

PROFESSIONAL CUSTOMIZATION TO SOLVE YOUR WORRIES

Unique electromagnetic interference processing technology to ensure signal integrity. Professional production technology to ensure that every piece of product has superior performance.

Professional pre-sales and after-sales technical support to ensure that our products are perfectly integrated with your equipment

JiuJiang Ingiant Technology Co.,Ltd

Add: NO.1 Factory Building of Automotive Electronic Industry Park, Jiujiang Economic and Technological Development Zone, Jiangxi, 332000, China.

Tel: +86 792 8321551

Fax: +86 792 8984000 exit 0806

Email: sales@ingiant.com / service@ingiant.com

Web: <http://www.ingiant.cn>



JIUJIANG INGIANT TECHNOLOGY CO.,LTD



As a device for 360 degree rotating transfer electric power, signal, data, pneumatically or hydraulically, the application of slip ring is almost endless.

www.ingiant.cn

Company Profile

Founded in December 2014, JiuJiang Ingiant Technology Co., Ltd is a professional manufacturer of slip rings and rotary joints integrating R&D, manufacturing, testing, sales and technical support services, which located in Jiujiang national level economic and Technological Development Zone. INGIANT manufactures various media rotary connectors, committed to solving various technical problems for rotary conduction of electric power, signal, data, gas, liquid, light, microwave and other fields of automation industry, we provide our customers with complete rotary conduction products and solutions.

At present, Ingiant covers an area of more than 6000 square meters of scientific research & production space and with a professional design & manufacturing team of more than 100 staffs; The company owns complete mechanical processing equipments including a CNC processing center, with strict inspection and testing standards which can meet national military GJB standard and quality management system, own 27 kinds of technical patents of slip rings and rotary joints(include 26 utility model patents, 1 invention patent).

Our products are widely used in high-end automation equipment and various occasions that require rotating conduction, such as radar, missiles, packaging machinery, wind power generator, turntables, robots, engineering machinery, mining equipment, port machinery and other fields. By providing high-quality products and technical services, Ingiant has become the long-term designated qualified supplier for numerous military units & research institutes, domestic and foreign companies.

INGIANT adheres to the business philosophy of "customer-centered, quality-based, innovation-driven", seeks to win the market with high-quality products and considerate services.



Quality policy
Customer-centered
Quality-based
Innovation-driven



CONTENTS

Quality target



1、Corporate honor.....	01
2、Testing equipment.....	03
3、Cooperative partner.....	04
4、Product series	05
◆ DHK Series Through Hole Slip Ring	05
◆ DHS series flange install slip ring	14
◆ Gas / Liquid rotary joint	23
◆ Fiber optic rotary joint	27
◆ Radio frequency high speed rotary joint series	36
◆ Hybrid slip ring	42
◆ Slip ring series for special industries	52
◆ Optical transceiver	56

Corporate honor





Testing equipment



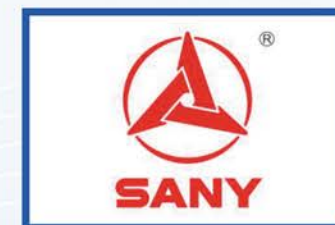
Cooperative partner



Beijing Institute of Technology



China Huaneng Group Co., Ltd.



SANY HEAVY INDUSTRY CO., LTD.



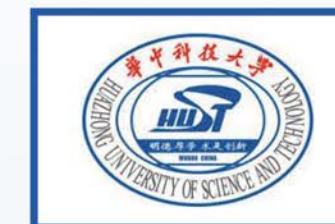
CETC



MCC Group



National University of Defense Technology



Huazhong University of Science and Technology



CHINA STATE SHIPBUILDING CORPORATION LIMITED



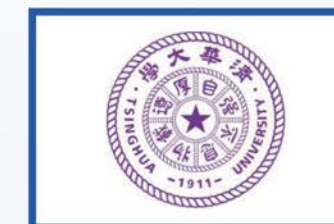
COSIC



Chinese Academy of Sciences



Harbin Institute of Technology



Tsinghua University



NORINCO GROUP



CASC



China Railway Construction Corporation Limited ("CRCC")

DHK

DHK series through hole slip ring

DHK series through hole slip ring is specially designed with a central hole for easy installation of hydraulic channel, air pressure channel or drive shaft. It adopts advanced beam brush type multi-point contact to ensure reliable contact under extremely low friction. The through hole ranges from 3mm to 500mm. Optional, the current can be selected from 2 Amperes to 1000 Amperes, which can fully meet your different transmission schemes.

Features

- Transmit analog and data signals
- Compatible with data bus protocol
- Long life, maintenance-free
- Easy to install
- 360° continuous rotation to transmit power and data signals

Can be customized specifications

- Inner diameter, outer diameter, length
- Rotating speed
- Circuits(Also named Channel/Wire quantity)
- Current and voltage
- Wire length, connector type
- Housing material and color
- Protection level
- Signal and power transmitted separately or mixed

Typical application

- Industrial machining center, rotary table
- Heavy equipment tower or cable reel, laboratory equipment
- Packing equipment, stackers, magnetic clutches, process control equipment
- Rotation sensors, emergency lighting equipment, robots
- Exhibit/display equipment, medical equipment
- Hotel, guesthouse revolving door control system

Professional Customization To Solve Your Worries



Naming description of model

DH K 038 — 18 — 10A — 002

- (6). Identify Number
- (5).Rated Current
- (4). Circuits Number
- (3). Inner Diameter Number
- (2). Installation Method
- (1). Product Type

- (1).Product type: DH—electric slip ring
- (2).Installation method: K—through hole
- (3).Through hole product bore diameter
- (4).Total circuits
- (5).The rated current or it will not be marked if it passes through a different rated current for the circuits.
- (6).Identify number: --XXX; In order to distinguish different specifications of the same product model, the identification number is added after the name. For example: DHK040-40 has two sets of products with the same name, the cable length, connector, installation method, etc. are different, you can add the identification number: DHK040-40-002; if there are more of this model in the future, and so on - 003 , -004, etc.

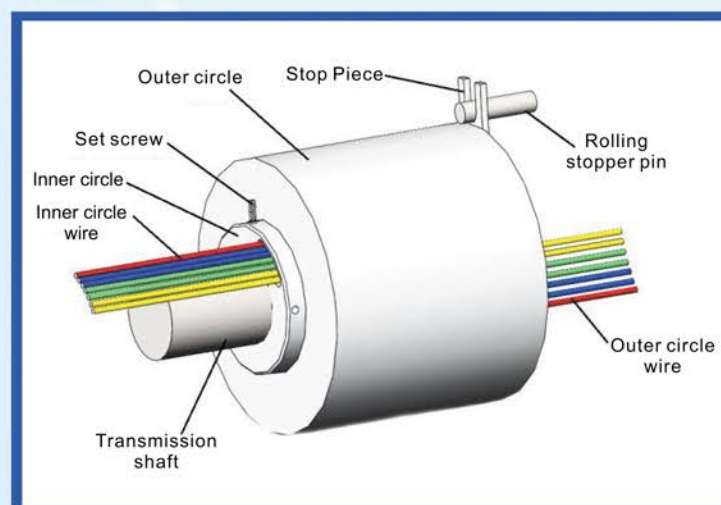
Model	Inner diameter (ID)	Outer diameter (OD)	The Length Corresponding To The Standard Number Of Circuits (L)								Max number of circuits
			6circuits	12circuits	18circuits	24circuits	30circuits	36circuits	42circuits	42circuits	
DHK012-I	12.7	53	27.4-36.4	39.4-51.4	51.4-55	63.4-68.2					
DHK012-II	12.7	60	27.4-36.4	39.4-57.4	51.4-69.4	63.4-87.4	75.4-81.4	87.4-94.6	99.4	111.4	
DHK025	25.4	78	33.4-42.4	45.4-63.4	57.4-84.4	69.4-105.4	81.4-87.4	93.4-100.6	105.4-113.8	117.4-127	
DHK038	38	99	33.4-42.4	45.4-63.4	57.4-84.4	69.4-105.4	81.4-87.4	93.4-100.6	105.4-113.8	117.4-127	
DHK050	50	120	42.4-54.4	54.4-78.4	66.4-102.4	78.4-126.4	90.4-135.4	102.4-156.4	114.4-122.8	126.4-136	72circuits
DHK060	60	130	43.4-55.4	55.4-79.4	67.4-103.4	79.4-127.4	91.4-151.4	103.4-175.4	115.4-178.4	127.4-199.4	108circuits
DHK070	70	145	51-63	63-87	75-111	87-135	99-159	111-183	123-207	135-231	120circuits
DHK080	80	155	51-63	63-87	75-111	87-135	99-159	111-183	123-207	135-231	120circuits
DHK090	90	165	51-63	63-87	75-111	87-135	99-159	111-183	123-207	135-231	120circuits
DHK100	100	185	59-71	71-95	83-119	95-143	107-167	119-191	131-215	143-239	120circuits



