

## MUSB2501 (USB slip rings)

1 channel USB2.0 + 1~20 circuits Power/signal

MUSB2501, support 1 channel USB2.0 slip rings, with through bore size 50 mm (1.97"), overall diameter 86mm, are standard, off-the-shelf, Color-coded lead wires are used on both the stator and rotor for simplified electrical connections.

PART# Explanation:

MUSB2501 - P0610 - S06

S06: signal/5A each @ 6 circuits

P0610: 10A each @ 6 circuits



### Specifications

PART #	OD *L	SIGNAL/2A	10A	20A	USB
MUSB2501-S02	120mm*52mm	2	0	0	1
MUSB2501-P0210	120mm*52mm	0	2	0	1
MUSB2501-S08	120mm*76mm	8	0	0	1
MUSB2501-P0810	120mm*76mm	0	8	0	1
MUSB2501-P0210-S06	120mm*76mm	6	2	0	1
MUSB2501-P0410-S04	120mm*76mm	4	4	0	1
MUSB2501-S14	120mm*100mm	14	0	0	1
MUSB2501-P1410	120mm*100mm	0	14	0	1
MUSB2501-P0410-S10	120mm*100mm	10	4	0	1
MUSB2501-P0810-S06	120mm*100mm	6	8	0	1
MUSB2501-S20	120mm*124mm	20	0	0	1

### USB Specifications

USB	USB1.0,USB2.0	connectors	rotor: male, stator: male
BER	10E-11	Insert loss	2db

### Power/signal Specifications

Circuits	1-20 (see table as above)	Current	Signal(2A),10A, Multiple 10A
Voltage	600 VDC/VAC	Max speed	300RPM
Through bore size	50.8mm(1.5")	Overall diameter	120mm(4.72")
Housing Material	Aluminium Alloy	Contact material	0.8N.m
Working life	150million revolutions	Torque	Precious Metal:Gold-Gold
Electrical noise	<10 milliohms	Contact Resistance	<200mOhm(AWG16#,300mm)
Dielectric strength	1000VDC@50Hz	Lead Wire	UL Teflon®
Insulation resistance	1000MΩ@600VDC	Lead Lengths	250mm
Operating Temp.	-40°C to 80°C	Protection	IP51
Mechanical vibration	MIL-SID-810E	Humidity	10% to 90% RH
Materials	Lead Free,RoHS compliant	CE Certified	YES

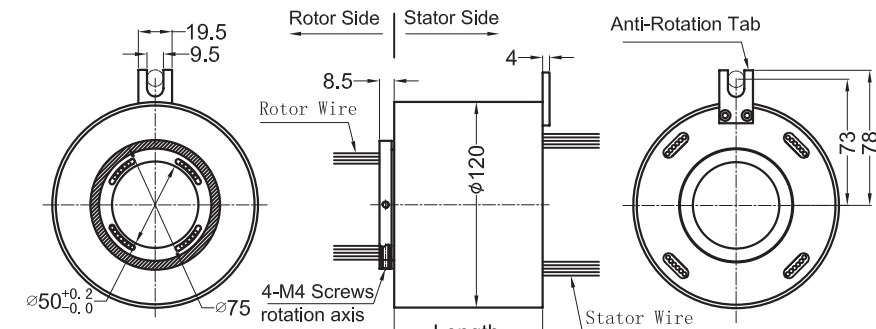
Notes: 10A rings parallel can be used as multiple 10A large current.

For Example: 3 rings parallel = 1 wires 30A, please see order instructions

- 1)The operational life of the unit is dependent upon rotational speed, environment and temperature.
- 2)Lead Wire size: 2A/signal -> AWG22, 10A -> AWG16, 20A -> Awg14, colored code.
- 3)Electrical noise is dependent upon the rotating speed and current,voltage.

### Drawings

Standard drawings:



MUSB2501

12 wires for one group color. from 13 ... 24, repeat the same color as 1 ... 12, indicated with number code pipe.

### Lead wire Color codes

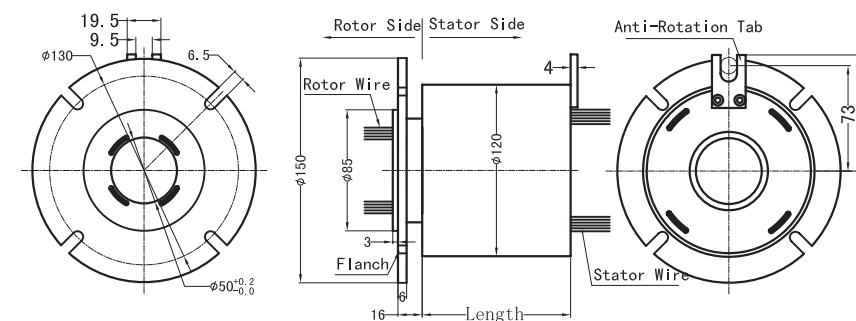
Rings#	Color Code	Rings#	Color Code	Rings#	Color Code
1	BLK	5	YEL	9	GRY
2	BRN	6	GRN	10	WHT
3	RED	7	BLU	11	PINK
4	ORN	8	PURPLE	12	AZURY

Optional Flanges mounting:

At sometimes, we need a different flange for mounting instead, how should we do?

Great! Moflon supply flange style as below:

(when you order, pls add FL01 at the suffix of Part#, for example: MUSB2501-S06-FL01 means MUSB2501-S06with optional flange FL01.)



Suffix -FL01



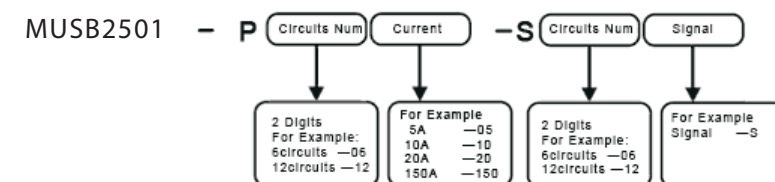
## Options

- ▶ Can combine more wires:1-96Ring
- ▶ Specified connectors and Heat-shrink tube.
- ▶ Longer lead lengths available.
- ▶ Shielded cables
- ▶ Connectors
- ▶ Frequencies up to 500 MHz
- ▶ High-speed data transmission for fast Ethernet and EtherCat
- ▶ Signal, Coax, and Power combinations
- ▶ Thermocouples
- ▶ Shock, Vibration, and Temperature Qualified
- ▶ Pneumatic/Hydraulic Capability
- ▶ High temperature---up to 450 degree
- ▶ High Voltage & large Current(1000A)
- ▶ Military Grade.

## Build On Request

how to build on request?

Please see ordering information instructions as below :



For example:

- ▶ if order MUSB2501 with 6wires\*signal,the model should be **MUSB2501-S06**.
- ▶ if order MUSB2501 with 12wires\*signal + 3wires\*10A,the model should be **MUSB2501-P0310-S12**
- ▶ if you have other optional requirements,such as lead wire length,connectors,military grade, Please descrip in your email.