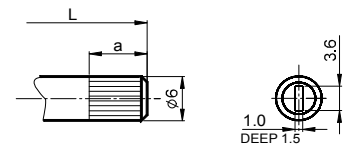
T TYPE

L	17.5	20	22.5	25
a	5	7	7	12



Y TYPE

L	17.5	20	22.5	25
a	5	7	7	12





## 12mm 系列绝缘轴旋转编码器 12mm SERIES INSULATED SHAFT ROTARY ENCODERS

### EC12 系列规格参数 SPECIFICATIONS

#### ■ 机械特性 MECHANICAL SPECIFICATION

全旋转角度 Total Rotational Angle	360°
旋转力矩 Rotational Torque	30~200gf.cm(5°C~35°C)
轴推拉强度 Push & Pull Strength	≥5kgf.cm

#### ■ 电气特性 ELECTRICAL SPECIFICATION

负载功率 Power Rating	DC 5V 0.5mA
绝缘电阻 Insulation Resistance	100MΩ min at 50V DC
耐电压 Withstanding Voltage	1 minute at 50V AC

#### 分解能力及信号的输出形式 Resolution & Output signal formal

分解能力 RESOLUTION	定位 DETENT	相位差 PHASE-DIFFERENCE	旋转方向 ROTATION DIRECTION	信号 SIGNAL	输出波形 OUTPUT PHASE
12P	12		C. W	A(Terminal A-C)	OFF ON
	24			B(Terminal B-C)	OFF ON
18P	18		C. W	A(Terminal A-C)	OFF ON
				B(Terminal B-C)	OFF ON
24P	24		C. W	A(Terminal A-C)	OFF ON
				B(Terminal B-C)	OFF ON

#### ■ 推动开关特性 PUSH-ON SWITCH SPECIFICATION

开关工作行程 Switch Travel	0.5mm
开关作动力 Switch Operating Force	360gf.cm
开关额定功率 Switch Power Rating	DC 5V 10mA
开关接触阻抗 Switch Contact Resistance	第一个周期 \First period:100mΩ 在有效的寿命范围结束后 \after the end of useful life is reached:200mΩ
开关寿命 Switch Life	≥20,000 cycles

#### ■ 耐久性能 ENDURANCE

旋转寿命 Rotational Life	≥30,000 cycles
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# 16mm 系列绝缘轴旋转编码器 16mm SERIES INSULATED SHAFT ROTARY ENCODERS

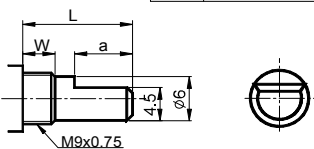
型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>EC1610 - V</p>		
<p>EC161S-V</p>		
<p>EC1610 - H</p>		
<p>EC161S-H</p>		

## EC16 系列塑料轴类型 SERIES INSULATED SHAFT TYPE

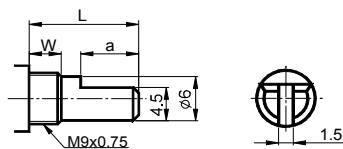
UNIT:mm

F TYPE

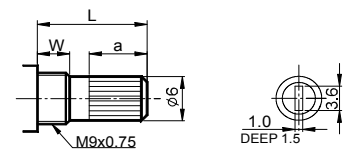
L	15	20	25	30
a	7	12	12	12
W	5.0 / 7.0			



T TYPE



Y TYPE





# 16mm 系列绝缘轴旋转编码器 16mm SERIES INSULATED SHAFT ROTARY ENCODERS

## EC16 系列规格参数 SPECIFICATIONS

### ■ 机械特性 MECHANICAL SPECIFICATION

全旋转角度 Total Rotational Angle	360°
旋转力矩 Rotational Torque	30~200gf.cm(5°C~35°C)
轴推拉强度 Push & Pull Strength	≥5kgf.cm

### ■ 电气特性 ELECTRICAL SPECIFICATION

负载功率 Power Rating	DC 5V 0.5mA
绝缘电阻 Insulation Resistance	100MΩ min at 50V DC
耐电压 Withstanding Voltage	1 minute at 50V AC

### 分解能力及信号的输出形式 Resolution & Output signal formal

分解能力 RESOLUTION	定位 DETENT	相位差 PHASE-DIFFERENCE	旋转方向 ROTATION DIRECTION	信号 SIGNAL	输出波形 OUTPUT PHASE
12P	12		C. W	A(Terminal A-C)	
	24			B(Terminal B-C)	
24P	24		C. W	A(Terminal A-C)	
				B(Terminal B-C)	

### ■ 推动开关特性 PUSH-ON SWITCH SPECIFICATION

开关工作行程 Switch Travel	0.5mm
开关作动力 Switch Operating Force	360gf.cm
开关额定功率 Switch Power Rating	DC 5V 10mA
开关接触阻抗 Switch Contact Resistance	第一个周期 \First period:100mΩ 在有效的寿命范围结束后 \after the end of useful life is reached:200mΩ
开关寿命 Switch Life	≥20,000 cycles

### ■ 耐久性能 ENDURANCE

旋转寿命 Rotational Life	≥30,000 cycles
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# 10mm 系列金属轴旋转复位开关

