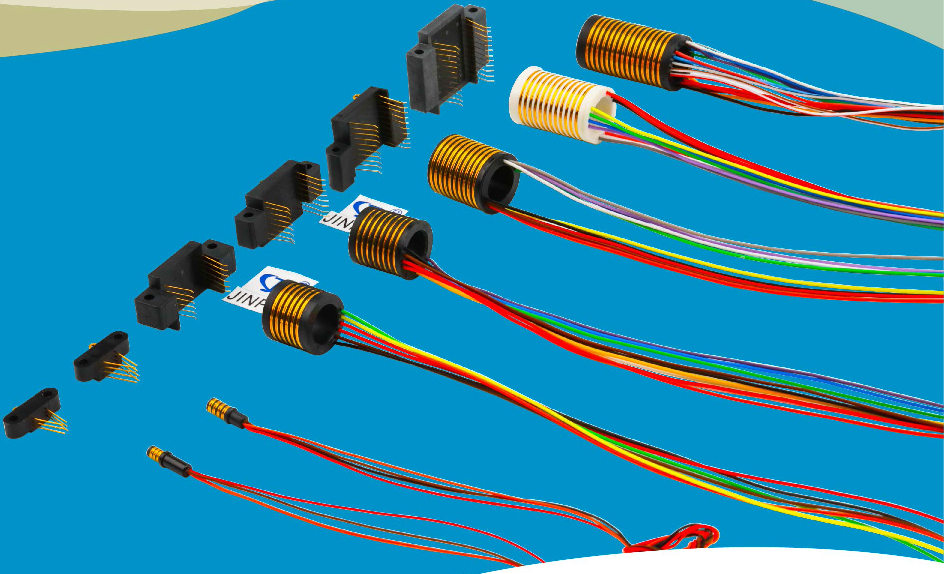
LPS Series—Separate Slip Rings



LPS series refers to a family of Separate Slip Rings with a pin distance as small as 0.77mm. The electrical swivel derives from the stand-alone one that transmits signal or data from stationary to rotating units. The slip ring (rotor) and brush block (stator) are offered as separate components to be mated by the customer in their own system. It is able to transmit combination of weak signals with extremely low electrical noise (Min 1mΩ) and low resistance. Also, advanced mode-made technology supports a high precision and flexible customization. Both connecting way and shape of the stator are optional. Possessing a wide range of products from off-the-shelf to tailor-made parts, JINPAT could design and manufacture more high-quality slip rings to meet more challenges. For years, much extended technology and skilled service have not only allured first customers but also constructed a good long-standing relationship with those from all over the world.

Parameters

Electric & Electrical	
Current Rating	2A
Voltage Rating	240VAC/DC
Dielectric Strength	≥500VAC@50Hz
Insulation	100MΩ@500VDC
Electrical Noise	Min 1mΩ
Signal Compatible	Ethernet, USB, RS, LVDS, CANBUS, FireWire, Control Signal

Mechanical	
Working Speed	0~100 RPM
Contact	Precious Metal
Lead Wire	AWG26# Silver Plated Teflon® 310 mm

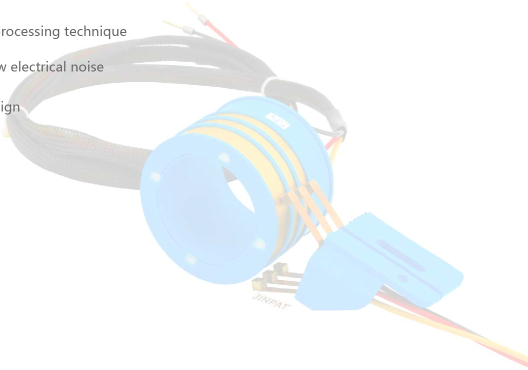
Environment	
Temperature	-20°C~+60°C
Humidity	60%RH
IP	IP54

Life
≥10 million turns

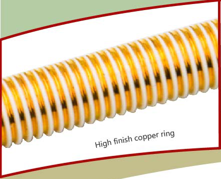
* Life test was done under JINPAT laboratory condition.

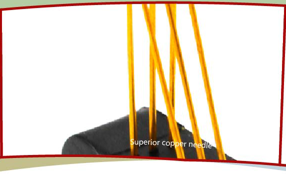
* For any request beyond specification above, please feel free to contact us.

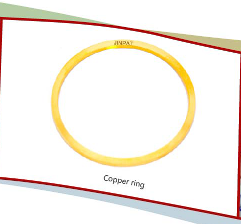
Features & Advantages



- Loading standard module while transmitting power and signal in 360 ° rotation
- Precise and compact internal structure with military surface processing technique
- Special grooved design guarantees a smooth running and low electrical noise
- Low contact pressure, low wear debris with multi-contact design
- Stable dimension, high precision with injection molding
- Copper ear stator, easy to weld for customers
- Separate construction, suitable for tiny installation space
- No lubrication, maintenance free
- Long service life
- Customization available
- Mass production, rapid delivery


High finish copper ring


Superior copper needle



Copper ring

Life test

Application

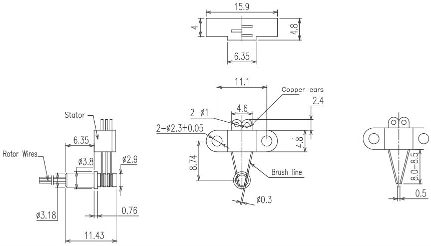
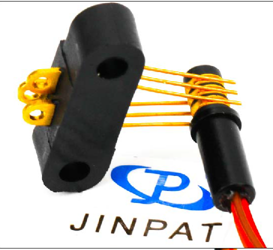
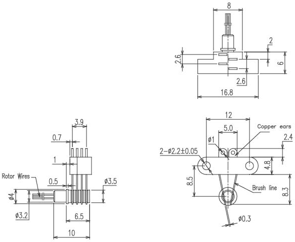
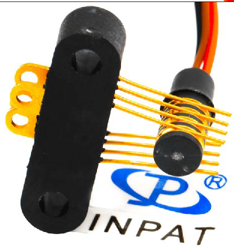
UAV

