



P012 series PCB slip ring

P012 series PCB slip ring, hole size 12.7mm, thickness 6mm, is more thinner than SenRing Pancake slip ring, adopt innovative PCB material, min thickness 5mm, ultra-hard gold plating and ultra-thick copper foil process, support power and signal combined transmission, make sure high stability, low torque, low loss, no maintenance, low electrical noise, long life, etc.

Part No. Description

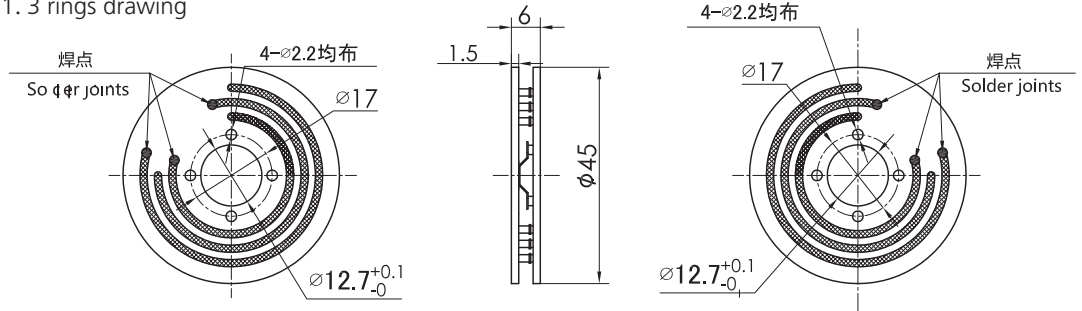
| P012 | - power circuits | - signal circuits | - Product grade | Examples : |
|---|------------------|-------------------|-----------------|--|
| P012 series PCB slip ring ID:12.7mm OD;6mm | | | | C : standard D : industrial |
| Examples : | | | | Examples : |
| 0610:6 circuits@10A | | | | 06S:6 circuits signal@2A (5A options) |
| 1230:12 circuits@30A | | | | 12S:12 circuits signal@2A (5A options) |

Examples

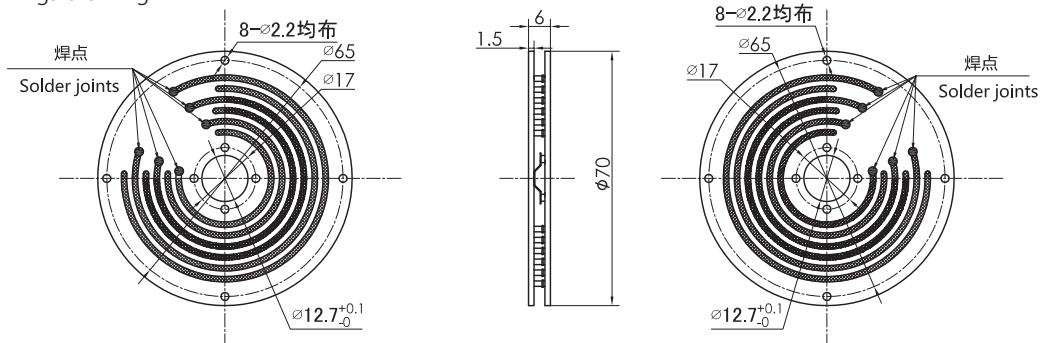
P012-0310: P012 means PCB slip ring, hole size 12.7mm ,0310 means 3 circuits(10A each)current;

P012-0810-02S: P012 means PCB slip ring, hole size 12.7mm,0810 means 8 circuits(10A each)current, 02s means 2 circuits signal;