## 10mm SERIES METAL SHAFT ROTARY ROUTE SWITCHES

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm																								
<p><b>KH1010 - V</b></p>	<table border="1" style="margin-top: 10px; width: 100%;"> <tr> <td>L</td> <td>15</td> <td>20</td> <td>25</td> </tr> <tr> <td>a</td> <td>6.5</td> <td>12</td> <td>12</td> </tr> </table>	L	15	20	25	a	6.5	12	12	<p>CODE TABLE ( — = ON )</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>Angle</td> <td>30°</td> <td>0°</td> <td>30°</td> </tr> <tr> <td>Terminal</td> <td>CCW (12°)</td> <td></td> <td>CW (12°)</td> </tr> <tr> <td></td> <td>2</td> <td></td> <td>1</td> </tr> <tr> <td></td> <td>C</td> <td></td> <td></td> </tr> </table> <p style="text-align: center;">MOUNTING HOLE DETAIL</p>	Angle	30°	0°	30°	Terminal	CCW (12°)		CW (12°)		2		1		C		
L	15	20	25																							
a	6.5	12	12																							
Angle	30°	0°	30°																							
Terminal	CCW (12°)		CW (12°)																							
	2		1																							
	C																									
<p><b>KH1010 - H</b></p>	<table border="1" style="margin-top: 10px; width: 100%;"> <tr> <td>L</td> <td>15</td> <td>20</td> <td>25</td> </tr> <tr> <td>a</td> <td>6.5</td> <td>12</td> <td>12</td> </tr> </table>	L	15	20	25	a	6.5	12	12	<p>CODE TABLE ( — = ON )</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>Angle</td> <td>30°</td> <td>0°</td> <td>30°</td> </tr> <tr> <td>Terminal</td> <td>CCW (12°)</td> <td></td> <td>CW (12°)</td> </tr> <tr> <td></td> <td>2</td> <td></td> <td>1</td> </tr> <tr> <td></td> <td>C</td> <td></td> <td></td> </tr> </table> <p style="text-align: center;">MOUNTING HOLE DETAIL</p>	Angle	30°	0°	30°	Terminal	CCW (12°)		CW (12°)		2		1		C		
L	15	20	25																							
a	6.5	12	12																							
Angle	30°	0°	30°																							
Terminal	CCW (12°)		CW (12°)																							
	2		1																							
	C																									
<p><b>KH1120 - H</b></p>	<p style="text-align: center;">SW1</p>	<p style="text-align: center;">P.C.B MOUNTING HOLES</p>																								
<p><b>KH112S - H</b></p>	<p style="text-align: center;">SW1</p>	<p style="text-align: center;">P.C.B MOUNTING HOLES</p>																								

注：金属轴类型及尺寸参见第 44 页 EC11 系列。  
 Note: Refer to P.44 EC11 series metal shaft type and dimensions.

注：金属轴类型及尺寸参见第 44 页 EC11 系列。  
 Note: Refer to P.44 EC11 series metal shaft type and dimensions.

KH10/11 系列规格参数 SPECIFICATIONS		KH11 系列回路图 CIRCUIT DIAGRAM	
功率 Rating	DC 16V 0.1A (KH10) DC 5V 100MA (KH11)	<p style="text-align: center;">Self-return switch 1</p>	<p>带按键开关 With Push Switch</p> <p style="text-align: center;">Self-return switch 1 Push switch 2</p>
接触阻抗 Contact Resistance	100mΩ Less than		
耐电压 Withstand Voltage	1 minute at 300V AC		
旋转力矩 Rotational Torque	200±100gf.cm		
旋转寿命 Rotational Life	15,000 cycles		



10mm 系列金属轴旋转脉冲开关 / 多路开关  
10mm SERIES METAL SHAFT ROTARY PULSE SWITCHES / ROUTE SWITCHES

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
RP101 - V		

RP10 系列规格参数 SPECIFICATIONS		回路图 Circuit Diagram
功率 Rating	DC 16V 0.3A	<p>CW: 1,2 ON during changeover only C.C.W: 3,4 ON during changeover only</p>
接触阻抗 Contact Resistance	50mΩ Less than	
耐电压 Withstand Voltage	1 minute at 500V AC	
旋转力矩 Rotational Torque	200±100gf. cm	
定位数 Number of positions	20 (Endless)	
旋转寿命 Rotational Life	≥10,000 cycles	

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
RS101 - V		

RS10 系列规格参数 SPECIFICATIONS		回路图 Circuit Diagram
功率 Rating	DC 16V 0.3A	
接触阻抗 Contact Resistance	50mΩ Less than	
耐电压 Withstand Voltage	1 minute at 500V AC	
旋转力矩 Rotational Torque	200±100gf. cm	
切换角度 Changeover Angle	30°±3°	
旋转寿命 Rotational Life	≥10,000 cycles	

RP10/RS10 系列金属轴类型及尺寸 METAL SHAFT TYPE & DIMENSINOS		UNIT : mm																
F TYPE	<table border="1"> <tr> <td>L</td> <td>15</td> <td>20</td> <td>25</td> <td>30</td> <td>35</td> <td></td> </tr> <tr> <td>a</td> <td>7</td> <td>12</td> <td>12</td> <td>12</td> <td>12</td> <td></td> </tr> </table>	L	15	20	25	30	35		a	7	12	12	12	12				
L	15	20	25	30	35													
a	7	12	12	12	12													
K TYPE	<table border="1"> <tr> <td>L</td> <td>15</td> <td>20</td> <td>25</td> </tr> <tr> <td>T</td> <td>6.5</td> <td>11</td> <td>14</td> </tr> <tr> <td>a</td> <td>6</td> <td>10</td> <td>12</td> </tr> <tr> <td>M</td> <td>1</td> <td>2</td> <td>4</td> </tr> </table>	L	15	20	25	T	6.5	11	14	a	6	10	12	M	1	2	4	
L	15	20	25															
T	6.5	11	14															
a	6	10	12															
M	1	2	4															



