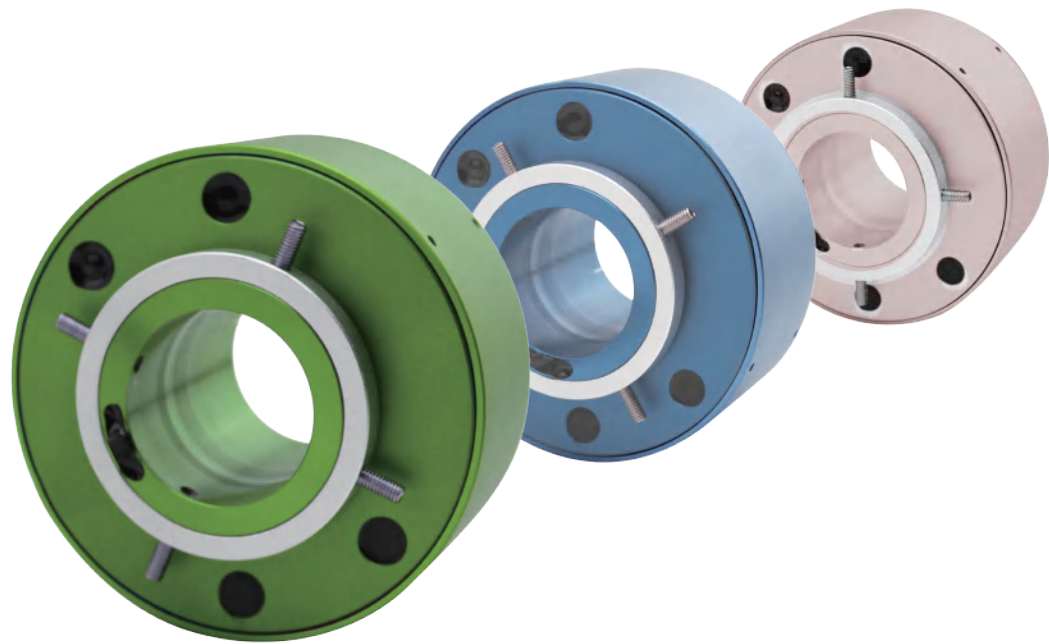


# LPT Through-bore Slip Rings



## Brief Introduction

LPT series are through-bore slip rings (the center hole can pass through the drive shaft, gas-liquid passage; it can also integrate high frequency, fiber, encoder, waveguide, gas and liquid and other joints). The use of advanced fiber brush ensures reliable contact under extremely low friction. The center hole is available from 0 to 1000mm. The current is from mA to 5000 amps. The voltage can be up to 10000 volts, which can fully meet different needs of transmission.

### Features:

- ⊙ Transmit analog and digital signal
- ⊙ The power and signal are mixed transmitted, and the signal categories are as follows:
  - ⊙ Ethernet: Rate (10Mbps/100Mbps/1000Mbps)
  - ⊙ Industrial Ethernet: EtherNet , EtherCAT ,ProfiNet, Powerlink , SercosIII/IP, etc.
  - ⊙ HD video: SDI, LVDS, etc.
  - ⊙ Serial communication: RS232, RS485, RS422, etc.
  - ⊙ Universal Serial Bus: USB2.0
  - ⊙ Industrial Fieldbus: CANBus,ProfiBus, InterBus, CC-Link, DeviceNet, etc.
  - ⊙ Sensor signal: thermal resistance, thermocouple, strain gauge, etc.
- ⊙ Long service life, maintenance-free
- ⊙ Easy to install