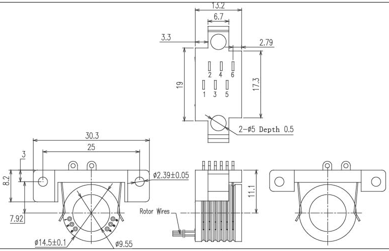
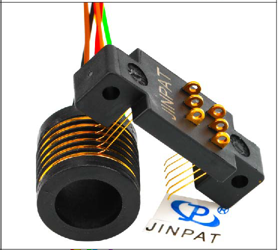
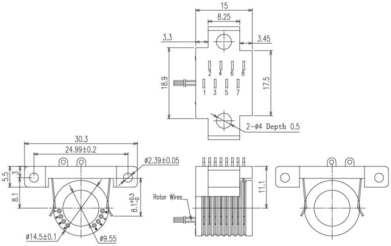
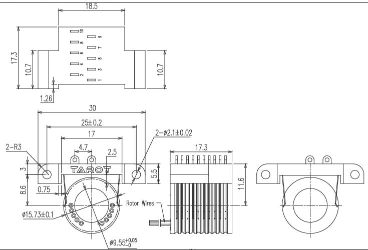
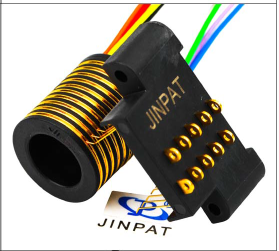
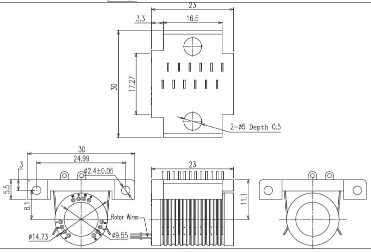
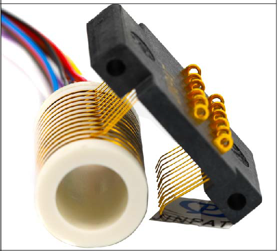
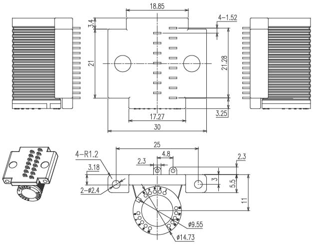
Rotary Platform

Aerial Photography Pan-tilt

Aircraft

LPS Series

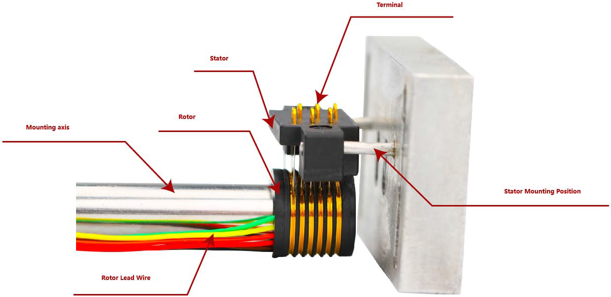
Model	Outline Drawing	Product
LPS-03	 15.9 4 4.8 6.35 11.1 Copper ears 2.4 4.6 2−ø1 2−ø2.3±0.05 4.8 8.74 Brush line ø0.3 Stator 6.35 Rotor Wires ø3.8 ø2.9 ø3.18 0.76 11.43 8.0−8.5 0.5	
LPS-04	 8 2 2.6 6 2.6 16.8 3.9 0.7 1 Rotor Wires 0.5 ø3.5 ø4 ø3.2 6.5 10 12 5.0 Copper ears ø1 2.4 2−ø2.2±0.05 4.8 8.5 Brush line 8.3 ø0.3	

LPS-06	 13.2 6.7 3.3 2.79 2 4 6 1 3 5 19 17.3 2-ø5 Depth 0.5 30.3 25 3 8.2 ø2.39±0.05 11.1 Rotor Wires 7.92 ø14.5±0.1 ø9.55	 JINPAT JINPAT
LPS-08	 15 8.25 3.3 3.45 2 4 6 8 1 3 5 7 18.9 17.5 2-ø4 Depth 0.5 30.3 24.99±0.2 ø2.39±0.05 5.5 3 8.1 8.1+0.3/0 Rotor Wires 11.1 ø14.5±0.1 ø9.55	JINPAT JINPAT
LPS-10	 18.5 17.3 10.7 10.7 1.26 30 25±0.2 17 2-ø2.1±0.02 2-R3 4.7 2.5 17.3 3 5.5 11.6 8.6 0.75 TAROT Rotor Wires ø15.73±0.1 ø9.55+0.05/0	 JINPAT JINPAT
LPS-12	 23 3.3 16.5 30 17.27 2-ø5 Depth 0.5 30 24.99 3 ø2.4±0.05 23 5.5 8.1 11.1 Rotor Wires ø14.73 ø9.55	
LPS-15	 18.85 4-1.52 3.4 21 21.28 3.25 17.27 30 25 4-R1.2 2.3 4.8 2.3 3.18 3 5.5 2-ø2.4 11 ø9.55 ø14.73	

* The specification above might be subject to change prior to notice

Installing Methods

Fix the rotor on rotating axis and match up with the axis; fix the stator on holder with screws and keep its radial distance from rotor.


Terminal
Stator
Rotor
Mounting axis
Stator Mounting Position
Rotor Lead Wire