# 12/22mm 系列金属轴旋转多路开关

## 12/22mm SERIES METAL SHAFT ROTARY ROUTE SWITCHES

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm						
RS122 - V1 RS122 - V2		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RS122 - V1</td> <td>10.0</td> </tr> <tr> <td>RS122 - V2</td> <td>12.5</td> </tr> </tbody> </table>	型号 MODEL	H	RS122 - V1	10.0	RS122 - V2	12.5
型号 MODEL	H							
RS122 - V1	10.0							
RS122 - V2	12.5							
	<p>SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p>MOUNTING HOLE DETAIL</p>						
RS124 - V1 RS124 - V2		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RS124 - V1</td> <td>10.0</td> </tr> <tr> <td>RS124 - V2</td> <td>12.5</td> </tr> </tbody> </table>	型号 MODEL	H	RS124 - V1	10.0	RS124 - V2	12.5
型号 MODEL	H							
RS124 - V1	10.0							
RS124 - V2	12.5							
	<p>SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p>MOUNTING HOLE DETAIL</p>						
RS222 - V1 RS222 - V2		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RS222 - V1</td> <td>10.0</td> </tr> <tr> <td>RS222 - V2</td> <td>12.5</td> </tr> </tbody> </table>	型号 MODEL	H	RS222 - V1	10.0	RS222 - V2	12.5
型号 MODEL	H							
RS222 - V1	10.0							
RS222 - V2	12.5							
	<p>SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p>MOUNTING HOLE DETAIL</p>						
RS224 - V1 RS224 - V2		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>型号 MODEL</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>RS224 - V1</td> <td>10.0</td> </tr> <tr> <td>RS224 - V2</td> <td>12.5</td> </tr> </tbody> </table>	型号 MODEL	H	RS224 - V1	10.0	RS224 - V2	12.5
型号 MODEL	H							
RS224 - V1	10.0							
RS224 - V2	12.5							
	<p>SHAFT SHOWN IN FULL C.C.W. POSITION</p>	<p>MOUNTING HOLE DETAIL</p>						



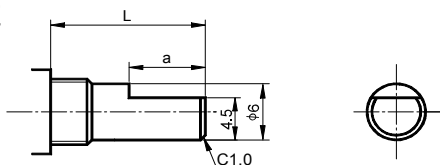
# 12/22mm 系列金属轴旋转多路开关

## 12/22mm SERIES METAL SHAFT ROTARY ROUTE SWITCHES

### RS12/22 系列金属轴类型及尺寸 METAL SHAFT TYPE & DIMENSINOS

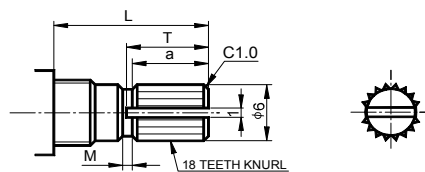
UNIT : mm

F TYPE



L	10	15	20	25	30	35		
a	2.5	7	12	12	12	12		

K TYPE



L	10	15	20	25	30	35		
T	3.5	6.5	11	14	14	14		
a	3.2	6	10	12	12	12		
M	0.5	1	2	4	4	4		

### RS12/22 系列规格参数 SPECIFICATIONS

#### 机械特性 MECHANICAL SPECIFICATION

每段角度 Step Angle	$30^\circ \pm 3^\circ$
旋转力矩 Rotational Torque	$500 \pm 200\text{gf.cm}$
端子强度 Terminal Strength	more than 400gf.cm
轴止动强度 Shaft Stop Strength	more than 5kgf.cm

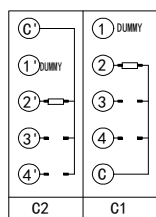
#### 电气特性 ELECTRICAL SPECIFICATION

额定功率 Rating Power	3A, DC 16V
接触阻抗 Contact Resistance	$50\text{m}\Omega$ max
绝缘电阻 Insulation Resistance	$100\text{M}\Omega$ at DC 500V
耐电压 Withstanding Voltage	1 minute at AC 500V

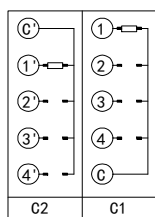
#### 耐久特性 ENDURANCE

旋转寿命 Rotational Life	15,000 cycles
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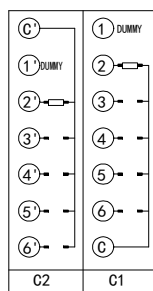
### RS12/22 回路图 Circuit Diagram



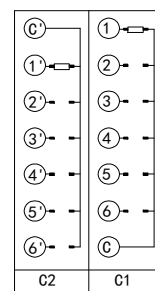
Y=15°



Y=45°



Y=75°



Y=105°

注明： Y 为轴心逆时针旋转停止位置。

NOTE: Y Shaft shown in full C.C.W. Position.



# 17mm 系列绝缘轴旋转多路开关

## 17mm SERIES INSULATED SHAFT ROTARY ROUTE SWITCHES

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
RS175 - H	<p style="text-align: center;">P.C.B. MOUNTING HOLE DETAIL</p>	

RS17 系列绝缘轴类型及尺寸 INSULATED SHAFT TYPE & DIMENSIONS		UNIT : mm																								
<p><b>F Type</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>15</td> <td>20</td> <td>25</td> <td>30</td> <td></td> </tr> <tr> <td>a</td> <td>7</td> <td>12</td> <td>12</td> <td>12</td> <td></td> </tr> </table>	L	15	20	25	30		a	7	12	12	12		<p><b>Y Type</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>L</td> <td>15</td> <td>20</td> <td>25</td> <td>30</td> <td></td> </tr> <tr> <td>a</td> <td>7</td> <td>12</td> <td>12</td> <td>12</td> <td></td> </tr> </table>	L	15	20	25	30		a	7	12	12	12		
L	15	20	25	30																						
a	7	12	12	12																						
L	15	20	25	30																						
a	7	12	12	12																						

