

LW097 Series

Electrical Characteristics

- | | | | |
|-------------------------------|-------------------------------------|------------------------------|---------------------------------------|
| • Total Resistance: | 500Ω-5MΩ | • Rotational Life: | 10,000 cycles min |
| • Residual Resistance: | <20Ω | • Slider Noise : | Less than 100MV |
| • Total Resistance Tolerance: | A B C D W | • Gang Error: | ±4dB (-40~0dB) |
| • Voltage Proof Minute at: | 300V AC | • Insulation Resistance: | 100MΩ min. at 250V DC |
| • Power Rating : | B taper 0.05w
Other taper 0.025w | • Maximum Operating Voltage: | B taper 50V AC;
Other taper 25V AC |

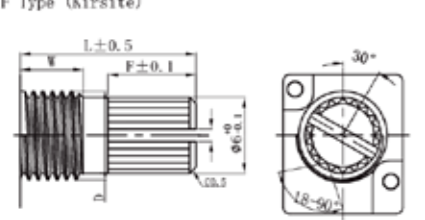
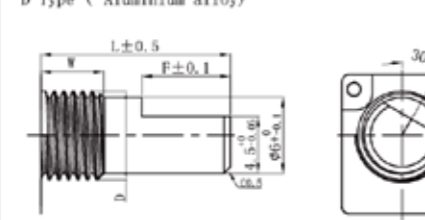
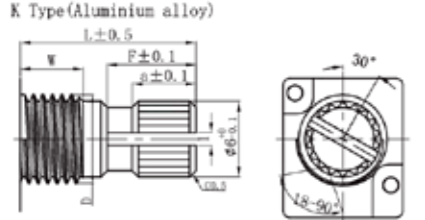
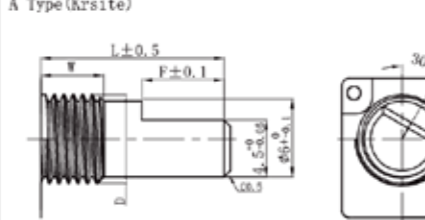
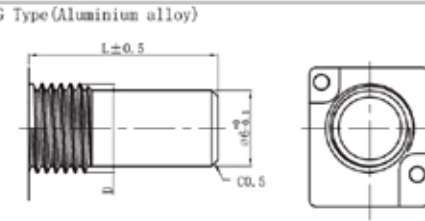
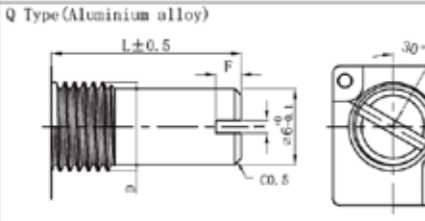
Mechanical Structure

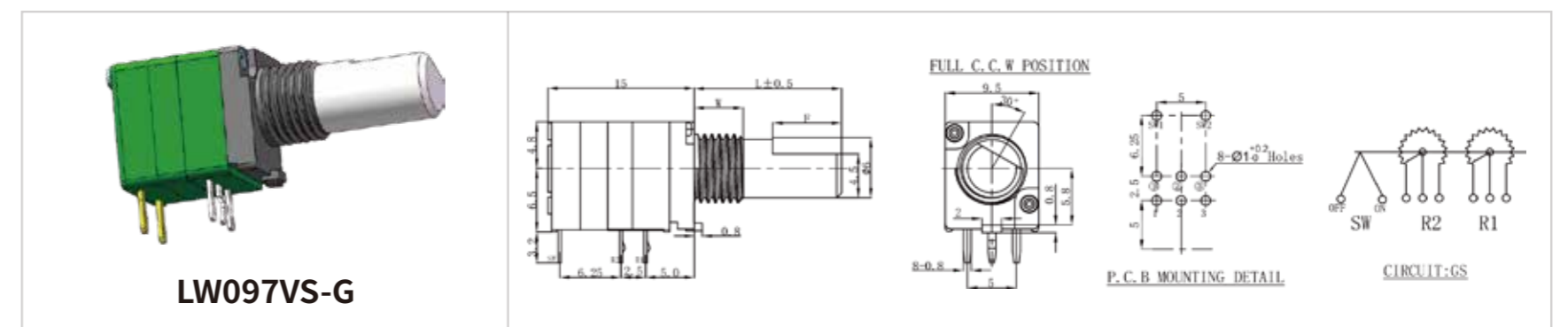
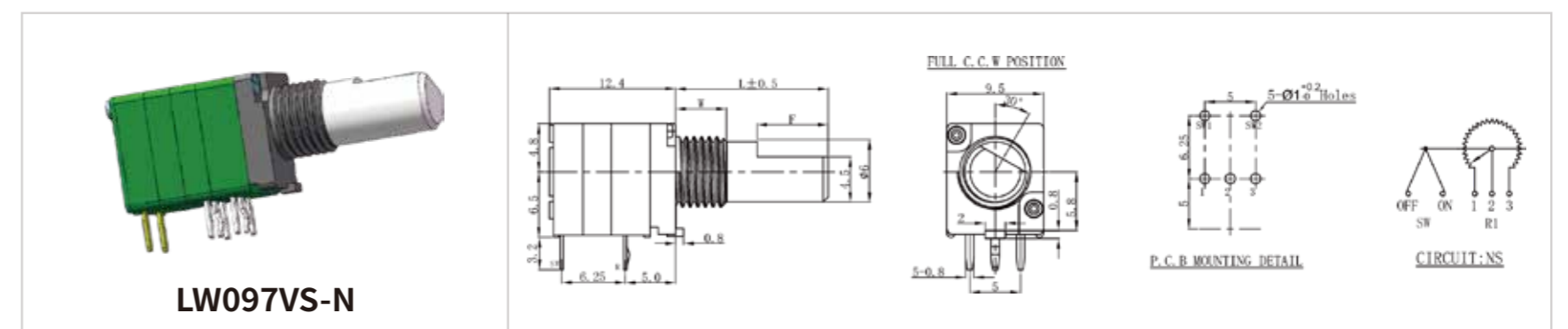
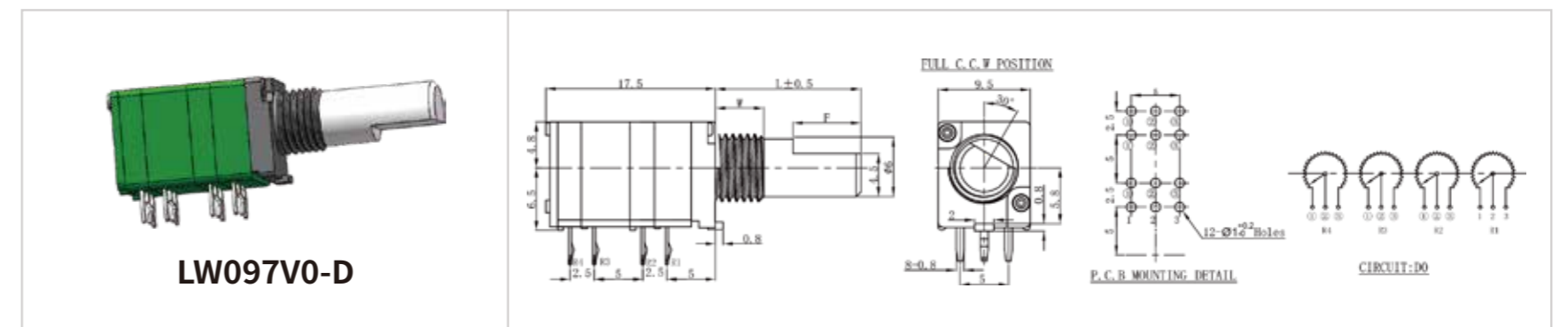
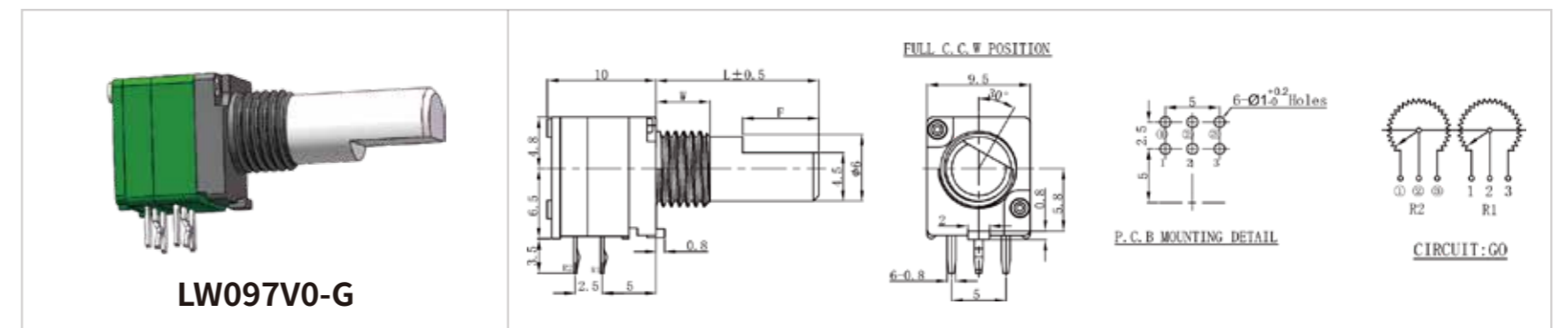
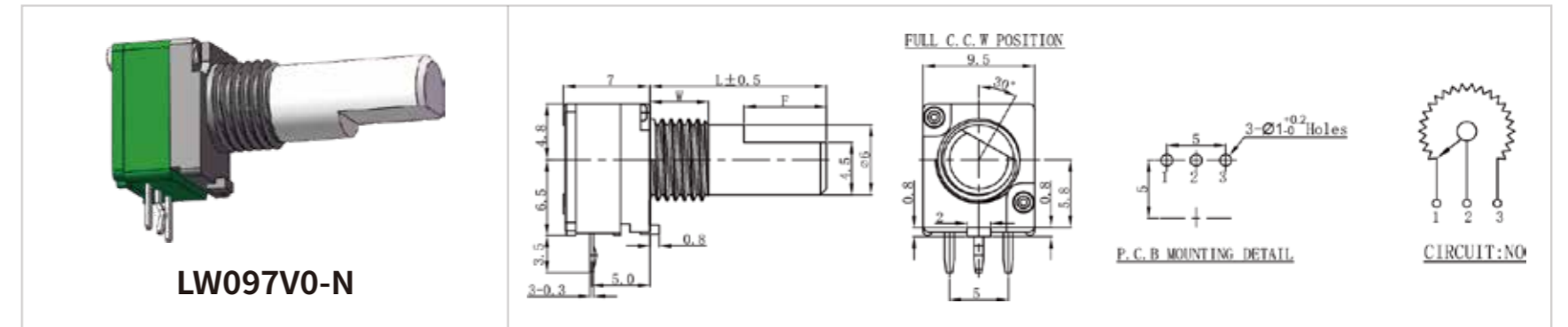
- | | | | |
|---------------------------|-------------|--------------------------------|-------------|
| • Total Rotational Angle: | 300°±10° | • Rotational Stopper Strength: | 3Kgf.cm MAX |
| • Rotational Torque: | 10~200gf.cm | • Push-pull Strength: | 6kgf MAX |

