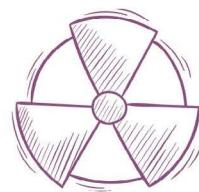
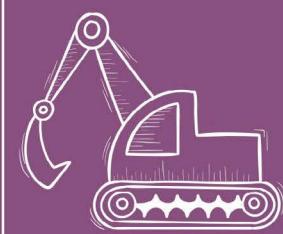
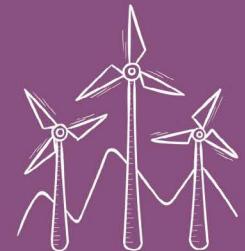
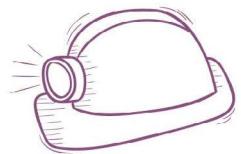


# AUTOMATION



2018 - 2019  
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JiGO  
POWER TO PERFORM

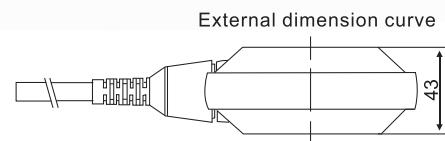
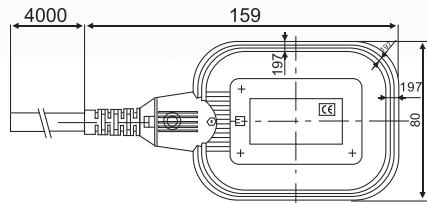
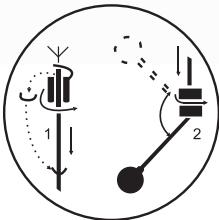
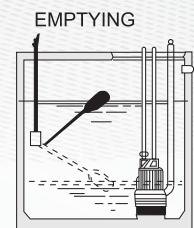
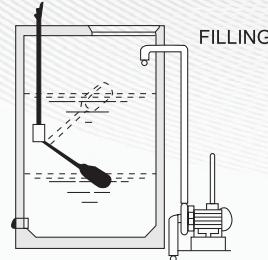
# FLOAT SWITCH

## INSTALLATION OF COUNTERWEIGHT

1. Insert the cable in the counterweight. From the conical part and rotate it, thus causing the plastic ring inserted in the opening to become detached (if necessary this operation can be facilitated with the use of a screwdriver). The ring should be then positioned in the point where it is desired to block the counterweight.



2. Force the counterweight on the ring by rotating it, using a slight pressure

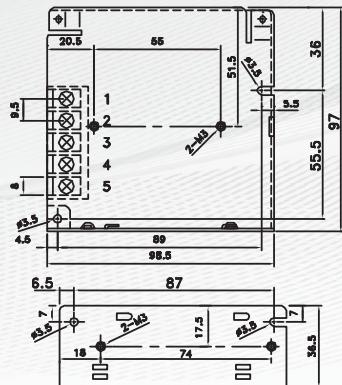


Model No.	Description	Technical Parameters
JG - FLS01	Float Switch 2m	Microswitch : 10 (8) 250V~10 (4) A 380V Switch currency : 50000C according VDE special standard to test the operation switch
JG - FLS03	Float Switch 3m	Protective connection : <input type="checkbox"/> T 70U88 Protection : Waterproof
JG - FLS05	Float Switch 5m	Max.temperature : 70 Max.Working pressure : Max.Ibay
JG - FLS09	Float Switch 9m	Limit Circuitbreaking capacity : 250V 1KW DC Voltage

# SWITCHING MODE POWER SUPPLY (SMPS)



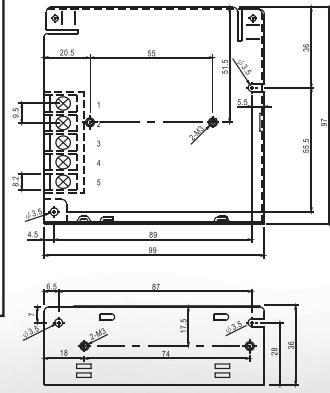
## 15 Watt Series



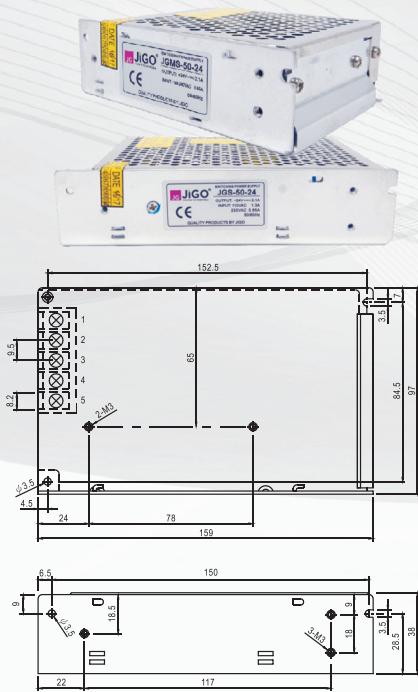
Model Specification	JG-MS15-5 3A 5VDC SMPS	JG - MS - 15 1.1A 12V DC SMPS
DC Output voltage	5V	12V
Rated output current	3A	1.3A
Output current range	0~3A	0~1.3A
DC output power	15W	15.6W
Efficiency	80%	80%
Input current	0.5A/115V 0.25A/230V	
Temperature coefficient	±0.02%/°C (0~50°C)	
Setup, rise, hold up time	200ms 100ms 30ms	
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
Overall dimension	99X97X35mm (L*W*H)	
Weight	0.23kgS	

## 25 Watt Series

Model Specification	JG - MS 25-5 5A 5VDC	JG - MS 25 2.1A 12V DC	JG - MS 25 1.1A 24V DC
DC Output voltage	5V	12V	24V
RATED OUTPUT CURRENT	5A	2.1A	1.1A
OUTPUT CURRENT RANGE	0~5A	0~2.1A	0~1.1A
DC output power	25W	25.2W	26.4W
Efficiency	80%	80%	80%
Input current	0.6A/115V 0.35A/230V		
Temperature coefficient	±0.02%/°C (0~50°C)		
Setup, rise, hold up time	800ms, 50ms, 10ms/150VAC 300ms, 50ms, 80ms/230VAC		
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC		
Overall dimension	99X97X35mm (L*W*H)		
Weight	0.23kgS		



# SWITCHING MODE POWER SUPPLY (SMPS)

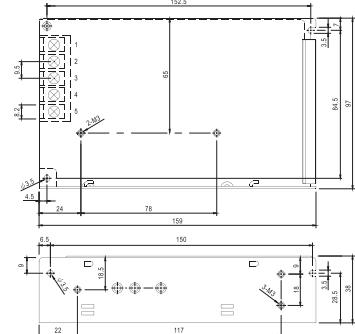


## 50 Watt Series

Model Specification	JG-S50-5 10A 5VDC SMPS	JG - S - 50 2.1A 24V DC SMPS
DC Output voltage	5V	24V
RATED OUTPUT CURRENT	10A	2.1A
OUTPUT CURRENT RANGE	0~10A	0~2.1A
DC output power	50W	50.4W
Efficiency	80%	80%
Input current	1.3A/115V 0.65A/230V	
Temperature coefficient	±0.03%/°C (0~50°C)	
Setup, rise, hold up time	200ms 100ms 30ms	
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
Overall dimension	159X197X38 MM (L*W*H)	
Weight	0.44kgS	

## 60 Watt Series

Model Specification	JG-S60-5 12A 5VDC SMPS	JG - S - 60 5A 12V DC SMPS
DC Output voltage	5V	12V
RATED OUTPUT CURRENT	12A	5A
OUTPUT CURRENT RANGE	0~12A	0~5A
DC output power	60W	60W
Efficiency	73%	78%
Input current	1.3A/115V 0.65A/230V	
Temperature coefficient	±0.03%/°C (0~50°C)	
Setup, rise, hold up time	800ms, 50ms, 10ms/150VAC 300ms, 50ms, 80ms/230VAC	
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
Overall dimension	159X97X38mm (L*W*H)	
Weight	0.44kgS	



# SWITCHING MODE POWER SUPPLY (SMPS)

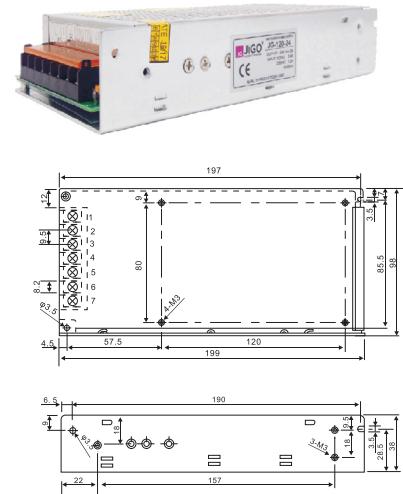


## 75 Watt Series

Model Specification	JG-S75-5 15A 5VDC SMPS	JG - S75 6.5A 12V DC SMPS
DC Output voltage	5V	12V
RATED OUTPUT CURRENT	15A	6.3A
OUTPUT CURRENT RANGE	0~15A	0~6.3A
DC output power	75W	75W
Efficiency	74%	81%
Input current	1.6A/115V 0.8A/230V	
Temperature coefficient	±0.03%/°C (0~50°C)	
Setup, rise, hold up time	200ms 100ms 30ms	
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
Overall dimension	159X97X38MM (L*W*H)	
Weight	0.45kgS	

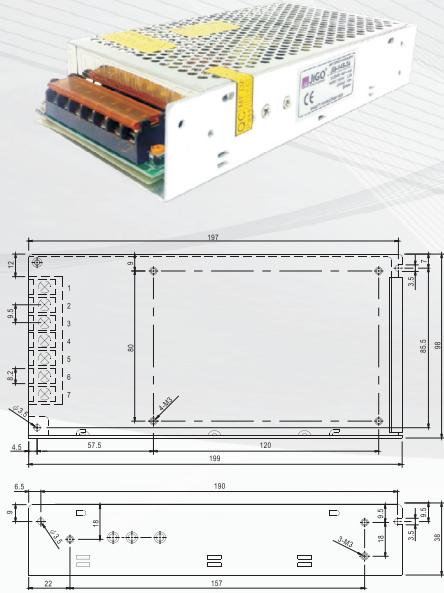
## 120 Watt Series

Model Specification	JG-S120-5 24A 5VDC	JG - S - 120 10A 12V DC	JG - S - 120 5A 24V DC
DC Output voltage	5V	12V	24V
Rated Output Current	22A	10A	5A
Output Current Range	0~22A	0~10A	0~5A
DC output power	110W	120W	120W
Efficiency	76%	80%	83%
Input current	2.4A/115V 1.2A/230V		
Temperature coefficient	±0.03%/°C (0~50°C)		
Setup, rise, hold up time	200ms, 100ms, 30ms		
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC		
Overall dimension	199X98X38mm (L*W*H)		
Weight	0.57kgS		



# SWITCHING MODE POWER SUPPLY (SMPS)

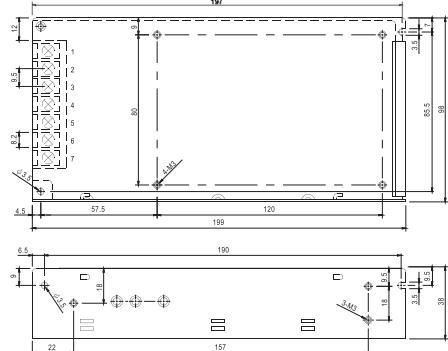
## 145 Watt Series



Model Specification	JG - S - 145 6A 24V DC SMPS
DC Output voltage	24V
RATED OUTPUT CURRENT	6A
OUTPUT CURRENT RANGE	0~6A
DC output power	145W
Efficiency	85%
Input current	3.2A/115V 1.6A/230V
Temperature coefficient	$\pm 0.03\%/{^\circ}\text{C}$ (0~50 $^{\circ}\text{C}$ )
Setup, rise, hold up time	100ms, 50ms, 20ms
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC
Overall dimension	199X98X38mm (L*W*H)
Weight	0.65kgS

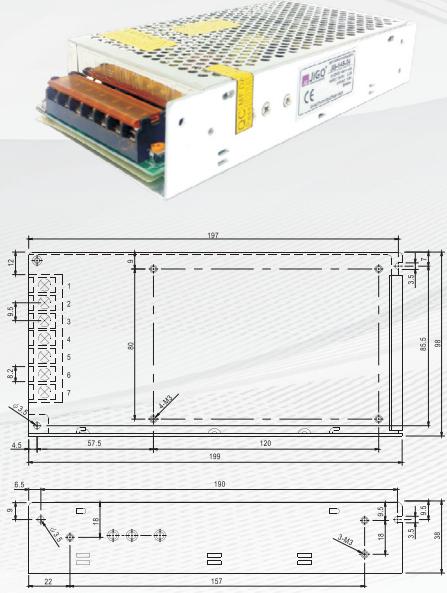
## 150 Watt Series

Model Specification	JG-S150-5 29A 5VDC SMPS	JG - S - 150 6.5A 24V DC SMPS
DC Output voltage	5V	24V
RATED OUTPUT CURRENT	29A	6.5A
OUTPUT CURRENT RANGE	0~29A	0~6.5A
DC output power	150W	156W
Efficiency	80%	85%
Input current	3.2A/115V 1.6A/230V	
Temperature coefficient	$\pm 0.03\%/{^\circ}\text{C}$ (0~50 $^{\circ}\text{C}$ )	
Setup, rise, hold up time	100ms, 50ms, 20ms	
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
Overall dimension	199X98X38mm (L*W*H)	
Weight	0.65kgS	



# SWITCHING MODE POWER SUPPLY (SMPS)

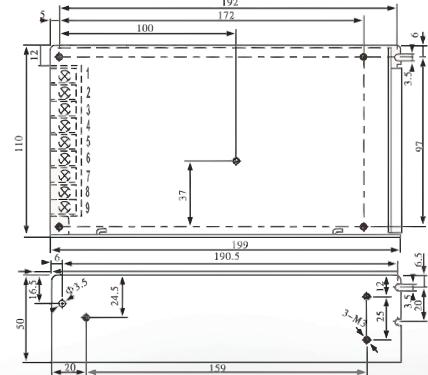
## 240 Watt Series



Model Specification	JG - S-240 20A 12V DC SMPS	JG - S - 250 10A 24V DC SMPS
DC Output voltage	12V	24V
RATED OUTPUT CURRENT	20A	10A
OUTPUT CURRENT RANGE	0~20A	0~10A
DC output power	240W	240W
Efficiency	84%	85%
Input current	4.2A/115V 2.2A/230V	
Temperature coefficient	$\pm 0.03\%/\text{°C}$ (0~50°C)	
Setup, rise, hold up time	200ms, 100ms, 20ms	
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
Overall dimension	199X110X50mm (L*W*H)	
Weight	0.86kgS	

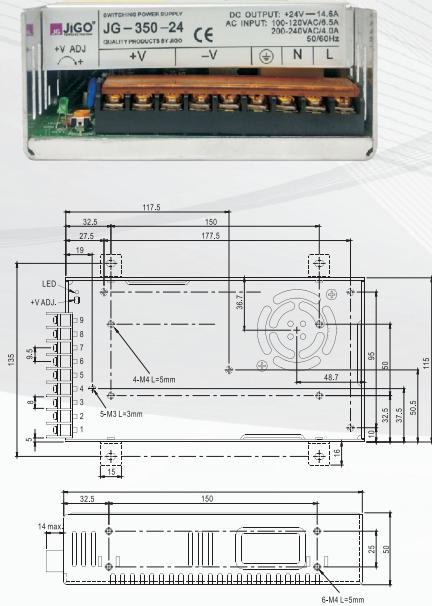
## 150 Watt Series

Model Specification	JG-S150-5 29A 5VDC SMPS	JG - S - 150 6.5A 24V DC SMPS
DC Output voltage	5V	24V
RATED OUTPUT CURRENT	29A	6.5A
OUTPUT CURRENT RANGE	0~29A	0~6.5A
DC output power	150W	156W
Efficiency	80%	85%
Input current	3.2A/115V 1.6A/230V	
Temperature coefficient	$\pm 0.03\%/\text{°C}$ (0~50°C)	
Setup, rise, hold up time	100ms, 50ms, 20ms	
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
Overall dimension	199X98X38mm (L*W*H)	
Weight	0.65kgS	



# SWITCHING MODE POWER SUPPLY (SMPS)

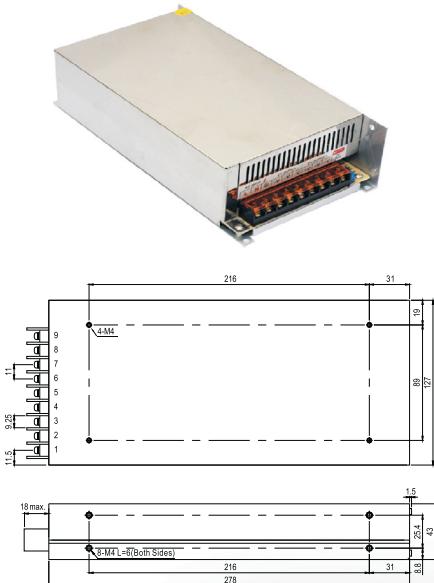
## 350 Watt Series



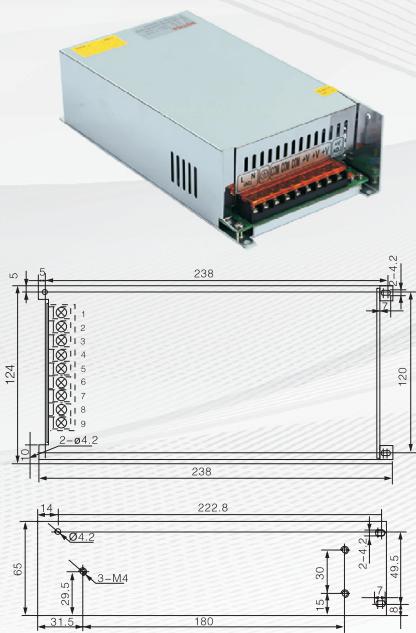
Model Specification	JG - S - 360 30A 12V DC SMPS	JG - S - 350 14.5A 24V DC SMPS
DC Output voltage	12V	24V
RATED OUTPUT CURRENT	29A	14.6A
OUTPUT CURRENT RANGE	0~29A	0~14.6A
DC output power	348W	350.4W
Efficiency	83%	84%
Input current	6.5A/115V 4A/230V	
Temperature coefficient	±0.03%/°C (0~50°C)	
Setup, rise, hold up time	200ms, 100ms, 20ms	
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC	
Overall dimension	215X115X50(L*W*H)	
Weight	0.90kgS	