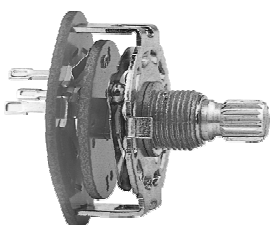
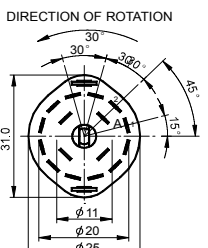
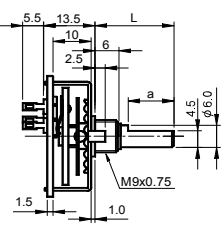
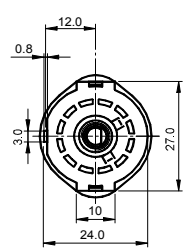
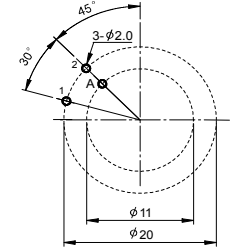
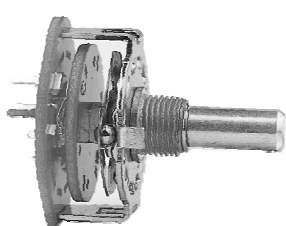
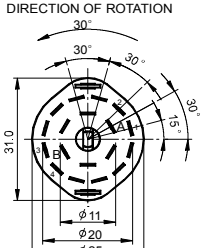
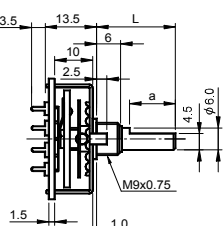
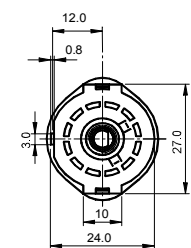
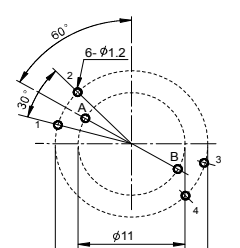
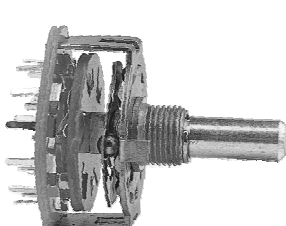
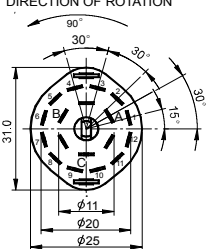
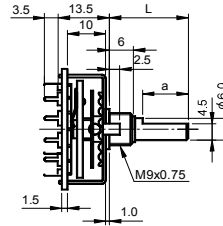
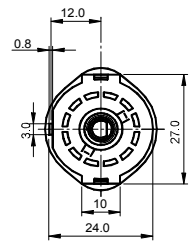
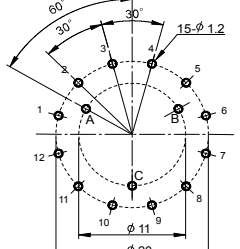
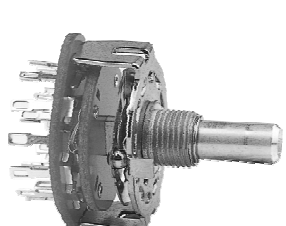
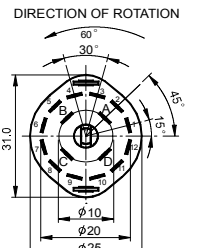
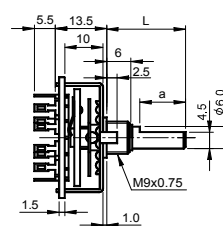
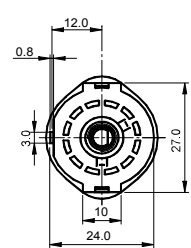
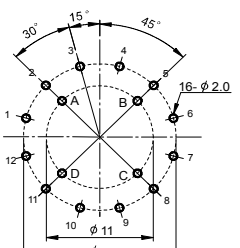
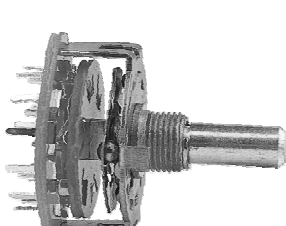
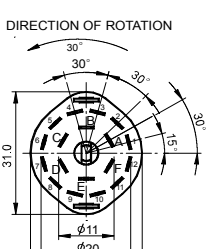
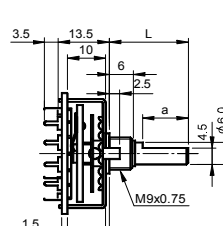
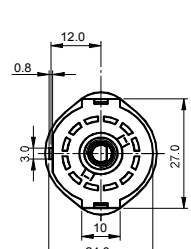
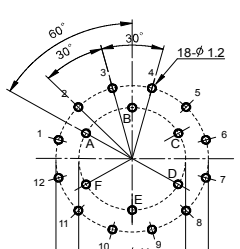
RS17 系列规格参数 SPECIFICATIONS	
功率 Rating	DC 16V 0.3A
接触阻抗 Contact Resistance	50mΩ Less than
切换角度 Changeover Angle	30°±3°
耐电压 Withstand Voltage	1 minute at 500V AC
旋转力矩 Rotational Torque	200±100gf.cm
旋转寿命 Rotational Life	≥10,000 cycles

回路图 Circuit Diagram	
<p>1 极 2 ~ 8 个接触点</p>	<p>2 极 2 ~ 4 个接触点</p>



# 25mm 系列金属轴旋转多路开关

## 25mm SERIES METAL SHAFT ROTARY ROUTE SWITCHES

型号 MODEL	外形尺寸图 DIMENSIONS				UNIT : mm
RS251 - 1-2-W					
RS251-2-2-H					
RS251-3-4-H					
RS251-4-3-H					
RS251-6-2-H					

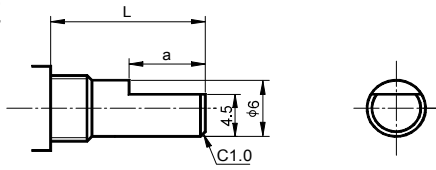


## 25mm 系列金属轴旋转多路开关 25mm SERIES METAL SHAFT ROTARY ROUTE SWITCHES

### RS25 系列金属轴类型及尺寸 METAL SHAFT TYPE & DIMENSINOS

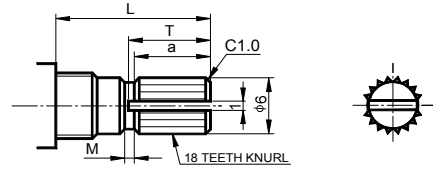
UNIT : mm

F TYPE



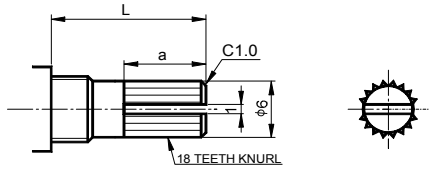
L	10	15	20	25	30	35		
a	2.5	7	12	12	12	12		