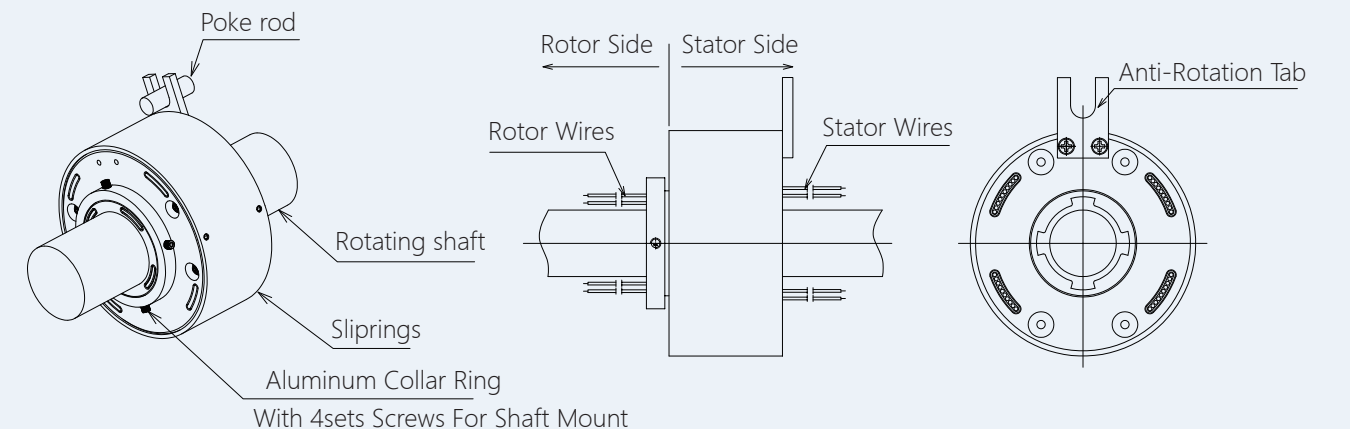
### Main Applications:

- ⊙ Industrial automation equipment/Medical equipment/Wind power equipment/Test equipment/Exhibition / display equipment/Robots/Turntable equipment/Amusement equipment/High-speed railway equipment/Packaging machinery/Ship offshore equipment/Construction machinery

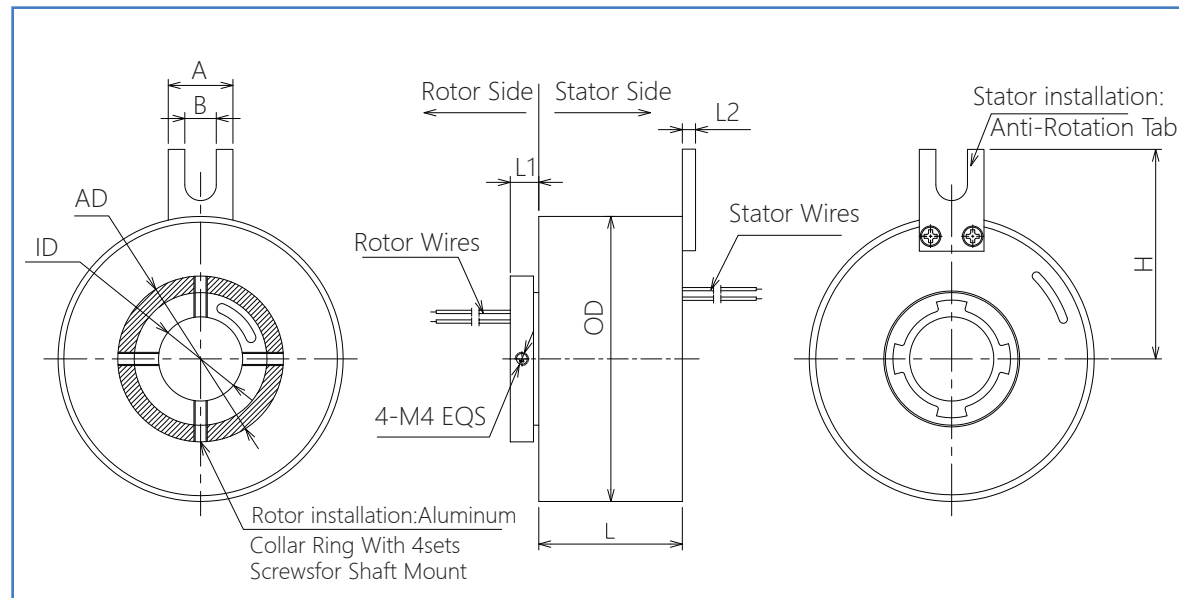
Electrical & Electronics		Mechanical		Enviromental	
Number of Circuits	06/12/18/24	Rotating Speed	0~300rpm	Temperature	Industrial: -20°C~+60°C Military: -55°C~+80°C
Current	5A(Signal)/10A/15A	Contact Material	Engineering plastic	Humidity	95%,100%RH or higher
Voltage	240VAC/DC	Housing Material	Aluminum	Protection Grade	IP50
Dielectric Strength	1000VAC@50Hz	Torque	≤0.1N.m/6 circuits , +0.03N.m/6 circuits	<b>Others</b>	
Insulation Resistance	≥500MΩ@500VDC	Wire Type	Teflon or others		
Dynamic Contact Resistance	Min 1mΩ	Wire Length	rotor/stator : 300mm	Life Span	10 million (customizable)