## 500 Watt Series

Model Specification	JG - S - 500 20A 24V DC SMPS
DC Output voltage	24V
RATED OUTPUT CURRENT	20A
OUTPUT CURRENT RANGE	0~20A
DC output power	480W
Efficiency	86%
Input current	5A/230V
Temperature coefficient	±0.03%/°C (0~50°C)
Setup, rise, hold up time	1s, 100ms, 50ms
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC
Overall dimension	238X124X65mm (L*W*H)
Weight	1.45kgS



# SWITCHING MODE POWER SUPPLY (SMPS)

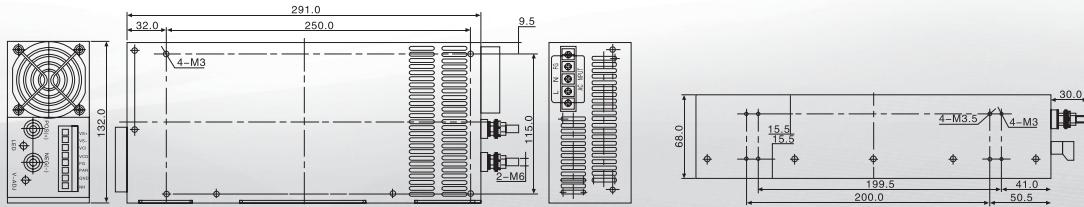


## 600 Watt Series

Model Specification	JG - S - 600 25A 24V DC SMPS
DC Output voltage	24V
RATED OUTPUT CURRENT	25A
OUTPUT CURRENT RANGE	0~25A
DC output power	600W
Efficiency	86%
Input current	5A/230V
Temperature coefficient	$\pm 0.03\%/{^\circ}\text{C}$ (0~50 $^{\circ}\text{C}$ )
Setup, rise, hold up time	1s, 100ms, 50ms
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC
Overall dimension	238 x 124 x 65mm(L*W*H)
Weight	1.45kgS

## 1000 Watt Series

Model Specification	JG - S - 500 20A 24V DC SMPS
DC Output voltage	24V
RATED OUTPUT CURRENT	40A
OUTPUT CURRENT RANGE	0~40A
DC output power	1000W
Efficiency	85.5%
Input current	7A/230V
Temperature coefficient	$\pm 0.03\%/{^\circ}\text{C}$ (0~50 $^{\circ}\text{C}$ )
Setup, rise, hold up time	1.5s, 50ms, 20ms
Withstand voltage	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC
Overall dimension	291X132X68mm (L*W*H)
Weight	2.35kgS

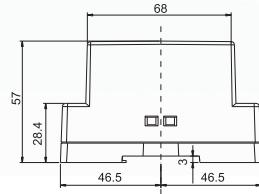
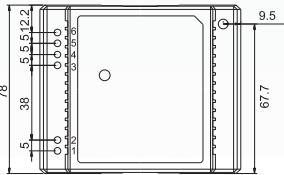


# SWITCHING MODE POWER SUPPLY (SMPS)

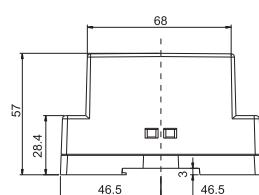
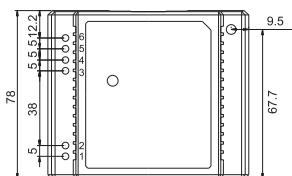
## DIN RAIL Series

Model Specification	JG - DR - 25 1.1A 24V DC	JG - DR - 60 2.5A 24V DC	JG-DR-120 5A 24V DC	JG-DR-240 10A 24V DC
Rated Output	24V 0-1.5A	24V 0-2.5A	24V 0-5A	24V 0-10A
DC output power	36W	60W	120W	240W
Efficiency	83%	84%	84%	84%
Input current (115V/230V)	0.88A/0.48A	1.2A/0.8A	2.6A/1.6A	1.4A(230V)
Setup, rise	100ms, 30ms,	100ms, 30ms	500ms, 70ms	800ms, 40ms
hold up time(230V/115V)	100ms/21ms	100ms/21ms	36ms/32ms	24ms/24ms
Withstand voltage	I/P-O/P:3KVAC			
Overall dimension (L*W*H) in mm	73x93x56	78x93x56	65.5x125.2x100	125.5x125.2x100
Weight	0.27kgS	0.27kgS	0.8 kgS	1.2 kgS

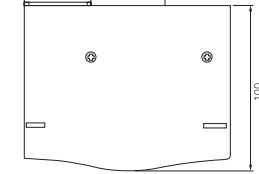
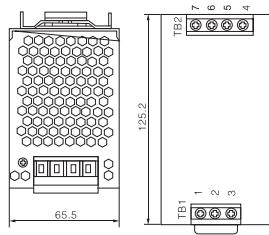
JG - DR - 25



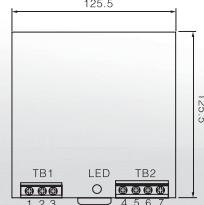
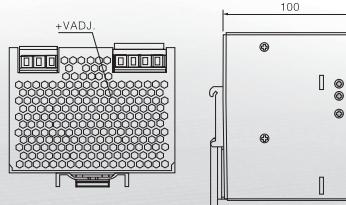
JG - DR - 60



JG-DR-120



JG-DR-240

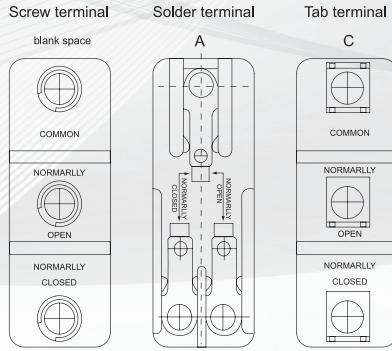


# MICRO SWITCH

## Basic Micro Switch

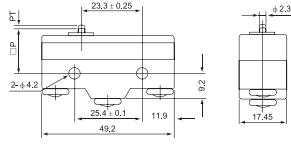
Operation speed	0.01mm-1m/sec
Operating frequency	Mechanical: 240 operations/min. Electrical: 20 operations/min.
Contact resistance	15mΩ max. (initial value)
Insulation resistance	100mΩ min. (at 500VDC)
	1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity
	1500VAC, 50/60 HZ for 1 minute between current-carrying and non-current-carrying metal parts
Vibration	10-55Hz, 1.5mm double amplitude
Shock	Mechanical durable: 1, 000m/Sec <sup>2</sup> (about 100G'S) Malfunction: 300m/Sec <sup>2</sup> (about 30G'S)
Ambient temperature	General purpose type: -25°C to +80°C (With no icing), Sealed type: -15°C to +80°C (With no icing)
Humidity	General purpose type: 85% RH max., Sealed type: 95% RH max.
Life	Mechanical: 20,000,000 operations/min. Electrical: 500,000 operations/min.
Weight	About 22 to 58g

### Terminal Type

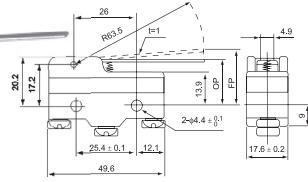


Models	JG - XZ-15G-B	JG - XZ-15GW-B	JG - XZ-15GW2-B	JG - XZ-15GW22-B
OF (Max.)	350g	70g	100g	160g
RF(Min.)	114g	14g	22g	42g
PT(Max.)	0.4mm	10mm	7.1mm	2.7mm
OT(Min.)	0.13mm	5.6mm	4mm	2.4mm
MD(Max.)	0.05mm	1.27mm	1.02mm	0.5mm
FP(Max.)		28.2mm	36.5mm	32.5mm
OP(mm)	15.9±0.4	19±0.8	30.2±0.8	30.2±0.4

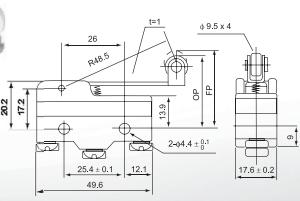
JG - XZ-15G-B - Micro Switch Dot Point



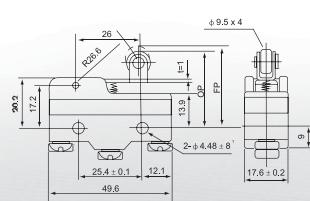
JG - XZ-15GW-B - Micro Switch Long Patti



JG - XZ-15GW2-B - Micro Switch Long Patti Roller



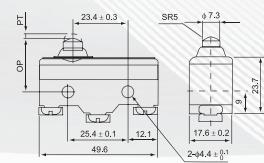
JG - XZ-15GW22-B - Micro Switch Patti Roller



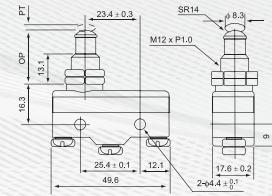
# MICRO SWITCH

Models	JG - XZ-15GD-B	JG - XZ-15GQ-B	JG - XZ-15GQ21-B	JG - XZ-15GQ22-B
OF (Max.)	350g	350g	350g	350g
RF(Min.)	114g	114g	114g	114g
PT(Max.)	0.4mm	0.4mm	0.4mm	0.4mm
OT(Min.)	1.6mm	5.5mm	3.58mm	3.58mm
MD(Max.)	0.05mm	0.05mm	0.05mm	0.05mm
FP(Max.)				
OP(mm)	21.5 <sup>±</sup> 0.5	21.8 0.8	33.4 <sup>±</sup> 1.2	33.4 <sup>±</sup> 1.2

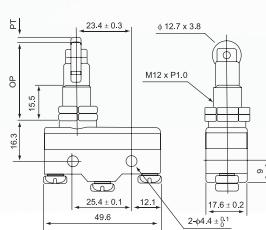
JG - XZ-15GD-B - Micro Switch Small Plunger



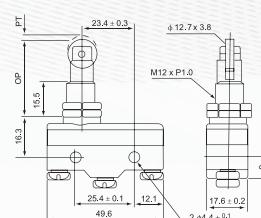
JG - XZ-15GQ-B - Micro Switch Plunger



JG - XZ-15GQ21-B - Micro Switch Vertical Roller

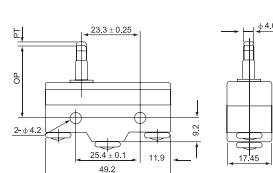


JG - XZ-15GQ22-B - Micro Switch Horizontal Roller

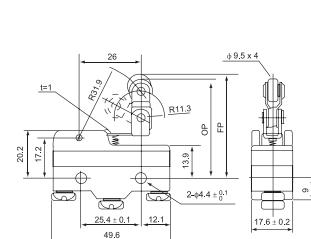


Models	JG - XZ-15GS-B	JG - XZ-15GW2277-B	JG - XZ-15HW78-B	JG - XZ-15HW24-B
OF (Max.)	350g	160g	10g	10g
RF(Min.)	114g	42g	3g	3g
PT(Max.)	0.4mm	2.7mm	20mm	20mm
OT(Min.)	1.6mm	2.4mm	5.6mm	5.6mm
MD(Max.)	0.05mm	0.5mm	3mm	3mm
FP(Max.)		43.6mm		
OP(mm)	28.2 <sup>±</sup> 0.5	43.1 <sup>±</sup> 0.8	19 <sup>±</sup> 0.8	19 <sup>±</sup> 0.8

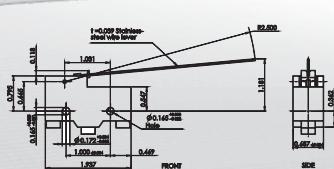
JG - XZ-15GS-B - Micro Switch Short Push Plunger



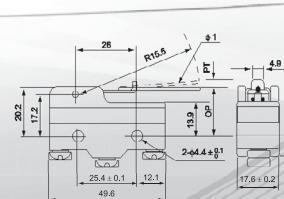
JG - XZ-15GW2277-B - Micro Switch Roller Level Plunger



JG - XZ-15HW78-B Micro Switch Low Force Wire Hinge Lever



JG - XZ-15HW24-B Micro Switch Low Force Hinge Lever

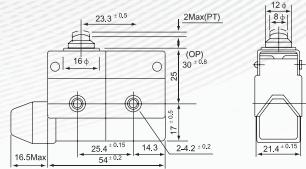


# MICRO SWITCH

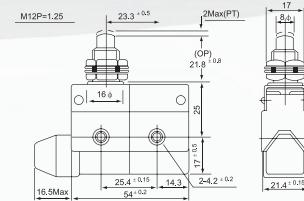
## Basic Micro Switch

Model	JG - XZ-7100	JG - XZ-7310	JG - XZ-7120	JG - XZ-7311	JG - XZ-7140	JG - XZ-7141	JG - XZ-7121
OF (Max.)	600g	600g	180g	240g	220g	150g	600g
RF(Min.)	100g	100g	50g	80g	60g	40g	100g
PT (Max.)	2.0mm	2.0mm	11.0mm	6.5mm	8.5mm	13.5mm	2.0mm
OT(Min.)	0.8mm	6.0mm	3.0mm	2.0mm	2.5mm	4.0mm	6.0mm
MD (Max.)	0.8mm	0.8mm	2.4mm	1.5mm	2.0mm	3.2mm	0.8mm
OP	$30.5 \pm 0.8\text{mm}$	$21.8 \pm 1.2\text{mm}$	$40 \pm 1\text{mm}$	$40 \pm 1\text{mm}$	$25 \pm 1\text{mm}$	$25 \pm 1\text{mm}$	$33.3 \pm 1.2\text{mm}$
FP					46mm	32mm	35mm

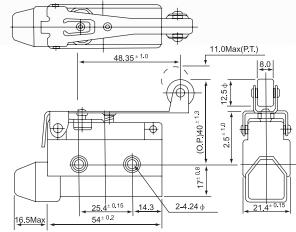
JG - XZ-7100 - Micro Switch Short Push Plunger



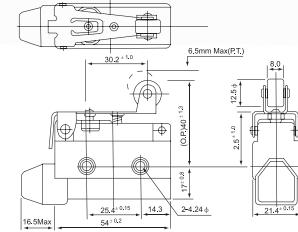
JG - XZ-7310 - Micro Switch Panel Mount Plunger



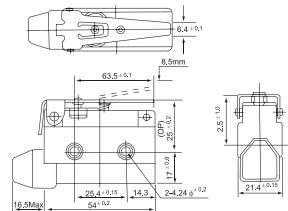
JG - XZ-7121 - Micro Switch Long Hinge Roller Lever



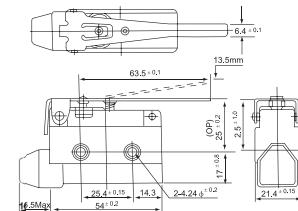
JG - XZ-7141 - Micro Switch Short Hinge Roller Lever



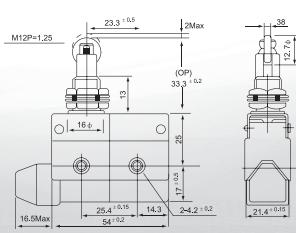
JG - XZ-7140 - Micro Switch Short Hinge Lever



JG - XZ-7120 - Micro Switch Long Hinge Lever



JG - XZ-7311 - Micro Switch Parallel Roller Plunger



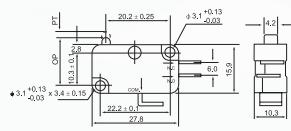
# MICRO SWITCH

## Basic Micro Switch

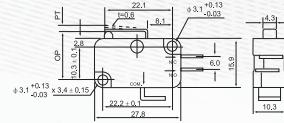
Model	JG - XV-15-1C25	JG - XV-151-1C25	JG - XV-152-1C25	JG - XV-153-1C25	JG - XV-155-1C25	JG - XV-156-1C25
OF (Max.)	2.4N	2.4N	1.23N	0.69N	2.7N	1.23N
RF(Min.)	0.49N	0.49N	0.14N	0.06N	0.49N	0.14N
PT (Max.)	1.2mm	1.6mm	4.0mm	9.0mm	1.5mm	4.0mm
OT(Min.)	1.0mm	0.8mm	1.6mm	2.0mm	0.8mm	1.6mm
MD (Max.)	0.4mm	0.6mm	1.5mm	2.8mm	0.6mm	1.5mm
OP (mm)	14.7±0.4mm	15.2±0.5mm	15.2±1.2mm	15.2±3mm	20.7±0.6mm	20.7±1.2mm

