

5 mm Size Slide Switches

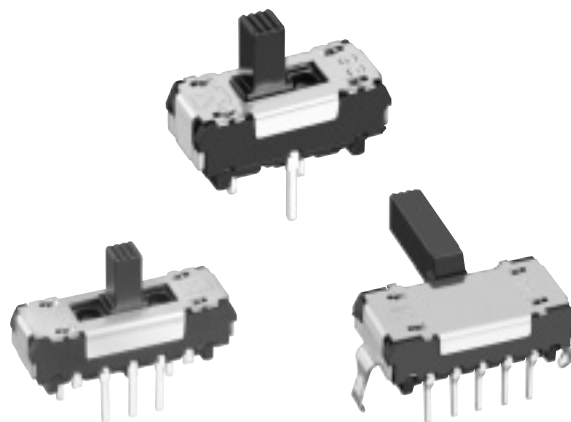
Japan

Type: **ESD17**

Easy-to-use, wide range of customizable features

■ Features

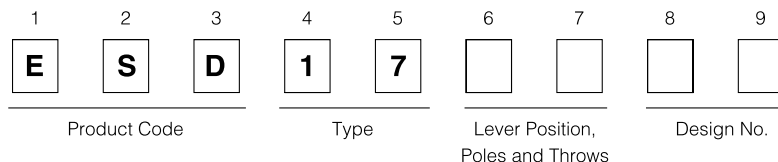
- A wide range of customizable features (lever direction, types of lever, circuit diagram)
- Easy-to-use and robust
- Self-standing type



■ Recommended Applications

- Signal switches for car audio equipment and air conditioners

■ Explanation of Part Numbers



■ Major Specifications

Lever Position	Vertical	Horizontal
Rating	50 μ A 3 Vdc to 0.1 A 30 Vdc	
Travel	2.0 mm	
Mounting Height	5.0 mm	
Poles	1-pole, 2-poles	
Throws	2-throws, 3-throws	
Terminal Pitch	2.0 mm	
Switching Mode	Non-shorting	
Minimum Quantity/Packing Unit	Type I	100 pcs. (Vinyl Bag)
	Type II	100 pcs. (Vinyl Bag)
Quantity/Carton	Type I	2000 pcs.
	Type II	2000 pcs.

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

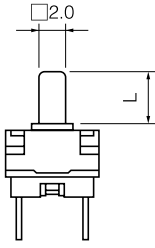
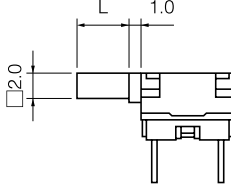
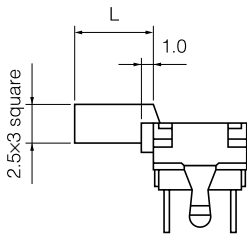
■ Standard Products (Type I)

Poles	Throws	Lever Length	Vertical		Horizontal	
			Self-standing	Without Legs	Self-standing	Without Legs
1-pole	2-throws	2.0 mm	ESD170201	ESD170205	ESD175201	ESD175205
		4.0 mm	ESD170202	ESD170206	ESD175202	ESD175206
2-poles		2.0 mm	ESD172201	ESD172205	ESD177201	ESD177205
		4.0 mm	ESD172202	ESD172206	ESD177202	ESD177206
1-pole	3-throws	2.0 mm	ESD170301	ESD170305	ESD175301	ESD175305
		4.0 mm	ESD170302	ESD170306	ESD175302	ESD175306
2-poles		2.0 mm	ESD172301	ESD172305	ESD177301	ESD177305
		4.0 mm	ESD172302	ESD172306	ESD177302	ESD177306

■ Standard Products (Type II)

Poles	Throws	Lever Length	Horizontal
			Self-standing
2-poles	2-throws	6.0 mm	ESD177210
		9.0 mm	ESD177211
2-poles	3-throws	6.0 mm	ESD177310
		9.0 mm	ESD177311

■ Product Chart

Poles	Throws	Type I				Type II	
		□2.0 mm×L mm				□(2.5 mm×3.0 mm)×L mm	
		Vertical		Horizontal		Horizontal	
							
	L=	2.0 mm	4.0 mm	2.0 mm	4.0 mm	6.0 mm	9.0 mm
1-pole	2-throws	○	○	○	○	—	—
	3-throws	○	○	○	○	—	—
2-poles	2-throws	○	○	○	○	○	○
	3-throws	○	○	○	○	○	○

Note: Available with or without Self-standing legs (Type I)

Design and specifications are each subject to change without notice. Ask factory for the current technical specifications before purchase and/or use. Should a safety concern arise regarding this product, please be sure to contact us immediately.