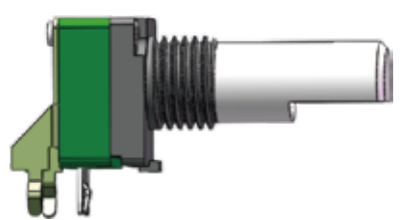
Switch characteristics

- | | | | |
|------------------------------|---------------|----------------------------|----------------|
| • Switch Contact Resistance: | 50mΩMax | • Switch Rotational Angle: | 50°±10° |
| • Switch Rated Power: | 12V DC 0.5A | • Switch Action: | 500gf.cm below |
| • Switch Life: | 15,000 cycles | • Switch Action: | 500±200gf |

Shaft Type and Lengths Metal shaft

<p>F Type (Kirsite)</p> 	<p>D Type (Aluminium alloy)</p> 	<p>W=5</p> <table border="1"> <tr><td>L</td><td>10</td><td>12</td><td>15</td><td>20</td><td>25</td></tr> <tr><td>F</td><td>4</td><td>5</td><td>8</td><td>12</td><td>15</td></tr> <tr><td>a</td><td>3</td><td>4</td><td>7</td><td>11</td><td>13</td></tr> </table>	L	10	12	15	20	25	F	4	5	8	12	15	a	3	4	7	11	13
L	10		12	15	20	25														
F	4		5	8	12	15														
a	3	4	7	11	13															
<p>K Type (Aluminium alloy)</p> 	<p>A Type (Kirsite)</p> 	<p>W=7</p> <table border="1"> <tr><td>L</td><td>12</td><td>15</td><td>20</td><td>25</td></tr> <tr><td>F</td><td>4</td><td>7</td><td>12</td><td>15</td></tr> <tr><td>a</td><td>3</td><td>6</td><td>10</td><td>13</td></tr> </table>	L	12	15	20	25	F	4	7	12	15	a	3	6	10	13			
L	12	15	20	25																
F	4	7	12	15																
a	3	6	10	13																
<p>G Type (Aluminium alloy)</p> 	<p>Q Type (Aluminium alloy)</p> 	<p>W=10</p> <table border="1"> <tr><td>L</td><td>15</td><td>20</td><td>25</td><td>30</td></tr> <tr><td>F</td><td>4</td><td>7</td><td>12</td><td>15</td></tr> <tr><td>a</td><td>3</td><td>6</td><td>10</td><td>13</td></tr> </table>	L	15	20	25	30	F	4	7	12	15	a	3	6	10	13			
L	15	20	25	30																
F	4	7	12	15																
a	3	6	10	13																
<p>W 1 2.5 5 7 10 15</p> <p>D φ7 M7*0.75P M9*0.75P</p>																				

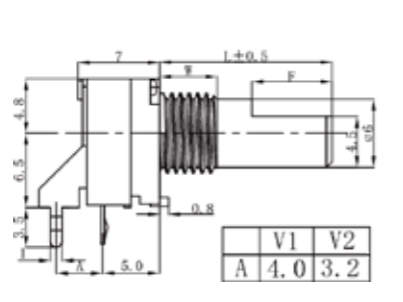
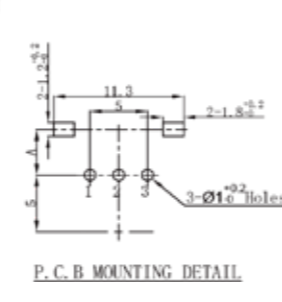





LW097V0-NX

V1	V2
A 4.0	3.2

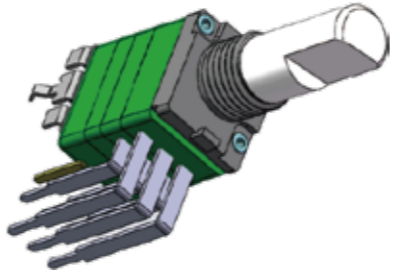
FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