Model	JG - XV-15-1B5	JG - XSS-5	JG - XSS-5GL	JG - XSS-5GL2	JG - DS-438
OF (Max.)	200g(1.96N)	160g(1.57N)	70g(0.7N)	90g(0.9N)	200g(1.96N)
RF(Min.)	50g(0.49N)	25g(0.25N)	10g(0.1N)	14g(0.14N)	50g(0.49N)
PT (Max.)	1.2mm	0.6mm	2.2mm	1.6mm	1.2mm
OT(Min.)	0.6mm	0.5mm	0.5mm	0.8mm	0.6mm
MD (Max.)	0.3mm	0.3mm	0.5mm	0.5mm	0.5mm
OP (mm)	14.7±0.5mm	8.4±0.5mm	8.8±0.6mm	15.2±0.5mm	21.3±0.4mm

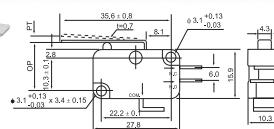
JG - XV-15-1C25 - Micro Switch Basic Point (NO+NC)



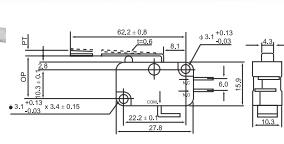
JG - XV-151-1C25 - Micro Switch Basic Patti (NO+NC)



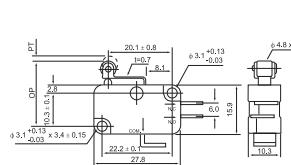
JG - XV-152-1C25 - Micro Switch Basic Small Patti (NO+NC)



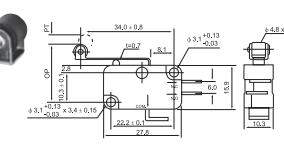
JG - XV-153-1C25 - Micro Switch Basic Long Patti (NO+NC)



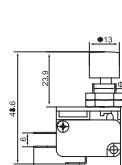
JG - XV-155-1C25 - Micro Switch Basic Patti Roller (NO+NC)



JG - XV-156-1C25 - Micro Switch Basic Long Patti Roller (NO+NC)



JG - DS-438 - Micro Switch Basic Electronic Push Button RED



# LIMIT SWITCH

## Limit Switch

### Characteristics

Operation speed	0.5mm-50cm/sec
Operating frequency	Mechanical: 120 operations/minute Electrical: 30 operations/minute
Contact resistance	25m $\Omega$ max. (initial value)
Insulation resistance	100M $\Omega$ min. below 500VDC
Dielectric strength	1000VAC, 50/60 Hz for 1 minute between terminals of the same polarity 1500VAC, 50/60 Hz for 1 minute between current-carrying and non-current-carrying metal parts 1500VAC, 50/60 Hz for 1 minute between each terminal and ground
Vibration	10-55Hz, 1.5mm double amplitude
Shock	Mechanical durable: 1, 000m/Sec <sup>2</sup> (about 100G'S) Malfunction: 300m/Sec <sup>2</sup> (about 30G'S)
Ambient temperature	10~+70°C
Humidity	<95% RH
Life	Mechanical: 10,000,000 operations above Electrical: 500,000 operations above
Degree of protection	IP65 (IEC Standard)

NOTES: 1.Inductive load has a power factor of 0.4 min.(AC) and a time constant of 7 msec. max.(DC).  
 2.Lamp load has an inrush current of 10 times the steady-state current,while motor load has an inrush current of 6 times the steady-state current.  
 3.Product with spring, its usable range of operating part is within one third of the whole spring length from the front end of spring.

### Ratings

Rated voltage	Noninductive Load (A)				Inductive Load (A)			
	Resistance Load		Lamp Load		Inductive Load		Motor Load	
	NC	NO	NC	NO	NC	NO	NC	NO
125VAC	5	5	1.5	0.7	3	3	2	1
250VAC	5	5	1	0.5	3	3	1.5	0.8
8VDC	5	5	3	3	5	4	3	3
14VDC	5	5	3	3	4	4	3	3
30VDC	5	5	3	3	4	4	3	3
125VDC	0.4	0.4						
250VDC	0.2	0.2						
Inrush Current	N.C: below 24A, N.O: below 12A							

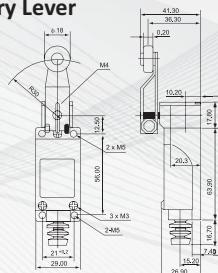
Model	JG-XZ-8104	JG-XZ-8107	JG-XZ-8108	JG-XZ-8111	JG-XZ-8112/8122	JG-XZ-8166/8167/8168/8169
OF(Max.)	750g	750g	750g	900g	900g	150g
RF(Min.)	100g	100g	100g	150g	150g	-
PT(Max.)	20°	20°	20°	1.5mm	1.5mm	30mm
OT(Min.)	50°	50°	50°	4mm	4mm	-
MD(Max.)	12°	12°	12°	1mm	1mm	-
OP	-	-	-	26±0.8mm	37±0.8mm	-



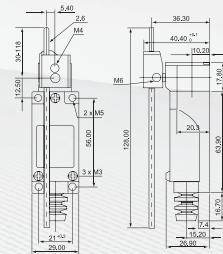
# LIMIT SWITCH

## Limit Switch

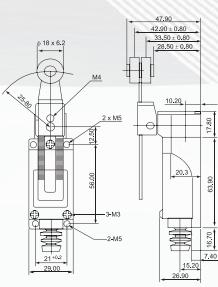
JG - XZ-8104 - Limit Switch Side Rotary Lever



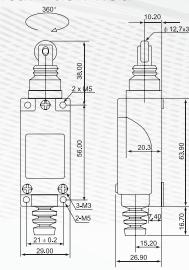
JG - XZ-8107 - Limit Switch Side Rotary with Rod



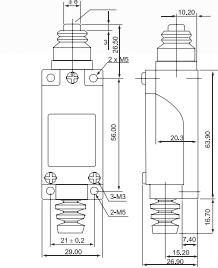
JG - XZ-8108 - Limit Switch Adjustable Lever with Roller



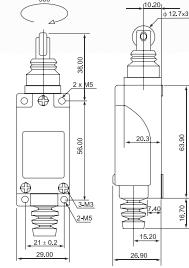
JG - XZ-8111 - Limit Switch Vertical Push Rod



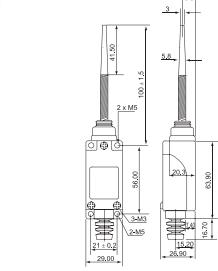
JG - XZ-8112 - Limit Switch Top Roller Vertical



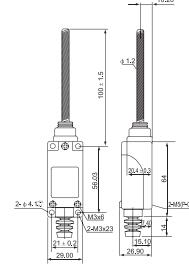
JG - XZ-8122 - Limit Switch Top Roller Horizontal



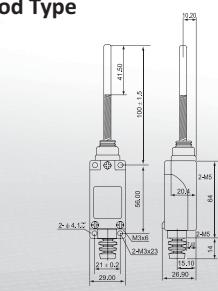
JG - XZ-8166 - Limit Switch Flexible Rod Type



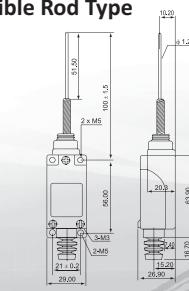
JG - XZ-8167 - Limit Switch Flexible Rod Type



JG - XZ-8168 - Limit Switch Flexible Rod Type



JG - XZ-8169 - Limit Switch Flexible Rod Type

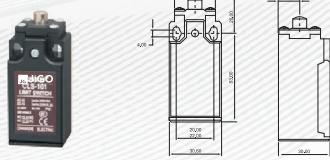


# LIMIT SWITCH

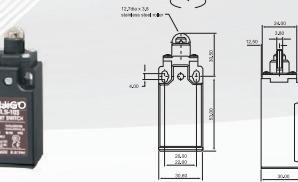
## Limit Switch

Model	JG - XZ9101	JG - XZ9102	JG - XZ9103 JG - XZ9203	JG - XZ9104 JG - XZ9204	JG - XZ9108	JG - XZ9105	JG - XZ9310	JG - XZ9508
<b>Operating force</b>	700g	700g	700g	500g	500g-cm	700g	500g-cm	400g-cm
<b>Release force</b>	200g	200g	200g	100g-cm	100g-cm	200g	100g-cm	100g-cm
<b>Pre-travel</b>	1.8mm	1.8mm	1.8mm	20°	20°	1.8mm	20°	20°
<b>Tripping position</b>	2.0mm	2.0mm	2.0mm	22.5°	22.5°	2.0mm	22.5°	22.5°
<b>Movement differential</b>	1.2mm	1.2mm	1.2mm	10°	10°	1.2mm	10°	10°
<b>Over travel</b>	4.0mm	4.0mm	4.0mm	75°	75°	4.0mm	75°	75°
<b>Total travel</b>	5.8mm	5.8mm	5.8mm	95°	95°	5.8mm	95°	95°
<b>Rotary indexing</b>				22.5°	22.5°		22.5°	22.5°

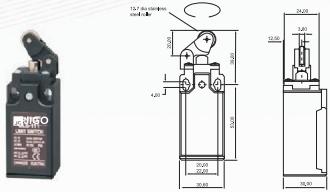
JG - XZ9101 - Limit Switch Push Plunger Type



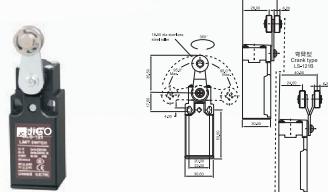
JG - XZ9102 - Limit Switch Roller Plunger Type



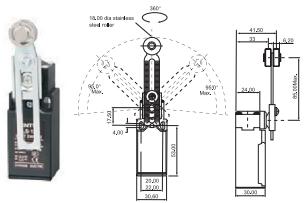
JG - XZ9103 - Limit Switch Roller Lever Type



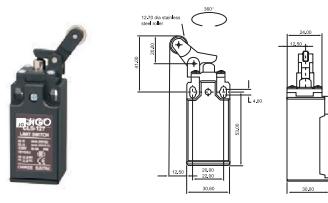
JG - XZ9104 - Limit Switch Roller Arm Type



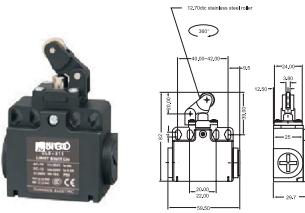
JG - XZ9108 - Limit Switch Adjustable Roller Arm Type



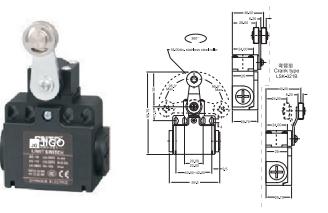
JG - XZ9105 - Limit Switch Roller Lever Type



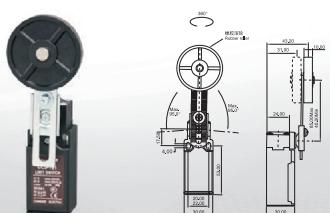
JG - XZ9203 - Limit Switch Roller Lever Type



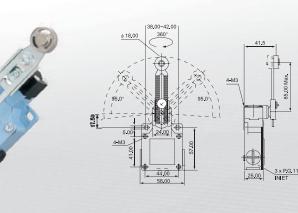
JG - XZ9204 - Limit Switch Roller Arm Type



JG - XZ9310 - Limit Switch Big Roller Arm Type



JG - XZ9508 - Limit Switch Adjustable Roller Arm Type



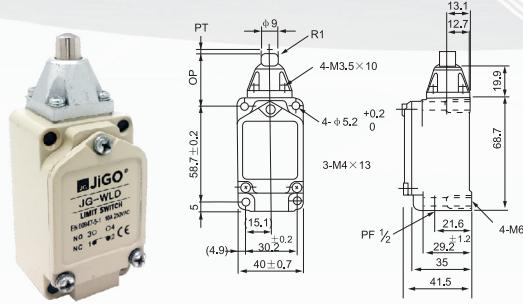
# LIMIT SWITCH

## Limit Switch

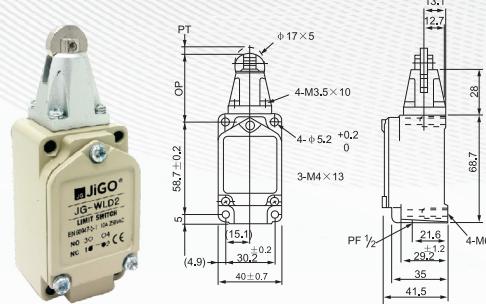
### Operating Characteristics

Models	JG - WLD	JG - WLD2	JG - WLCA2	JG - WLCA12	JG - WLCA32	JG - WLNJ
OF(Max.)	2720g	2720g	1360g	1360g	1200g	150g
RF(Min.)	910g	910g	227g	227g	-	-
PT(Max.)	1.7mm	1.7mm	20°	20°	55°	28mm
OT(Min.)	6.4mm	5.6mm	30°	30°	35°	-
MD(Max.)	1mm	1mm	12°	12°	-	-
TF(Max.)	-	-	2720g	2720g	-	-
TT(Min.)	OP:34±2.8mm	6.5±0.8mm	50°	50°	OP:90±10°	-

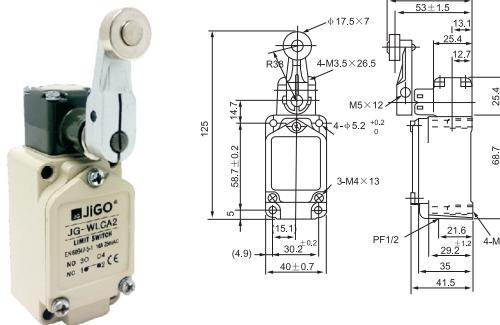
JG - WLD - Limit Switch Top Push Rod



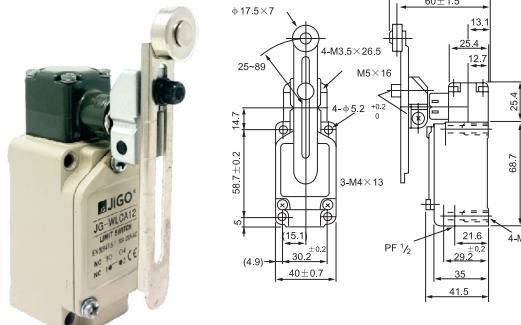
JG - WLD2 - Limit Switch Top Plunger Roller



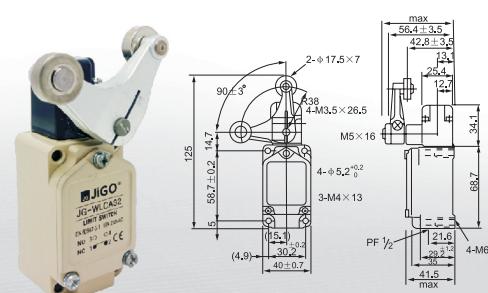
JG - WLCA2 - Limit Switch with Side Rotary Lever



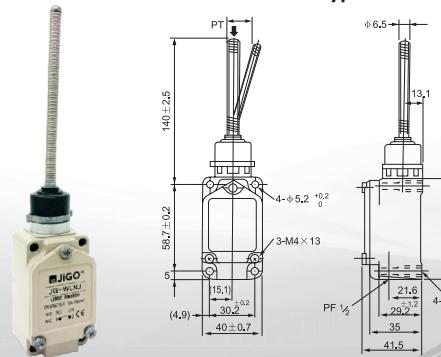
JG - WLCA12 - Limit Switch Adjustable Lever with Roller



JG - WLCA32 - Limit Switch Fork Lever with Roller



JG - WLNJ - Limit Switch Flexible Rod Type

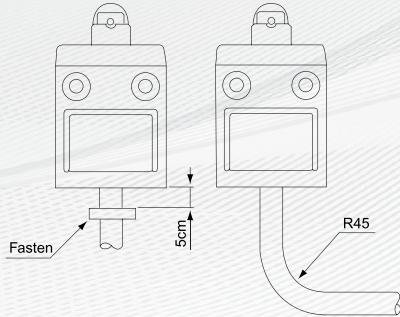


# LIMIT SWITCH

## Compact Prewired Limit Switch

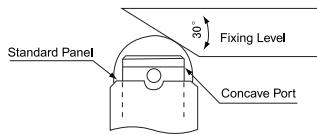
### Fastening of the switch cable

The switch bodies are filled with resin for sealing purposes. To avoid stressing the cable and switch body, fasten the switch at 5 cm or farther away from the switch body, should the wire be bent, the bending radius shall be at least 45mm.



### Installation

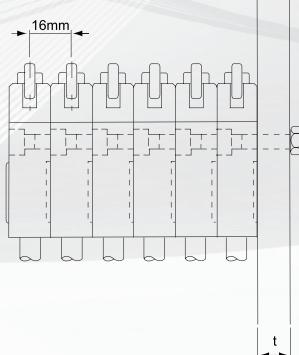
The service life and accuracy of switches will be effected by the shape of actuator operation frequency & over travel. So the angular of the fixing level should be about 30°, the surface finish of the fixing level should be over, the hardness is from HV400~500. When installing, the position of the concave part should be above the standard panel.



### Switch bank mounting

A maximum of six switches may be mounted together as a switch bank. During the installation, the convex part of the switch back. The mounting panel shall be 6mm or thicker.

6mm min.

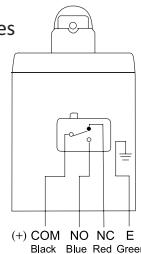


### Mounting

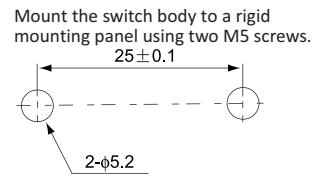
Recommended tightening torque according to the following form.