## Installation Specifications

1. The slip ring is not designed to bear the weight of the equipment to which it is connected. Also, the wires are vulnerable to pull and drag.
2. "Hard mounting" of both ends (rotor and stator) of the slip ring is forbidden. We suggest stabilizing the slip ring on the shaft with 4 screws, then plant the anti-rotation tab. Meantime, secure all wires to avoid interference and damage.
3. Slip rings are precise electronic components. Take protection measures in case of harsh environment or apply slip rings with higher protection level.



## LPT Through-bore Slip Rings Outline Drawing



## Wire Color Code

Wire Size	Ring#	Color	Ring#	Color	Ring#	Color	Ring#	Color
AWG22# Teflon UL(5A)	#1	BLK	#2	RED	#3	YEL	#4	GRE
	#5	BLU	#6	WIT	#7	BRN	#8	ORG
	#9	GRAY	#10	CLAR	#11	WIT/RED	#12	WIT/BLU
AWG17# Teflon UL(10A)	#13	WIT/YEL	#14	WIT/GRE	#15	WIT/BLK	#16	WIT/BRN
	#17	WIT/ORG	#18	WIT/GRAY	#19	BLK/RED	#20	BLK/YEL
	#21	BLK/GRE	#22	BLK/BLU	#23	BLK/BRN	#24	BLK/GRAY
1、AWG22#、AWG17# Teflon wire, 24 colors for a circle 2、"#1" from rotor side (The color of the wire can be changed)								
AWG14# Teflon UL(15A)	#1	BLK	#2	RED	#3	YEL	#4	GRE
	#5	BLU	#6	WIT	#7	BRN	#8	ORG
	#9	GRAY	#10	CLAR	#11	WIT/RED	#12	WIT/BLU
1、AWG14# Teflon wire, 12 colors for a circle 2、#1 from rotor side (The color of the wire can be changed)								

