

# AJ3 Series Universal Metal Button Switch

## AJ3 Series technical parameter

Performance parameter	
Contact materia	AgSnO2
Contact Resistance(Initial value)	≤50mΩ
Insulation impedance	≥100MΩ (500VDC)
Withstand voltage	Between different pole contacts: 2000VAC 50Hz for 1 minute; Between contacts that are disconnected at the same pole: 1000VAC 50Hz for 1 minute; Between contacts and lamp terminals: 1000VAC 50Hz for 1 minute;
Degree of Protection	Indicator light and button: IP65 (in front of the panel); Selection and emergency stop: IP40 (in front of the panel); Key: IP20 (front of panel)
Action stroke	Connect approximately 1.5mm, with a total travel distance of approximately 3.5mm
Operating pressure	3~5N
Installation panel thickness	0.5~4mm
Nut torque	2~6N.m
Operating temperature	-25 °C~55 °C (without icing)
Working humidity	45%~85% (without condensation)
Mechanical Life	Self recovery: 1 million times; Self locking type: 100000 times; Selection and key: 250000 times
Electrical Life	100000 times
Vibration Resistance	10~55Hz, amplitude 1.2mm
Soldering Temperature	320°C±5°C 3S

LED lighting	
Lamp Type	Unidirectional LED light beads (need to distinguish positive and negative poles)
Rated Voltage	A:6VDC, B:12VDC, C:24VDC, D:110VAC, E:220VAC
Rated Current	Below 24V: approximately 15mA; Above 110V: approximately 8mA
Colour and number	R:Red, G:Green, B:Blue, W:White, Y:Yellow, O:orange
Life	40000H (reference value)
Depressurization method	Built-in resistor

Contact Ratings			
Rated insulation voltage	250VAC		
Heating current I <sub>th</sub>	5A Temperature does not exceed the maximum allowed current		
Rated voltage	24VAC	110VAC	220VAC
Rated current	AC-15	3.0A	1.0A
	DC-13	0.7A	0.2A

\* Applicable load (reference value)=5VAC/DC 5mA (usable range depends on usage conditions and load type)

Terminal style						
Terminal arrangement	Indicator	SPDT (Without LED)	DPDT (Without LED)	SPDT (With LED)	DPDT (With LED)	Buzzer
Wiring diagram						

Select the key handle position					
Operating position specifications		Contact	↙	↑	↗
L R		SPDT		—	
		DPDT		—	
L C R		DPDT		—	

<b>AJ3</b>	<b>19</b>	<b>-</b>	<b>1</b>	<b>T</b>	<b>P</b>	<b>R</b>	<b>C</b>	<b>P</b>
series	Install size	Classification	Kenel	Function	Color	Voltage	Wiring method	
Universal Metal	8.8mm 12.12mm 16.16mm 19.19mm 22.22mm 28.28mm 30.30mm	1:Indicator	T: Flat head type D: High head type Y: Arc-shaped head shape C: Concave type	P: Flat A: Sphere	R:Red G:Green Y:Yellow B:Blue W:White A:orange	A:6V B:12V C:24V D:110V E:220V	P: Welding type S: Screw type L: Lead type	