K TYPE



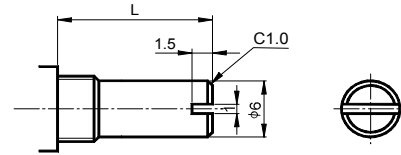
L	10	15	20	25	30	35		
T	3.5	6.5	11	14	14	14		
a	3.2	6	10	12	12	12		
M	0.5	1	2	4	4	4		

Y TYPE



L	10	15	20	25		
a	3.5	7	12	12		

R TYPE



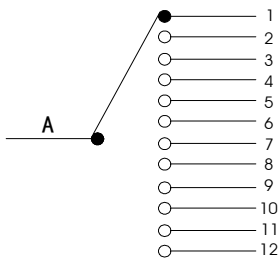
L	10	15	20	25	30	35
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### RS25 系列规格参数 SPECIFICATIONS

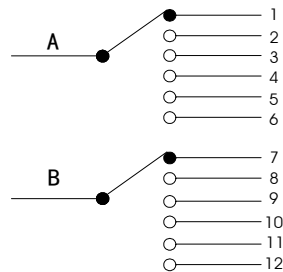
功率 Rating	DC 30V 0.3A
接触阻抗 Contact Resistance	DC 5V 1A, 20MΩ Less than
绝缘电阻 Insulation Resistance	≥100MΩ at 500V DC
耐电压 Withstand Voltage	500V 50~60Hz 1 minute
旋转力矩 Rotational Torque	3kgf. cm Max
电气耐久性 Electrical Endurance	≥10,000 cycles
机械耐久性 Mechanical Endurance	≥10,000 cycles

### 开关接触方式 SWITCH CONTACT STATUS

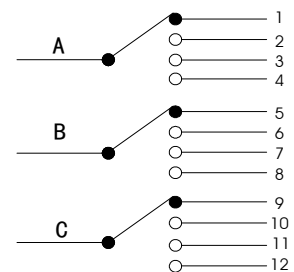
1 极 2 ~ 12 个接触点



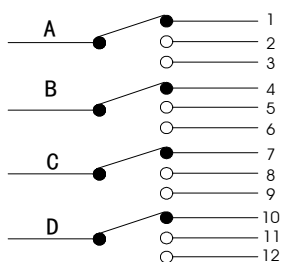
2 极 2 ~ 6 个接触点



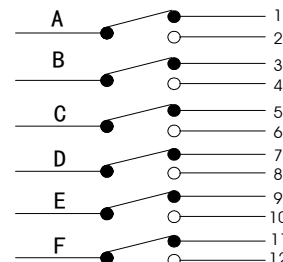
3 极 2 ~ 4 个接触点



4 极 2 ~ 3 个接触点

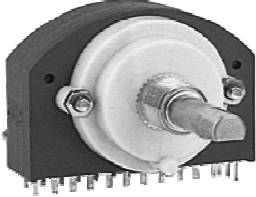
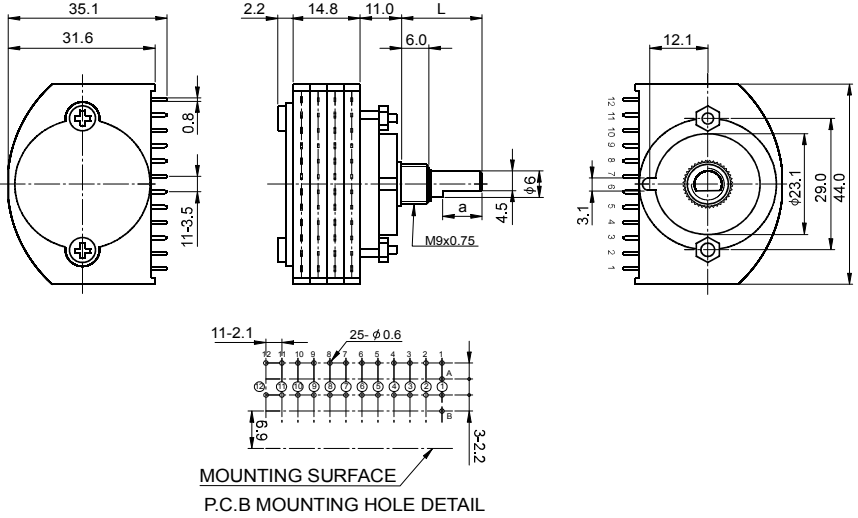


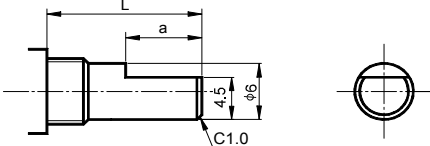
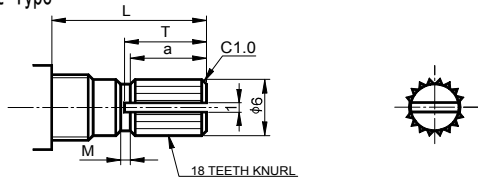
6 极 2 个接触点



