

### NHG100203Series

Slip rings of the NHG100203 series are specially fit for high temperature 100°C~250°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.

NHG100203 series with through hole 100mm, OD 203mm, suitable for rotating application which requires a through hole  $\leq 100$ mm, Standard model supports 1-48 power rings (0-20A/ring) or 1-96 signal rings (0~5A/ring)

### Features

- ◆ Multi-point brush contact material ensure long life
- ◆ Integrated structure design for easy installation
- ◆ Standard model supports 1-96 rings 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, IP68 Operation 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.

## Specifications

Electrical Data			Mechanical Data	
	Power	Signal	Max. Speed	0-250 rpm
Rated Current	10~20A/ring	2~5A/ring	Working Temperature	-20°C~+250°C
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(adjustable)			
Dynamic Resistance	<0.01Ω		Protection level	IP51

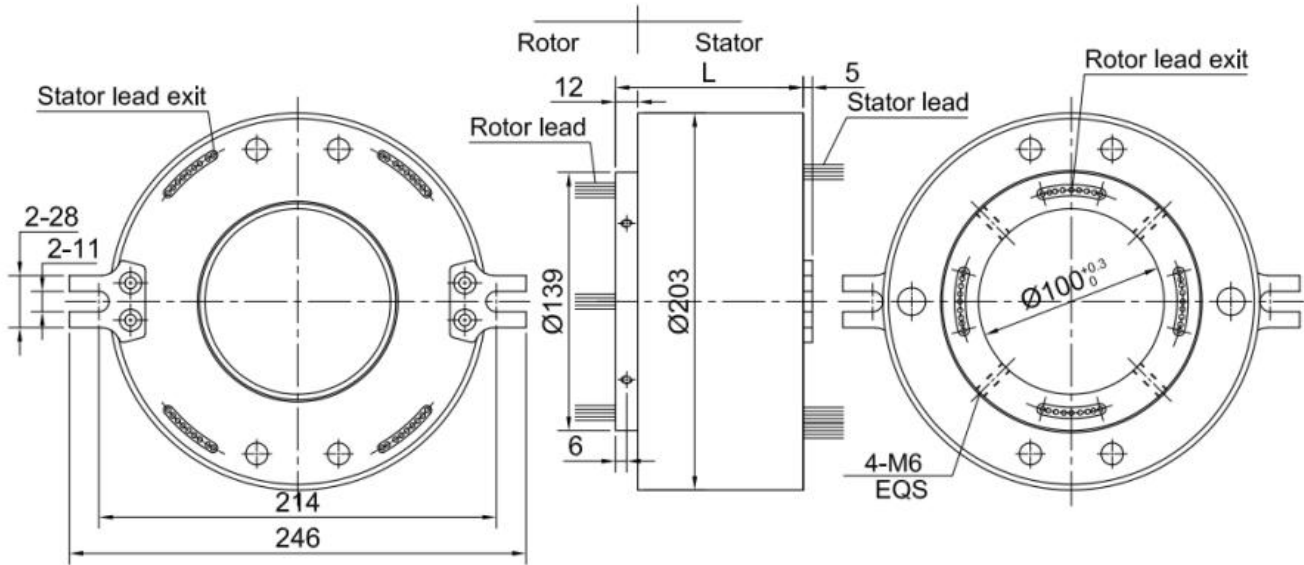
## Product Code

For standard versions	<b>NHG XXX XXX – XP/XS –XXX</b>
	<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">1</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">2</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">3</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">4</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">5</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">6</span>
<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">1</span>	High temperature slip ring
<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">2</span>	Inner dimension of housing ; Eg, XXX= 100, the ID is 100mm
<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">3</span>	Outer dimension of housing; Eg, XXX= 203, the OD is 203mm
<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">4</span>	Number of power rings; Eg, XP= 3P, the number of power rings is 3, P=10A, P1=15A, P2=20A
<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">5</span>	Number of signal circuits; Eg, XS= 2S, the number of signal rings is 2
<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">6</span>	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	KHK

## Drawing for Outline Dimension



## Model List

Model	Power Ring (10A/15A/20A)	Signal Ring(5A)	Length (mm)
NHG100203-6P	6	-	94.5
NHG100203-12S	-	12	94.5
NHG100203-12P	12	-	124.5
NHG100203-6P/12S	6	12	124.5
NHG100203-24S	-	24	124.5
NHG100203-18P	18	-	154.5
NHG100203-12P/12S	12	12	154.5
NHG100203-6P/24S	6	24	154.5
NHG100203-36S	-	36	154.5
NHG100203-24P	24	-	184.5
NHG100203-18P/12S	18	12	184.5
NHG100203-12P/24S	12	24	184.5
NHG100203-6P/36S	6	36	184.5
NHG100203-48S	-	48	184.5
NHG100203-30P	30	-	214.5
NHG100203-24P/12S	24	12	214.5
NHG100203-18P/24S	18	24	214.5
NHG100203-12P/36S	12	36	214.5
NHG100203-6P/48S	6	48	214.5
NHG100203-60S	-	60	214.5

NHG100203-36P	36	-	244.5
NHG100203-30P/12S	30	12	244.5
NHG100203-24P/24S	24	24	244.5
NHG100203-18P/36S	18	36	244.5
NHG100203-12P/48S	12	48	244.5
NHG100203-6P/60S	6	60	244.5
NHG100203-72S	-	72	244.5
NHG100203-42P	42	-	274.5
NHG100203-36P/12S	36	12	274.5
NHG100203-30P/24S	30	24	274.5
NHG100203-24P/36S	24	36	274.5
NHG100203-18P/48S	18	48	274.5
NHG100203-12P/60S	12	60	274.5
NHG100203-6P/72S	6	72	274.5
NHG100203-84S	-	84	274.5
NHG100203-48P	48	-	304.5
NHG100203-42P/12S	42	12	304.5
NHG100203-36P/24S	36	24	304.5
NHG100203-30P/36S	30	36	304.5
NHG100203-24P/48S	24	48	304.5
NHG100203-18P/60S	18	60	304.5
NHG100203-12P/72S	12	72	304.5
NHG100203-6P/84S	6	84	304.5
NHG100203-96S	-	96	304.5