Model	Screw type	Torque
1	M5 fastening screws	43.4~52lb.in (50~60kgf.cm)
2	M3.5 installing screws	6.9~7.9lb.in (8~9kgf.cm)

### Contact types



### Mounting holes



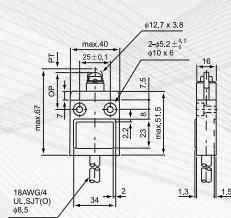
### Operating Characteristics

Models	JG - TZ-3102	JG - TZ-3112	JG - TZ-3104/3108	JG - TZ-3101	JG - TZ-3111
OF(Max.)	1200gf(11.77N)	1800gf(17.65N)	580gf(5.69N)	1200gf(11.77N)	1800gf(17.65N)
RF(Min.)	450gf(4.41N)	450gf(4.41N)	150gf(1.47N)	450gf(4.41N)	450gf(4.41N)
PT(Max.)	1.8mm	1.8mm	25	1.8mm	1.8mm
OT(Min.)	3mm	3mm	40	3mm	3mm
MD(Max.)	0.2mm	0.2mm	3	0.2mm	0.2mm
OP	28.5±1mm	34.3±1mm	-	15.7±1mm	24.9±1mm

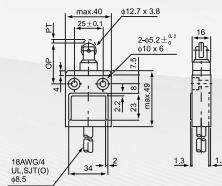
# LIMIT SWITCH

## Compact Prewired Limit Switch

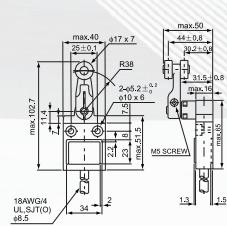
JG - TZ-3102 - 3M WITH IP68



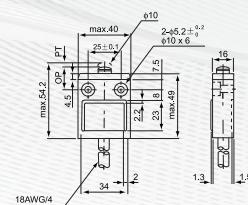
JG - TZ-3112 - 3M WITH IP68



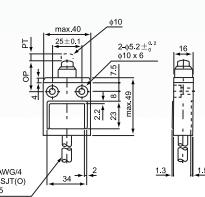
JG - TZ-3104 - 3M WITH IP68



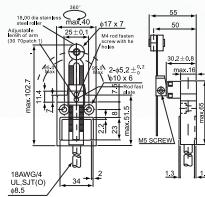
JG - TZ-3101 - 3M WITH IP68



JG - TZ-3111 - 3M WITH IP68

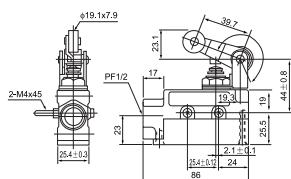


JG - TZ-3108 - 3M WITH IP68

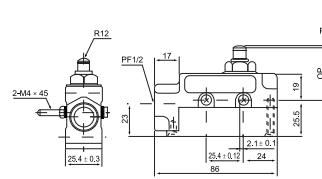


## Sealed Limit Switch

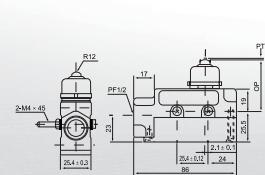
JG - TZ-6004 - Long Patti with Lever



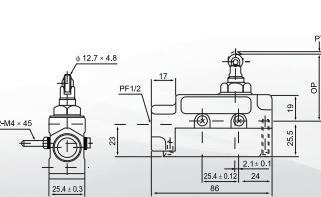
JG - TZ-6001 - Micro Switch Plunger



JG - TZ-6101 - Micro Switch Plunger

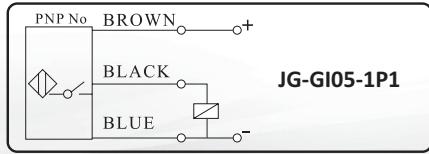
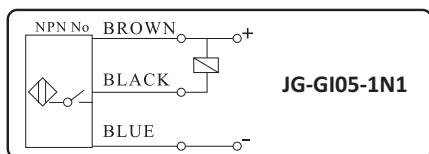
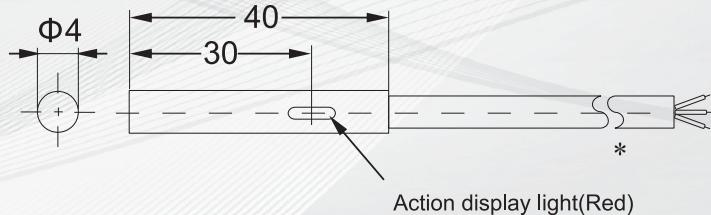
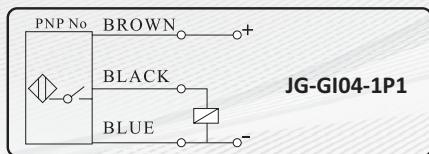
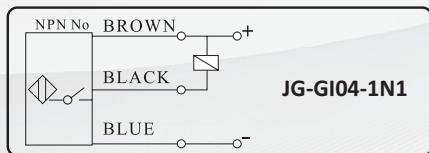


JG - TZ-6002 - Micro Switch Horizontal Roller

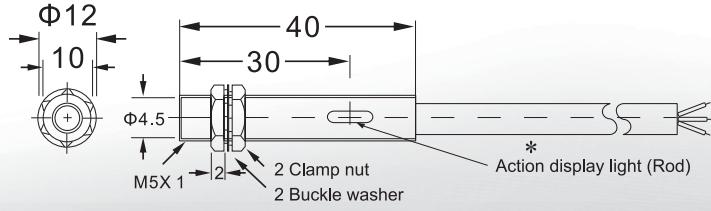


# PROXIMITY SWITCHES & SENSORS

## INDUCTIVE TYPE - ROUND MODEL 3 WIRE

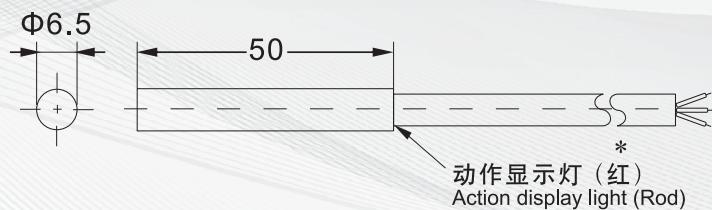
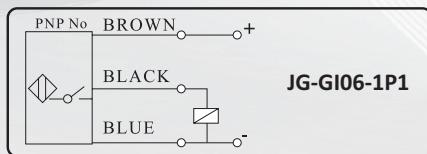
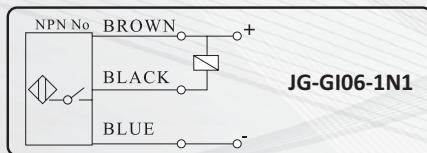


Technical parameters	
Set distance	0~0.7 mm
Standard detected object	5x5x1mm
Power supply voltage	10-30 VDC
Switching point offset	<±10%
Load current	<100mA
Drop	<2.5V
Consumption current	<10mA
Hysteresis range	1% ~ 20%
Repeated precision	<3%
Switching frequency	3000Hz
Output indicator	LED
Polarity protection	yes
Surge protection	yes
Short circuit protection	--
Ambient temperature	-25°C ~ +70°C
Ambient humidity	35% ~ 95%
Protection grade	IP67
Shell material	nickel plated brass
Connection	1.5m PUR



# PROXIMITY SWITCHES & SENSORS

## INDUCTIVE TYPE - ROUND MODEL 3 WIRE

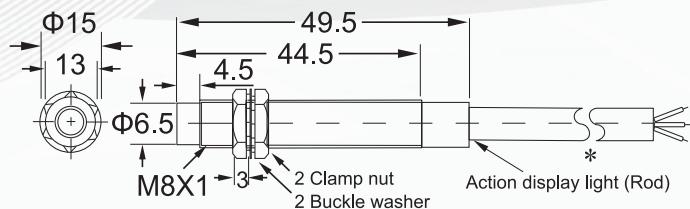
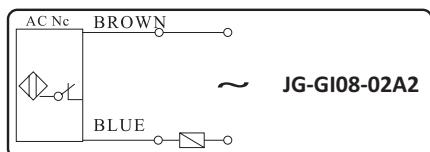
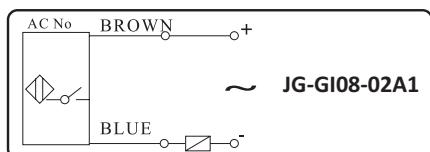
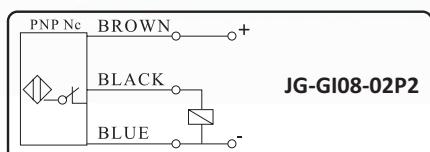
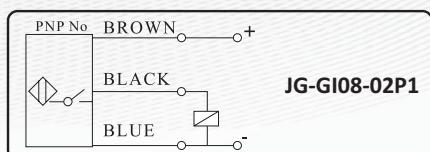
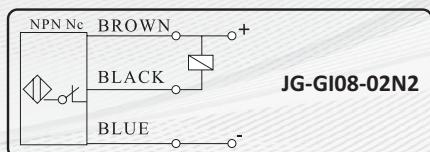
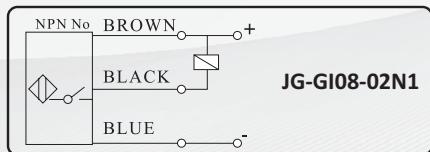


### Technical parameters

Set distance	0~1 mm
Standard detected object	8x8x1 mm
Power supply voltage	6-36 VDC / 90-250 VAC
Switching point offset	<±10%
Load current	<150mA
Drop	<2.5V
Consumption current	<10mA
Hysteresis range	1% ~ 20%
Repeated precision	<3%
Switching frequency	DC-2000Hz / AC-25Hz
Output indicator	LED
Polarity protection	yes
Surge protection	yes
Short circuit protection	yes
Ambient temperature	-25°C ~ +70°C
Ambient humidity	35% ~ 95%
Protection grade	IP67
Shell material	nickel plated brass
Connection	1.5m PUR

# PROXIMITY SWITCHES & SENSORS

## INDUCTIVE TYPE - ROUND MODEL 3 WIRE

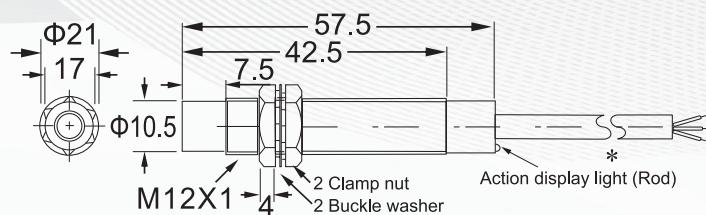
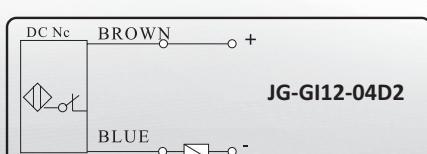
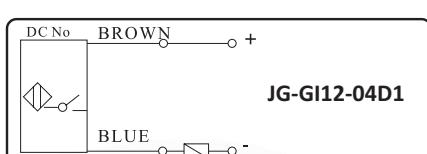
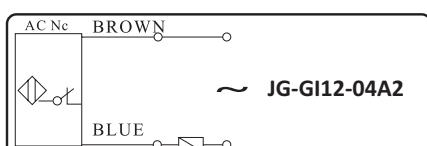
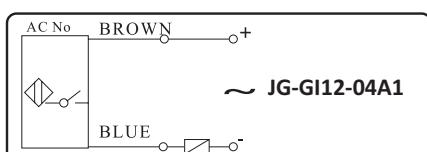
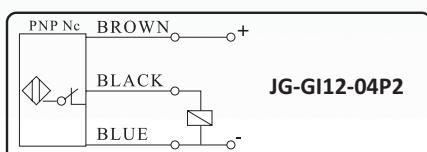
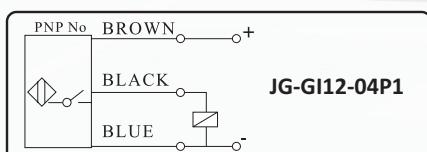
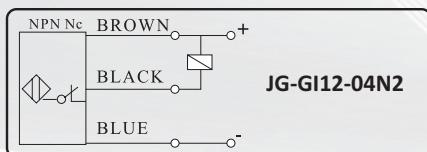
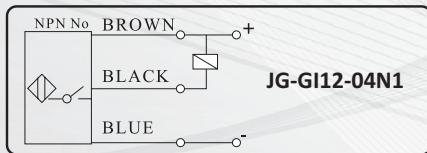


### Technical parameters

Set distance	0~2mm ±10%
Standard detected object	12x12x1 mm
Power supply voltage	6-36 VDC / 90-250 VAC
Switching point offset	<±10%
Load current	<300mA
Drop	<2.5V
Consumption current	<10mA
Hysteresis range	1% ~ 20%
Repeated precision	<3%
Switching frequency	DC-1000Hz / AC-25Hz
Output indicator	LED
Polarity protection	yes
Surge protection	yes
Short circuit protection	yes
Ambient temperature	-25°C ~ +70°C
Ambient humidity	35% ~ 95%
Protection grade	IP67
Shell material	nickel plated brass
Connection	1.5m PUR

# PROXIMITY SWITCHES & SENSORS

## INDUCTIVE TYPE - ROUND MODEL 3 WIRE

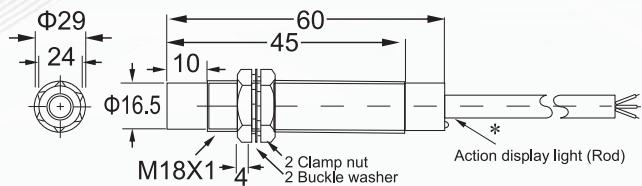
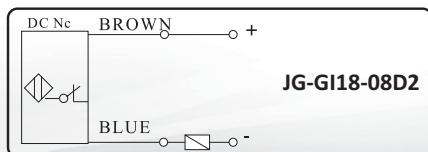
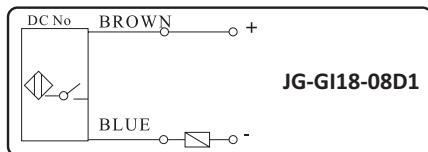
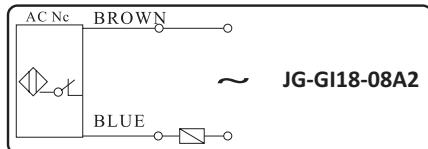
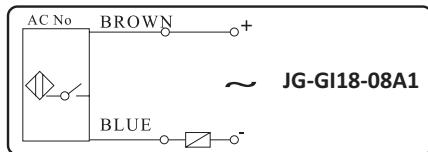
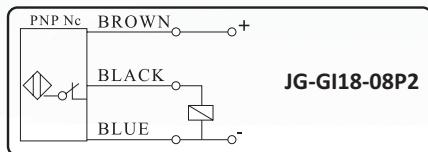
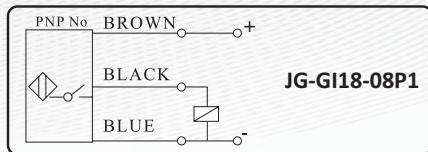
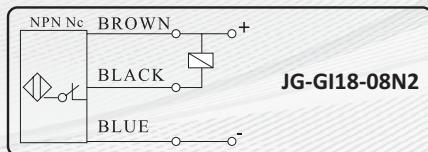
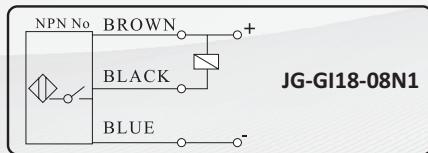


### Technical parameters

Set distance	0~4mm ±10%
Standard detected object	15x15x1 mm
Power supply voltage	6-36 VDC / 90-250 VAC
Switching point offset	<±10%
Load current	<300mA
Drop	<2.5V
Consumption current	<10mA
Hysteresis range	1% ~ 20%
Repeated precision	<3%
Switching frequency	DC-400Hz / AC-25Hz
Output indicator	LED
Polarity protection	yes
Surge protection	yes
Short circuit protection	yes
Ambient temperature	-25°C ~ +70°C
Ambient humidity	35% ~ 95%
Protection grade	IP67
Shell material	nickel plated brass
Connection	1.5m PUR

# PROXIMITY SWITCHES & SENSORS

## INDUCTIVE TYPE - ROUND MODEL 3 WIRE

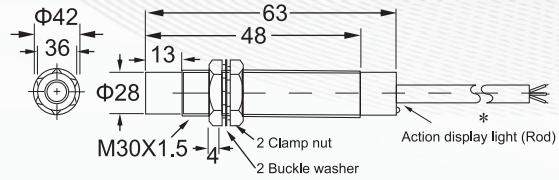
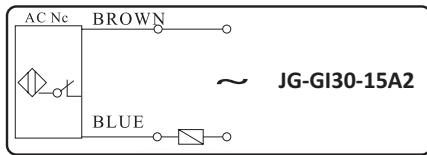
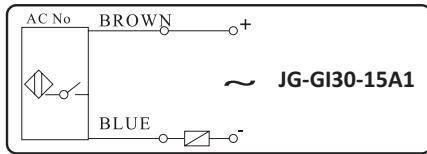
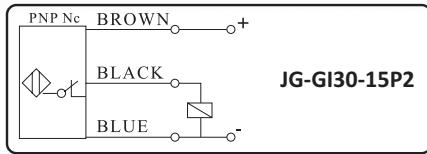
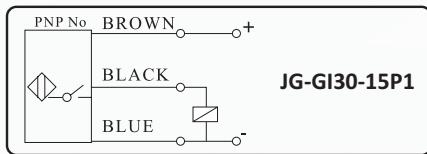
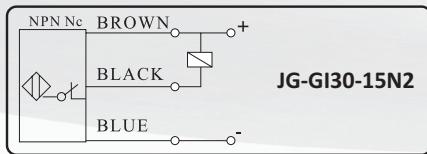
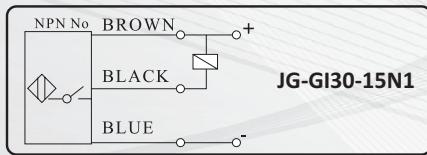