DHK through hole series standard slip ring

Through hole slip ring installation manual

1. Install the slip ring at the required position and tighten the matching screws radially, and at the same time ensure that the rotor center is coaxial with the rotation axis.
2. Arrange the wires and make the necessary connections to prevent the wires from obstructing the free rotation of the slip ring, and not to press the wires to cause the wires to bend, otherwise an accident may be caused by the damage of the wire insulation.
3. Use cylindrical pins or bolts to clamp in the U-shaped groove of the stop piece.



Flange slip ring installation manual

1. Locate the outlet of the slip ring to the be installed equipment right position, and lock it with washers and screws.
2. Arrange the wires and make the necessary connections to prevent the wires from obstructing the free rotation of the slip ring.
3. The other end is fixed with positioning block or stop piece.

Warning: Because there may be a mechanical fit error between the slip ring and the customer's specific application, it is not recommended to fasten and install the stator and rotor at both ends of the slip ring at the same time, otherwise the slip ring may be damaged prematurely due to poor concentricity.



Technical parameter

Circuits	As The Customer Required
Rotating speed	0~1000rpm
Work temperature	-40℃~+65℃
Work humidity	0~95%

Electrical performance

Rated voltage	0~24VDC、250VAC/VDC、440VAC
Rated current	2A、5A、10A、15A、25A
Voltage resistance strength	Power: among 2 rings≥1000VAC@50Hz, Signal: among 2 rings≥500VAC@50Hz
Insulation resistance	Power: ≥1000MΩ@500VDC, Signal: ≥500MΩ@500VDC
Dynamic resistance variation	<10mΩ

Mechanical performance

Contact material	Precious metal
Wire specifications	According To Customer Requirements
Wire length	According To Customer Requirements
Housing materia	Aluminum Alloy
Torque	1mN · m/ring
Protection level	IP51-IP68

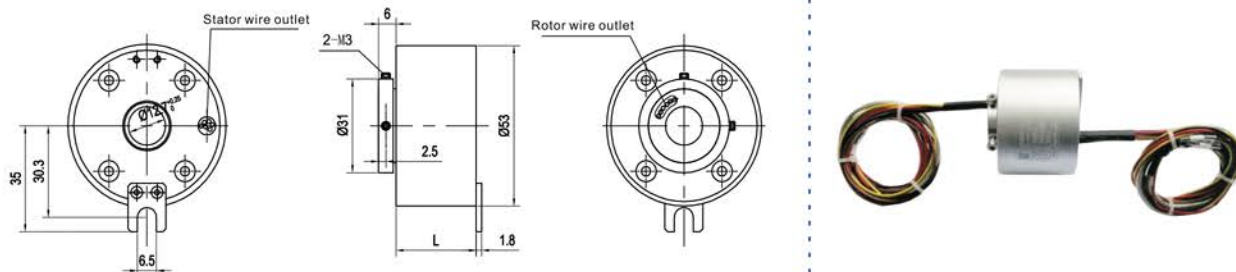
Wire Information Table

Current	Wire Specs	Color													
		Red	Yellow	Black	Blue	Green	White	Brown	Gray	Orange	Purple	Light red	Transparent color		
2A	AWG26														
5A	AWG22														
10A	AWG18														
15A	AWG16														
20A	AWG14														
25A	AWG12														

Trustworthy Product with Military Quality

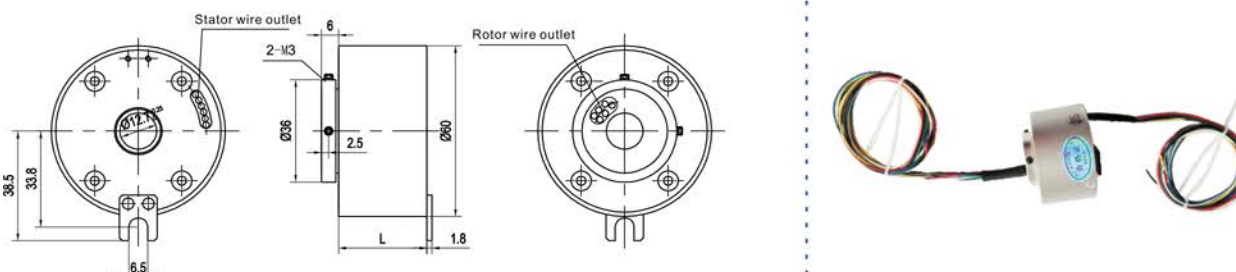


DHK012-I



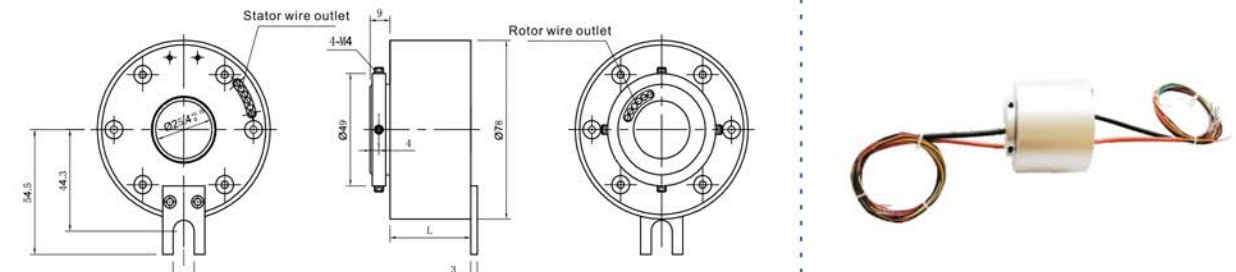
The main parameters			
Number of circuits	According to requirements of customers	Working temperature	-40℃~+65℃
Rated current	2A、5A	Working humidity	< 70%
Rated voltage	0~240VAC/VDC	Protection level	IP54
Insulation resistance	≥ 1000MΩ@500VDC	Housing material	Aluminum Alloy
Insulator strength	1500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10mΩ	Lead wire specification	Colored Teflon insulated & tinned stranded flexible wire
Rotating speed	0~600rpm	Lead wire length	500mm+20mm

DHK012-II



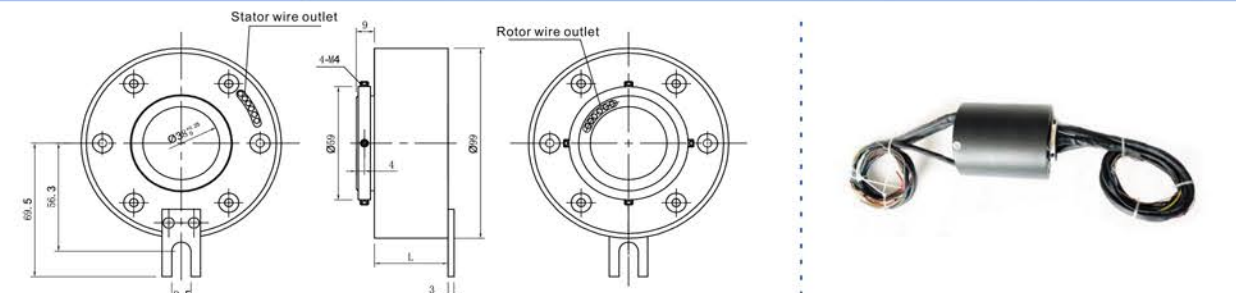
The main parameters			
Number of circuits	According to requirements of customers	Working temperature	-40℃~+65℃
Rated current	2A、5A、10A、15A、20A	Working humidity	< 70%
Rated voltage	0~240VAC/VDC	Protection level	IP54
Insulation resistance	≥ 1000MΩ@500VDC	Housing material	Aluminum Alloy
Insulator strength	1500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10mΩ	Lead wire specification	Colored Teflon insulated & tinned stranded flexible wire
Rotating speed	0~600rpm	Lead wire length	500mm+20mm

