Super Miniature Capsule Slip Rings

LPMS series is a group of Super Miniature Capsule Slip Rings designed and manufactured by JINPAT, with the outer diameter of 5.5~11.1mm. It's designed exclusively for transmitting weak signals. Fairly compact size makes it fit for equipment where small space is presented. Gold-to-gold contact enables not only an excellent electrical conductivity, but also a low contact resistance and electrical noise (mini 1mΩ). Also, there is no surge kind of interference or data package loss in reliable signal transmission. The notable point lies in its ability of transmitting signals over 30 kinds, including Ethernet, USB, RS, LVDS, CANBUS, SDI, HDMI and so on. Besides the highly recognized off-the-shelf units, with a senior R & D Team, custom solution is available for customers worldwide.

Parameters

Electronic	
Circuits	1~12 circuits
Signal & Data Compatible	Gigabit Ethernet, USB2.0, LVDS, CANBUS, RS422, CC-Link, InterBus, DeviceNet, Profibus

Electric	
Current Rating	1A per circuit
Voltage Rating	48 VAC/DC or higher
Dielectric Strength	between circuits≥100 V@50 Hz
Insulation Resistance	10 MΩ@100 VDC
Electrical Noise	Min 1mΩ

Mechanical	
Operating Speed	0-300 RPM
Contact	Gold to Gold
Lead Wire Size	AWG30#/32# Silver Plated Teflon UL
Wire Length	250 mm
Torque	≤0.5gf.m

Environment	
Temperature	-20℃~+60℃
Humidity	60%RH
IP	IP54
Life	5 million turns

*Custom solution is available for customers' actual needs.

Features & Benefits

- Transmitting analog and data signal
- Loading standard module while transmitting power and signal
- Grooved design, smooth rotation and low electrical noise
- Multiple contacts per circuit, low contact pressure, low wear debris
- Advanced fiber brush technique, maintenance free
- Long life span, customization available
- Mass production, rapid delivery

Teflon wire

High accuracy module

Gold plated copper ring

Fine test

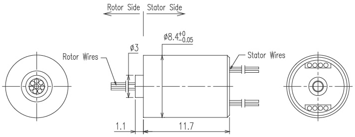
LPMS Series

LPMS-08A

Capsule Length (L)

Circuit: 8

Length (mm): 11.7


Rotor Side
Stator Side
$\phi 8.4^{+0}_{-0.05}$
ø3
Rotor Wires
Stator Wires
1.1
11.7

Wire Code								
Wire Size	Ring#	Color	Ring#	Color	Ring#	Color	Ring#	Color
AWG30# Silver Plated Teflon UL	#1	BLK	#2	BRN	#3	RED	#4	ORG
	#5	YEL	#6	GRN	#7	BLU	#8	PUR
Remark: #1 from the rotor side (the color of the wire can be changed /customized)								

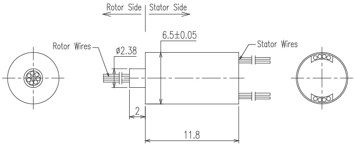
LPMS-08C

Capsule Length (L)

Circuit: 8

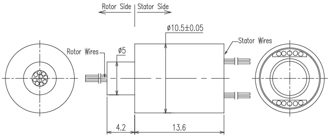
Length (mm): 11.8

JINPAT ®
LPMS-08C


Rotor Side
Stator Side
6.5±0.05
Rotor Wires
ø2.38
Stator Wires
2
11.8

Wire Code								
Wire Size	Ring#	Color	Ring#	Color	Ring#	Color	Ring#	Color
AWG30# Silver Plated Teflon UL	#1	BLK	#2	BRN	#3	RED	#4	ORG
	#5	YEL	#6	GRN	#7	BLU	#8	PUR
Remark: #1 from the rotor side (the color of the wire can be changed /customized)								

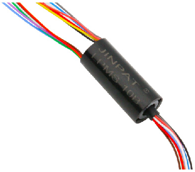
LPMS-10B


Rotor Side
Stator Side
ø10.5±0.05
Stator Wires
Rotor Wires
ø5
4.2
13.6

Capsule Length (L)

Circuit: 10

Length (mm): 13.6


JINPAT ®
LPMS-10B

Wire Code								
Wire Size	Ring#	Color	Ring#	Color	Ring#	Color	Ring#	Color
AWG30# Silver Plated Teflon UL	#1	BLK	#2	BRN	#3	RED	#4	ORG
	#5	YEL	#6	GRN	#7	BLK-BLU	#8	PUR
	#9	GRAY	#10	WIT				
Remark: #1 from the rotor side (the color of the wire can be changed /customized)								

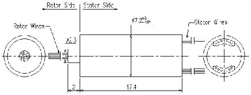
LPMS-12B

JINPAT
LPMS-12B

Capsule Length (L)

Circuit: 12

Length (mm): 17.4

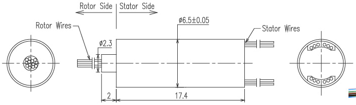

Rotor Side
Stator Side
Rotor Wires
Ø2.3
Ø7.2
Stator Wires
2
17.4

Wire Code

Wire Size	Ring#	Color	Ring#	Color	Ring#	Color	Ring#	Color
AWG32# Silver Plated Teflon UL	#1	BLK	#2	BRN	#3	RED	#4	ORG
	#5	YEL	#6	GRN	#7	BLK-BLU	#8	PUR
	#9	GRAY	#10	WIT	#11	PINK	#12	AZURY

Remark: #1 from the rotor side (the color of the wire can be changed /customized)

LPMS-12U


Rotor Side
Stator Side
Rotor Wires
ø2.3
ø6.5±0.05
Stator Wires
2
17.4

Capsule Length (L)

Circuit: 12

Length (mm): 17.4

*The model is restricted to metal capsule.

Wire Code

Wire Size	Ring#	Color	Ring#	Color	Ring#	Color	Ring#	Color
AWG32# Silver Plated Teflon UL	#1	BLK	#2	BRN	#3	RED	#4	ORG
	#5	YEL	#6	GRN	#7	BLK-BLU	#8	PUR
	#9	GRAY	#10	WIT	#11	PINK	#12	AZURY

Remark: #1 from the rotor side (the color of the wire can be changed /customized)

Application

Thermal Imager

Robot for Sweeping

UAV

Camera Tripod