### Technical parameters

Set distance	0~8mm ±10%
Standard detected object	30x30x1mm
Power supply voltage	6-36 VDC / 90-250 VAC
Switching point offset	<±10%
Load current	<300mA
Drop	<2.5V
Consumption current	<10mA
Hysteresis range	1% ~ 20%
Repeated precision	<3%
Switching frequency	DC-200Hz / AC-25Hz
Output indicator	LED
Polarity protection	yes
Surge protection	yes
Short circuit protection	yes
Ambient temperature	-25°C ~ +70°C
Ambient humidity	35% ~ 95%
Protection grade	IP67
Shell material	nickel plated brass
Connection	1.5m PUR

# PROXIMITY SWITCHES & SENSORS

## INDUCTIVE TYPE - ROUND MODEL 3 WIRE



### Technical parameters

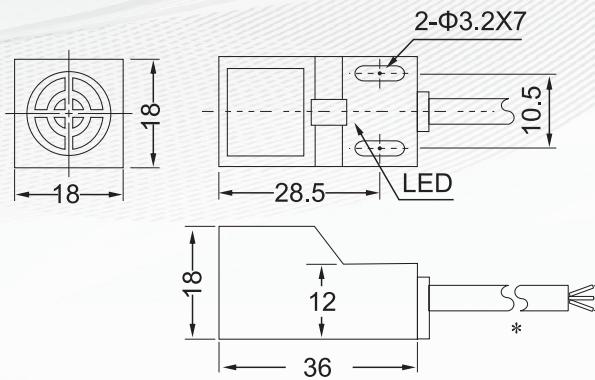
Set distance	0~15mm ±10%
Standard detected object	54x54x1mm
Power supply voltage	6-36 VDC / 90-250 VAC
Switching point offset	<±10%
Load current	<300mA
Drop	<2.5V
Consumption current	<10mA
Hysteresis range	1% ~ 20%
Repeated precision	<3%
Switching frequency	DC-200Hz / AC-25Hz
Output indicator	LED
Polarity protection	yes
Surge protection	yes
Short circuit protection	yes
Ambient temperature	-25°C ~ +70°C
Ambient humidity	35% ~ 95%
Protection grade	IP67
Shell material	nickel plated brass
Connection	1.5m PUR

# PROXIMITY SWITCHES & SENSORS

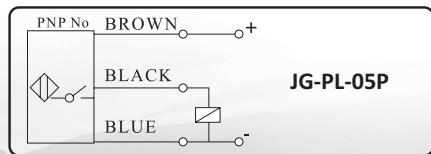
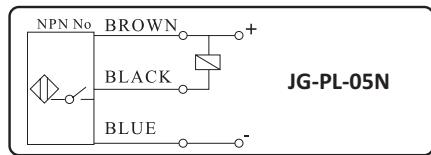
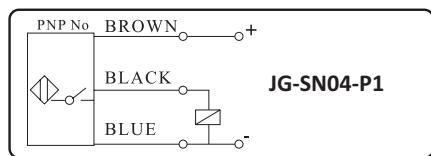
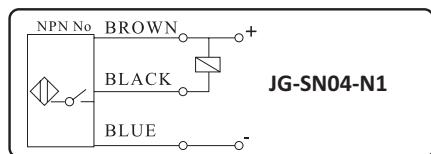
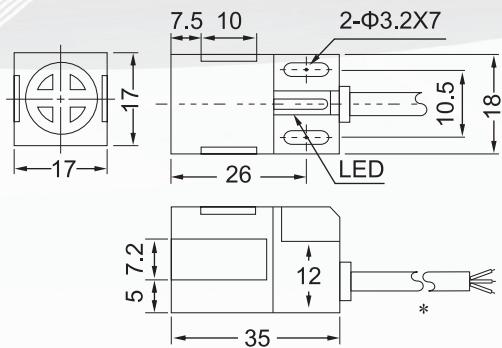
## INDUCTIVE TYPE - RECTANGULAR



JG-SN04



JG-SN04



Technical parameters	JG-SN04	JG-PL
Set distance	0~4mm	0~5mm ±10%
Standard detected object	18x18x1mm	18x18x1mm
Power supply voltage	6-36 VDC / 90-250 VAC	6-36 VDC / 90-250 VAC
Switching point offset	<±10%	<±10%
Load current	<300mA	<300mA
Drop	<2.5V	<2.5V
Consumption current	<10mA	<10mA
Hysteresis range	1% ~ 20%	1% ~ 20%
Repeated precision	<3%	<3%
Switching frequency	DC-600Hz / AC-25Hz	DC-600Hz / AC-25Hz
Output indicator	LED	LED
Polarity protection	yes	yes
Surge protection	yes	yes
Short circuit protection	yes	yes
Ambient temperature	-25°C ~ +70°C	-25°C ~ +70°C
Ambient humidity	35% ~ 95%	35% ~ 95%
Protection grade	IP67	IP67
Shell material	ABS	ABS
Connection	1.5m PUR	1.5m PUR

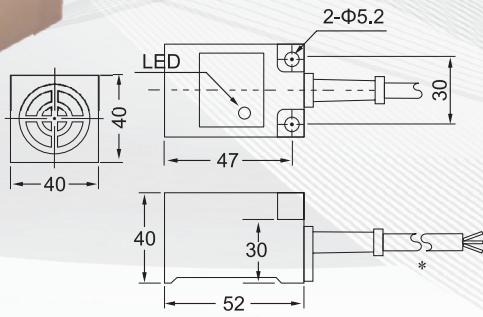


# PROXIMITY SWITCHES & SENSORS

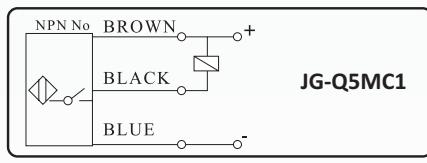
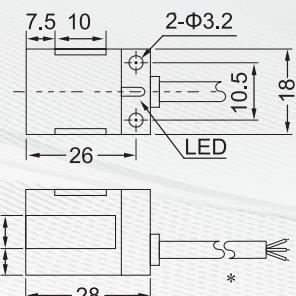
## INDUCTIVE TYPE - RECTANGULAR



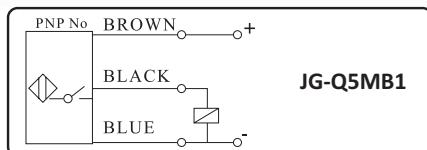
JG-N20M



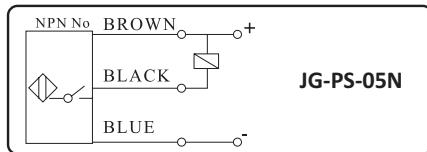
JG-PS



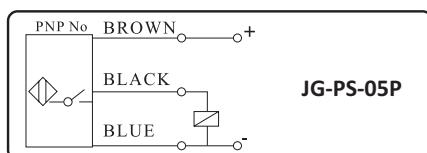
JG-Q5MC1



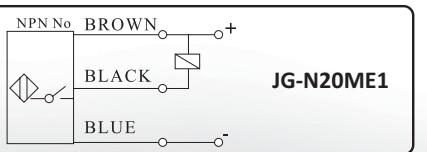
JG-Q5MB1



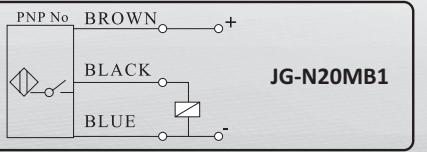
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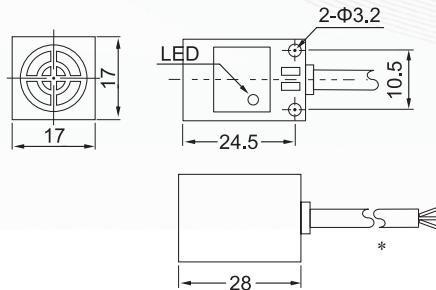
JG-PS-05P



JG-N20ME1



JG-N20MB1



JG-Q5M

Technical parameters	JG-N20M	JG-Q5M / JG-PS
Set distance	0~20mm±10%	0~5mm ±10%
Standard detected object	50X50x1mm	18x18x1mm
Power supply voltage	6-36 VDC / 90-250 VAC	6-36 VDC / 90-250 VAC
Switching point offset	<±10%	<±10%
Load current	<300mA	<300mA
Drop	<2.5V	<2.5V
Consumption current	<10mA	<10mA
Hysteresis range	1% ~ 20%	1% ~ 20%
Repeated precision	<3%	<3%
Switching frequency	DC-600Hz / AC-25Hz	DC-600Hz / AC-25Hz
Output indicator	LED	LED
Polarity protection	yes	yes
Surge protection	yes	yes
Short circuit protection	yes	yes
Ambient temperature	-25°C ~ +70°C	-25°C ~ +70°C
Ambient humidity	35% ~ 95%	35% ~ 95%
Protection grade	IP67	IP67
Shell material	ABS	ABS
Connection	1.5m PUR	1.5m PUR

# PROXIMITY SWITCHES & SENSORS

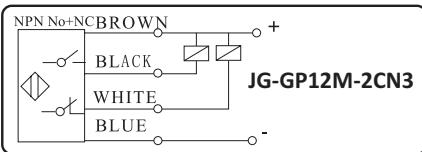
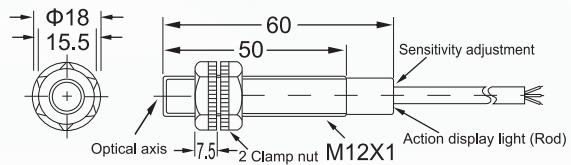
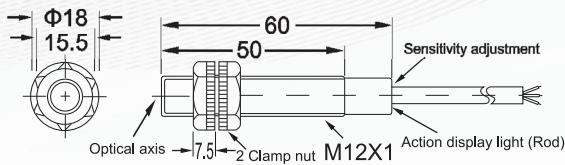
## PHOTO ELECTRIC SENSOR - 12 mm



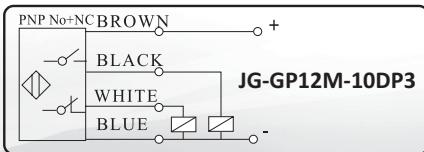
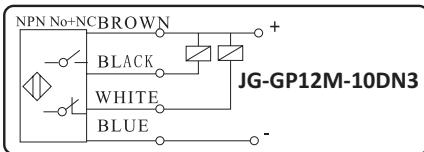
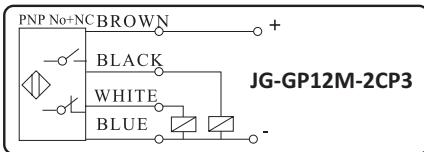
JG-GP12M-2C



JG-GP12M-10D



Technical parameters	JG-GP12M-2C	JG-GP12M-10D
Detection Range	2mm±10%	10mm ±10%
Detection Target	Non Transparent	Transparent / Non Transparent
Detection Range Regulation	Unadjustable	Unadjustable
Response time	1ms	1ms
Power supply voltage	6-36 VDC / 90-250 VAC	6-36 VDC / 90-250 VAC
Light Source	LED(880nm)	LED(880nm)
Load current	<300mA	<300mA
Drop	<2.5V	<2.5V
Consumption current	<25mA	<25mA
Hysteresis range	3% ~ 20%	3% ~ 20%
Repeated precision	<5%	<5%
Output indicator	LED	LED
Polarity protection	yes	yes
Surge protection	yes	yes
Short circuit protection	yes	yes
Ambient temperature	-25°C ~ +55°C	-25°C ~ +55°C
Ambient humidity	35% ~ 95%	35% ~ 95%
Protection grade	IP67	IP67
Shell material	Nickel Plated Brass	Nickel Plated Brass
Connection	1.5m PUR	1.5m PUR

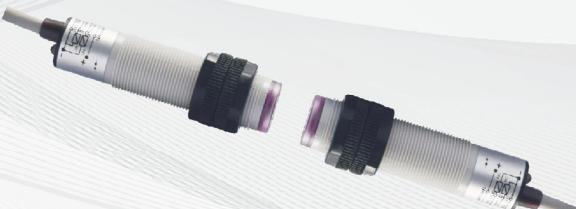
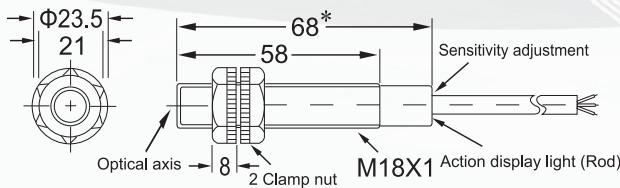


# PROXIMITY SWITCHES & SENSORS

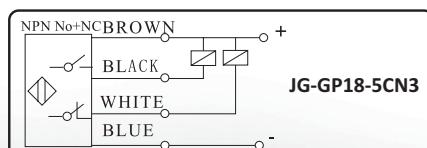
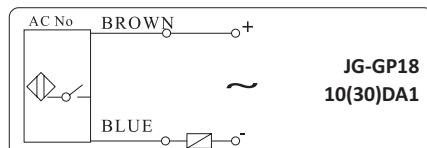
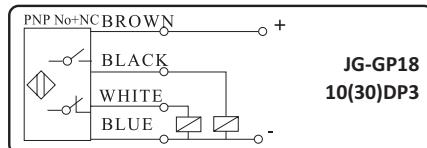
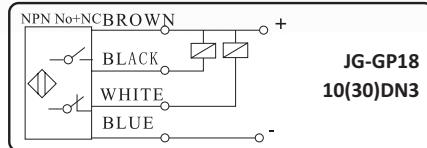
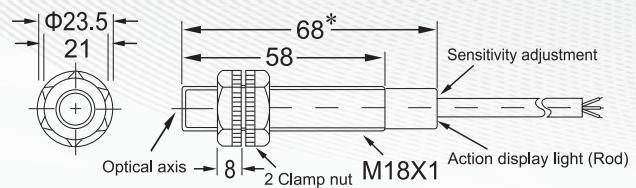
## PHOTO ELECTRIC SENSOR - 18mm (Diffuse & through Beam)



JG-GP18-10(30)



JG-GP18-5C



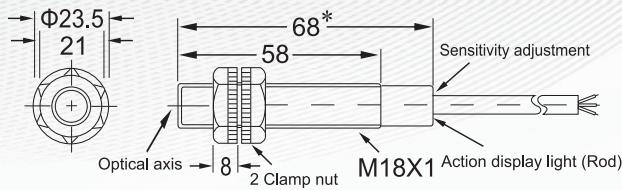
Technical parameters	JG-GP18-10(30)	JG-GP18-5C
Detection Range	10-30cm±10%	5m ±10%
Detection Target	Non Transparent	Non Transparent
Detection Range Regulation	Adjustable	Unadjustable
Response time	1ms	1ms
Power supply voltage	6-36 VDC / 90-250 VAC	6-36 VDC / 90-250 VAC
Light Source	LED(880nm)	LED(880nm)
Load current	<300mA	<300mA
Drop	<2.5V	<2.5V
Consumption current	<25mA	<25mA
Hysteresis range	3% ~ 20%	3% ~ 20%
Repeated precision	<5%	<5%
Output indicator	LED	LED
Polarity protection	yes	yes
Surge protection	yes	yes
Short circuit protection	yes	yes
Ambient temperature	-25°C ~ +55°C	-25°C ~ +55°C
Ambient humidity	35% ~ 95%	35% ~ 95%
Protection grade	IP67	IP67
Shell material	ABS	ABS
Connection	1.5m PUR	1.5m PUR

# PROXIMITY SWITCHES & SENSORS

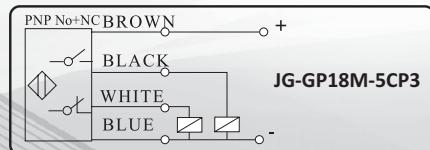
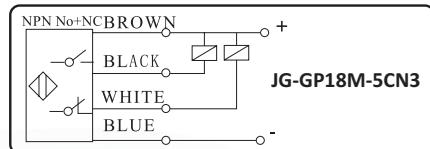
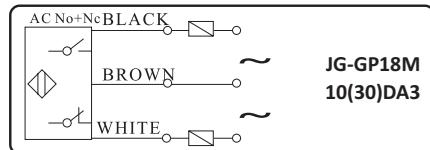
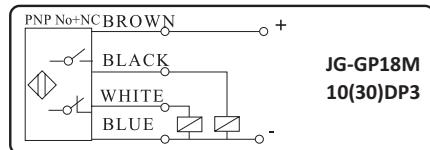
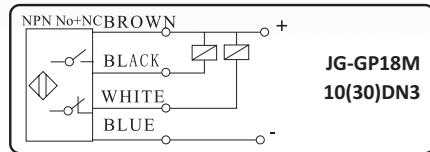
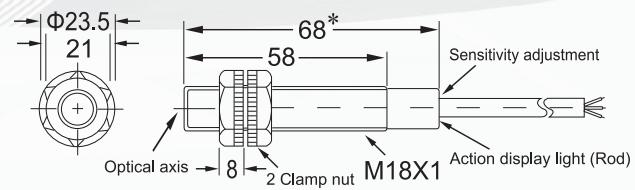
## PHOTO ELECTRIC SENSOR - 18mm (Metal) (Diffuse & through Beam)