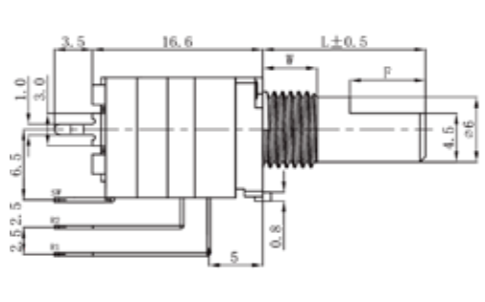
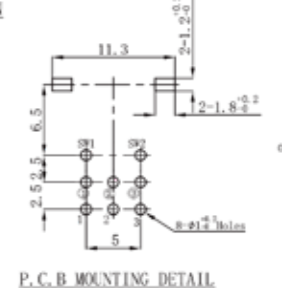


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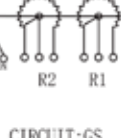


LW097HS-G

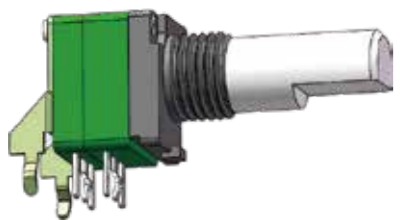
FULL C.C.W POSITION

P.C.B MOUNTING DETAIL



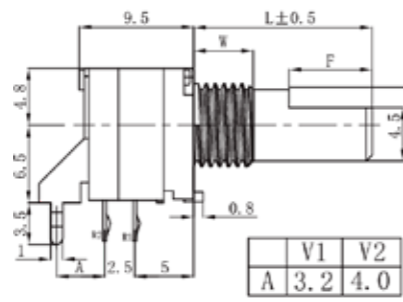
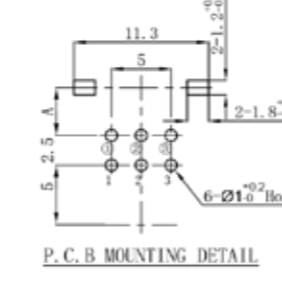
CIRCUIT-GS




LW097V0-GX

V1	V2
A 3.2	4.0

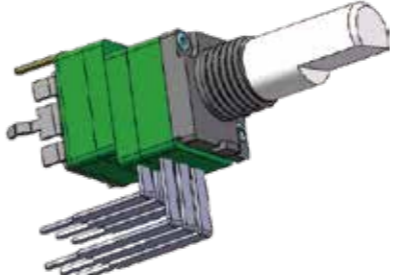
FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

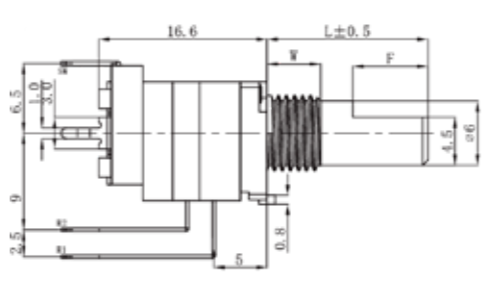
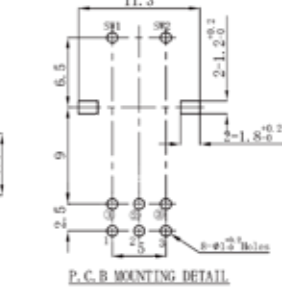


CIRCUIT-NO

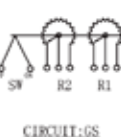


LW097HF-G

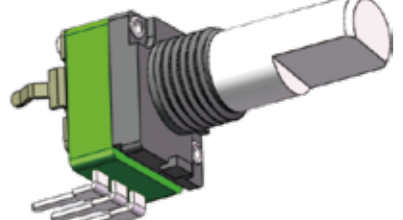
FULL C.C.W POSITION

P.C.B MOUNTING DETAIL



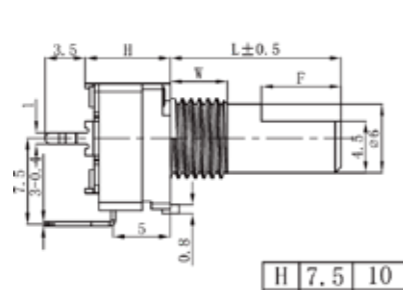
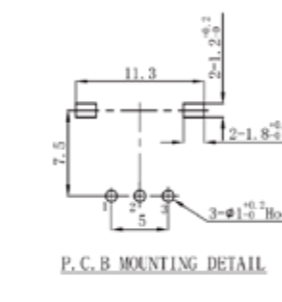
CIRCUIT-GS




LW097H0-N

H	7.5	10
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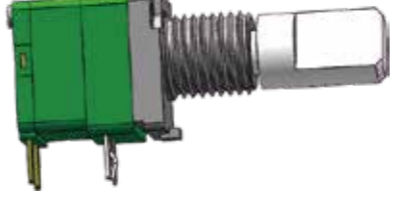
FULL C.C.W POSITION

P.C.B MOUNTING DETAIL



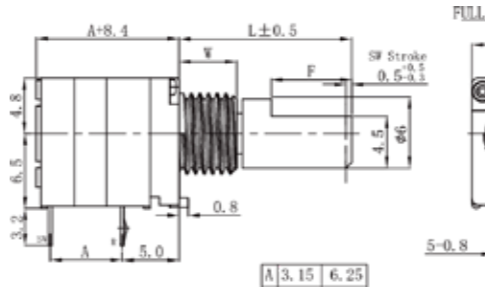
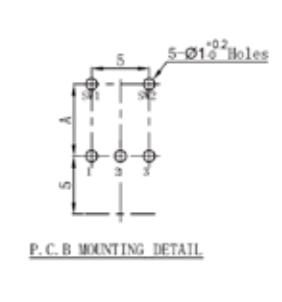
CIRCUIT-NO



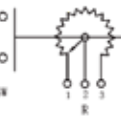
LW097AV0-N

A	3.15	6.25
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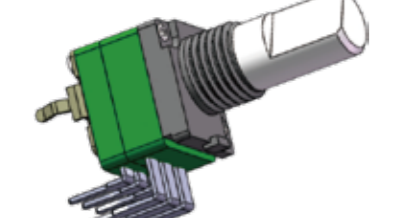
FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

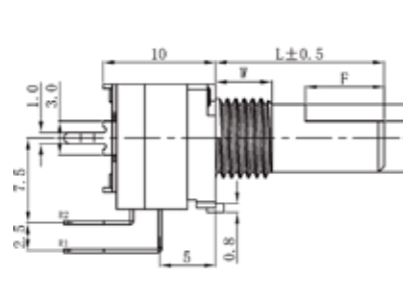
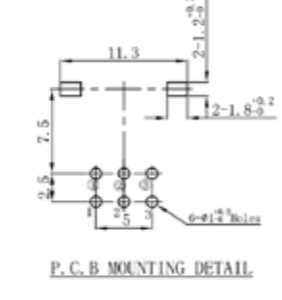