## Specification

Appearance	Kenel	Lampshade shape	Installation method	Model	Color	Voltage	Dimensions
	Flat head type/Φ 8mm	Plane	Lead type	AJ308-1TP□▲L	Please code with the following colors Replace the "□" in the model  R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	Please code with the following colors Replace the "▲" in the model  A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC	
	Flat head type/Φ 8mm	Sphere	Lead type	AJ308-1TA□▲L			
	Arc-shaped head shape/Φ 8mm	Plane	Lead type	AJ308-1YP□▲L			
	Arc-shaped head shape/Φ 8mm	Sphere	Lead type	AJ308-1YA□▲L			
	Flat head type/Φ12mm	Plane	Lead type	AJ312-1TP□▲L			
	Flat head type/Φ12mm	Sphere	Lead type	AJ312-1TA□▲L			
	Flat head type/Φ12mm	Plane	Welded type	AJ312-1TP□▲P			
	Concave head/Φ12mm	Plane	Welded type	AJ312-1CP□▲P			
	Flat head type/Φ12mm	Plane	Screw type	AJ312-1TP□▲S			
	Concave head/Φ12mm	Plane	Screw type	AJ312-1CP□▲S			
	Flat head type/Φ12mm	Plane	Welded type	AJ316-1TP□▲P			
	Concave head/Φ16 mm	Plane	Welded type	AJ316-1CP□▲P			
	Flat head type/Φ12mm	Plane	Screw type	AJ316-1TP□▲S			
	Concave head/Φ16 mm	Plane	Screw type	AJ316-1CP□▲S			
	Flat head/Φ19mm	Plane	Welded type	AJ319-1TP□▲P			
	High head/Φ19mm	Plane	Welded type	AJ319-1DP□▲P			
	Flat head/Φ19mm	Plane	Screw type	AJ319-1TP□▲S			
	High head/Φ19mm	Plane	Screw type	AJ319-1DP□▲S			
	Flat head type/Φ22mm	Plane	Welded type	AJ322-1TP□▲P			
	Concave head/Φ22mm	Plane	Welded type	AJ322-1CP□▲P			
	Flat head type/Φ22mm	Plane	Screw type	AJ322-1TP□▲S			
	Concave head/Φ22mm	Plane	Screw type	AJ322-1CP□▲S			
	Flat head type/Φ28mm	Plane	Welded type	AJ328-1TP□▲P			
	Concave head/Φ28mm	Plane	Welded type	AJ328-1CP□▲P			
	Flat head type/Φ28mm	Plane	Screw type	AJ328-1TP□▲S			
	Concave head/Φ28mm	Plane	Screw type	AJ328-1CP□▲S			
	Flat head type/Φ30mm	Plane	Welded type	AJ330-1TP□▲P			
	Concave head/Φ30mm	Plane	Welded type	AJ330-1CP□▲P			
	Flat head type/Φ30mm	Plane	Screw type	AJ330-1TP□▲S			
	Concave head/Φ30mm	Plane	Screw type	AJ330-1CP□▲S			

※ ① The light bead colors are R: red, G: green, B: blue, W: white, Y: yellow, and A: orange, and the listed codes can be used to replace the "□" in the model as needed;  
 ② The lamp bead voltages are A: 6VAC/DC, B: 12VAC/DC, C: 24VAC/DC, D: 110VAC/DC, and E: 220VAC/DC, respectively. The listed codes can be used to replace the "▲" in the models as needed. For more specifications, please request the "Technical Specification" from the business department.

# AJ3 Button switch

<b>AJ3</b>	<b>16</b>	<b>-</b>	<b>2</b>	<b>T</b>	<b>1</b>	<b>N</b>	<b>12</b>	<b>C</b>
series	Install size	Category	Form	Function	Color	Contact type	Voltage	
All-purpose metal	16:16mm 19:19mm 22:22mm	2: button switch 3: Select switch 4: Key switch 5: emergency stop switch	T: Flat head type U: High head type V: Cukki head type W: Arc head type X: Flat head type with lamp Y: High head type with lamp Z: Arc head type with lamp	A: Flat head with light B: High head with light C: Cukki head with light D: Second gear E: First gear F: Second gear with light G: First gear with light	1: Momentary R: Red 2: Maintained G: Green Y: Yellow B: Blue W: White A: Orange N: No	12: 1N0+1NC 34: 2N0+2NC	A: 6V B: 12V C: 24V D: 110V E: 220V	


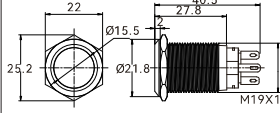


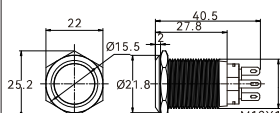

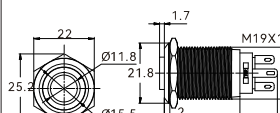

## ■ Specification(AJ316 Series)


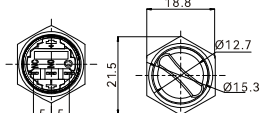
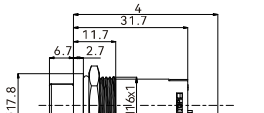