JG-GP18M-10(30)



JG-GP18M-5C



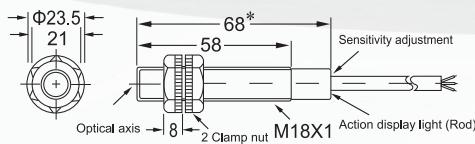
Technical parameters	JG-GP18M-10(30)	JG-GP18M-5C
Detection Range	10-30cm±10%	5m ±10%
Detection Target	Non Transparent	Non Transparent
Detection Range Regulation	Unadjustable	Unadjustable
Response time	1ms	1ms
Power supply voltage	6-36 VDC / 90-250 VAC	6-36 VDC / 90-250 VAC
Light Source	LED(880nm)	LED(880nm)
Load current	<300mA	<300mA
Drop	<2.5V	<2.5V
Consumption current	<25mA	<25mA
Hysteresis range	3% ~ 20%	3% ~ 20%
Repeated precision	<5%	<5%
Output indicator	LED	LED
Polarity protection	yes	yes
Surge protection	yes	yes
Short circuit protection	yes	yes
Ambient temperature	-25°C ~ +55°C	-25°C ~ +55°C
Ambient humidity	35% ~ 95%	35% ~ 95%
Protection grade	IP67	IP67
Shell material	Nickel Plated Brass	Nickel Plated Brass
Connection	1.5m PUR	1.5m PUR

# PROXIMITY SWITCHES & SENSORS

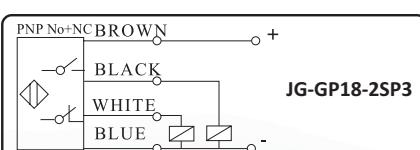
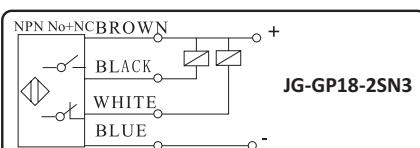
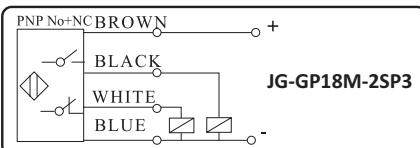
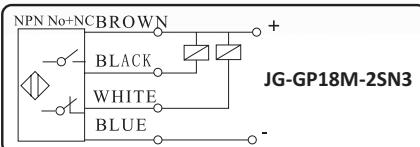
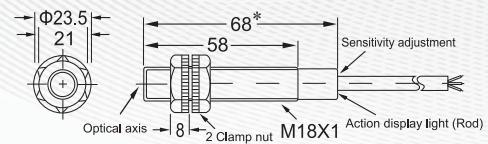
## PHOTO ELECTRIC SENSOR - 18mm (Reflector)



JG-GP18M-2S



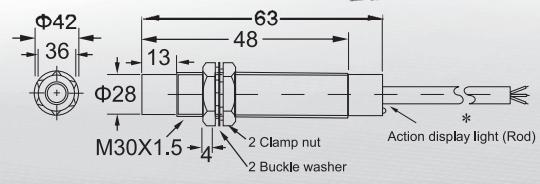
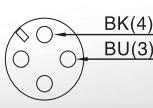
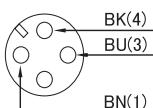
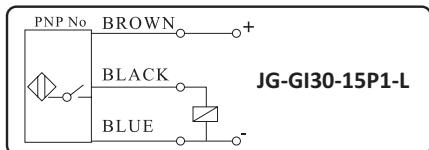
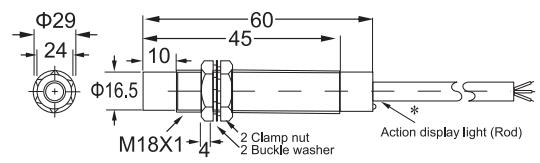
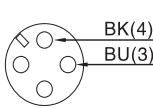
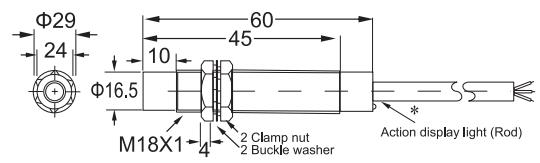
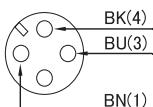
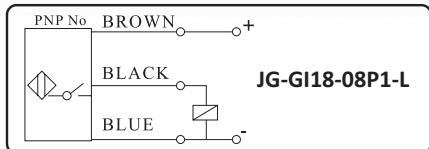
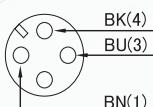
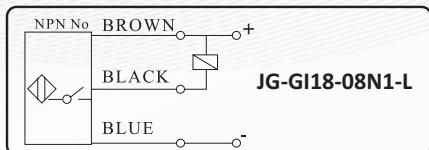
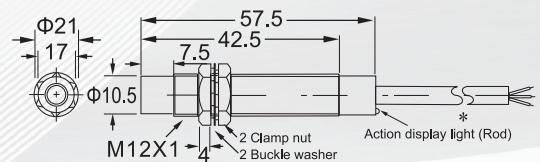
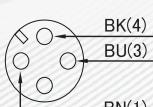
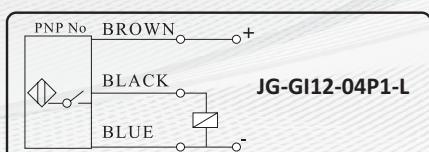
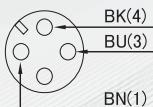
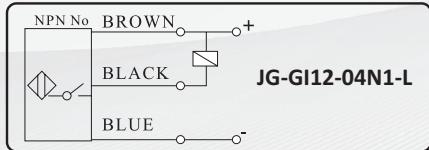
JG-GP18-2S



Technical parameters	JG-GP18M-2S	JG-GP18-2S
Detection Range	2m±10%	5m ±10%
Detection Target	Non Transparent	Non Transparent
Detection Range Regulation	Adjustable	Adjustable
Response time	1ms	1ms
Power supply voltage	6-36 VDC / 90-250 VAC	6-36 VDC / 90-250 VAC
Light Source	LED(880nm)	LED(880nm)
Load current	<300mA	<300mA
Drop	<2.5V	<2.5V
Consumption current	<25mA	<25mA
Hysteresis range	3% ~ 20%	3% ~ 20%
Repeated precision	<5%	<5%
Output indicator	LED	LED
Polarity protection	yes	yes
Surge protection	yes	yes
Short circuit protection	yes	yes
Ambient temperature	-25°C ~ +55°C	-25°C ~ +55°C
Ambient humidity	35% ~ 95%	35% ~ 95%
Protection grade	IP67	IP67
Shell material	Nickel Plated Brass	ABS
Connection	1.5m PUR	1.5m PUR

# PROXIMITY SWITCHES & SENSORS

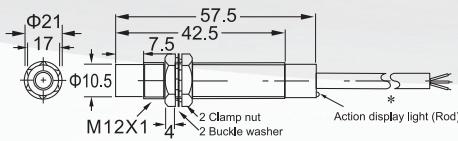
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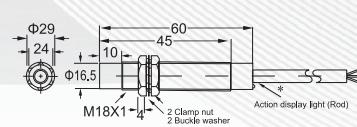
# PROXIMITY SWITCHES & SENSORS

## INDUCTIVE TYPE - CAPACITIVE

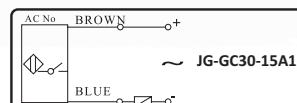
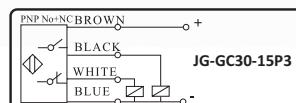
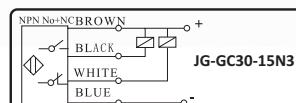
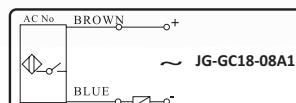
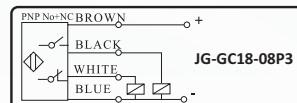
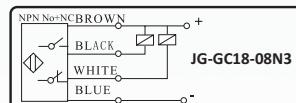
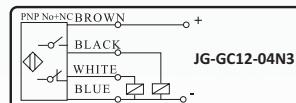
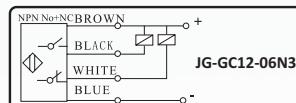
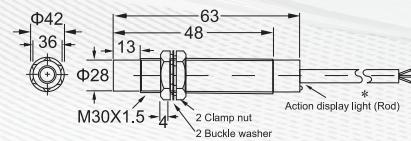
JG-GC12



JG-GC18



JG-GC30

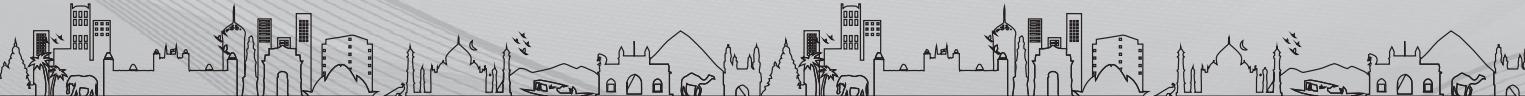


Technical parameters	JG-GC12	JG-GC18	JG-GC30
Set distance	0~6mm ±10%	0~8mm ±10%	0~15mm ±10%
Standard detected object	15x15x1 mm	30x30x1 mm	
Power supply voltage	6-36 VDC / 90-250 VAC	6-36 VDC / 90-250 VAC	6-36 VDC / 90-250 VAC
Switching point offset	<±10%	<±10%	
Load current	<300mA	<300mA	<300mA
Drop	<2.5V	<2.5V	
Consumption current	<10mA	<10mA	<10mA
Hysteresis range	1% ~ 20%	1% ~ 20%	
Repeated precision	<3%	<3%	<3%
Switching frequency	DC-400Hz / AC-25Hz	DC-200Hz / AC-25Hz	
Output indicator	LED	LED	LED
Polarity protection	yes	yes	
Surge protection	yes	yes	yes
Short circuit protection	yes	yes	
Ambient temperature	-25°C ~ +70°C	-25°C ~ +70°C	-25°C ~ +70°C
Ambient humidity	35% ~ 95%	35% ~ 95%	
Protection grade	IP67	IP67	IP67
Shell material	Nickle Plated Brass	Nickle Plated Brass	
Connection	1.5m PUR	1.5m PUR	1.5m PUR

# AREA SECURE SENSOR

Model	Detection distance	Optic axis distance	Optic axis number	Detection width	Min detectable object
JG - 40-4/160MM	≤3m	40mm	4	120mm	φ50mm
JG - 40/8/320MM	≤3m	40mm	8	280mm	φ 50mm
JG - 40/10/400MM	≤3m	40mm	10	360mm	φ 50mm

Performance	Power voltage	Under 12 VDC ± pulsation(P-P)10%
Consumption current	Under 100mA	
Response time	Under 20mS	
Output form	Collector open circuit NPN type: current 100mA, residual voltage 1.6V	
Output state	ON when all the optic axis is photic	
Optic source	Infrared ray LED	
Connection way	With specific cable connector	
Shell material	Sheel:A1 alloy, color filter cover: PMMA	
Environment-resisting light	Incandescent lamp: intensity of illumination of photic surface 3000Lx, sunlight: intensity of illumination of photic surface 10000Lx.	
Ambient temperature	-10~55(do not freeze)while working -40~70 while storing	
Environment humidity	35~85%RH while working, 35~39%RH while storing	
Vibration	Vibration frequency: 10~55Hz, vibration range: 1.5mm, each direction of X,Y,Z 2 hours	
Shock	Acceleration: 500/s(about 50g) each direction of X,Y,Z for 3 times	

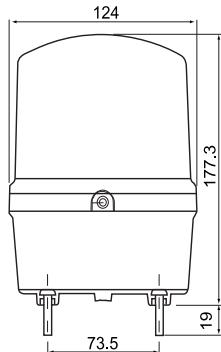


# REVOLVING LIGHT

## FEATURES

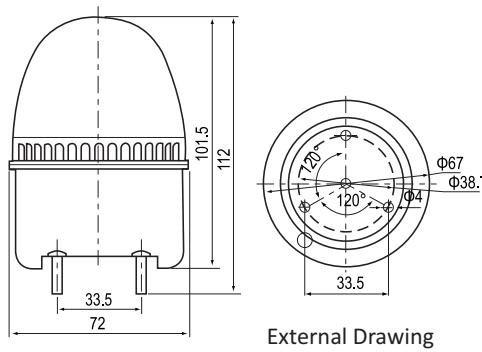
- With a Magnet, Sound can be customized
- Circular chassis with fixed bottom making installation easier.
- In case of product using input AC voltage for 12V to 24V DC, power supply is required.
- Material: Lens-PC, Body-ABS
- Certification : CE
- Protection class: IP30

## 1103 LED Series



External Drawing

## 2071 Flashing Signal Light



External Drawing

## Technical Specification

Model	Voltage	Current	Flashes Per Min.	Color
JG-LTE 1103/J 2071/J	DC12V	0.090A	60-80/ Per Min.	R
	DC24V	0.080A		Y
	AC110V	0.042A		G
	AC220V	0.021A		B

J : With Buzzer

# REVOLVING LIGHT

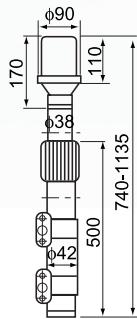
## STROBE WARNING LIGHT



Technical Specification

Model	Voltage	Power	Color
JG-N504	AC220V	3W	R Y G B

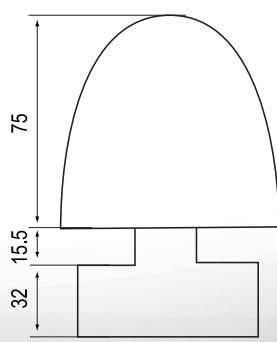
## CAR SIGNAL LIGHT



Technical Specification

Model	Voltage	Color
JG-N3093	DC12V/24V	R

## Warning Signal Light



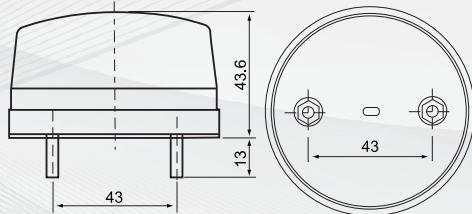
Technical Specification

Model	Voltage	Color
JG-N-TX	AC 220V	R

- Sound can be customized
- High brightness LED lamps
- Having a built-in switch for steady / flashing selection.
- Semi-permanent in the self-life of light source and suitable for machines having lots of vibration and impact and for places where bulb change is difficult.
- Material: Lens-PC, Body-ABS
- Protection class: IP30

# SMALL SIZE WARNING LIGHT

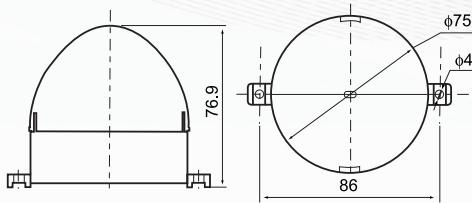
## SMALL FLASHING LIGHT



Technical Specification

Model	Voltage	Current	Weight	Flashes Per Min	Color
JG-N3071	AC220V	0.021A	0.51Kg	60-80	R Y G B

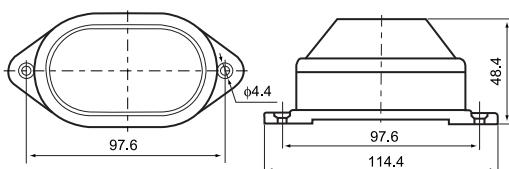
## STROBE FLASHING LIGHT



Technical Specification

Model	Voltage	Current	Weight	Flashes Per Min	Color
JG-N3072	AC220V	0.021A	0.51Kg	60-80	R Y G B

## RECTANGULAR FLASHING LIGHT

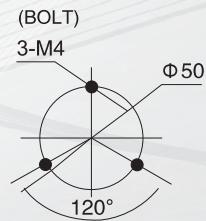
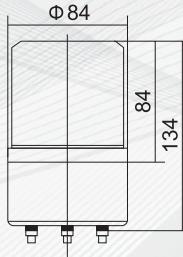


Technical Specification

Model	Voltage	Current	Weight	Flashes Per Min	Color
JG-N3051	DC12V	0.090A	0.34Kg	60-80	R Y G B
	DC24V	0.080A	0.34Kg		
	AC220V	0.021A	0.51Kg		

# OTHERS

## SOLAR REVOLVING

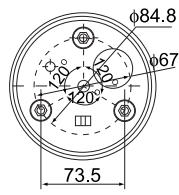
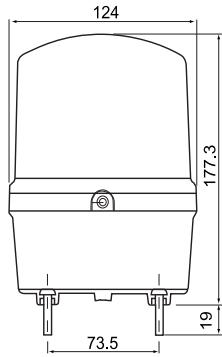


### Technical Specification

- Ultra-bright LED life: 20,000 hours
- Light control mode: auto on-at-dusk, off-at-dawn
- Battery: 1pc of 1000mA NiMH rechargeable battery
- Solar cell: Φ60,120mA
- 8 hours recharged can work 120-150 hours