CIRCUIT-NS

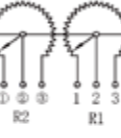


LW097H0-G


FULL C.C.W POSITION

P.C.B MOUNTING DETAIL



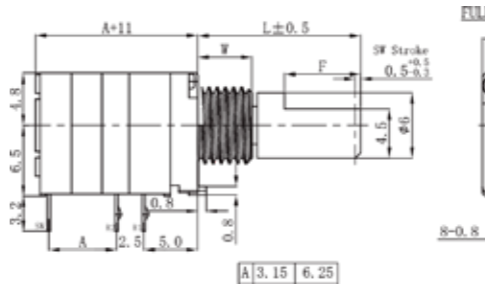
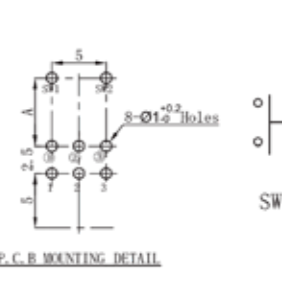
CIRCUIT-GO



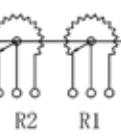
LW097AV0-G

A	3.15	6.25
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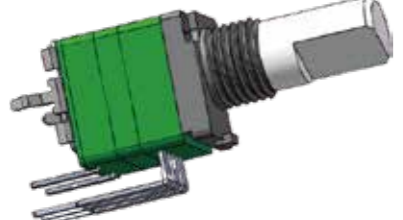
FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

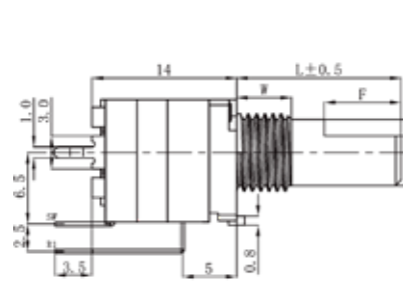
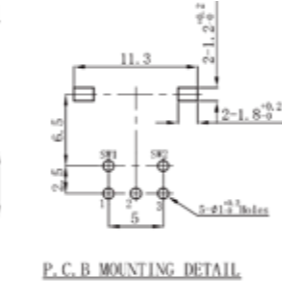


CIRCUIT-GS




LW097HS-N

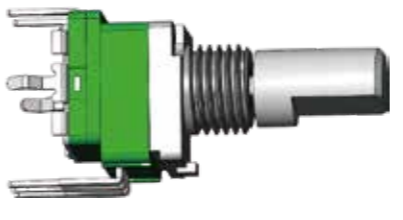
FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

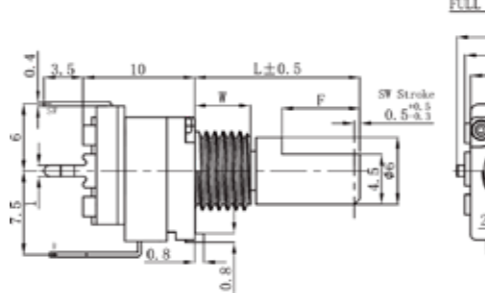
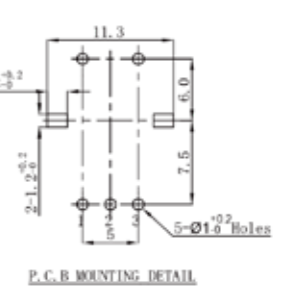


CIRCUIT-NS

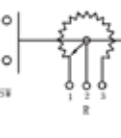


LW097AH0-N

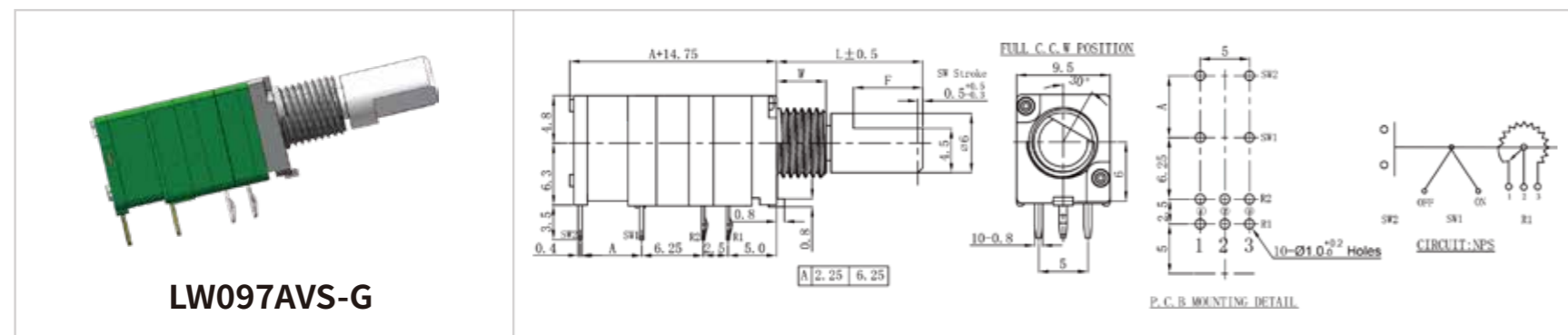
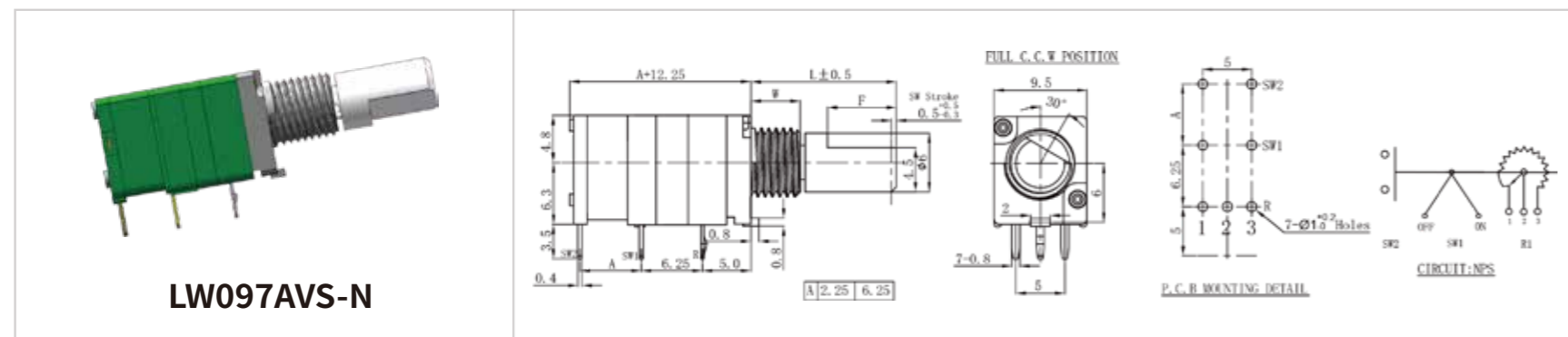
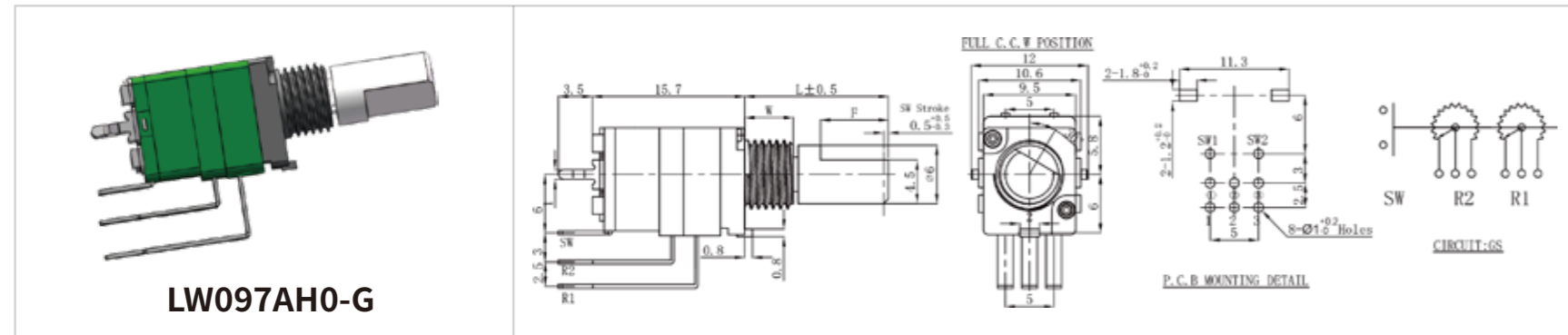
FULL C.C.W POSITION