■ Dimensions in mm (not to scale)

<p>No. 1</p> <p>1-pole 2-throw Type I Self-standing leg</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD170201</td> <td>2.0</td> </tr> <tr> <td>ESD170202</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (a↔b)</p>	Part No.	L	ESD170201	2.0	ESD170202	4.0	<p>Circuit diagram</p> <p>View from terminal side</p> <p>Recommended PWB piercing plan</p> <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge: 1.6</p>
Part No.	L						
ESD170201	2.0						
ESD170202	4.0						
<p>No. 2</p> <p>1-pole 2-throw Type I</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD170205</td> <td>2.0</td> </tr> <tr> <td>ESD170206</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (a↔b)</p>	Part No.	L	ESD170205	2.0	ESD170206	4.0	<p>Circuit diagram</p> <p>View from terminal side</p> <p>Recommended PWB piercing plan</p> <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge: 1.6</p>
Part No.	L						
ESD170205	2.0						
ESD170206	4.0						
<p>No. 3</p> <p>1-pole 3-throw Type I Self-standing leg</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD170301</td> <td>2.0</td> </tr> <tr> <td>ESD170302</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (b)→(a)←(c) 2.45 N±1.47 N (b)←(a)→(c)</p>	Part No.	L	ESD170301	2.0	ESD170302	4.0	<p>Circuit diagram</p> <p>View from terminal side</p> <p>Recommended PWB piercing plan</p> <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge: 1.6</p>
Part No.	L						
ESD170301	2.0						
ESD170302	4.0						
<p>No. 4</p> <p>1-pole 3-throw Type I</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD170305</td> <td>2.0</td> </tr> <tr> <td>ESD170306</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (b)→(a)←(c) 2.45 N±1.47 N (b)←(a)→(c)</p>	Part No.	L	ESD170305	2.0	ESD170306	4.0	<p>Circuit diagram</p> <p>View from terminal side</p> <p>Recommended PWB piercing plan</p> <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge: 1.6</p>
Part No.	L						
ESD170305	2.0						
ESD170306	4.0						

Note: (C)=Common terminal

■ Dimensions in mm (not to scale)

<p>No. 5</p> <p>2-poles 2-throws Type I Self-standing leg</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD172201</td> <td>2.0</td> </tr> <tr> <td>ESD172202</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (a↔b)</p>	Part No.	L	ESD172201	2.0	ESD172202	4.0	<p>Circuit diagram</p> <p>View from terminal side</p> <p>Recommended PWB piercing plan</p> <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD172201	2.0						
ESD172202	4.0						
<p>No. 6</p> <p>2-poles 2-throws Type I</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD172205</td> <td>2.0</td> </tr> <tr> <td>ESD172206</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (a↔b)</p>	Part No.	L	ESD172205	2.0	ESD172206	4.0	<p>Circuit diagram</p> <p>View from terminal side</p> <p>Recommended PWB piercing plan</p> <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD172205	2.0						
ESD172206	4.0						
<p>No. 7</p> <p>2-poles 3-throws Type I Self-standing leg</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD172301</td> <td>2.0</td> </tr> <tr> <td>ESD172302</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (b)→(a)←(c) 2.45 N±1.47 N (b)←(a)→(c)</p>	Part No.	L	ESD172301	2.0	ESD172302	4.0	<p>Circuit diagram</p> <p>View from terminal side</p> <p>Recommended PWB piercing plan</p> <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD172301	2.0						
ESD172302	4.0						
<p>No. 8</p> <p>2-poles 3-throws Type I</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD172305</td> <td>2.0</td> </tr> <tr> <td>ESD172306</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (b)→(a)←(c) 2.45 N±1.47 N (b)←(a)→(c)</p>	Part No.	L	ESD172305	2.0	ESD172306	4.0	<p>Circuit diagram</p> <p>View from terminal side</p> <p>Recommended PWB piercing plan</p> <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD172305	2.0						
ESD172306	4.0						