Model	Voltage	Power	Color
JG-5088	DC3.6V	1W	R Y G B
JG-5088J			J : With Buzzer

## REVOLVING LIGHT WITH MAGNET



### Technical Specification

Model	Voltage	Flashes Per Minute	Color
JG-TYN	AC220V	60-80	R Y G B

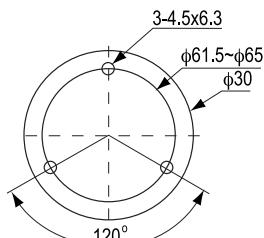
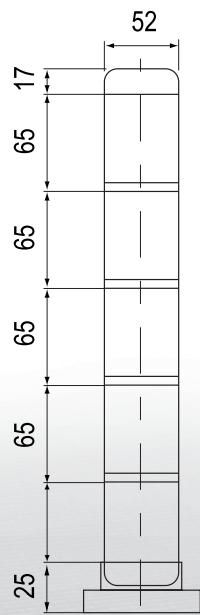
# TOWER LIGHT

- High brightness LED type
- Enhancing visibility by employing the special light diffusion globe
- LED light source with a high degree of Wusi long life bulbs
- Using various types of brackets with practicality and brilliant appearance
- Flashes:60-80/min
- Built-in buzzer type volume:85dB
- Material: lens-PC, Body-ABS
- Certification:CE
- Protection class :IP30



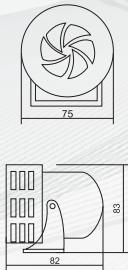
Voltage	Signal Line Current	Rush Current	External Contract Capacity	Buzzer Line Current
DC12V	0.357A	4.8A	Over 5A	0.025A
DC24V	0.185A	2.4A	Over 3A	0.012A
AC110V	0.042A	0.6A	Over 1A	0.038A
AC220V	0.021A	0.4A	Over 1A	0.004A

Model	Tier	Voltage	Colour
JG-JPT5-1-D / 1U-D	1		■ R
JG-JPT5-2-D / 2U-D	2		■ R ■ G
JG-JPT5-3-D / 3U-D	3		■ R ■ G ■ Y
JG-JPT5-4-D / 4U-D	4	12VDC / 24VDC 110VAC / 220VAC	■ R ■ G ■ Y ■ B
JG-JPT5-5-D / 5U-D	5		■ R ■ G ■ Y ■ B □W



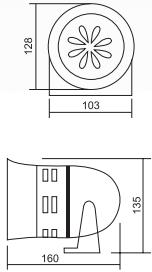
# INDUSTRIAL MOTOR SIREN

## MINI MOTOR SIREN



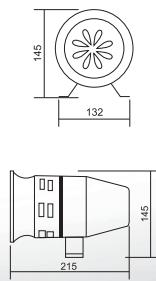
Model	Voltage	Sound Level	Body Material
JG-MS190	DC12V DC24V AC110V AC220V	90-100dB Radius 1 meter	Metal

## MOTOR SIREN



Model	Voltage	Sound Level	Body Material
JG-MS290	DC12V DC24V AC110V AC220V	95-105dB Radius 1 meter	Metal (all voltage) Plastic (Only in 220VAC)

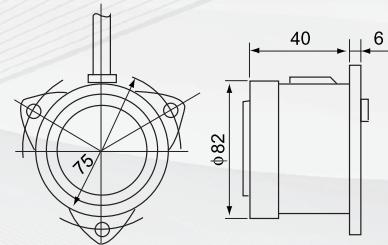
## HEAVY DUTY MOTOR SIREN



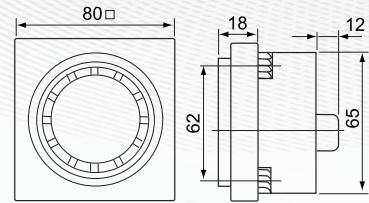
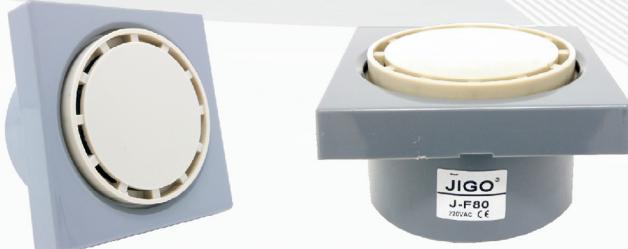
Model	Voltage	Sound Level	Body Material
JG-MS390	DC12V DC24V AC110V AC220V	100-110dB Radius 1 meter	Metal

# INDUSTRIAL BUZZER

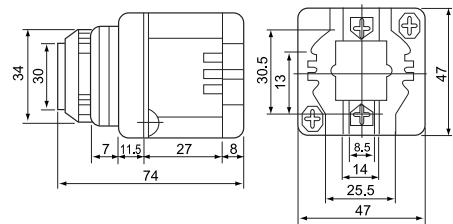
JG-PS80N



JG-PS80



JG-PS30



## Technical Specification

Model	Voltage	Rated Current	Sound Level dB
JG-PS80N	240VAC	30mA	95 dB
JG-PS80	240VAC	30mA	95 dB
JG-PS30	12VDC / 24VDC /240VAC	25mA	90 dB

# TEMPERATURE CONTROLLER

## PID SERIES



JG-48P



JG-72P



JG-96P

TECHNICAL DETAILS	SPECIFICATION	
Input signal	Thermocouple:E,K Thermal resistance:Cu50,Pt100 Standard current: 0-10mA 4-20mA	
Accuracy	$\pm 1.0\% F.S \pm 1$ word	
Control way	PID Control, States Control	
Control output	Relay contact point: AC250V 3A (resistance) Logical voltage DC:0/5V Start pulse over zero: optical couple control silicon output 1A 600V	
Alarm function	High Limit Alarm, Lower Limit Alarm	
Work power	AC220V $\pm 10\%$ 50/60Hz	
	Out Dimension	Install Dimension
JG-48P	48 X 48 X 80mm	44 x 44 mm
JG-72P	72 X 72 X 80mm	66 x 66 mm
JG-96P	96 X 96 X 80mm	90 x 90 mm

## E5C SERIES



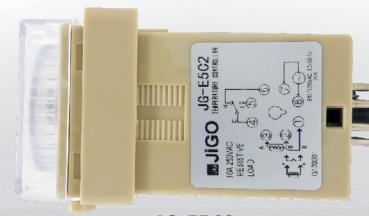
TECHNICAL DETAILS	SPECIFICATION
Temp. Range	0~99.9°C, 0~399°C, 0~599°C, 0~999°C
Input specification	(K,J)PT100Ω
Set deviation	$\leq 1\% / 0.5\%$ less than 0.5% full scale or range display
Indicating precision	Less than $\pm 2^\circ\text{C}$
Control action	ON/OFF type,proportion type(PD)
Output mode	Relay connection point 5A 250VAC,voltage of non connecting point 12VDC for SSR use
Dimension	AC110V/220V $\pm 10\%$ 50/60HZ
Size	48*48*100mm / 48 * 96* 110 mm (E5EN)
Power consumption	3W



JG-E5EN



JG-E5C2



JG-E5C2

# TIMER AND HOUR RELAY



JG-HM1

## Technical Specification

Supply Voltage AC110V, 220V/50Hz

Dimension 48\*48\*40 mm

Timing range 0 - 99,999.99 Hours

Net Weight 50g



JG-BZ142

# TEMPERATURE CONTROLLER

## DIGITAL SERIES



JG-48D



JG-72D



JG-96D

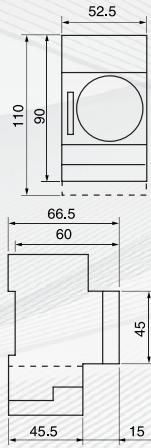
TECHNICAL DETAILS	JG-48D	JG-72D	JG-96D
Input signal		Thermocouple:E,K Thermal resistance:Cu50,Pt100	
Accuracy		±1.0 % F.S±1 word	
Control way		Two phase or time rate adjustment	
Control output		Relay	
Alarm function		Having alarm function	
Work power		AC110V / 220V 50/60Hz	
Measurement Range		0~99.9°C, 0~399°C, 0~599°C, 0~999°C	
Out dimension	48 X 48 X 80mm	72 X 72 X 80mm	96 X 96 X 80mm
Install dimension	45 <sup>+1</sup> X 45 <sup>+1</sup> mm	68 <sup>+1</sup> X 68 <sup>+1</sup> mm	92 <sup>+1</sup> X 92 <sup>+1</sup> mm

# TIMER AND HOUR RELAY



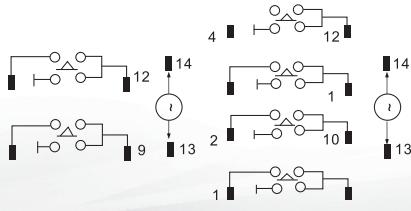
JG-SUL181H

JG-SUL181D



## Technical Specification

Contact Capacity	AC220V 16A
Full Timing Range	24h
Contact Resistance	< 50m Ω
Insulation Resistance	> 100M Ω
Coil Voltage	110, 230V AC
Life	Electrical 105 Times Mechanical 107 Times
Operating Temperature	-40°C~+55°C
Storage Battery(Working Reserve)	Time 150h
Minimum Setting Unit	30Minutes
Set Up Times	30 m/per times 48 times

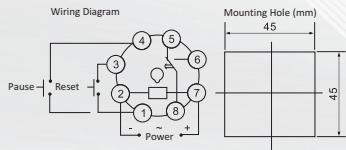


## Technical Specification

Operation mode	Power On delay
Contact amount	Two groups time delay conversion contacts or Four groups time delay conversion contacts
Contact capacity	AC250V 10A resistance
Contact electric life	$10^5$
Operation voltage	AC:24V-220V 50Hz, DC:24V-110V
Delaying specification	0.1-1s, 0.5-5s, 1-10s, 2.5-30s, 5-60s, 1-180s, 0.5-5m, 1-10m, 5-30m
Delaying specification	$\leq 1\%$
Ambient temperature	-5°C~+40°C
Outline Size	10*20*80 mm

JG-H3Y2/4

# TIMER AND HOUR RELAY



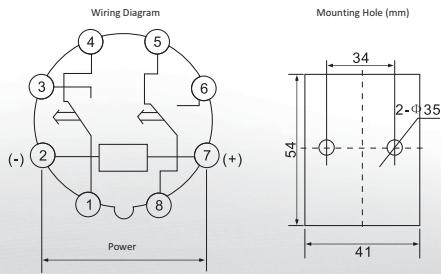
**JG-DH48S-2Z**

## Technical Specification

Operation mode	Power On delay
Contact amount	Delay contacts SPDT/DPDT
Contact capacity	AC250V 5A resistance
Contact electric life	$10^5$
Operation voltage	AC:36V,110V,127V,220V,380V DC:12V,24V 50/60Hz
Delaying specification	0.01s-99.99s,1s-99m99s, 0.01s-99.99m,1m-99h99m,1s-99h
Delaying specification	<=1%
Ambient temperature	-5°C~+50°C
Outline Size	122*51*51mm



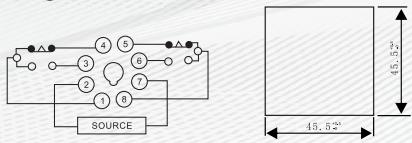
**JG-ST3P**



## Technical Specification

Operation mode	Power On delay
Contact amount	Two groups time delay contacts DPDT
Contact capacity	AC250V 3A resistance
Contact electric life	$10^5$
Operation voltage	AC:36V,110V,127V,220V,380V 50Hz DC: 24V
Delaying specification	A-A:0.5s,5s,30s,3m; A-B:1s,10s,60s,6m A-C:5s,50s,5m,30m;A-D:10s,100s,10m,60m A-E:60s,10m,60m,6h;A-F:2m,20m,2h,12h A-G:4m,40m,4h,24h
Delaying specification	<=5%
Ambient temperature	-5°C~+40°C
Outline Size	57*41*84mm

# TIMER AND HOUR RELAY



**JG-H3BA-8H**

## Technical Specification

Operation mode	On delay
Contact amount	Delay contact DPDT
Contact capacity	AC250V 5A
Contact electric life	$10^5$
Operation voltage	AC:from 24V to 220V DC:from 12V to 48V 50/60Hz
Delaying specification	(s,m,h)0.05~0.5,0.1~1,0.5~5,1~10; 0.5~5h,1~10h,5~50h,10~100h
Delaying specification	<5%
Ambient temperature	-10°C~+55°C
Outline Size	48*48*93.5mm



**JG-H3CR-A8**

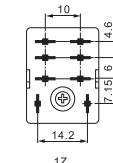
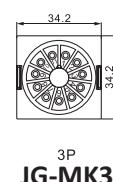
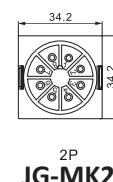
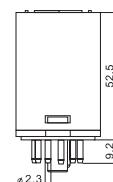
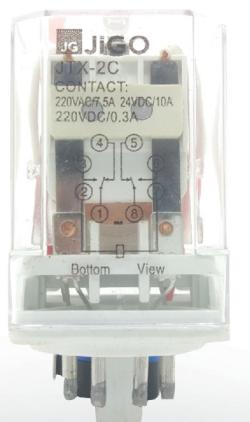
## Technical Specification

Operation mode	On delay
Contact capacity	AC250V 10A
Contact electric life	$10^5$
Operation voltage	AC:from 24V to 220V DC:from 12V to 48V 50/60Hz
Delaying specification	(s,m,h)0.5s~300h
Delaying tolerance	<5%
Ambient temperature	-10°C~+55°C
Outline Size	48*48*81.6mm

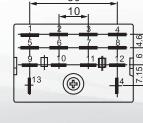
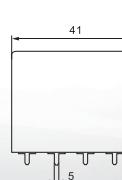
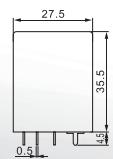
# GENERAL PURPOSE RELAY

## JG-MK/LY SERIES

TECHNICAL DETAILS		JG-LY2	JG-LY4	JG-MK2	JG-MK3
Terminal layout		2Z	2Z	2Z	3Z
Contact capacity	AC	10A 250V	10A 250V	10A 250V	10A 250V
	DC	10A 30V	10A 30V	10A 30V	10A 30V
Contact resistance (mΩ)		≤50mΩ	≤50mΩ	≤50mΩ	≤50mΩ
Insulation resistance (MΩ)		≥100MΩ	≥500MΩ	≥500MΩ	≥500MΩ
Dielectric strength	BOC	1000VAC	1500VAC	1500VAC	1500VAC
	BCC	1500VAC	1500VAC	1500VAC	1500VAC
Coil nominal voltage	AC	6 to 240V	6 to 380V	6 to 380V	6 to 380V
	DC	6 to 220V	6 to 220V	6 to 220V	6 to 220V
Coil nominal power	AC	0.9VA to 1.2VA	≤2.8 VA	≤2.8 VA	≤2.8 VA
	DC	≤0.9W	≤1.6W	≤1.6W	≤1.6W
Electrical life(OPS)		105	105	105	105
Mechanical life(OPS)		107	107	107	107
Operating temperature(°C)		-40°C to 60°C	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C
Weight(g)		≤35	≤80	≤80	≤80
Mounting methods		Printed-circuit board	Outlet Flange	Outlet	Outlet



JG-LY2

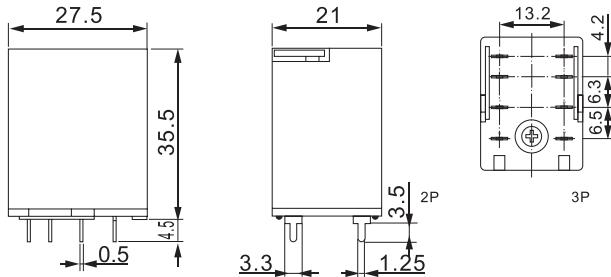


JG-LY4

# GENERAL PURPOSE RELAY

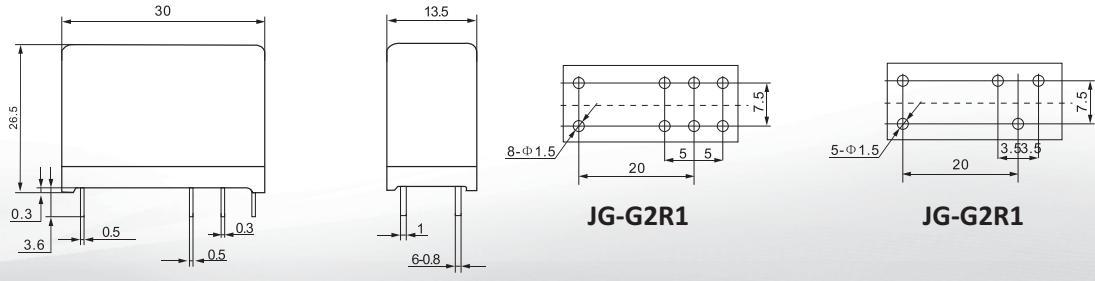
## JG-MY SERIES

TECHNICAL DETAILS		JG-MY2	JG-MY3	JG-MY4	JG-G2R1/2
Terminal layout		2Z	3Z	4Z	1Z, 2Z
Contact capacity	AC	5A 250V	5A 250V	3A 250V	10A 250V
	DC	5A 30V	5A 30V	3A 30V	10A 30V
Contact resistance	(mΩ)	≤50mΩ	≤50mΩ	≤50mΩ	≤100mΩ
Insulation resistance	(MΩ)	≥100MΩ	≥100MΩ	≥100MΩ	≤1000MΩ
Dielectric strength	BOC	1000VAC	1000VAC	1000VAC	1000VAC
	BCC	1500VAC	1500VAC	1500VAC	4000VAC
Coil nominal voltage	AC	6 to 240V	6 to 240V	6 to 240V	6 to 240V
	DC	6 to 220V	6 to 220V	6 to 220V	6 to 220V
Coil nominal power	AC	0.9VA to 1.2VA	0.9VA to 1.2VA	0.9VA to 1.2VA	
	DC	≤0.9W	≤0.9W	≤0.9W	0.55W
Electrical life(OPS)		105	105	105	105
Mechanical life(OPS)		107	107	107	107
Operating temperature(°C)		-40°C to 60°C	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C
Mounting methods		Printed-circuit board, Outlet.	Printed-circuit board, Outlet.	Printed-circuit board, Outlet	Outlet