Appearance	Shape of top	Operation	Contact type	Model	Color	Voltage	Dimensions								
	Flat head type Φ16mm	Monentary	1N0+1NC	<b>AJ316-2T1N12</b>	Please code with the following colors Replace the "□" in the model  R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	Please code with the following colors Replace the "▲" in the model  A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC									
		Maintained	2N0+2NC	<b>AJ316-2T1N34</b>											
	High head type Φ16mm	Monentary	1N0+1NC	<b>AJ316-2D1N12</b>			Please code with the following colors Replace the "□" in the model  R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	Please code with the following colors Replace the "▲" in the model  A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC							
		Maintained	2N0+2NC	<b>AJ316-2D1N34</b>											
	Arc head Φ16mm	Monentary	1N0+1NC	<b>AJ316-2Y1N12</b>					Please code with the following colors Replace the "□" in the model  R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	Please code with the following colors Replace the "▲" in the model  A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC					
		Maintained	2N0+2NC	<b>AJ316-2Y1N34</b>											
	Flat head type with lamp Φ16mm	Monentary	1N0+1NC	<b>AJ316-2P1□12▲</b>							Please code with the following colors Replace the "□" in the model  R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	Please code with the following colors Replace the "▲" in the model  A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC			
		Maintained	2N0+2NC	<b>AJ316-2P1□34▲</b>											
	High head with lamp Φ16mm	Monentary	1N0+1NC	<b>AJ316-2G1□12▲</b>									Please code with the following colors Replace the "□" in the model  R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	Please code with the following colors Replace the "▲" in the model  A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC	
		Maintained	2N0+2NC	<b>AJ316-2G1□34▲</b>											

※ ① The light bead colors are R: red, G: green, B: blue, W: white, Y: yellow, and A: orange, and the listed codes can be used to replace the "□" in the model as needed;  
 ② The lamp bead voltages are A: 6VAC/DC, B: 12VAC/DC, C: 24VAC/DC, D: 110VAC/DC, and E: 220VAC/DC, respectively. The listed codes can be used to replace the "▲" in the models as needed. For more specifications, please request the "Technical Specification" from the business department.

Appearance	Gear position	Illuminated type	Type of action	Contact type	Model	Color	Voltage	Dimensions		
	Second gear	Without LED	Monentary	1N0+1NC	<b>AJ316-3X1N12</b>	Please code with the following colors Replace the "□" in the model  R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	Please code with the following colors Replace the "▲" in the model  A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC			
			Maintained	2N0+2NC	<b>AJ316-3X2N12</b>					
		Maintained	2N0+2NC	<b>AJ316-3X2N34</b>						
		With LED	1N0+1NC	<b>AJ316-3Y1□12▲</b>						
	With LED	Maintained	2N0+2NC	<b>AJ316-3Y2□12▲</b>						
		Maintained	2N0+2NC	<b>AJ316-3Y2□34▲</b>						
Third gear	Without LED	Monentary	1N0+1NC	<b>AJ316-3W1N12</b>	Please code with the following colors Replace the "□" in the model  R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	Please code with the following colors Replace the "▲" in the model  A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC				
		Maintained	2N0+2NC	<b>AJ316-3W2N34</b>						
	With LED	Monentary	1N0+1NC	<b>AJ316-3Z1□12▲</b>						
		Maintained	2N0+2NC	<b>AJ316-3Z2□34▲</b>						
	Second gear	Without LED	Monentary	1N0+1NC			<b>AJ316-4X1N12</b>	Please code with the following colors Replace the "□" in the model  R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	Please code with the following colors Replace the "▲" in the model  A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC	
			Maintained	2N0+2NC			<b>AJ316-4X2N12</b>			
	Third gear	Without LED	Monentary	1N0+1NC	<b>AJ316-4W1N12</b>					
			Maintained	2N0+2NC	<b>AJ316-4W1N34</b>					
	---	Without LED	---	---	---	Please code with the following colors Replace the "□" in the model  R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	Please code with the following colors Replace the "▲" in the model  A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC			
			Maintained	1N0+1NC	<b>AJ316-5N2R12</b>					
				2N0+2NC	<b>AJ316-5N2R34</b>					

■ Specification(AJ319 Series)