DHK025



The main parameters			
Number of circuits	According to requirements of customers	Working temperature	-40℃~+65℃
Rated current	2A、5A、10A、15A、20A	Working humidity	<70%
Rated voltage	0~240VAC/VDC	Protection level	IP54
Insulation resistance	≥1000MΩ@500VDC	Housing material	Aluminum Alloy
Insulator strength	1500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	<10mΩ	Lead wire specification	Colored Teflon insulated & tinned stranded flexible wire
Rotating speed	0~600rpm	Lead wire length	500mm+20mm

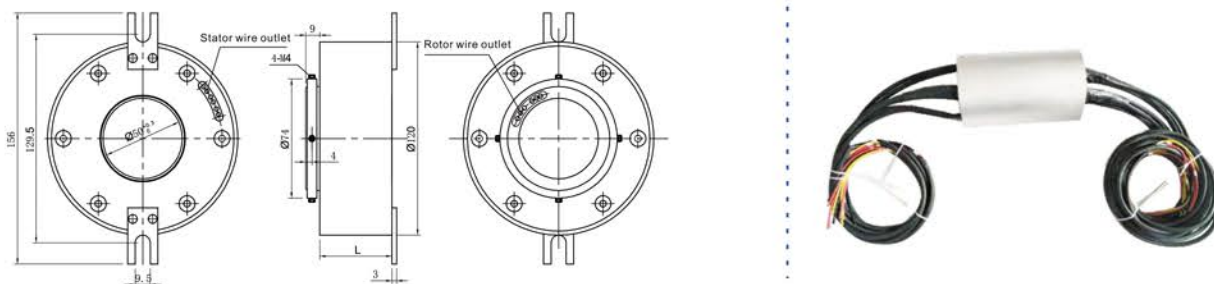
DHK038



The main parameters			
Number of circuits	According to requirements of customers	Working temperature	-40℃~+65℃
Rated current	2A、5A、10A、15A、20A	Working humidity	< 70%
Rated voltage	0~240VAC/VDC	Protection level	IP54
Insulation resistance	≥ 1000MΩ@500VDC	Housing material	Aluminum Alloy
Insulator strength	1500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10mΩ	Lead wire specification	Colored Teflon insulated & tinned stranded flexible wire
Rotating speed	0~600rpm	Lead wire length	500mm+20mm

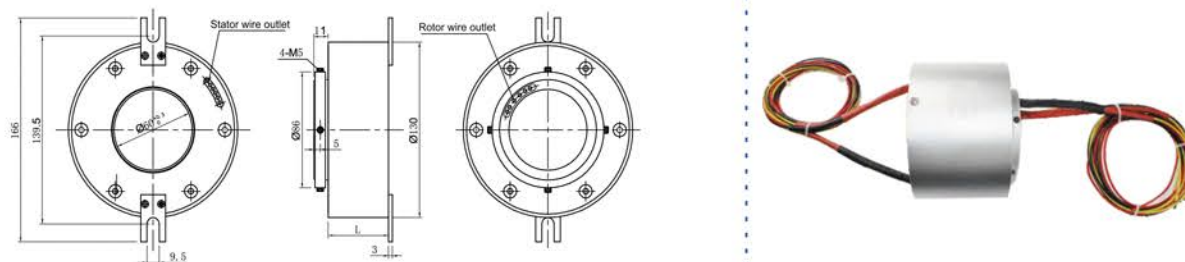


DHK050



The main parameters			
Number of circuits	According to requirements of customers	Working temperature	-40℃~+65℃
Rated current	2A、5A、10A、15A、20A	Working humidity	< 70%
Rated voltage	0~240VAC/VDC	Protection level	IP54
Insulation resistance	≥ 1000MΩ @500VDC	Housing material	Aluminum Alloy
Insulator strength	1500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10mΩ	Lead wire specification	Colored Teflon insulated & tinned stranded flexible wire
Rotating speed	0~600rpm	Lead wire length	500mm+20mm

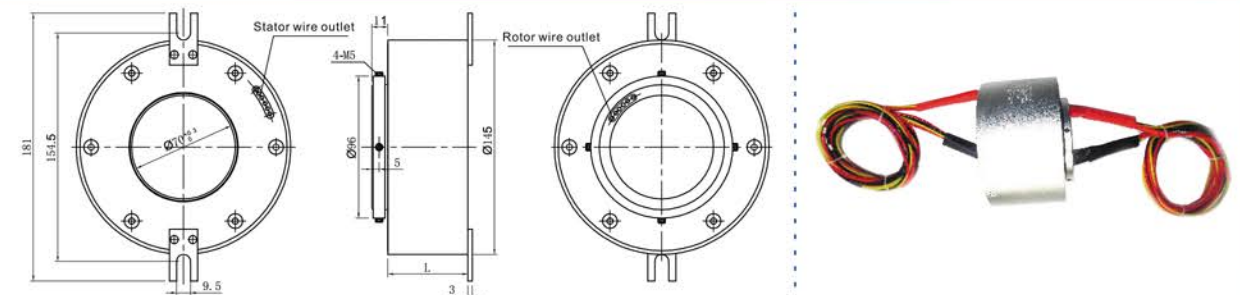
DHK060



The main parameters			
Number of circuits	According to requirements of customers	Working temperature	-40℃~+65℃
Rated current	2A、5A、10A、15A、20A	Working humidity	< 70%
Rated voltage	0~240VAC/VDC	Protection level	IP54
Insulation resistance	≥ 1000MΩ @500VDC	Housing material	Aluminum Alloy
Insulator strength	1500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10mΩ	Lead wire specification	Colored Teflon insulated & tinned stranded flexible wire
Rotating speed	0~600rpm	Lead wire length	500mm+20mm

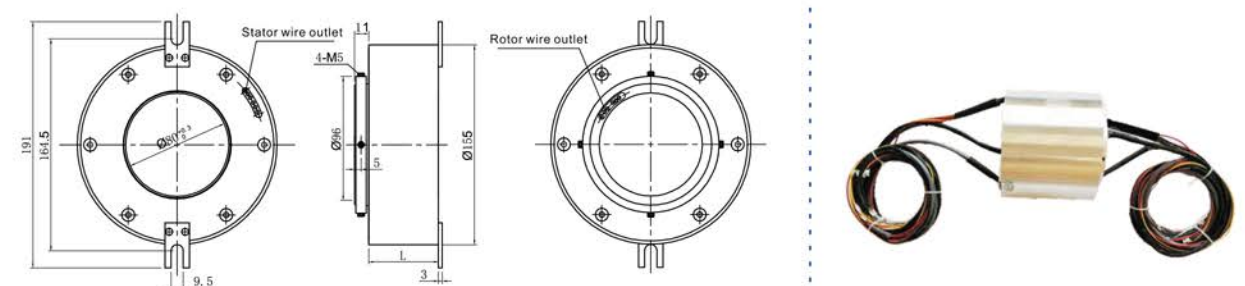


DHK070



The main parameters			
Number of circuits	According to requirements of customers	Working temperature	-40℃~+65℃
Rated current	2A、5A、10A、15A、20A	Working humidity	< 70%
Rated voltage	0~240VAC/VDC	Protection level	IP54
Insulation resistance	≥ 1000MΩ @500VDC	Housing material	Aluminum Alloy
Insulator strength	1500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10mΩ	Lead wire specification	Colored Teflon insulated & tinned stranded flexible wire
Rotating speed	0~600rpm	Lead wire length	500mm+20mm