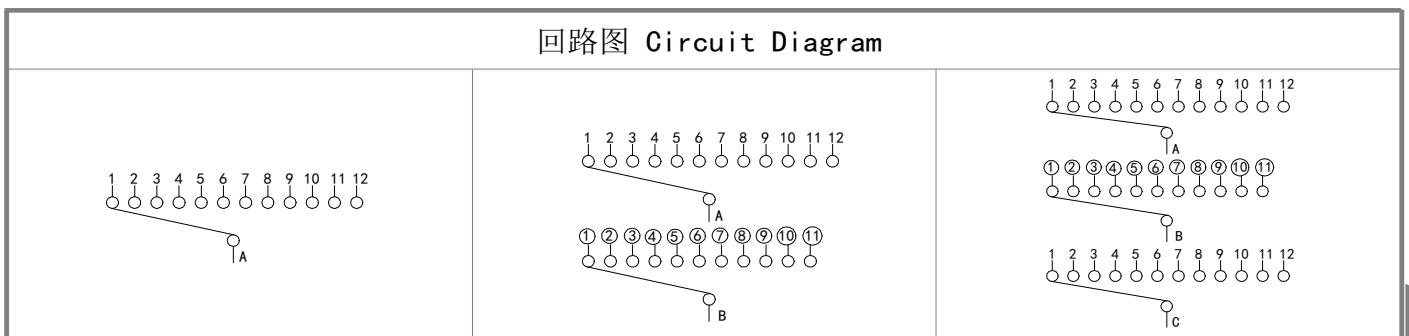


## 44mm 系列金属轴旋转多路开关 44mm SERIES METAL SHAFT ROTARY ROUTE SWITCHES

型号 MODEL	外形尺寸图 DIMENSIONS	UNIT : mm
<p>RS440 - V</p> 	 <p style="text-align: center;">MOUNTING SURFACE P.C.B MOUNTING HOLE DETAIL</p>	

RS44 系列金属轴类型及尺寸 METAL SHAFT TYPE & DIMENSINOS		UNIT : mm																																										
<p>F Shaft Type</p>  <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>L</td> <td>10</td> <td>16</td> <td>20</td> <td>25</td> <td>30</td> <td>35</td> <td></td> <td></td> </tr> <tr> <td>a</td> <td>2.5</td> <td>7</td> <td>12</td> <td>12</td> <td>12</td> <td>12</td> <td></td> <td></td> </tr> </table>	L	10	16	20	25	30	35			a	2.5	7	12	12	12	12			<p>K Shaft Type</p>  <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>L</td> <td>16</td> <td>20</td> <td>25</td> <td>30</td> <td></td> </tr> <tr> <td>T</td> <td>7</td> <td>12</td> <td>14</td> <td>14</td> <td></td> </tr> <tr> <td>a</td> <td>6</td> <td>10</td> <td>12</td> <td>12</td> <td></td> </tr> <tr> <td>M</td> <td>2</td> <td>2</td> <td>4</td> <td>4</td> <td></td> </tr> </table>	L	16	20	25	30		T	7	12	14	14		a	6	10	12	12		M	2	2	4	4		
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RS44 系列规格参数 SPECIFICATIONS	
功率 Rating	DC 12V 0.5A
接触阻抗 Contact Resistance	DC 5V 1A, 20MΩ Less than
绝缘电阻 Insulation Resistance	≥100mΩ
耐电压 Withstand Voltage	1 minute at 500V AC
旋转力矩 Rotational Torque	3kgf. cm Max
旋转寿命 Rotational Life	≥10,000 cycles





## 电位器使用注意事项

### 慎用化学药品

由于电位器以使用多碳酸盐类的合成树脂为主，故应避免与以下化学品接触，如：氨水，其它氨类，盐水溶液，芳香族氢化合物，酮类和盐素族的碳氢化合物等。

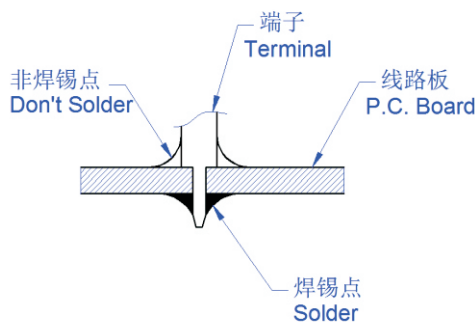
### 慎用助焊剂

应避免使用水溶性助焊剂（俗称松香），否则将加速金属氧化及导致材料发霉。或若助焊剂侵入电位器内部并附着在碳膜层表面，易造成电刷与电阻体接触不良，而产生INT和动噪音不良现象。

### 焊接工艺和方法

电位器的端子在焊接时若温度过高或时间过长，可能导致电位器损坏。通常情况下电位器（特别是不完全封闭式的电位器）标准焊接工艺为手工焊接，且焊接温度应在 $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ ，时间在3秒内完成。（若购买者因生产装配效率原因而采用非手工焊接工艺时，必要与电位器供应商进行说明和讨论。）

下图为常见的端子插入PCB焊接方法：



### 抗硫化保护层

为避免电位器导电银层硫化，可在其表面加印抗氧化层以作保护，但其残留电阻则会略微增加。

### 避免结露

慎防电位器表面结露或沾水，否则会导致其绝缘失效或短路。

### 储存条件

请将电位器存储于通风干爽处。温度宜保持在 $10^{\circ}\text{C}$ 至 $35^{\circ}\text{C}$ 。

## PRECAUTIONS

### Use of chemicals

Due to potentiometer to use polycarbonate synthesis Resin based, so should avoid contact with the following chemicals, such as: ammonia, other ammonia, saline solution, aromatic hydrogen compounds, ketones and salt group hydrocarbons, etc.

### Use of flux

Water-soluble flux (commonly known as loose) should be avoided. Incense, otherwise it will accelerate metal oxidation and cause material's mouldy. or if the flux intrudes into the potentiometer and attaches on the surface of the carbon film, it is easy to cause brushes and resistors poor contact, resulting in poor INT and dynamic noise.

### Welding process and method

If the terminal temperature of the potentiometer is too high or if the time is too long, the potentiometer may be damaged. Usually potentiometer (especially not completely enclosed electricity standard welding process is manual welding, and welding the temperature should be  $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ , and the time should be completed within 3 seconds. (if the buyer uses the non for production assembly efficiency reasons manual welding process, it is necessary to consult with the potentiometer supplier line description and discussion.)