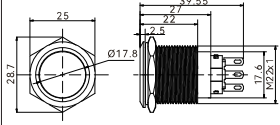


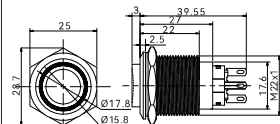

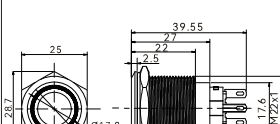
Appearance	Shape of top	Operation	Contact type	Model	Color	Voltage	Dimensions		
	Flat head type Φ19mm	Momentary	1N0+1NC	<b>AJ319-2T1N12</b>	---	---			
			2N0+2NC	<b>AJ319-2T1N34</b>					
		Maintained	1N0+1NC	<b>AJ319-2T2N12</b>					
			2N0+2NC	<b>AJ319-2T2N34</b>					
	High head type Φ19mm	Momentary	1N0+1NC	<b>AJ319-2D1N12</b>					
			2N0+2NC	<b>AJ319-2D1N34</b>					
		Maintained	1N0+1NC	<b>AJ319-2D2N12</b>					
			2N0+2NC	<b>AJ319-2D2N34</b>					
	Flat head with light Φ19mm	Momentary	1N0+1NC	<b>AJ319-2P1□12▲</b>	Please code with the following colors Replace the "□" in the model	Please code with the following colors Replace the "▲" in the model			
			2N0+2NC	<b>AJ319-2P1□34▲</b>					
		Maintained	1N0+1NC	<b>AJ319-2P2□12▲</b>					
			2N0+2NC	<b>AJ319-2P2□34▲</b>					
	High head with lamp Φ19mm	Momentary	1N0+1NC	<b>AJ319-2G1□12▲</b>			R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC	
			2N0+2NC	<b>AJ319-2G1□34▲</b>					
		Maintained	1N0+1NC	<b>AJ319-2G2□12▲</b>					
			2N0+2NC	<b>AJ319-2G2□34▲</b>					
	High head with light Φ19mm	Momentary	1N0+1NC	<b>AJ319-2B1□12▲</b>					
			2N0+2NC	<b>AJ319-2B1□34▲</b>					
		Maintained	1N0+1NC	<b>AJ319-2B2□12▲</b>					
			2N0+2NC	<b>AJ319-2B2□34▲</b>					

Appearance	Gear position	Illuminated type	Type of action	Contact type	Model	Color	Voltage	Dimensions					
	Second gear	Without LED	Momentary	1N0+1NC	<b>AJ319-3X1N12</b>	---	---						
				2N0+2NC	<b>AJ319-3X1N34</b>								
			Maintained	1N0+1NC	<b>AJ319-3X2N12</b>								
				2N0+2NC	<b>AJ319-3X2N34</b>								
			Third gear	With LED	Momentary				1N0+1NC	<b>AJ319-3Y1□12▲</b>	Please code with the following colors Replace the "□" in the model	Please code with the following colors Replace the "▲" in the model	
									2N0+2NC	<b>AJ319-3Y1□34▲</b>			
	Maintained	1N0+1NC			<b>AJ319-3Y2□12▲</b>								
		2N0+2NC			<b>AJ319-3Y2□34▲</b>								
	Selector switch Φ19mm	Third gear	Without LED	Momentary	1N0+1NC			<b>AJ319-3W1N12</b>	R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC			
					2N0+2NC			<b>AJ319-3W2N34</b>					
With LED				Momentary	1N0+1NC	<b>AJ319-3Z1□12▲</b>							
		2N0+2NC	<b>AJ319-3Z2□34▲</b>										
			Second gear	Without LED	Momentary	1N0+1NC	<b>AJ319-4X1N12</b>	---					---
2N0+2NC						<b>AJ319-4X1N34</b>							
Maintained	1N0+1NC				<b>AJ319-4X2N12</b>								
	2N0+2NC		<b>AJ319-4X2N34</b>										
Third gear	Without LED		Momentary		1N0+1NC	<b>AJ319-4W1N12</b>							
					2N0+2NC	<b>AJ319-4W1N34</b>							
		Without LED	Momentary	---	---								
Maintained	1N0+1NC			<b>AJ319-5N2R12</b>									
	2N0+2NC	<b>AJ319-5N2R34</b>											


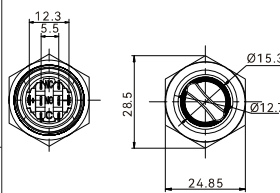
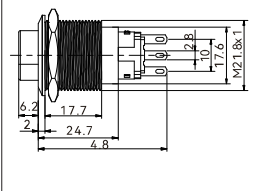

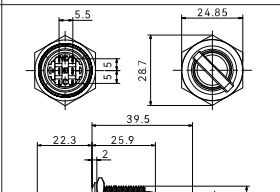
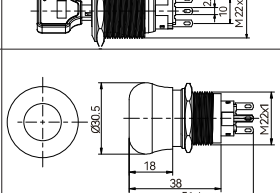

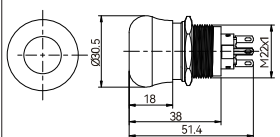
※ ① The light bead colors are R: red, G: green, B: blue, W: white, Y: yellow, and A: orange, and the listed codes can be used to replace the "□" in the model as needed; ② The lamp bead voltages are A: 6VAC/DC, B: 12VAC/DC, C: 24VAC/DC, D: 110VAC/DC, and E: 220VAC/DC, respectively. The listed codes can be used to replace the "▲" in the models as needed. For more specifications, please request the "Technical Specification" from the business department.