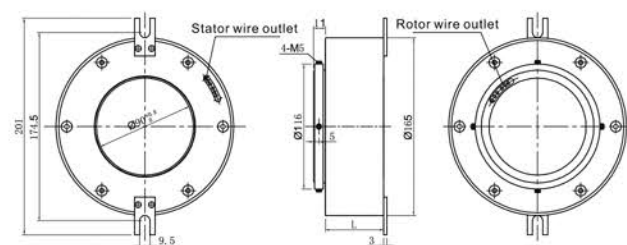
DHK080



The main parameters			
Number of circuits	According to requirements of customers	Working temperature	-40℃~+65℃
Rated current	2A、5A、10A、15A、20A	Working humidity	< 70%
Rated voltage	0~240VAC/VDC	Protection level	IP54
Insulation resistance	≥ 1000MΩ @500VDC	Housing material	Aluminum Alloy
Insulator strength	1500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10mΩ	Lead wire specification	Colored Teflon insulated & tinned stranded flexible wire
Rotating speed	0~600rpm	Lead wire length	500mm+20mm



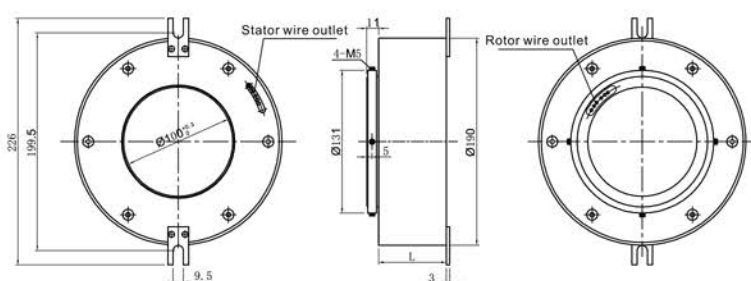
DHK090



The main parameters

Number of circuits	According to requirements of customers	Working temperature	-40℃~+65℃
Rated current	2A, 5A, 10A, 15A, 20A, As The Customer Required	Working humidity	< 70%
Rated voltage	0~240VAC/VDC	Protection level	IP54
Insulation resistance	≥ 1000MΩ @500VDC	Housing material	Aluminum Alloy
Insulator strength	1500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10mΩ	Lead wire specification	Colored Teflon insulated & tinned stranded flexible wire
Rotating speed	0~600rpm	Lead wire length	500mm+20mm

DHK100



The main parameters

Number of circuits	According to requirements of customers	Working temperature	-40℃~+65℃
Rated current	2A, 5A, 10A, 15A, 20A, As The Customer Required	Working humidity	< 70%
Rated voltage	0~240VAC/VDC	Protection level	IP54
Insulation resistance	≥ 1000MΩ @500VDC	Housing material	Aluminum Alloy
Insulator strength	1500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10mΩ	Lead wire specification	Colored Teflon insulated & tinned stranded flexible wire
Rotating speed	0~600rpm	Lead wire length	500mm+20mm

DHS

DHS series flange install slip rings

DHS series solid shaft slip ring is a compact power transmission device that implement the signal and current transmission between two relative rotating mechanisms. The beam brush type multi-point contact is used to ensure reliable contact under extremely low friction. It can be customized according to customer needs. The current is optional from 2 amperes to 2000 amperes, which can fully meet your different transmission schemes.

Features:

- Transmit analog and data signals
- Compatible with data bus protocol
- Long life, maintenance-free
- Easy to install
- 360° continuous rotation to transmit power and data signals

Can be customized specifications:

- Inner diameter, outer diameter, length
- Rotating speed
- Circuits
- Current & voltage
- Wire length, connector
- Housing material and color
- Protection level
- Signal and power transmitted separately or mixed

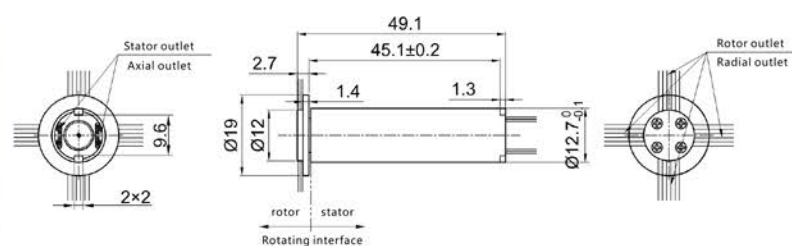
Typically applications:

- Military equipment
- Medical equipment
- Wind power equipment
- Manufacturing and control equipment
- Robot, radar antenna
- Magnetic actuator, rotary sensor
- Construction machinery, testing equipment, packing machinery





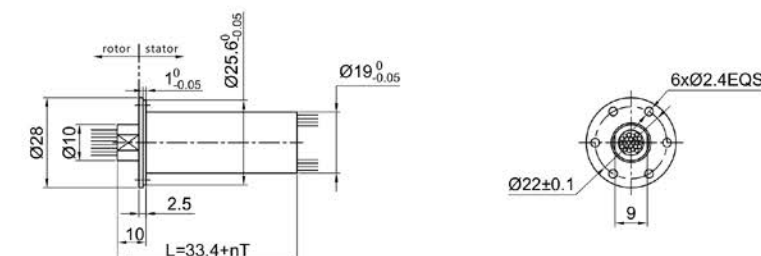
DHS013-50



The main parameters

Circuits	50 rings, can be customized	Working temperature	-40℃~+80℃
Rated current	0.8A	Working humidity	≤70%
Rated voltage	0~240VAC/VDC	Protection level	IP51
Insulation resistance	≥200MΩ @500VDC	Structural material	Stainless steel
Insulator strength	500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	≤10mΩ	Lead wire specification	2A per circuits with AF-0.15 mm ² , rest with AF-0.05 mm ²
Rotating speed	0~300rpm	Lead wire length	300mm+15mm

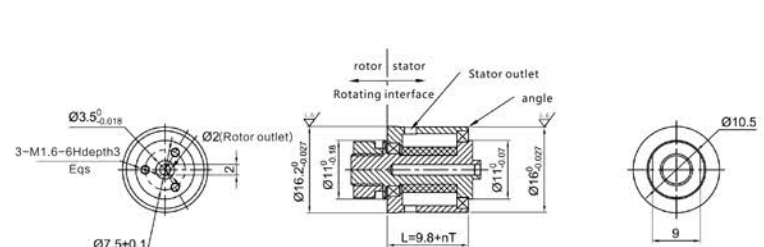
DHS019-30



The main parameters

Circuits	30 rings, can be customized	Working temperature	-40℃~+65℃
Rated current	7 circuits with 5A/24V, rest circuits with 2A	Working humidity	≤70%
Rated voltage	0~380VAC/VDC	Protection level	IP51
Insulation resistance	≥200MΩ @500VDC	Structural material	Stainless steel
Insulator strength	220VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	≤10mΩ	Lead wire specification	5A per circuits with AF-0.35 mm ² , rest with AF-0.15 mm ²
Rotating speed	0~300rpm	Lead wire length	500mm+20mm

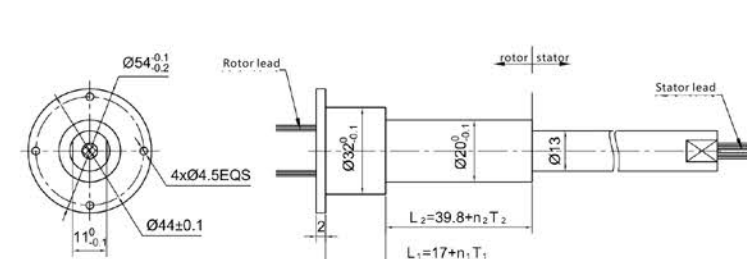
DHS016-6-1A



The main parameters

Circuits	6 rings, can be customized	Working temperature	-40℃~+65℃
Rated current	1A	Working humidity	≤70%
Rated voltage	0~240VAC/VDC	Protection level	IP51
Insulation resistance	≥100MΩ @500VDC	Structural material	Stainless steel
Insulator strength	500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	≤10mΩ	Lead wire specification	10A/every channel use 2 AF-0.35mm wire
Rotating speed	0~1200rpm	Lead wire length	500mm+20mm