P.C.B MOUNTING DETAIL



CIRCUIT-NS



LW0972 Series

Electrical Characteristics

- Total Resistance: 500Ω-5MΩ
- Residual Resistance: <20Ω
- Total Resistance Tolerance: A B C D W
- Power Rating: B taper 0.05w
Other taper 0.025w
- Voltage Proof Minute at: 300V AC
- Rotational Life: 10,000 cycles min
- Slider Noise: Less than 100MV
- Insulation Resistance: 100MΩ min. at 250V DC
- Maximum Operating Voltage: B taper 50V AC;
Other taper 25V AC

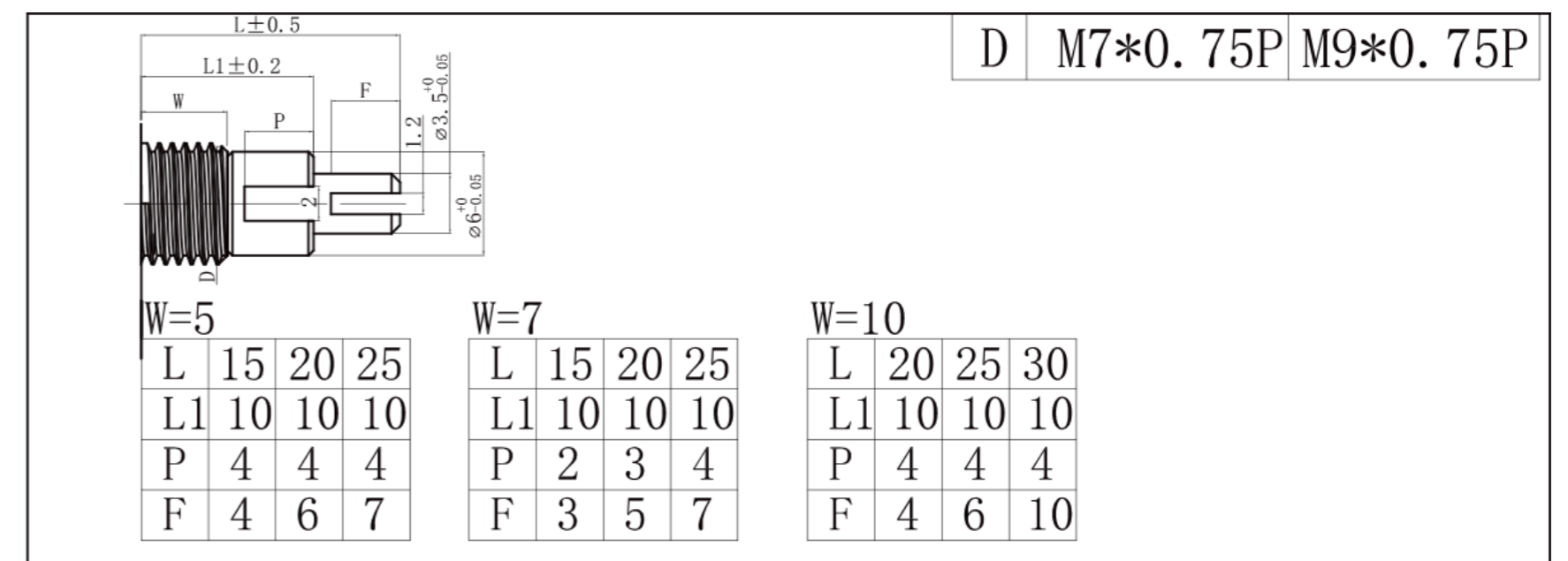
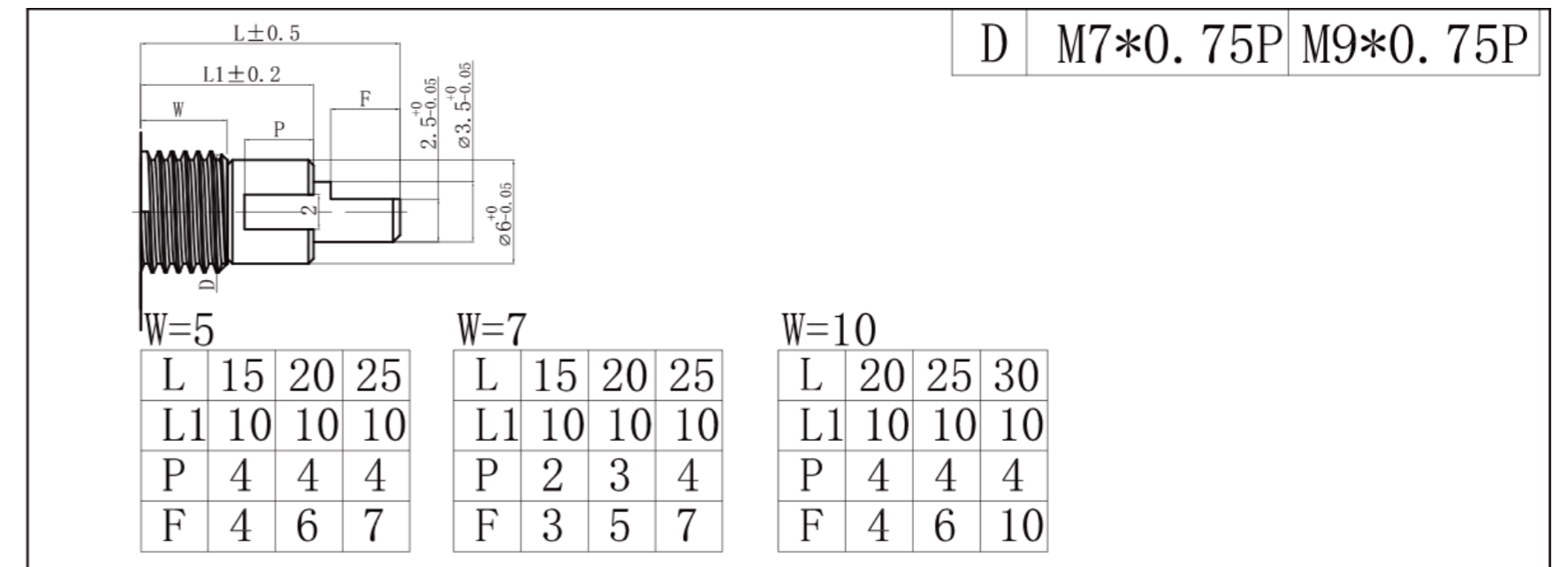
Mecanical Structure

- Total Rotational Angle: 300°±10°
- Rotational Torque: 10~200gf.cm
- Rotational Stopper Strength: 3Kgf.cm MAX
- Push-pull Strength: 6kgf MAX

Switch characteristics

- Switch Contact Resistance: 50mΩMax
- Switch Rated Power: 12V DC 0.5A
- Switch Life: 15,000 cycles
- Switch Rotational Angle: 50°±10°
- Switch Action: 500gf.cm below
- Switch Action: 500±200gf

