# @rand /

### **High Temperature Slip Ring Series**

#### NHG50120Series

Slip rings of the NHG50120 series are specially fit for high temperature  $100^{\circ}\text{C} \sim 250^{\circ}\text{C}$  working environment such as hot roller, heating device. Grand applies noble precious metal reduced noises and interference between circuits, low friction torque assures long life-span.

NHG50120 series with through hole 50mm, OD120mm, suitable for rotating application which requires a through hole ≤50mm, Standard model supports 1-36 power rings(0-20A/ring) or 1-72 signal rings(0~5A/ring)

#### **Features**

- Multi-point brush contact material ensure long life
- Integrated structure design for easy installation
- ◆ Standard model supports 1-96rings power or signal(0~20A/ring)
- ♦ IP 51 (IP54-IP68 can be customized)
- Both the data bus agreement compatible
- Free maintenance

#### **Typical application**

- Automatic machines
- Robotics, rotary sensors, urgent illumination equipment
- Roller
- Packaging
- Heating device
- Medical, Pharmaceutical equipment
- Converting machines
- Capping machines
- Labeling machines
- Filling machine
- Machine tools

#### **Options**

- ◆ Optional for underwater IP65, IP68Operation speed, current &voltage
- No. of rings
- Connector
- Housing material
- ♦ Position of wire outlet, wire length
- Protection level (dust and water)
- Flange mounting is optional
- Operating temperature
- Support mixed high speed data transmission(including Ethernet, USB, Profibus, Ethercat, CANOPEN, CANBUS, RS232, RS485, etc.)
- Fluidic rotary joints, FORJ and electric slip ring can be mixed.



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#### **Specifications**

Electrical Data			Mechanical Data		
	Power	Signal	Max. Speed	0-250 rpm	
Rated Current	10~20A/ring	2~5A/ring	Working Temperature	-20℃~+250℃	
Rated Voltage	0~380VAC/VDC	0~240VAC/VDC	Working Humidity	0-85% RH	
Insulation Resistance	≥500MΩ/500VDC	≥500MΩ/500VDC	Structure Material	Engineering plastic or metal	
Dielectric Strength	500VAC@50Hz,60s	500VAC@50Hz,60s	Contact material	Precious metal	
Wire Size	Sliver plated Teflon AWG16(10A), AWG14(20A)	Sliver plated Teflon AWG26(2A), AWG22(5A)	Operating Torque	0.1N·m for 6 rings, 0.03  N·m increased for every 6 rings added	
Wire Length	Standard 500mm(adj	ustable)		ever, o impo duded	
Dynamic Resistance	<0.01Ω		Protection level	IP51	

#### **Product Code**

For standard versions  $\underline{NHG} \underline{XXX} \underline{XXX} - \underline{XP/XS} - \underline{XXX}$ 

1 High temperature slip ring

2 Inner dimension of housing ; Eg, XXX= 100, the ID is 100mm

3 Outer dimension of housing; Eg, XXX= 203, the OD is 203mm

4 Number of power rings; Eg, XP= 3P, the number of power rings is 3, P=10A, P1=15A, P2=20A

**5** Number of signal circuits; Eg, XS= 2S, the number of signal rings is 2

6 Customer special options

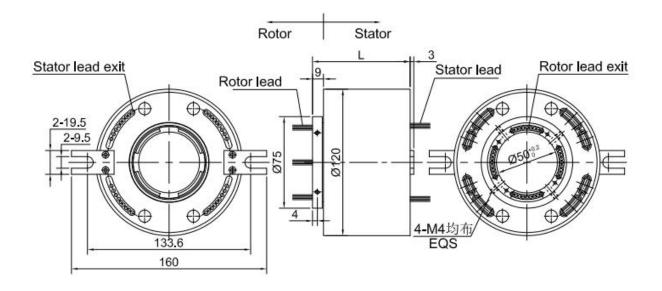
#### **Lead Wires Color Code**

Ring#	1	2	3	4	5	6	7	8	9	10	11	12
Color	RED	YEL	BLK	BLU	GRN	WHT	PUP	GRY	BRN	ORN	DBLU	КНК



## **High Temperature Slip Ring Series**

#### **Drawing for Outline Dimension**



#### **Model List**

Model	Power Ring(10A/15A/20A)	Signal Ring(5A)	Length (mm)	
NHG50120-6P	6	-	75.5	
NHG50120-12S	-	12	75.5	
NHG50120-12P	12	-	105.5	
NHG50120-6P/12S	6	12	105.5	
NHG50120-24S	-	24	105.5	
NHG50120-18P	18	-	135.5	
NHG50120-12P/12S	12	12	135.5	
NHG50120-6P/24S	6	24	135.5	
NHG50120-36S	-	36	135.5	
NHG50120-24P	24	-	165.5	
NHG50120-18P/12S	18	12	165.5	
NHG50120-12P/24S	12	24	165.5	
NHG50120-6P/36S	6	36	165.5	
NHG50120-48S	-	48	165.5	
NHG50120-30P	30	-	195.5	
NHG50120-24P/12S	24	12	195.5	
NHG50120-18P/24S	18	24	195.5	
NHG50120-12P/36S	12	36	195.5	
NHG50120-6P/48S	6	48	195.5	
NHG50120-60S	-	60	195.5	
NHG50120-36P	36	-	225.5	
NHG50120-30P/12S	30	12	225.5	



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NHG50120-24P/24S	24	24	225.5
NHG50120-18P/36S	18	36	225.5
NHG50120-12P/48S	12	48	
,	12		225.5
NHG50120-6P/60S	6	60	225.5
NHG50120-72S	-	72	225.5



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