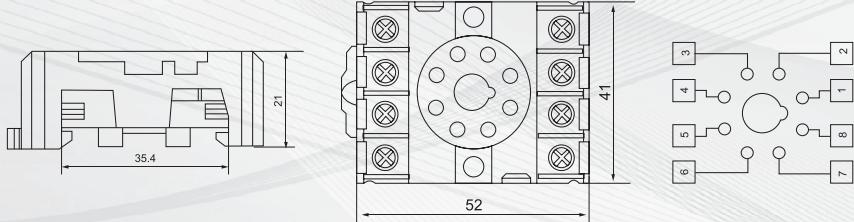
JG-MY Series

JG-G2R Series

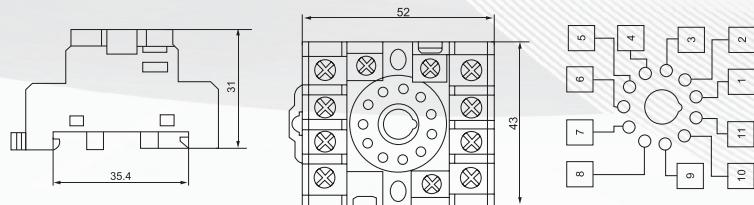


# RELAY SOCKET

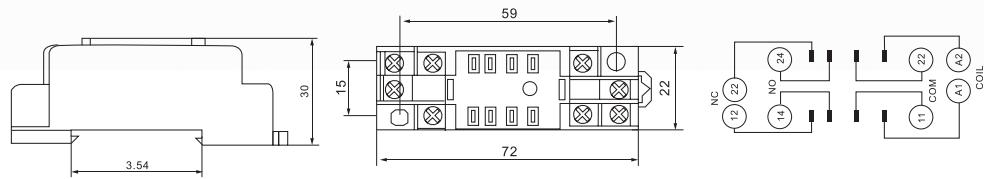
JG - PF083A - Socket for Relay Model MK2



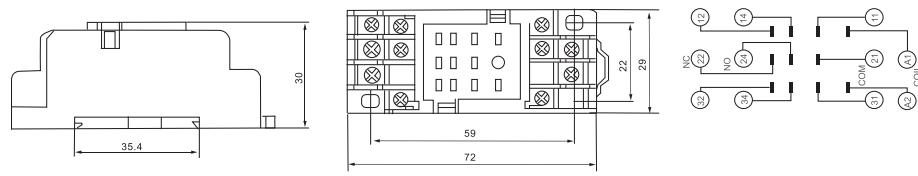
JG - PF113A - Socket for Relay Model MK3



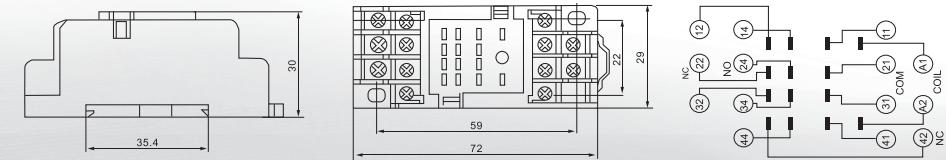
JG - PYF08A - Socket for Relay Model MY2



JG - PYF11A - Socket for Relay Model MY3

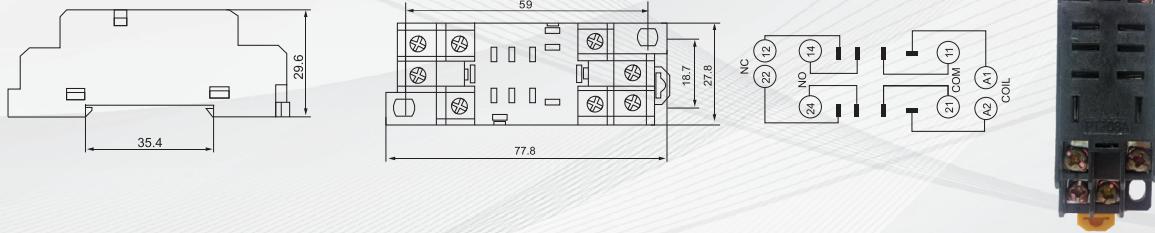


JG - PYF14A - Socket for Relay Model MY4

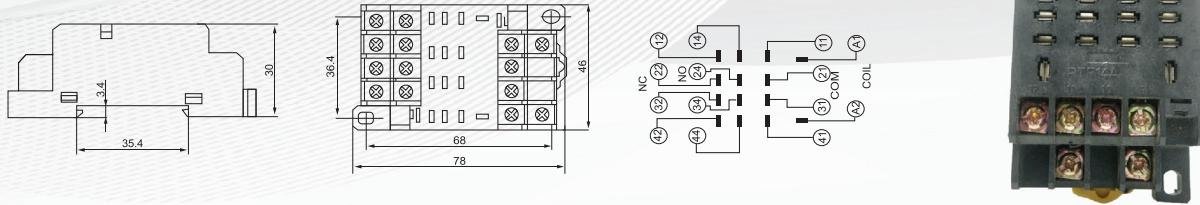


# RELAY SOCKET

**JG - PTF08A - Socket for Relay Model LY2**

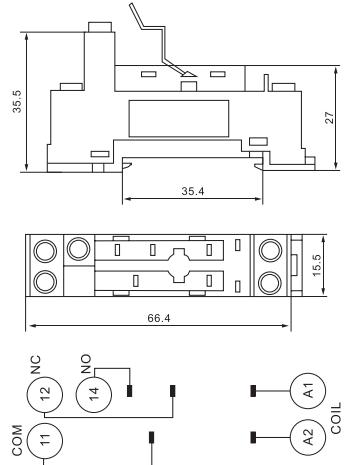


**JG - PTF14A - Socket for Relay Model LY4**



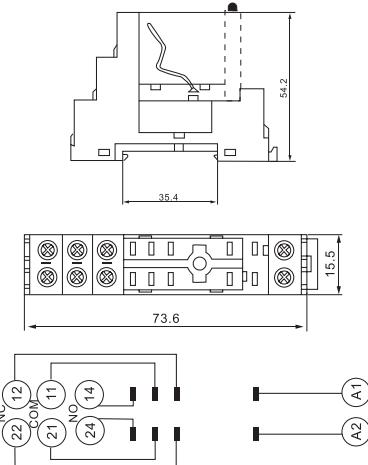
**JG - PSF-08AE\L**

**Socket for Relay Model G2R1**



**JG - PSF-14AE\L**

**Socket for Relay Model G2R2**

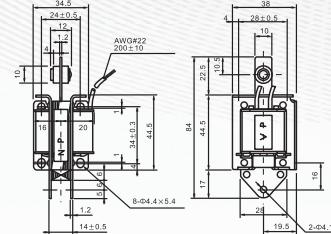


# SOLENOID COIL

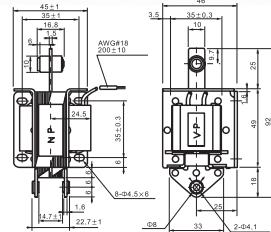
Code	Rated Voltage (V)	Rated Force (N)	Rated Stroke (mm)	Operating Frequency	Weight
JG-992	36 110 220 380	5	10	1500	0.5 Kg
JG-2402	36 110 220 380	10	15	1200	1 Kg
JG-2502	36 110 220 380	15	15	1200	1.5 Kg
JG-2602	36 110 220 380	20	15	1200	2 Kg
JG-3502	36 110 220 380	30	20	720	3 Kg
JG-3602	36 110 220 380	40	20	720	4 Kg
JG-3702	36 110 220 380	50	20	720	5 Kg
JG-4502	36 110 220 380	60	30	360	6 Kg
JG-4602	36 110 220 380	70	30	360	7 Kg



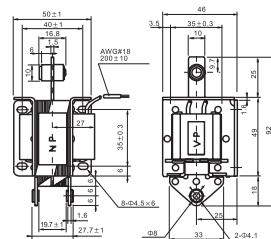
JG-992



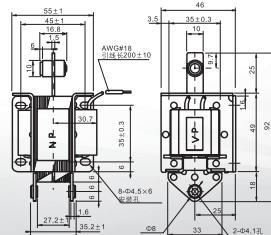
JG-2402



JG-2502



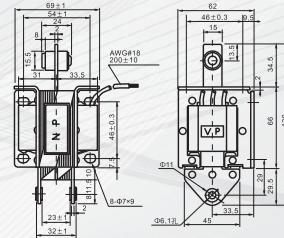
JG-2602



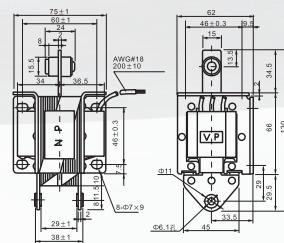
# SOLENOID COIL



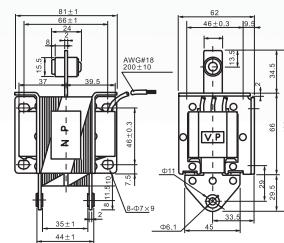
JG-3502



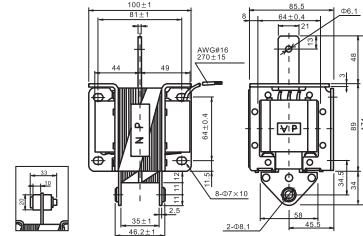
JG-3602



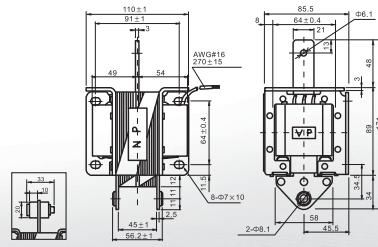
JG-3702



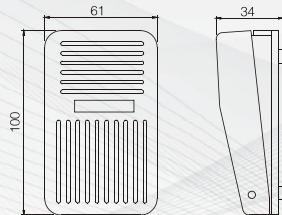
JG-4502



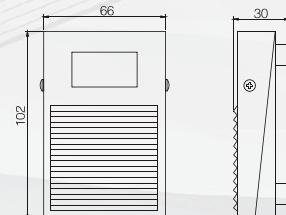
JG-4602



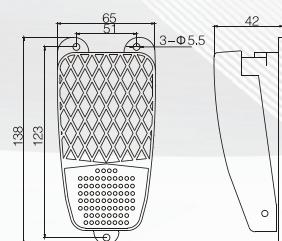
# FOOT SWITCH



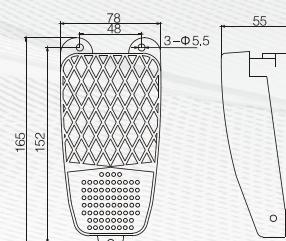
JG-XF-01



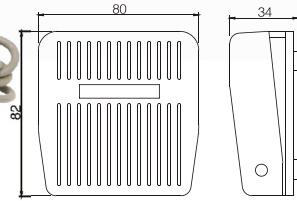
JG-XF-1



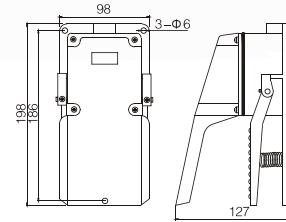
JG-XF-2



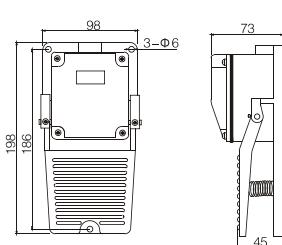
JG-XF-3



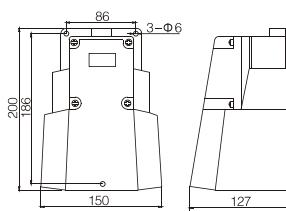
JG-FS-201



JG-XF-302C



JG-XF-402C



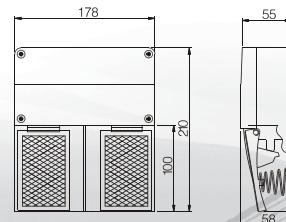
JG-XF-502



JG-SFMP1



JG-XF-86

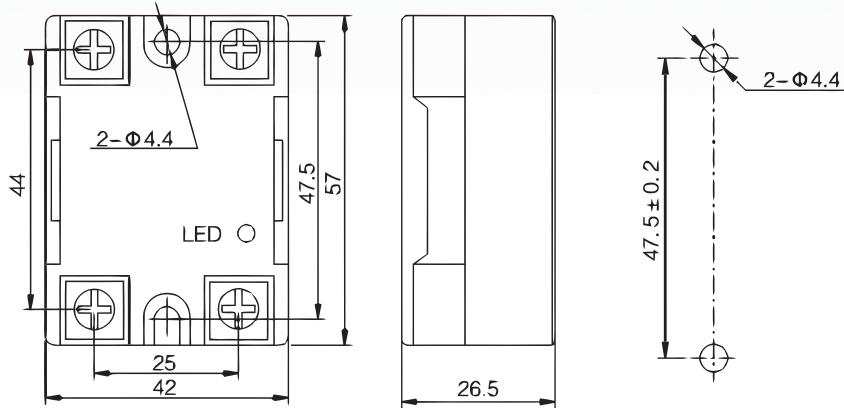


# SOLID STATE RELAY

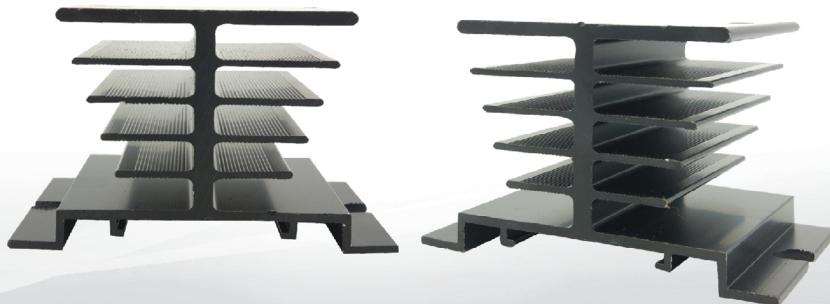
## SINGLE PHASE SSR - DC~AC, AC~AC



Load voltage	90 ~ 480 VAC
Load current	10A,15A,25A,40A,50A 60A,75A,90A,120A
Control voltage	DC3-32V / AC90-250V
Control current	DC3-25mA/AC12mA
On voltage	<= 1.5V
Off leading current	<=2mA
On-off time	<=10ms
Dielectric strength	2500VAC
Insulation resistance	1000mΩ/500VDC
Ambient temperature	-35~+70℃
Mounting methods	Screw
The working methods	LED
Weight	90g for 10A, 25A 135g for above 40A



## HEAT SINK - SINGLE PHASE SSR



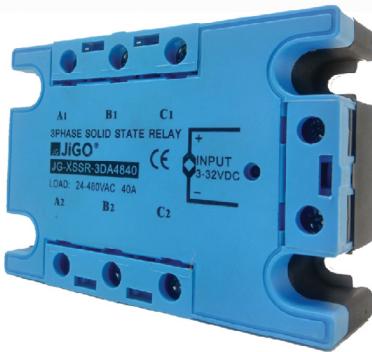
JG-XI50

For SSR 5~20A

# SOLID STATE RELAY

## THREE PHASE SSR - DC~AC, AC~AC

Product model	JG-XSSR-3DA48 □□DC	JG-XSSR-3DA48 □□AC
Control voltage	3-32VDC	80-250VAC
Control current	10-30mA	10-30mA
Reverse voltage	32VDC	/
Guarantee close voltage	1VDC	30VDC
Guarantee open voltage	3VDC	80VDC
Load voltage	24-480VAC	
Load max current	16A/25A/40A/50A/60A/80A/90A/100A/120A	
Load mini current	0.08A / 0.1A (>75A)	
Breakover voltage	≤1.8VDC / ≤2VDC (>75A)	
Output leakage current	≤8mA	
Medium withstand voltage	≥2500VAC	
Insulating resistance	≥100MΩ	
Switching time	≤10mS	
Frequency range	50-60Hz	
Operating temperature	-20-70°C	
Load current safety factor	(resistive load)50-60% (inductive load)30-40%	



UPTO 60A



ABOVE 80A



# SOLID STATE RELAY

## SINGLE PHASE SSR - MODULAR TYPE

Product model	JG-XSSR-DA48 □□□M1	JG-XSSR-DA48 □□□M2	JG-XSSR-DA48 □□□M3
Control voltage		3-32VDC	
Control current		6-25mA	
Reverse voltage		32VDC	
Guarantee close voltage		1VDC	
Guarantee open voltage		3VDC	
Load voltage		75-480VAC	
Load max current	150A	200A / 300A	250A / 400A
Load mini current	0.1A	0.2A	0.2A
Breakover voltage		≤ 2VDC	
Output leakage current		≤ 8mA	
Medium withstand voltage		≥ 2500VAC	
Insulating resistance		≥ 100MΩ	
Switching time		≤10mS	
Frequency range		50-60Hz	
Operating temperature		-20-70°C	
load current safety factor		(resistive load)50-60% (inductive load)30-40%	