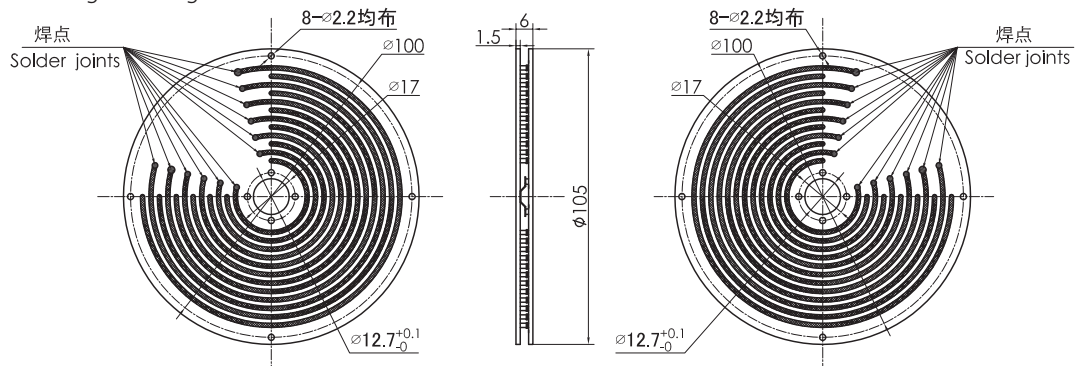
1. 3 rings drawing



2. 6 rings drawing



3. 12 rings drawing



Model List

| Model | 10A | signal/5A | Rings | Model | 10A | signal/5A | Rings |
|---------------|-----|-----------|-------|---------------|-----|-----------|-------|
| P012-0310 | 3 | 0 | 3 | P012-03S | 0 | 3 | 3 |
| P012-0210-04S | 2 | 4 | 6 | P012-0410-02S | 4 | 2 | 6 |
| P012-06S | 0 | 6 | 6 | P012-0610 | 6 | 0 | 6 |
| P012-1210 | 12 | 0 | 12 | P012-0210-10S | 2 | 10 | 12 |
| P012-0410-08S | 4 | 8 | 12 | P012-0610-06S | 6 | 6 | 12 |
| P012-0810-04S | 8 | 4 | 12 | P012-12S | 0 | 1 | 12 |

*Remark: Circuits can be combined in parallel for bigger current, N circuits of 10A to get N*10A, such as 2 circuits of 10A in parallel for 20A use. if you need customize the hole size, OD, thickness, circuit no. and signal type of slip ring, pls contact the SenRing technician: 186 7557 7111.

Technical Specification of the slip ring

| Mechanical Data | | Electrical Data | | |
|------------------|--------------------------------|-----------------------|------------------------------------|-----------------------------|
| spec | data | spec | data | |
| working life | refer to slip ring grade table | | power | signal |
| Rotating speed | refer to slip ring grade table | voltage range | 0~440VAC/VDC | 0~440VAC/VDC |
| working temp. | -30 ℃ ~80 ℃ | insulation resistance | ≥ 1000MΩ/500VDC | ≥ 1000MΩ/500VDC |
| work humidity | 0~85%RH | lead wire spec. | AWG17# Silver-plated teflon | AWG22# Silver-plated teflon |
| contact material | refer to slip ring grade table | | | |
| housing material | PCB base | lead wire length | standard 300mm (can be customized) | |
| torque | 0.1N.m; +0.03N.m/6 circuits | Dielectric Strength | 500VAC@50Hz, 60s | |
| IP grade | IP51 | Electrical noise | <0.01Ω | |

Grade code

| Grade code | Max rotating speed | working life | contact material |
|---------------|--------------------|--------------|------------------|
| C: standard | 100RPM | 5 millions | precious metal |
| D: industrial | 300RPM | 20 millions | gold-gold |

Color Code of Lead Wire

| ring # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------|
| color | BLK | BRN | RED | ORG | YEL | GRN | BLU | PUR | GRY | WHT | PINK | LGT BLU |
| ring# | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| color | WHT/BLK | WHT/BRN | WHT/RED | WHT/ORG | WHT/YEL | WHT/GRN | WHT/BLU | WHT/PUR | WHT/GRY | BLK/RED | BLK/BRN | Transparent |

Remark: "1": the first wire from rotor side, P012-06S wire color sequence: BLK/BRN/RED/ORG/YEL/GRN, 24 color wires as one group, if more than 24 wires, repeat as sequence, use number tube to tell group 1#, 2#....