DHS020-28

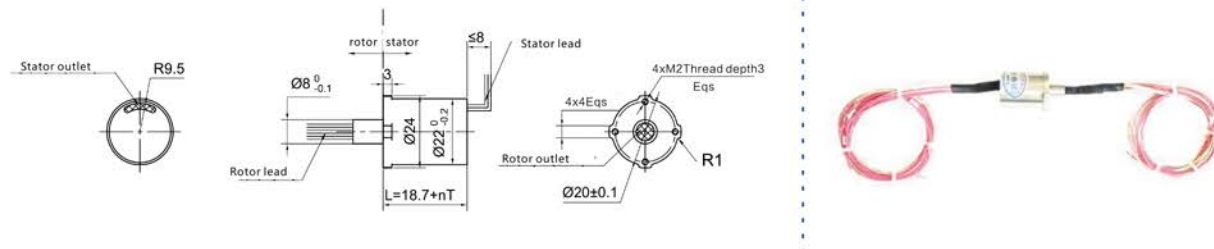


The main parameters

Circuits	28 rings, can be customized	Working temperature	-45℃~+85℃
Rated current	2 circuits with 8A, 3 circuits with 1A, 1 shield circuits, 22 circuits with 2A	Working humidity	≤70%
Rated voltage	0~240VAC/VDC	Protection level	IP51
Insulation resistance	≥200MΩ @250VDC	Structural material	Stainless steel
Insulator strength	500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	≤10mΩ	Lead wire specification	Silver-plated twisted pair AF-2*0.75mm ² , AF-0.2 mm ² , AF-0.1 mm ²
Rotating speed	0~60rpm	Lead wire length	500mm+20mm



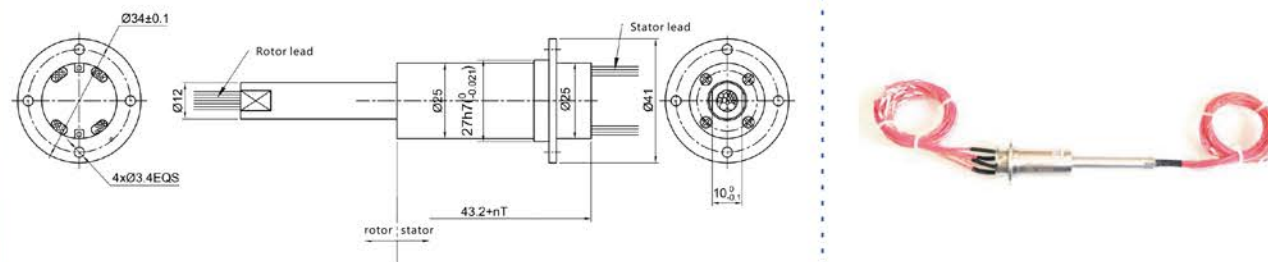
DHS022-15



The main parameters

Circuits	15 rings, can be customized	Working temperature	-40℃~+65℃
Rated current	5 circuits/3A, 5 circuits/2A, 1 circuits SD and 1 circuits HD-SDI (1080p/30hz)	Working humidity	≤70%
Rated voltage	0~120VAC/VDC	Protection level	IP51
Insulation resistance	≥100MΩ @500VDC	Structural material	Stainless steel
Insulator strength	250VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	≤10mΩ	Lead wire specification	AF-0.2 mm, AF-0.15 mm, RF1.13, RF1.13 coaxial cable
Rotating speed	0~500rpm	Lead wire length	300mm+15mm

DHS025-30-002

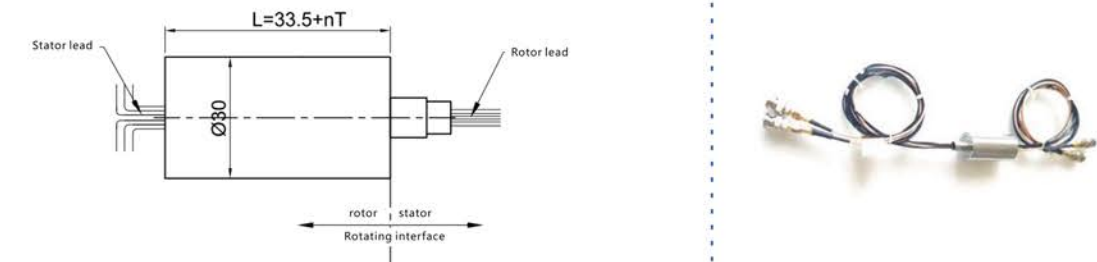


The main parameters

Circuits	30 rings, can be customized	Working temperature	-40℃~+65℃
Rated current	8 circuits with 5A, rest with 2A	Working humidity	≤70%
Rated voltage	0~240VAC/VDC	Protection level	IP51
Insulation resistance	≥500MΩ @500VDC	Structural material	Stainless steel
Insulator strength	500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	≤10mΩ	Lead wire specification	5A per circuits with AF-0.35 mm ² , rest with AF-0.15 mm ²
Rotating speed	0~300rpm	Lead wire length	200mm+15mm



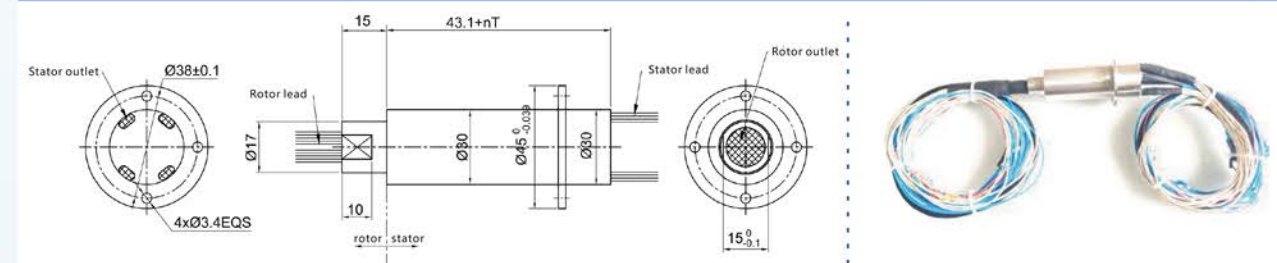
DHS030-6



The main parameters

Circuits	6 rings, can be customized	Working temperature	-40℃~+65℃
Rated current	2circuits/10A, 2 circuits 3G-SDI	Working humidity	≤70%
Rated voltage	0~240VAC/VDC	Protection level	IP51
Insulation resistance	≥200MΩ @500VDC	Structural material	Stainless steel
Insulator strength	500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	≤10mΩ	Lead wire specification	FF4-2Q-0.35 mm, RG316 coaxial cable
Rotating speed	0~300rpm	Lead wire length	500mm+15mm

DHS030-42

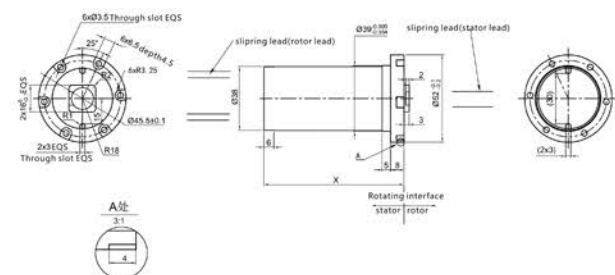


The main parameters

Circuits	42 rings, can be customized	Working temperature	-40℃~+65℃
Rated current	7circuits/10A, 2 circuits 3A, 18 circuits for signals, 1 Gigabit network	Working humidity	≤70%
Rated voltage	0~240VAC/VDC	Protection level	IP51
Insulation resistance	≥500MΩ @500VDC	Structural material	Stainless steel
Insulator strength	500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	≤10mΩ	Lead wire specification	AF-0.35 mm, AF-0.2 mm, Gigabit network cable
Rotating speed	0~300rpm	Lead wire length	500mm+15mm