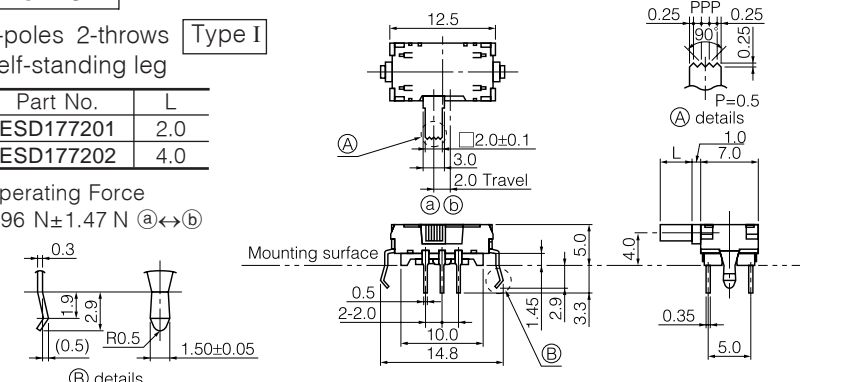
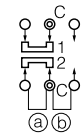
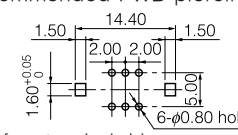
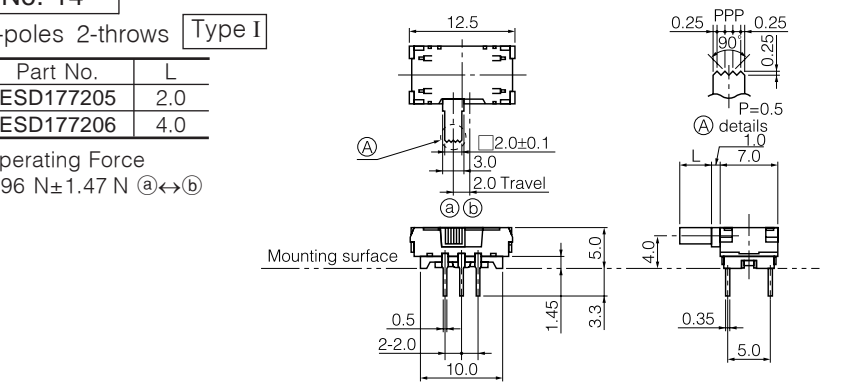
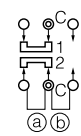
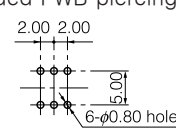
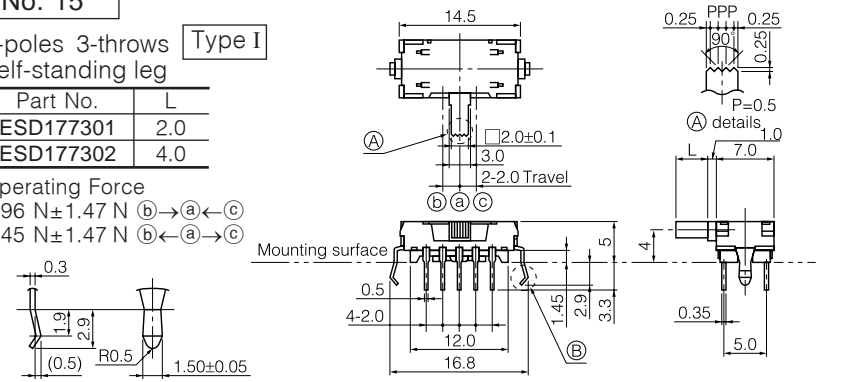
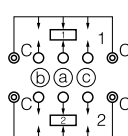
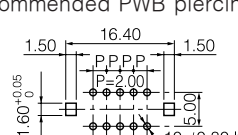
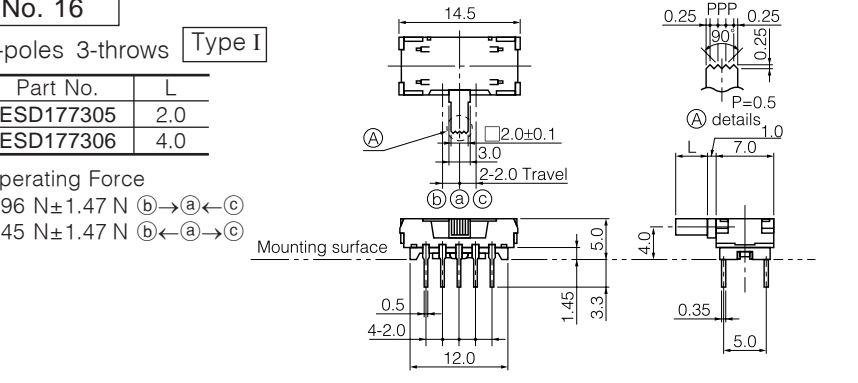
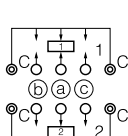
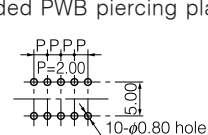
Note: ⊙C=Common terminal