The figure on the left shows the common terminal insertion PCB welding method.

### Protection against sulphides

In order to avoid vulcanization of the conductive silver layer of the potentiometer, it can be the surface is printed with an antioxidant layer for protection, but it retains electricity the resistance will increase slightly.

### Dew condensation

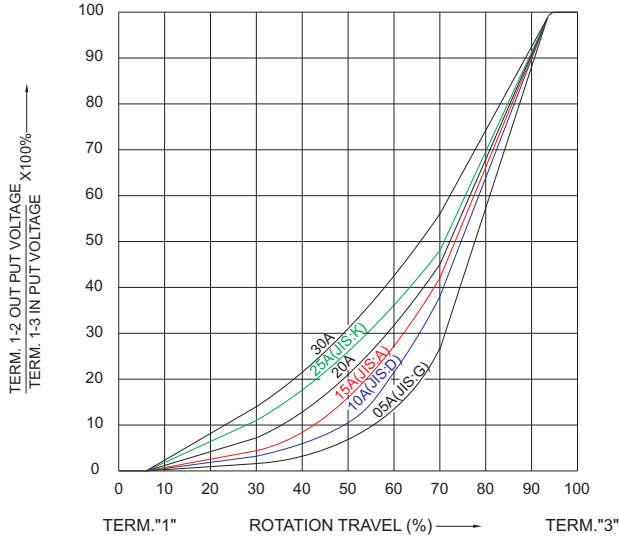
Be careful to prevent dew or water on the surface of the potentiometer, otherwise it may cause its insulation failure or short circuit..

### Storage condition

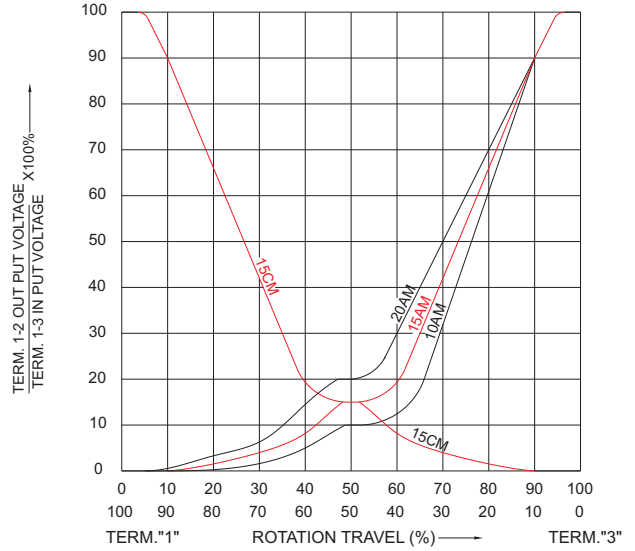
Store the potentiometer in a dry and ventilated place. temperature it should be keep at  $10^{\circ}\text{C}$  to  $35^{\circ}\text{C}$ .