Shaft Type and Lengths Metal shaft



LW092V0-N

FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

CIRCUIT-NO

LW092H0-N

FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

CIRCUIT-NO

LW092V0-G

FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

CIRCUIT-G0

LW092H0-G

FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

CIRCUIT-G0

LW092V0-F

FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

CIRCUIT-G0

LW092HS-N

FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

CIRCUIT-NS

LW092V0-D

FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

CIRCUIT-G0

LW092HS-G

FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

CIRCUIT-GS

LW092VS-N

FULL C.C.W POSITION

P.C.B MOUNTING DETAIL

CIRCUIT-NS

LW12 Series

Electrical Characteristics

- | | | | |
|-------------------------------|-------------------------------------|------------------------------|---------------------------------------|
| • Total Resistance: | 500Ω-5MΩ | • Slider Noise: | Less than 100MV |
| • Residual Resistance: | <20Ω | • Gang Error: | ≤±4dB (-40~0dB) |
| • Total Resistance Tolerance: | A B C D W | • Insulation Resistance: | 100MΩ min. at 250V DC |
| • Power Rating: | B taper 0.05w
Other taper 0.025w | • Maximum Operating Voltage: | B taper 50V AC;
Other taper 25V AC |
| • Voltage Proof Minute at: | 300V AC | | |

Mecanical Structure Itemsspecification

- | | | | |
|---------------------------|-------------------|--------------------------------|-------------|
| • Total Rotational Angle: | 300°±10° | • Rotational Stopper Strength: | 3Kgf.cm MAX |
| • Rotational Torque: | 10~200gf.cm | • Push-pull Strength: | 6kgf MAX |
| • Rotational Life: | 10,000 cycles min | | |

LW1212-NH

SHAFT SHOWN IN FULL C.W. POSITION

P.C.B. MOUNTING HOLE DETAIL

CIRCUIT-NO

LW1212-GH

SHAFT SHOWN IN FULL C.W. POSITION

P.C.B. MOUNTING HOLE DETAIL

CIRCUIT-NO

LW1213-NH

SHAFT SHOWN IN FULL C.W. POSITION

P.C.B. MOUNTING HOLE DETAIL

CIRCUIT-NO

LW1213-GH

SHAFT SHOWN IN FULL C.W. POSITION

P.C.B. MOUNTING HOLE DETAIL

CIRCUIT-NO

LW1212-NV

SHAFT SHOWN IN FULL C.W. POSITION

P.C.B. MOUNTING HOLE DETAIL

CIRCUIT-NO

LW1212-GV

SHAFT SHOWN IN FULL C.W. POSITION

P.C.B. MOUNTING HOLE DETAIL

CIRCUIT-NO

LW1213-NV

SHAFT SHOWN IN FULL C.W. POSITION

P.C.B. MOUNTING HOLE DETAIL

CIRCUIT-NO

LW1213-GV

SHAFT SHOWN IN FULL C.W. POSITION

P.C.B. MOUNTING HOLE DETAIL

CIRCUIT-NO

LW166-GH1

LW166-NS5

LW166-NS1

LW166-NS6

LW166-NS2

LW166-NS3

LW166-NS4

LW11 Series

Electrical Characteristics

- Power Rating: 0.5mA 5V DC
- Initial Contact Resistance: 50mΩ
- Withstand Voltage: AC300V for 1 minute
- Temperature Range: -30°C ~ 80°C
- Insulation Resistance: 100MΩ min. At 250V DC

Mecanical Structure

- Total Rotational Angle: 90° (Endless)
- Rotational Torque: 30~200gf.cm
- Push-pull Strength: 5Kgf Max
- Shaft Wobble: 0.5mm
- Rotational Life: 30,000 cycles min
- Rotation Play At The Click Position: 5° Max

Switch characteristics

- Contact Resistance: 100MΩ
- Switch Rating: DC 16V 0.5A
- Operating Force: 300~600gf
- Insulation Resistance: 100MΩ min. At 250V DC
- Withstand Voltage: 300V AC, 1mA for 1min
- Switch Life: 20,000 cycles min

Shaft Type and Lengths

<p>F Type (Kirsite)</p>	<p>F Type (Kirsite)</p>																						
<p>D Type (Aluminium alloy)</p>	<p>K Type (Aluminium alloy)</p>																						
<p>A Type (Kirsite)</p>	<table border="1"> <tr> <td>W=5</td> <td>W=7</td> </tr> <tr> <td>L 10 12 15 20 25</td> <td>L 12 15 20 25</td> </tr> <tr> <td>F 4 5 8 12 15</td> <td>F 4 7 12 15</td> </tr> <tr> <td>a 3 4 7 11 13</td> <td>a 3 6 10 13</td> </tr> </table> <table border="1"> <tr> <td>W</td> <td>1</td> <td>2.5</td> <td>5</td> <td>7</td> <td>10</td> <td>15</td> </tr> <tr> <td>D</td> <td>φ7</td> <td>M7*0.75P</td> <td>M9*0.75P</td> <td></td> <td></td> <td></td> </tr> </table>	W=5	W=7	L 10 12 15 20 25	L 12 15 20 25	F 4 5 8 12 15	F 4 7 12 15	a 3 4 7 11 13	a 3 6 10 13	W	1	2.5	5	7	10	15	D	φ7	M7*0.75P	M9*0.75P			
W=5	W=7																						
L 10 12 15 20 25	L 12 15 20 25																						
F 4 5 8 12 15	F 4 7 12 15																						
a 3 4 7 11 13	a 3 6 10 13																						
W	1	2.5	5	7	10	15																	
D	φ7	M7*0.75P	M9*0.75P																				