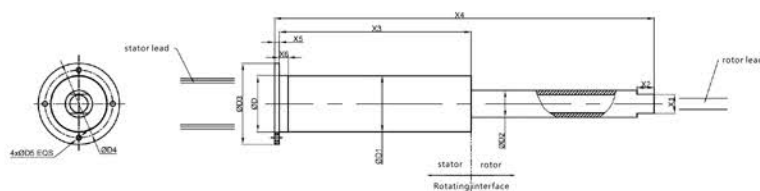
DHS039-23-004



The main parameters

Circuits	23 rings, can be customized	Working temperature	-40℃~+65℃
Rated current	4circuits/20A, 19 circuits 2A	Working humidity	≤70%
Rated voltage	0~240VAC/VDC	Protection level	IP51
Insulation resistance	≥100MΩ @500VDC	Structural material	Stainless steel
Insulator strength	500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	≤5mΩ	Lead wire specification	AF-0.5 mm ² , AF-0.15 mm ² , AFPF-0.15 mm ²
Rotating speed	0~300rpm	Lead wire length	500mm+20mm

DHS050-101

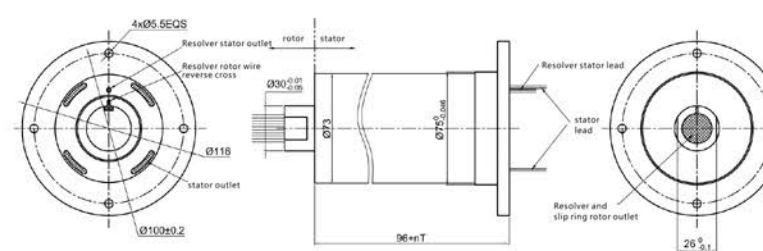


The main parameters

Circuits	101 rings, can be customized	Working temperature	-40℃~+65℃
Rated current	3circuits/20A, 18 circuits 10A, rest with 3A	Working humidity	≤70%
Rated voltage	0~240VAC/VDC	Protection level	IP51
Insulation resistance	≥500MΩ @500VDC	Structural material	Stainless steel
Insulator strength	1000VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	≤10mΩ	Lead wire specification	20A with AF-0.75 mm ² , 10A with AF-0.75 mm ² , AF-0.15 mm ²
Rotating speed	0~300rpm	Lead wire length	500mm+20mm



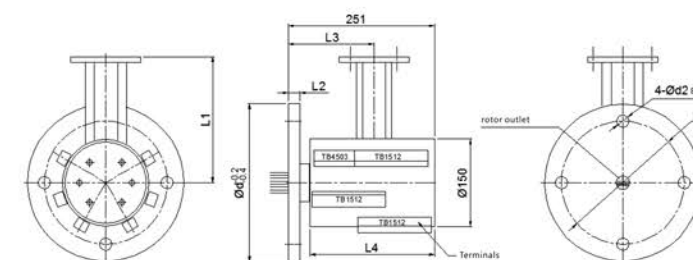
DHS075-35



The main parameters

Circuits	35 rings, can be customized	Working temperature	-45℃~+85℃
Rated current	5 circuits/20A, rest with 2A	Working humidity	≤70%
Rated voltage	0~240VAC/VDC	Protection level	IP51
Insulation resistance	≥200MΩ @250VDC	Structural material	Stainless steel
Insulator strength	500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	≤10mΩ	Lead wire specification	20A with AF-0.75 mm ² , AF-0.15 mm ²
Rotating speed	0~60rpm	Lead wire length	500mm+20mm

DHS150-73



The main parameters

Circuits	73 rings, can be customized	Working temperature	-40℃~+65℃
Rated current	1circuit/30A, 28 circuit/10A, rest with 5A	Working humidity	≤70%
Rated voltage	0~380VAC/240VDC	Protection level	Ip54
Insulation resistance	≥1000MΩ @500VDC	Structural material	Housing material Q235A and rest aluminum alloy
Insulator strength	2000VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	≤10mΩ	Lead wire specification	Colored Teflon insulated tinned stranded and flexible wire AWG12#, AWG16#, AWG22#
Rotating speed	0~300rpm	Lead wire length	500mm+20mm

LH Gas / Liquid rotary joint

Features

- Hybrid slip ring data/signal/power circuits with pneumatic and hydraulic
- Compact structure

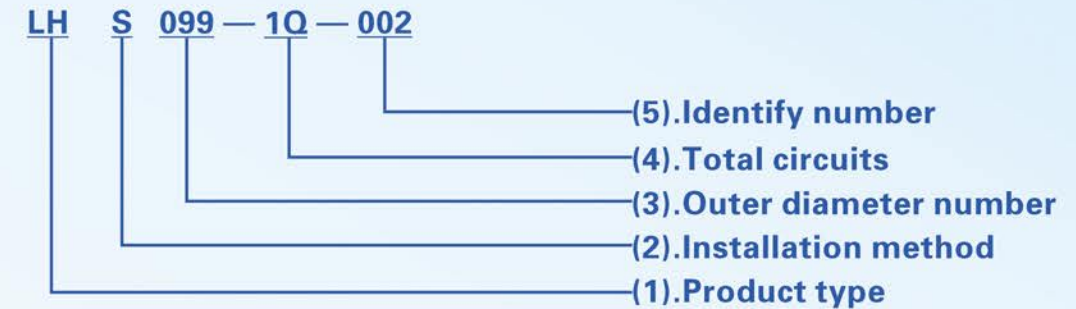
Can be customized specifications

- Number of electric circuits, pneumatic and hydraulic passages
- cable length
- Working medium and working pressure of pneumatic and hydraulic passage
- Rated speed

Typical application

- Medical equipment
- Automatic welding machine system
- Radar, antenna system
- Industrial Automation Control System

Naming description of model



(1).Product type: LH—pneumatic or hydraulic slip ring.

(2).Installation method: S—solid shaft slip ring; K—through hole slip ring.

(3).Outer diameter of solid slip ring, Through hole product bore diameter.

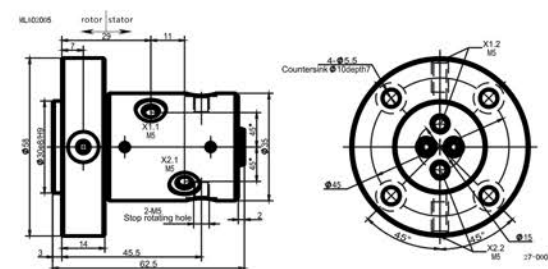
(4).Number of gas-liquid passages, Number + Q— passages number of the gas slip ring; Number + Y — passages number of the liquid slip ring.

(5).Identify number: --XXX; In order to distinguish different specifications of the same product model, the identification number is added after the name. For example: LHS145-8Q-002 ,if there are more of this model in the future, and so on -003 , -004, etc.





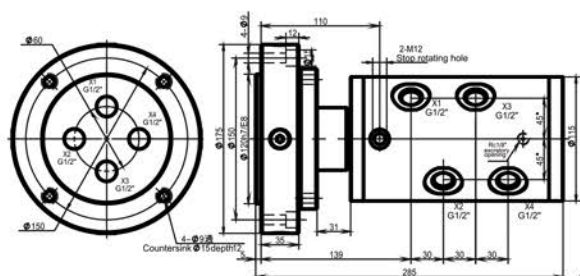
LHS035-2Q



Technical parameter

Passages	according to customers' requirement
Thread	M5
Flow hole size	φ 4
Working medium	compressed air
working pressure	1.1Mpa
Working speed	≤200rpm
Working temperature	-30℃~+80℃

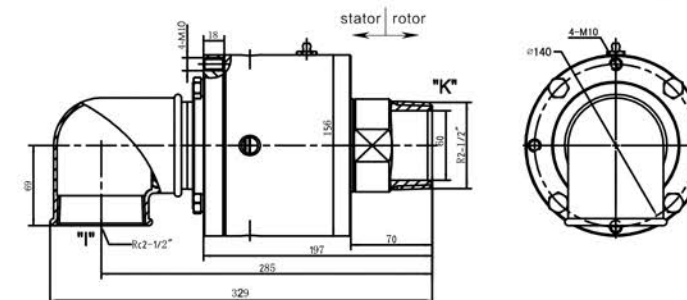
LHS115-4Y



Technical parameter

Passages	according to customers' requirement
Thread	M5
Flow hole size	φ 8
Working medium	hydraulic oil
working pressure	21Mpa
Working speed	≤200rpm
Working temperature	-30℃~+80℃