## LPT Through-bore Slip Rings

Model	ID (mm)	OD (mm)	Voltage	Current	Length ( mm )				Rotating Speed (rpm)	Aluminum Ring Diameter ( mm )	Rotor Exposed Length (L1)	Width of Anti-rotation Tab ( A )	Groove Width of Anti-rotation Tab ( B )	Height of Anti-rotation Tab ( H )	Thickness of Anti-rotation Tab ( L2 )
					6 Circuits	12 Circuits	18 Circuits	24 Circuits							
LPT012	Φ12.7	Φ53	240VAC/DC	5A/Signal	34.8	48.6	62.4	76.2	300	Φ30	5.5	12	6	32	2
				5A/Signal	34	47.8	61.6	75.4							
				10A	37	53.8	70.6	87.4							
LPT025	Φ25.4	Φ86	240VAC/DC 380VAC/DC	5A/Signal	43.3	62.5	81.7	100.9	300	Φ50	8.6	19.5	9.5	52.5	4
				10A	47.5	70.9	94.3	117.7							
				15A	52.3	80.5	108.7	136.9							
LPT038	Φ38.1	Φ99	240VAC/DC 380VAC/DC	5A/Signal	43.6	63.4	83.2	103	300	Φ60	8.7	19.5	9.5	56.5	4
				10A	47.8	71.8	95.8	119.8							
				15A	52.6	81.4	110.2	139							
LPT050	Φ50	Φ119	240VAC/DC	5A/Signal	50	69.8	89.6	109.4	300	Φ75	8.5	19.5	9.5	67.5	4
				10A	54.2	78.2	102.2	126.2							
				15A	59	87.8	116.6	145.4							
LPT060/070	Φ60 / 70	Φ135	240VAC/DC	5A/Signal	52.5	70.5	88.5	106.5	300	Φ95	8.7	19.5	9.5	74.3	4
				10A	56.7	78.9	101.1	123.3							
				15A	61.5	88.5	115.5	142.5							
LPT080	Φ80	Φ160	240VAC/DC	5A/Signal	61.6	85.6	109.6	133.6	300	Φ120	13	19.5	9.5	86.5	4
				10A	64.6	91.6	118.6	145.6							
				15A	67.6	97.6	127.6	157.6							
LPT096	Φ96	Φ185	240VAC/DC	5A/Signal	69	96	123	150	300	Φ140	14	35	15	103	5
				10A	69	96	123	150							
				15A	72	102	132	162							
LPT120	Φ120	Φ207	240VAC/DC	5A/Signal	81	108	135	162	300	Φ165	14	35	15	118	5
				10A	81	108	135	162							
				15A	84	114	144	174							
LPT150	Φ150	Φ250	240VAC/DC	5A/Signal	98	131	164	197	300	Φ182	14	35	15	140	5
				10A	98	131	164	197							
				15A	101	137	173	209							
LPT180	Φ180	Φ298	240VAC/DC	5A/Signal	104	137	170	203	300	Φ216	15	35	15	164	8
				10A	104	137	170	203							
				15A	107	143	179	215							

## LPT Long Life Slip Rings



### LPT Long Life Slip Rings

Model	ID(mm)	OD(mm)	Length(mm)	Voltage	Current	Rotating Speed(rmp)	Application	Lifespan (turns)
LPT009-0204-05S	Φ9.55	Φ35	26.6	240VAC/DC	2x4A+5 *common signal	300 or higher	Drone	50millions
LPT009-1802-HS	Φ9.5	Φ31.8	43	240V	2A/Signal	500 or higher	Turntable Equipment	50millions
LPT010-0602	Φ10	Φ36	24.6	240V	2A/Signal	300 or higher	Radar Equipment	50millions
LPT012A-1202	Φ12.7	Φ35	34.4	240VAC/DC	2A/Signal	300 or higher	Cable Reel Equipment	50millions
LPT012B-0602	Φ12.7	Φ35.1	29.6	240VAC/DC	2A/Signal	300 or higher	Test Equipment	50millions
LPT012B-0602-HS-HT	Φ12.7	Φ35.1	29.6	240VAC/DC	2A/Signal	2000 or higher	High-Speed Railway Equipment	200million
LPT012-3002-HS	Φ12.7	Φ36	66	240V	2A/Signal	500 or higher	Turntable Equipment	50millions
LPT032-0802-HS-HT	Φ32	Φ61	41.9	220V	2A/Signal	400	High-Speed Railway Equipment	50millions
SPT050-104-0610	Φ50	Φ104	58.8	500V	10A	400	Packaging Equipment	50millions
SPT050-104-1210	Φ50	Φ104	82.8	500V	10A	400	Packaging Equipment	50millions
SPT050-104-1810	Φ50	Φ104	106.8	500V	10A	400	Packaging Equipment	50millions
SPT050-104-2410	Φ50	Φ104	130.8	500V	10A	400	Packaging Equipment	50millions