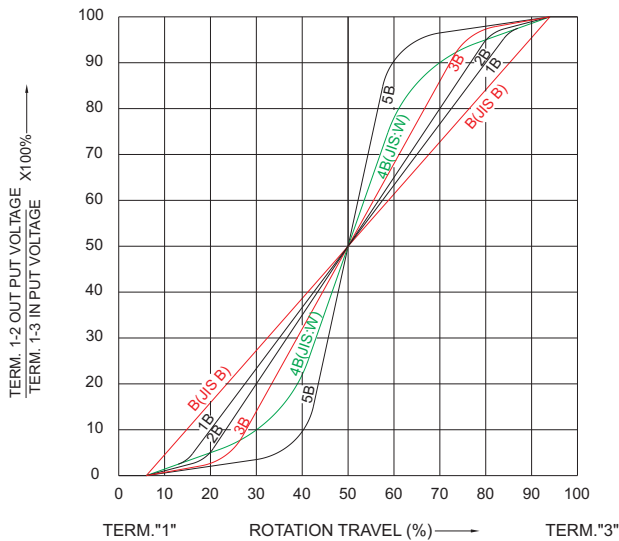
TAPERS (A) SERIES



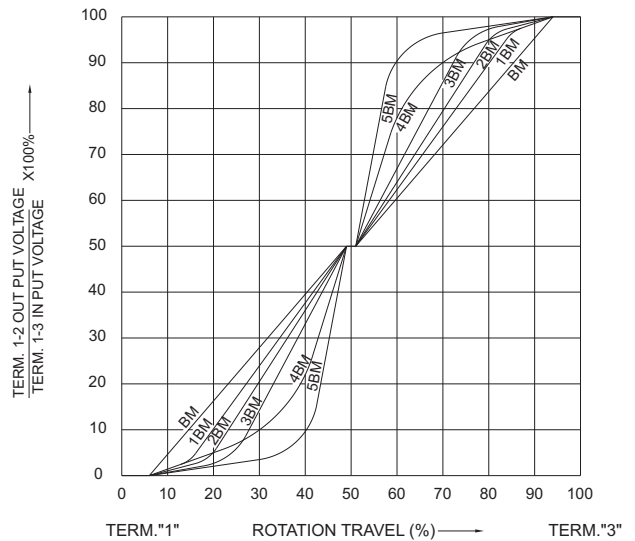
TAPERS (A&C) WITH 50% TAP



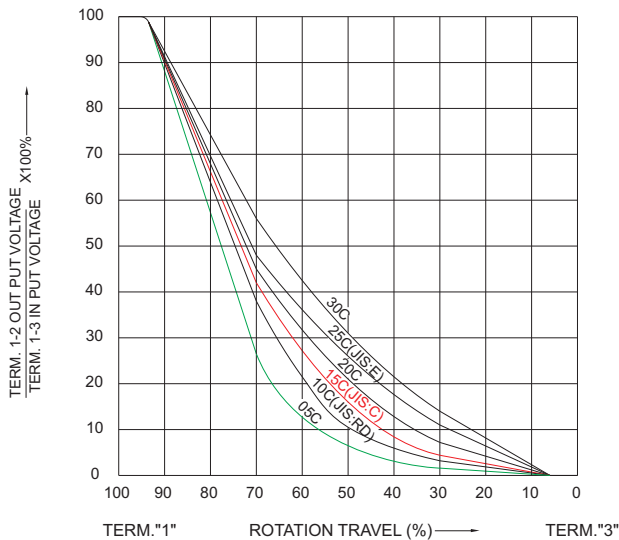
TAPERS (B) SERIES



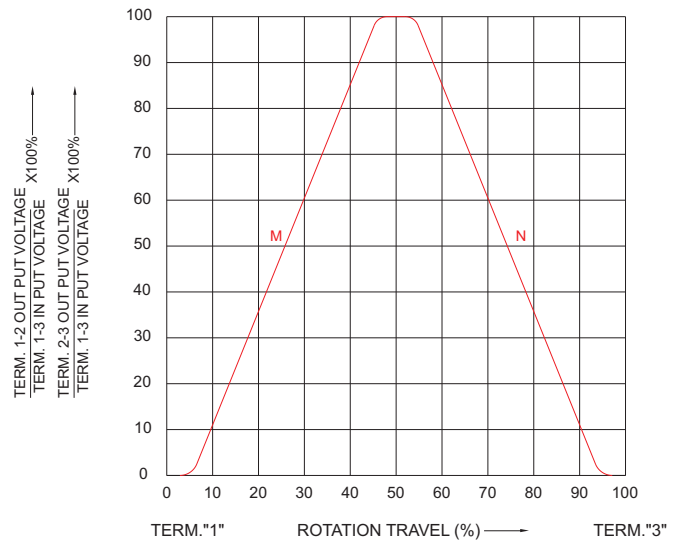
TAPERS (B) WITH 50% TAP



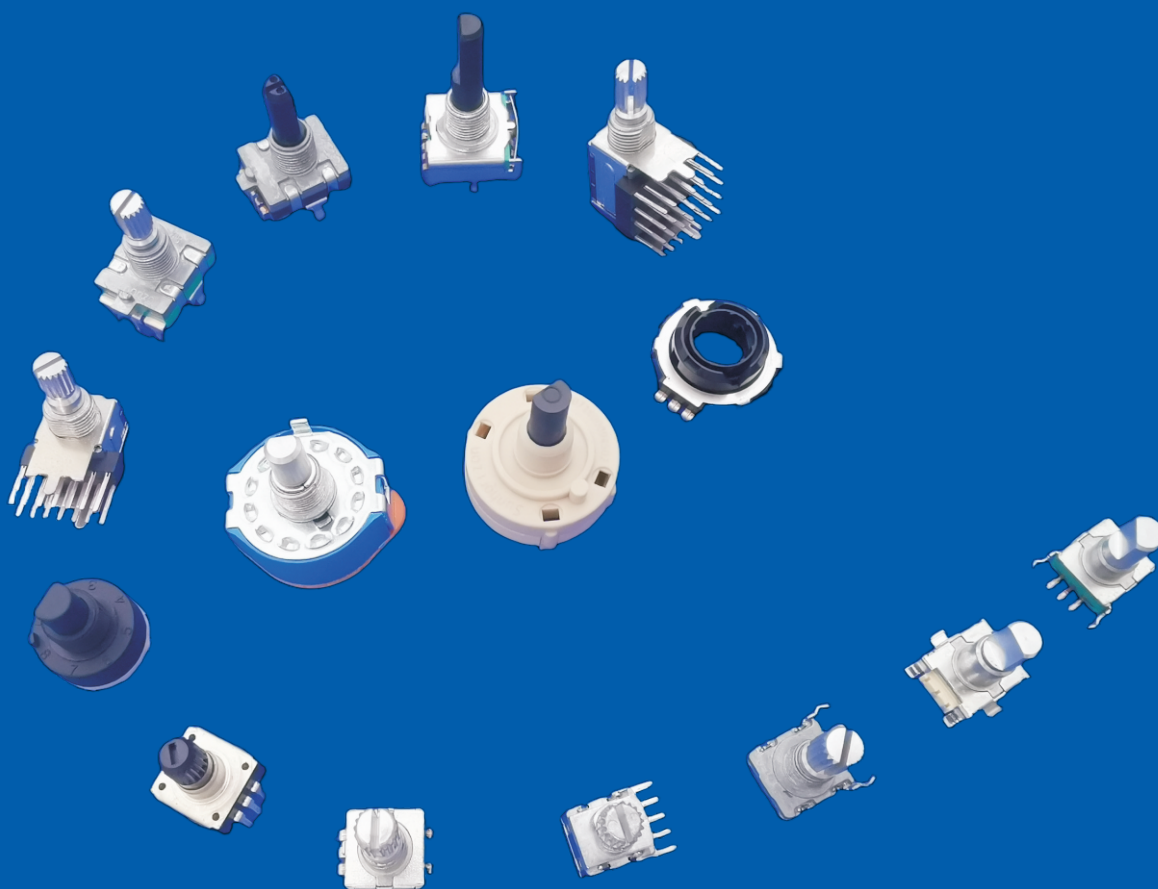
TAPERS (C) SERIES



TAPERS (M & N)



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深圳市三合正电子有限公司

SHENZHEN SUNHORIZON ELECTRONIC CO., LTD

Contact person: Jim MB/WeChat:13924669180

E-mail : jim@szsunhorizon.com

Address: 2nd Floor, No. 6-2, Yulong Street, Jinshuiqiao  
Industrial Zone, Yixin Community, Pingdi Street,  
Longgang District, Shenzhen, Guangdong, China

地址:广东省深圳市龙岗区坪地街道怡心社区金水桥工业区誉隆街6-2号厂房2楼