■ Dimensions in mm (not to scale)

<p>No. 9</p> <p>1-pole 2-throws Type I Self-standing leg</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD175201</td> <td>2.0</td> </tr> <tr> <td>ESD175202</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (a↔b)</p>	Part No.	L	ESD175201	2.0	ESD175202	4.0	<p>Circuit diagram</p> <p>View from terminal side</p> <p>Recommended PWB piercing plan</p> <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD175201	2.0						
ESD175202	4.0						
<p>No. 10</p> <p>1-pole 2-throws Type I</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD175205</td> <td>2.0</td> </tr> <tr> <td>ESD175206</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (a↔b)</p>	Part No.	L	ESD175205	2.0	ESD175206	4.0	<p>Circuit diagram</p> <p>View from terminal side</p> <p>Recommended PWB piercing plan</p> <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD175205	2.0						
ESD175206	4.0						
<p>No. 11</p> <p>1-pole 3-throws Type I Self-standing leg</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD175301</td> <td>2.0</td> </tr> <tr> <td>ESD175302</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (b)→(a)←(c) 2.45 N±1.47 N (b)←(a)→(c)</p>	Part No.	L	ESD175301	2.0	ESD175302	4.0	<p>Circuit diagram</p> <p>View from terminal side</p> <p>Recommended PWB piercing plan</p> <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD175301	2.0						
ESD175302	4.0						
<p>No. 12</p> <p>1-pole 3-throws Type I</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD175305</td> <td>2.0</td> </tr> <tr> <td>ESD175306</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (b)→(a)←(c) 2.45 N±1.47 N (b)←(a)→(c)</p>	Part No.	L	ESD175305	2.0	ESD175306	4.0	<p>Circuit diagram</p> <p>View from terminal side</p> <p>Recommended PWB piercing plan</p> <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD175305	2.0						
ESD175306	4.0						

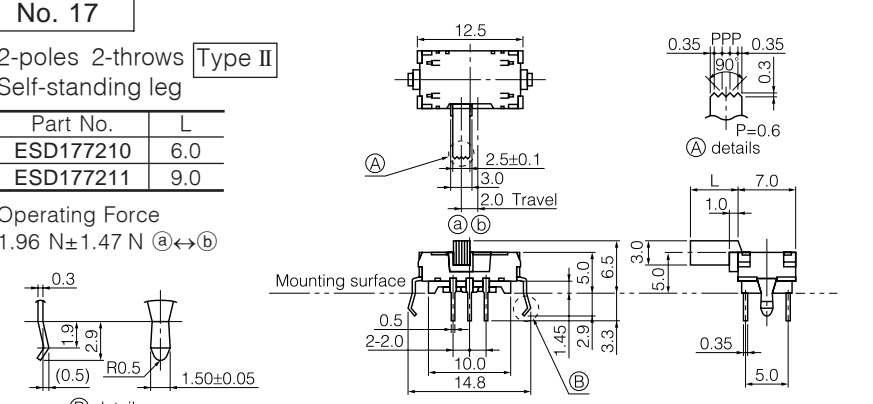
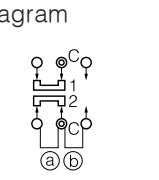
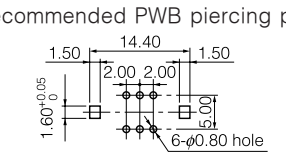
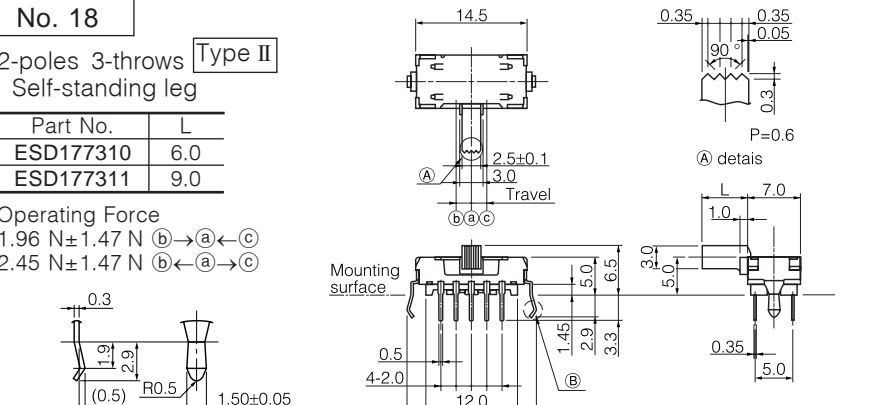
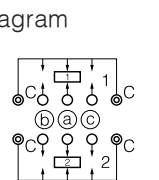
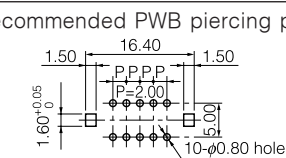
Note: (C)=Common terminal