LW11

Circuit Diagram

LW12(5Pin) Series

LW12-H1

SHAFT SHOWN IN FULL C # POSITION

(STOPPER) P.C.B. MOUNTING HOLE DETAIL

Switch Contact Status

LW12-H2

SHAFT SHOWN IN FULL C # POSITION

(STOPPER) P.C.B. MOUNTING HOLE DETAIL

Switch Contact Status

LW12-V1

SHAFT SHOWN IN FULL C # POSITION

(STOPPER) P.C.B. MOUNTING HOLE DETAIL

Switch Contact Status

LW12-V2

SHAFT SHOWN IN FULL C # POSITION

(STOPPER) P.C.B. MOUNTING HOLE DETAIL

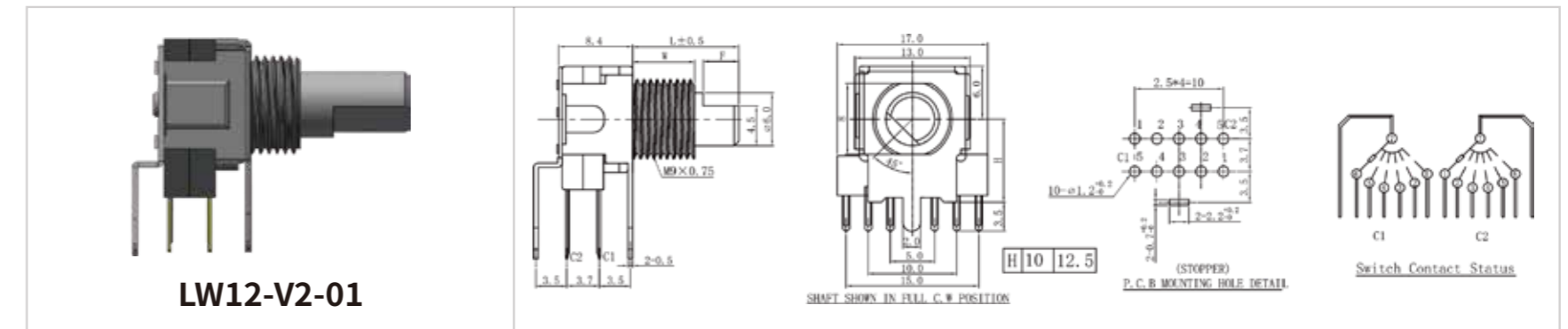
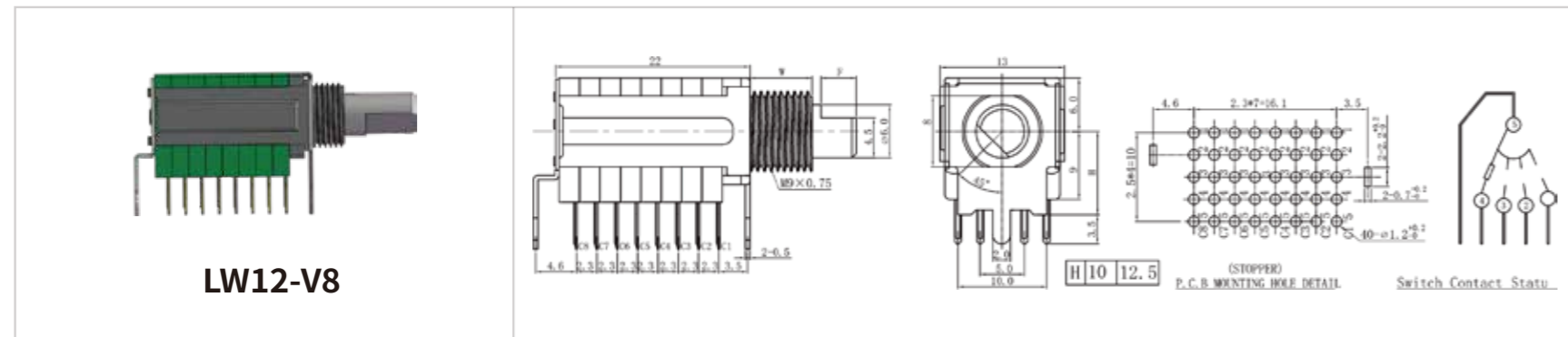
Switch Contact Status

LW12-V4

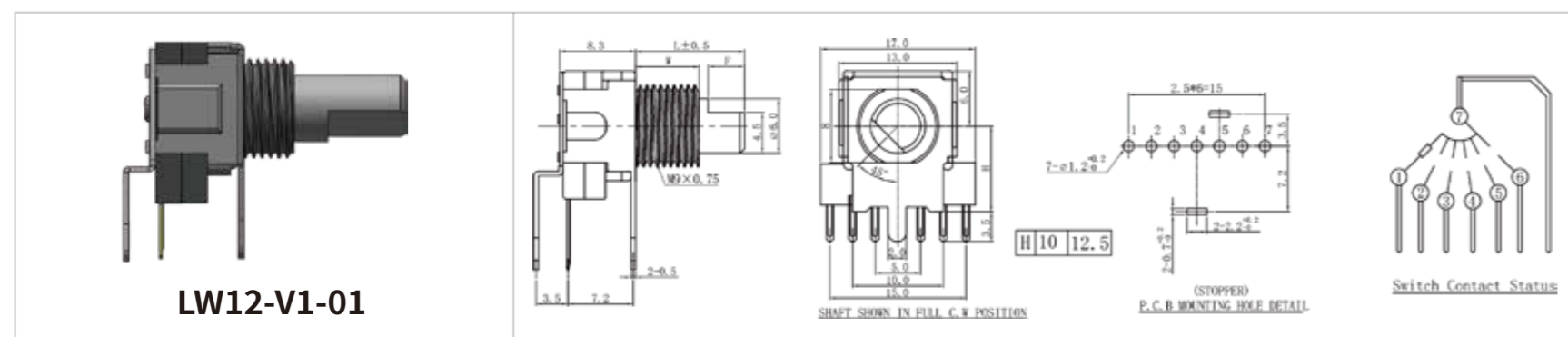
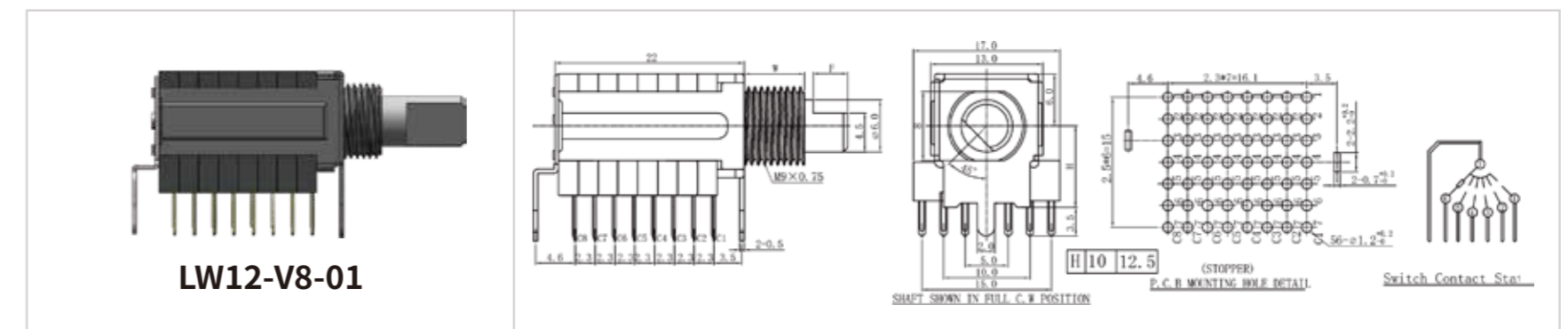
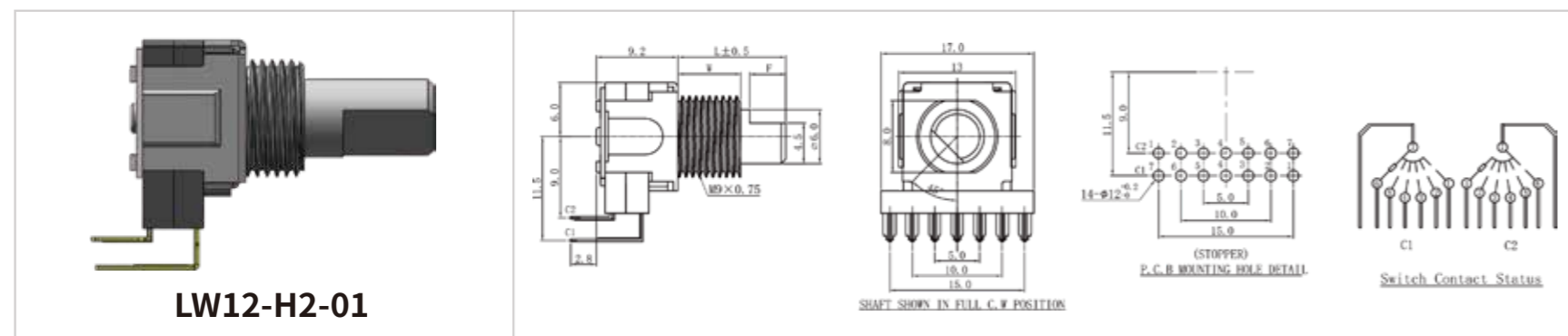
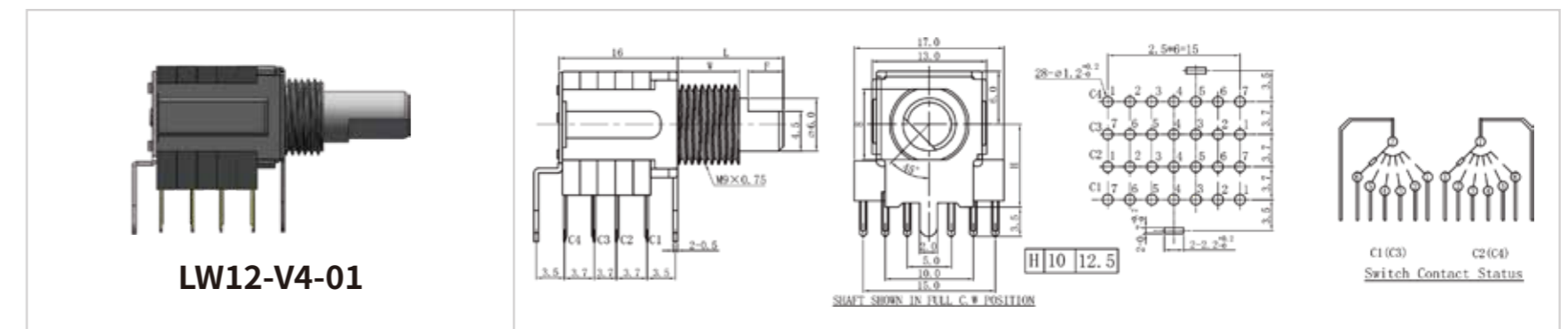
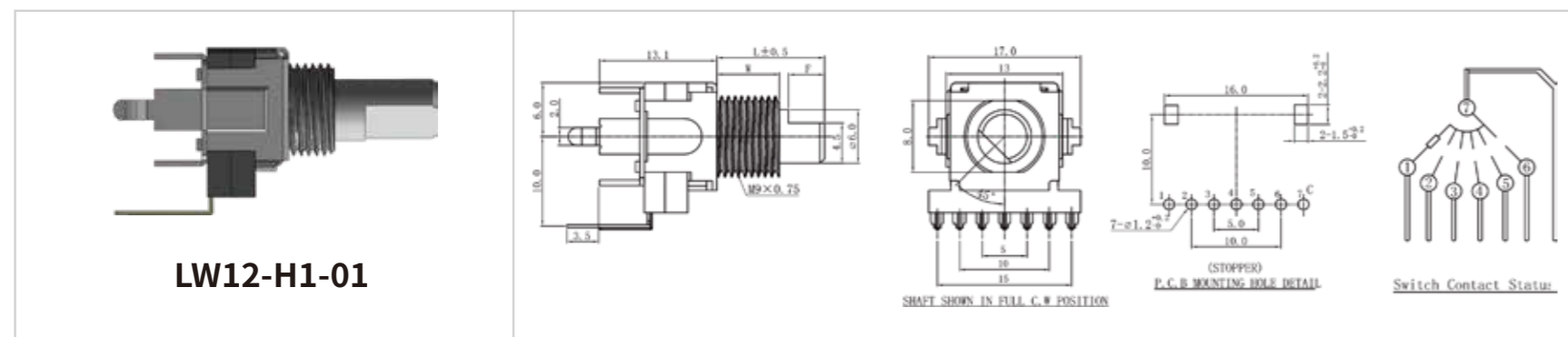
SHAFT SHOWN IN FULL C # POSITION