# AJ3 Button switch

## ■ Specification(AJ322 Series)

Appearance	Type/size	Operation	Contact type	Model	Color	Voltage	Dimensions		
	Flat head type Φ22mm	Momentary	1N0+1NC	<b>AJ322-2T1N12</b>	---	---			
			2N0+2NC	<b>AJ322-2T1N34</b>					
		Maintained	1N0+1NC	<b>AJ322-2T2N12</b>					
			2N0+2NC	<b>AJ322-2T2N34</b>					
	Arc type Φ22mm	Momentary	1N0+1NC	<b>AJ322-2Y1N12</b>					
			2N0+2NC	<b>AJ322-2Y1N34</b>					
		Maintained	1N0+1NC	<b>AJ322-2Y2N12</b>					
			2N0+2NC	<b>AJ322-2Y2N34</b>					
	Flat head with light Φ22mm	Momentary	1N0+1NC	<b>AJ322-2P1□12▲</b>	Please code with the following colors Replace the "□" in the model	Please code with the following colors Replace the "▲" in the model			
			2N0+2NC	<b>AJ322-2P1□34▲</b>					
		Maintained	1N0+1NC	<b>AJ322-2P2□12▲</b>					
			2N0+2NC	<b>AJ322-2P2□34▲</b>					
	High head with light Φ22mm	Momentary	1N0+1NC	<b>AJ322-2G1□12▲</b>			R: red ● G: green ● B: blue ● W: white ○ Y: yellow ● A: orange ●	A: 6VDC B: 12VDC C: 24VDC D: 110VAC E: 220VAC	
			2N0+2NC	<b>AJ322-2G1□34▲</b>					
		Maintained	1N0+1NC	<b>AJ322-2G2□12▲</b>					
			2N0+2NC	<b>AJ322-2G2□34▲</b>					

※ ① The light bead colors are R: red, G: green, B: blue, W: white, Y: yellow, and A: orange, and the listed codes can be used to replace the "□" in the model as needed;  
 ※ ② The lamp bead voltages are A: 6VAC/DC, B: 12VAC/DC, C: 24VAC/DC, D: 110VAC/DC, and E: 220VAC/DC, respectively. The listed codes can be used to replace the "▲" in the models as needed. For more specifications, please request the "Technical Specification" from the business department.

Appearance	Gear position	Illuminated type	Type of action	Contact type	Model	Color	Voltage	Dimensions		
	Second gear	Without LED	Momentary	1N0+1NC	<b>AJ322-3X1N12</b>	---	---			
				2N0+2NC	<b>AJ322-3X1N34</b>					
			Maintained	1N0+1NC	<b>AJ322-3X2N12</b>					
				2N0+2NC	<b>AJ322-3X2N34</b>					
	Third gear	With LED	Momentary	1N0+1NC	<b>AJ322-3Y1□12▲</b>			Please code with the following colors Replace the "□" in the model	Please code with the following colors Replace the "▲" in the model	
				2N0+2NC	<b>AJ322-3Y1□34▲</b>					
			Maintained	1N0+1NC	<b>AJ322-3Y2□12▲</b>					
				2N0+2NC	<b>AJ322-3Y2□34▲</b>					
	Second gear	Without LED	Momentary	1N0+1NC	<b>AJ322-4X1N12</b>	---	---			
				2N0+2NC	<b>AJ322-4X1N34</b>					
			Maintained	1N0+1NC	<b>AJ322-4X2N12</b>					
				2N0+2NC	<b>AJ322-4X2N34</b>					
	Third gear	Without LED	Momentary	1N0+1NC	<b>AJ322-4W1N12</b>			---	---	
				2N0+2NC	<b>AJ322-4W1N34</b>					
			Maintained	1N0+1NC	<b>AJ322-4W2N12</b>					
				2N0+2NC	<b>AJ322-4W2N34</b>					
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				Maintained	1N0+1NC					
			2N0+2NC		<b>AJ322-5Y2R34</b>					

※ ① The light bead colors are R: red, G: green, B: blue, W: white, Y: yellow, and A: orange, and the listed codes can be used to replace the "□" in the model as needed;  
 ※ ② The lamp bead voltages are A: 6VAC/DC, B: 12VAC/DC, C: 24VAC/DC, D: 110VAC/DC, and E: 220VAC/DC, respectively. The listed codes can be used to replace the "▲" in the models as needed. For more specifications, please request the "Technical Specification" from the business department.