■ Dimensions in mm (not to scale)

<p>No. 13</p> <p>2-poles 2-throws Type I Self-standing leg</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD177201</td> <td>2.0</td> </tr> <tr> <td>ESD177202</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (a↔b)</p> 	Part No.	L	ESD177201	2.0	ESD177202	4.0	<p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD177201	2.0						
ESD177202	4.0						
<p>No. 14</p> <p>2-poles 2-throws Type I</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD177205</td> <td>2.0</td> </tr> <tr> <td>ESD177206</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (a↔b)</p> 	Part No.	L	ESD177205	2.0	ESD177206	4.0	<p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD177205	2.0						
ESD177206	4.0						
<p>No. 15</p> <p>2-poles 3-throws Type I Self-standing leg</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD177301</td> <td>2.0</td> </tr> <tr> <td>ESD177302</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (b)→(a)←(c) 2.45 N±1.47 N (b)←(a)→(c)</p> 	Part No.	L	ESD177301	2.0	ESD177302	4.0	<p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD177301	2.0						
ESD177302	4.0						
<p>No. 16</p> <p>2-poles 3-throws Type I</p> <table border="1"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD177305</td> <td>2.0</td> </tr> <tr> <td>ESD177306</td> <td>4.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (b)→(a)←(c) 2.45 N±1.47 N (b)←(a)→(c)</p> 	Part No.	L	ESD177305	2.0	ESD177306	4.0	<p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD177305	2.0						
ESD177306	4.0						

Note: Ⓞ=Common terminal

■ Dimensions in mm (not to scale)

<p>No. 17</p> <p>2-poles 2-throws Type II Self-standing leg</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 5px;"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD177210</td> <td>6.0</td> </tr> <tr> <td>ESD177211</td> <td>9.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (a↔b)</p> 	Part No.	L	ESD177210	6.0	ESD177211	9.0	<p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD177210	6.0						
ESD177211	9.0						
<p>No. 18</p> <p>2-poles 3-throws Type II Self-standing leg</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 5px;"> <thead> <tr> <th>Part No.</th> <th>L</th> </tr> </thead> <tbody> <tr> <td>ESD177310</td> <td>6.0</td> </tr> <tr> <td>ESD177311</td> <td>9.0</td> </tr> </tbody> </table> <p>Operating Force 1.96 N±1.47 N (b)→(a)←(c) 2.45 N±1.47 N (b)←(a)→(c)</p> 	Part No.	L	ESD177310	6.0	ESD177311	9.0	<p>Circuit diagram</p>  <p>View from terminal side</p> <p>Recommended PWB piercing plan</p>  <p>View from terminal side Tolerance: ±0.05 Thickness of terminal pitch gauge : 1.6</p>
Part No.	L						
ESD177310	6.0						
ESD177311	9.0						

Note: ⊙C=Common terminal