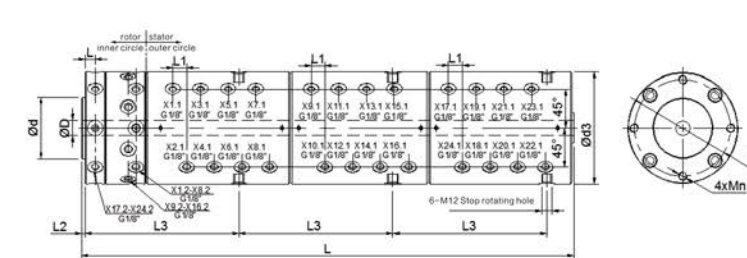
LHS156-1Y



Technical parameter

Passages	according to customers' requirement
Thread	RC2-1/2"
Flow hole size	φ 60
Working medium	water
working pressure	1.1Mpa
Working speed	800rpm
Working temperature	-30℃~+120℃

LHS145-24Q



Technical parameter

Passages	according to customers' requirement
Thread	G1/8"
Flow hole size	φ 6
Working medium	compressed air
working pressure	1.1Mpa
Working speed	≤15rpm
Working temperature	-30℃~+80℃



Fiber optic rotary joint

Features

- Fiber optic-electric slip ring for single-mode or multi-mode systems
- Full bidirectional rotation
- Integrate with existing electrical slip ring design
- Fully enclosed structure
- Fiber optic transmission signal, no leakage, no electromagnetic interference, can be transmitted over long distances
- Small size, high sealing, high protection level
- No contact, no friction, high speed, long life
- Can tailor the required products for customers

Can be customized specifications

- Various fiber sizes and fiber optic lengths
- Fiber type
- Fiber optic connector
- Fiber length
- Number of fiber channels

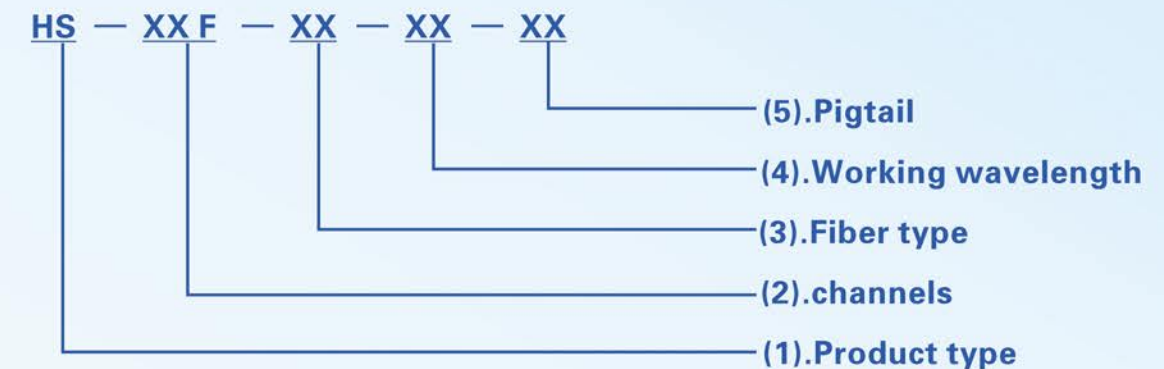
Typical application

- Long distance (>10KM) transmission
- High-speed data transmission

Professional Customization To Solve Your Worries



Naming description of model



(1).Product type: HS—Solid shaft slip ring

(2).channels: Number (number of optical channels) +F

(3).Fiber type: 9/125 (single mode), 50/125 (multi-mode), 62.5/125 (multimode)

(4).Working wavelength: 850nm, 1310nm, 1550nm;

(5).Pigtail: length 1.2m, S (customer specified)

Encapsulation: ϕ 0.9mm、 ϕ 2.0k、 ϕ 3.0k、k=armor

connector form: FC、ST、SC、LC、N=no connector

End face form PC (flat)、APC (inclined)

For example: HS-3F-50/125-S- ϕ 2.0K-FC/PC

Fiber optic rotary joint

The main parameters

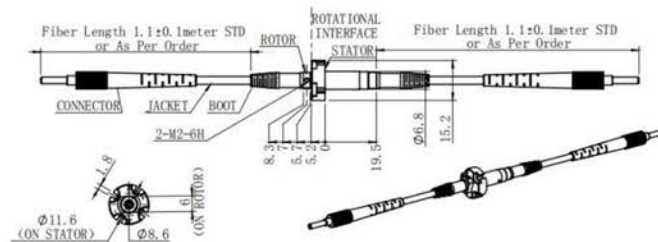
Number of channels	according to customer's actual requirements
Working wavelength	650nm-1550nm or other
Working temperature	-20℃~+60℃ (-40℃~+85℃ optional)
Rotating speed	0~2000rpm
Insertion loss	single channel: <1.5dB, multiple channels: <3.5dB
Dynamic loss	single channel: <±0.5dB, multiple channels: <1.5dB
Return loss	>50dB
Protection level	IP54 (IP65、IP67optional)
Construction material	stainless steel

Peripheral supporting products

If required, we can provide customers with one-stop accessory services and provide peripheral supporting products for connectors.

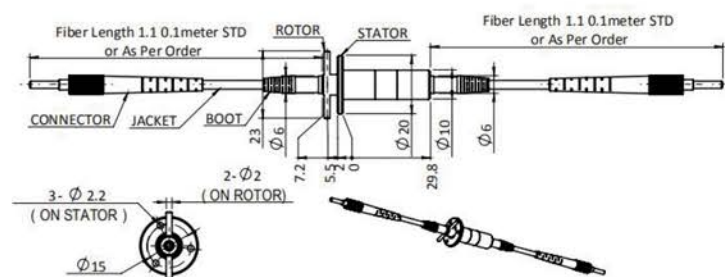


HS-1F-001



Main parameters			
Bandwidth	± 100nm	Maximum rotating speed	2000rpm
Wavelength range	650~1550nm	Life expectancy	>200 million round (1,000 rpm/365 days continuous)
Maximum insertion loss	<1.5dB	Working temperature	-20 ~ +60℃ (-40 ~ +85℃ optional)
Insertion loss variation	<0.5dB	Storage temperature	-45 ~ +85℃
Return loss	≥30dB	Weight	15g
Withstanding power	≤23dBm	Vibration and Shock Standard	GJB150
Tensile capacity	≤12N	Protection level	IP54 (IP65、IP67 optional)

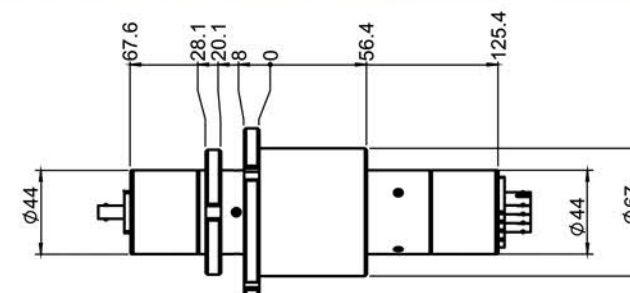
HS-1F-002



Main parameters			
Bandwidth	± 50nm	Maximum rotating speed	2000rpm
Wavelength range	850~1550nm	Life expectancy	>200 million round (1,000 rpm/365 days continuous)
Maximum insertion loss	<1.5dB	Working temperature	-20 ~ +60℃ (-40 ~ +85℃ optional)
Insertion loss variation	<0.5dB	Storage temperature	-45 ~ +85℃
Return loss	≥50dB	Weight	15g
Withstanding power	≤23dBm	Vibration and Shock Standard	GJB150
Tensile capacity	≤12N	Protection level	IP54 (IP65、IP67 optional)

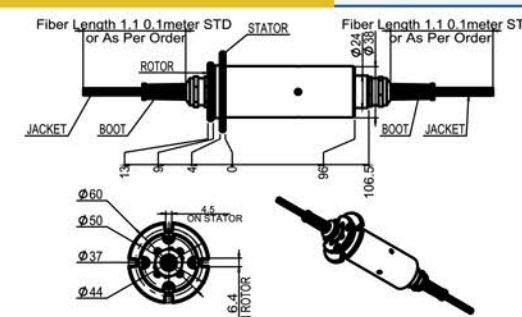


HS-NF-001(N=2~4)



