



### SNM012 series miniature capsule slip ring

OD 12.5mm

SNM012 is universal, compact capsule slip ring, which is research and development of specializing consume electronics, security industry, revolving stage of lights industry, and gold to gold contact which ensures the stability and working life

24 kind of color wires used for rotor side and stator side, it is convenient for connect wires. conductive ring adopt 90°V-groove design makes more contact surface, more smooth rotation, lower torque and lower dynamic resistance

SenRing R&D production is dedicated national defense, military, research institute and non-civilian fields, using thick gold plated processing, import bearings, rare metal alloy wire brush



#### Standard Part No. Description:

SNM012A-12 means : capsule slip ring , OD 12.5mm , flange A type , support 12 circuits signal 2A

SNM012U-06-8 means : capsule slip ring of high grade production , OD 12.5mm , support U type 6 circuits signal 2A

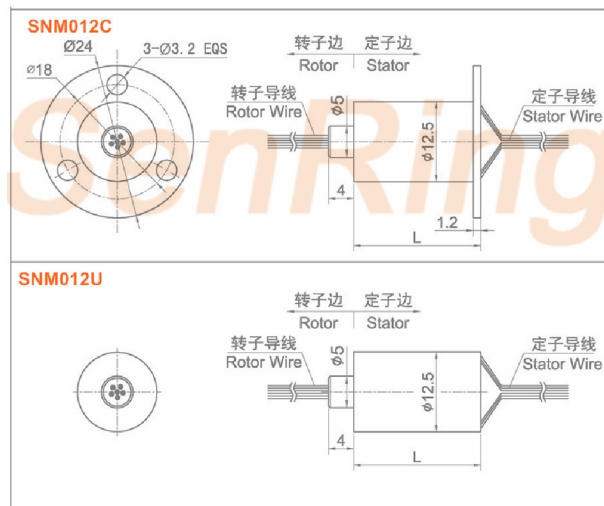
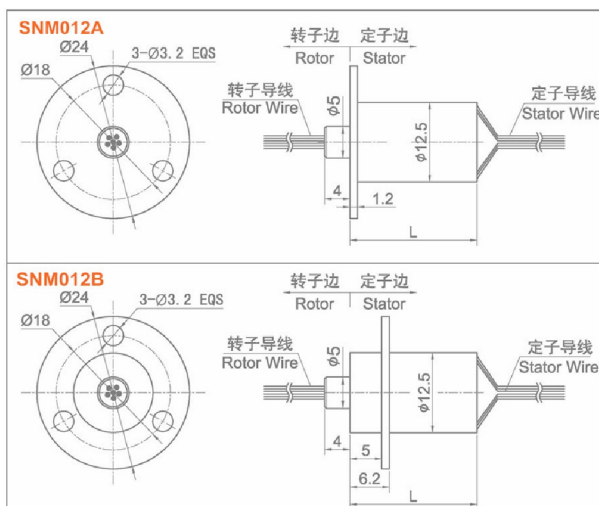
\* remark: circuits could be connected in parallel to be used as circuits no.\*2A

\* such as: 3 paralleling 2A circuits could be used as one 6A circuit

### Technical Data

Circuits No	2~18(PIs refer to below table)	Current	Standard 2A per circuit
Voltage	250 VDC/VAC	Max speed	250RPM
Through hole size	12.5mm	OD	13.5mm-23.5mm
Housing material	Plastic	Torque	<0.06N.m
Working life	> 20 millions revolutions(depends on work speed, environment)	Contact material	Precious metal:gold-gold
Electrical Noise	<10mΩ @6VDC, 50mA, 5RPM	Contact Resistance	<150mΩ(AWG30#, 250mm)
Dielectric Strength	500VDC@50Hz, 10s	Lead wire Spec	UL Teflon@Awg30
Insulation Resistance	1000MΩ@600VDC, 10s	Lead wire length	250mm
Work Temperature	-40°C to 85°C	IP grade	IP51
Mechanical vibration	MIL-SID-810E	Work Humidity	10% to 85% RH
Material	RoHS compliant	CE certificate	YES

### Drawing





### Lead Wire Color Code

Model no	Circuits	L--Length(mm)
SNM012-04	4	13.5
SNM012-06	6	13.5
SNM012-08	8	25
SNM012-12	12	25
SNM012-18	18	23.5

Lead Wire Color Code					
Ring no.#	Color	Ring no.#	Color	Ring no.#	Color
1	black	5	yellow	9	grey
2	brown	6	green	10	white
3	red	7	blue	11	pink
4	orange	8	purple	12	light blue
13	white-black	17	white-yellow	21	white-grey
14	white-brown	18	white-green	22	black-brown
15	white-red	19	white-blue	23	black-red
16	white-orange	20	white-purple	24	transparent

Ring no.1 means the first wire start from rotor side to stator side  
 example SNM012-06 of color is black,brown,red,orange,yellow,green ;  
 24 wires as a color group. repeat from 13...24 , each group wire marked with No. tube ( 1,2,3,4... )

#### Difference between SNM012 and SNM012-8

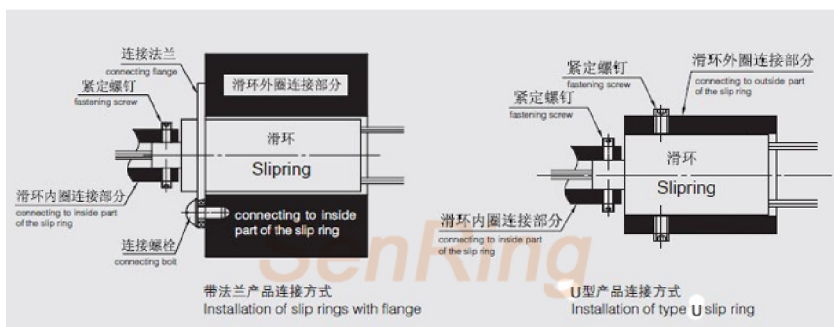
	Max speed	Working life	Torque	Housing material	Electrical noise@10Rpm
SNM012	250RPM	>4000万	0.02 N·m	Plastics	10mΩ
SNM012-8	1000RPM	>1.5亿	0.005 N·m	Metal	4mΩ

### Options

- ▲ Mounting flange
- ▲ Direction of lead wire exits.
- ▲ support 1~24 circuits
- ▲ connectors and heat shrink tube
- ▲ Lead wire length
- ▲ Shield wire
- ▲ 500 MHz transmitting speed
- ▲ Transmit combined high speed data ( Ethernet ,USB,Profibus )
- ▲ Combined with signal wires,coaxial wire and power wire
- ▲ Combined with thermocouple and signal
- ▲ Customize for high temperature,shockproof environment
- ▲ Combined with pneumatic,hydraulic
- ▲ Military level
- ▲ IP65,IP68 Optional

### Installation

#### Installation guide of capsule slip ring



#### Instructions :

- Because of low torque of capsule slip rings,the lead wire could be used to rotate or fix

#### Caution :

- Do not let slip ring to carry loads as well as lead wires
- Protect lead wire to avoid any damages of insulation when intallation
- As a precise component, slip ring should be operated in a dry, less dust environment. Pls take protect measur ements if bad conditions

### Application

#### Typical applications

- CCTV system, cameras
- Electric test equipments
- Medical equipments
- Robots , test instruments , turntable
- Automatic equipments
- And so on...
- Technical support for specail application,pls contactsales1@senring.com.