(STOPPER) P.C.B. MOUNTING HOLE DETAIL

Switch Contact Status



LW12(7Pin) Series



LW16 Series

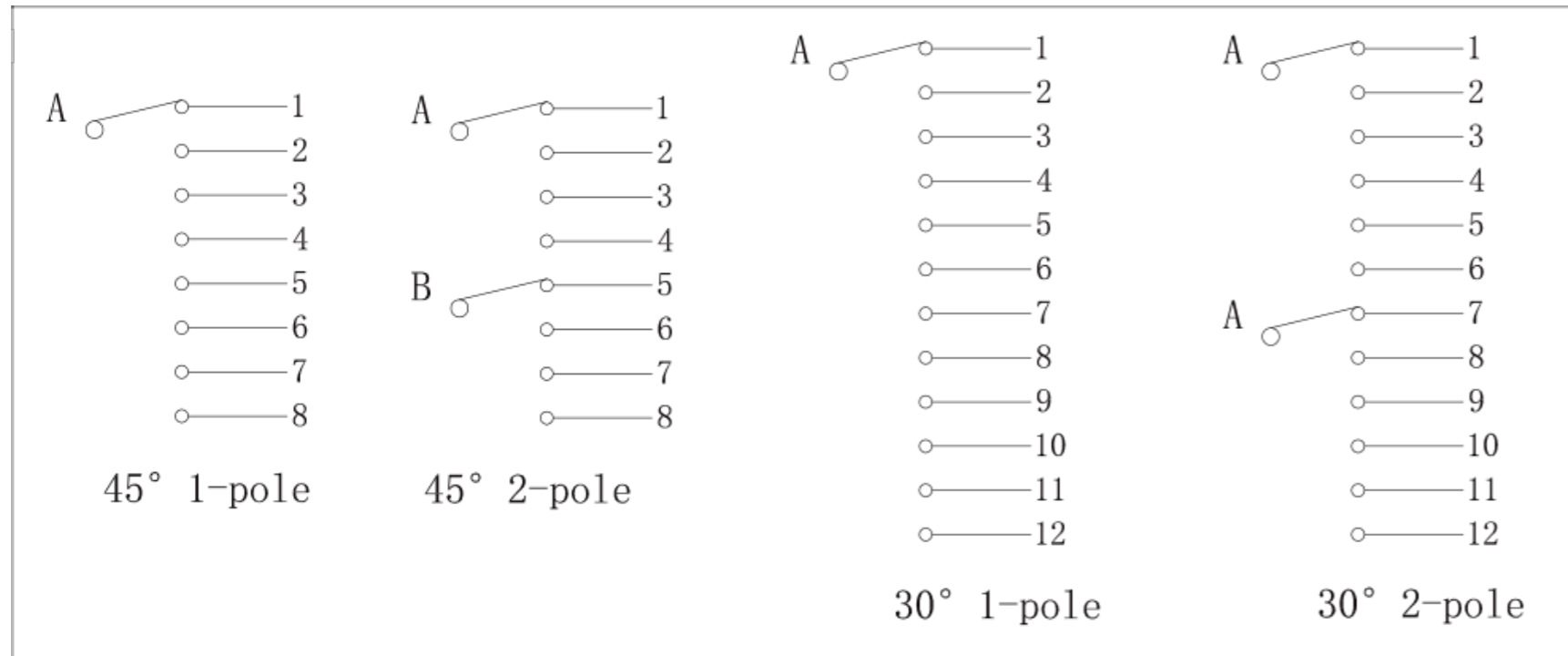
Electrical Characteristics

- Power Rating: 0.3A 16V DC
- Initial Contact Resistance: 50mΩ
- Withstand Voltage: AC500V for 1 minute
- Temperature Range: -30°C ~ 85°C
- Insulation Resistance: 100MΩ min. At 500V DC

Mechanical Structure Item Specification

- Changeover Angle: 30°C ~ 45°C
- Rotational Torque: 100 ~ 600gf.cm
- Rotational Stopper Strength: 5Kgf.cm Max
- Push-pull Strength: 5Kgf MAX
- Rotational Life: 10,000 cycles min

Switch Contact Status



Type of Shaft