Main parameters			
Bandwidth	± 50nm	Maximum rotating speed	300rpm
Wavelength range	850~1550nm	Life expectancy	>100 million round (1,000 rpm/365 days continuous)
Maximum insertion loss	<3.5dB	Working temperature	-20 ~ +60℃ (-40 ~ +85℃ optional)
Insertion loss variation	<1.5dB	Storage temperature	-45 ~ +85℃
Return loss	≥40dB	Weight	1400g
Withstanding power	≤23dBm	Vibration and Shock Standard	GJB150
Tensile capacity	≤12N	Protection level	IP54 (IP65、IP67 optional)

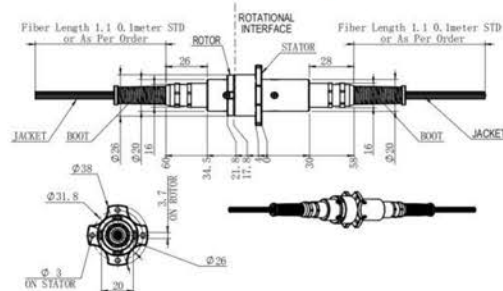
HS-NF-002(N=2~31)



Main parameters			
Bandwidth	± 50nm	Maximum rotating speed	2000rpm
Wavelength range	800~1550nm	Life expectancy	>200 million round (1,000 rpm/365 days continuous)
Maximum insertion loss	<3.5dB	Working temperature	-20 ~ +60℃ (-40 ~ +85℃ optional)
Insertion loss variation	<1.5dB	Storage temperature	-45 ~ +85℃
Return loss	≥40dB	Weight	620g
Withstanding power	≤23dBm	Vibration and Shock Standard	GJB150
Tensile capacity	≤12N	Protection level	IP54 (IP65、IP67 optional)



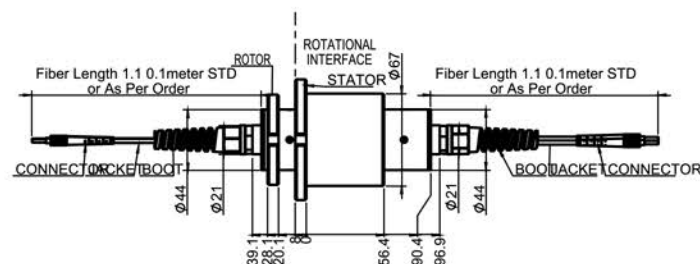
HS-NF-003(N=2~7)



Main parameters

Bandwidth	± 60nm	Maximum rotating speed	300rpm (can be customized)
Wavelength range	850~1550nm	Life expectancy	>100 million round (1,000 rpm/365 days continuous)
Maximum insertion loss	<3.5dB	Working temperature	-20 ~ +60℃ (-40 ~ +85℃ optional)
Insertion loss variation	<1.5dB	Storage temperature	-45 ~ +85℃
Return loss	≥ 40dB	Weight	185g
Withstanding power	≤ 23dBm	Vibration and Shock Standard	GJB150
Tensile capacity	≤ 12N	Protection level	IP54 (IP65、IP67 optional)

HS-NF-004(N=2~40)



Main parameters

Bandwidth	± 50nm	Maximum rotating speed	300rpm (can be customized)
Wavelength range	850~1550nm	Life expectancy	>100 million round (1,000 rpm/365 days continuous)
Maximum insertion loss	<3.5dB	Working temperature	-20 ~ +60℃ (-40 ~ +85℃ optional)
Insertion loss variation	<1.5dB	Storage temperature	-45 ~ +85℃
Return loss	≥ 40dB	Weight	1300g
Withstanding power	≤ 12dBm	Vibration and Shock Standard	GJB150
Tensile capacity	≤ 12N	Protection level	IP54 (IP65、IP67 optional)



MJX series micro single channel optical fiber rotary joint

MJX is a highly integrated optical fiber rotary joint, which is the smallest and lightest optical fiber rotary joint in the world. Has extremely low insertion loss and extremely high return loss. Among them, the return loss of the MJXA type can reach 60dB.

The standard package structure is waterproof and dustproof, can withstand occasional liquid splashing and soaking. At the same time, MJX can also withstand extreme operating temperature environments.

The static and dynamic torque of MJX-SAP is quite small. Suitable for low-torque systems, especially for optical related tomography (OCT), we can provide gear/pulley drive, both of which are suitable for OCT. The unified socket end can be SC/APC, FC/APC or LC/APC.

The insertion loss and return loss of all optical fiber rotating heads are completed by optical fiber fusion splicing. That is, the additional value brought by the optical fiber connector is not included in the test data.



Main parameters

Wavelength range	650~1650nm	Storage temperature	-50~85℃
Insertion loss	<2dB(typical value: <0.5dB)	Package type	Pigtail for both end (FC, FC/APC, or ST)
Insertion loss variation	< ± 0.25dB(typical value: ± 0.15dB)	Structural material	Stainless steel
Return loss (Single-mode)	>40dB(typical value: 45dB, 23C), >55 dB(MJXA)	Optic cable spec	Single-mode or multi-mode 3mm outer sheath (Kevlar/PVC)
Maximum rotating speed	2,000rpm	Connector type	FC,SC,ST,SMA,or LC(APC)
Tensile capacity	10N	External size	φ 6.8 × 28mm
Starting torque	<0.01Nm	Weight	10g
Life expectancy	200~400million round (1,000 rpm/365 days continuous)	Vibration standard	MIL-STD-167-1A
Maximum transmission power	23dBm	Impact standard	MIL-STD-810G
Working temperature	-40~85℃	IP Protection level	IP 68

RPC compensated fiber optic rotary joint

Although MJX and RTPPC fiber optic rotary joints can be used in water, their pressure compensation is only 1000 psi, while the RPC series can provide pressure compensation of up to 20,000 psi, with stainless steel armored optical cables and corresponding optical fiber connectors, such as FC, ST, etc. .

RPC has the characteristics of low insertion loss and high return loss. Can work in extreme temperature environments.

The insertion loss and return loss of all optical fiber rotary joints are completed by optical fiber fusion splicing. That is, the additional value of the optical fiber connector tape is not included in the test data.



Main parameters

Wavelength range	650~1650nm	Working temperature	-40~85℃
Insertion loss	<2dB	Storage temperature	-50~85℃
Insertion loss variation	< ± 0.25dB(typical value 1. ± 0.15dB)	Package type	Pigtail for both end (FC, FC/APC, or ST)
Return loss (Single-mode)	>40dB(RPC), >55dB(RPCA)	Structural material	Stainless steel
Maximum rotating speed	2,000rpm	Optic cable spec	Single-mode or multi-mode 2.9mm armour sheath (SS)
Pressure compensation	10,000 psi(About 6000 meters water depth)	Connector type	FC,ST,or SC
Tensile capacity	50N	External size	φ 17 × 46mm
Life expectancy	<0.1Nm	Product Weight	about 80g
Maximum transmission power	200~400million round (1,000 rpm/365 days continuous) 23dBm	Impact / Vibration standard	Telcordia GRI221CORE



Mj2 dual-channel fiber optical rotary joint

MJ2 can provide two independent fiber channels, which can be dual multimode fiber or one single mode plus one multimode fiber. If you need two single-mode optical fiber channels, please refer to MXn type fiber optic rotary joint. MJ2 guarantees the uninterrupted transmission of optical signals when rotating. There are no blind spots, MJ2 is a patented product with a good cost-effective.

The insertion loss and return loss of all fiber optic rotary joints are completed by optical fiber fusion splicing. That is, the additional value brought by the optical fiber connector is not included in the test data.



Main parameters			
Wavelength range	1310/850nm or 1310/1550nm	Storage temperature	-45~75℃
Insertion loss	<4dB/Product Weight1, <6dB/Product Weight2	Package type	Pigtail on both end
Insertion loss variation	<±1dB	Structural material	Stainless steel
Return loss	around15dB	Optic cable spec	Single-mode or multi-mode 3mm outer sheath (Kevlar) or armour
Channel crosstalk	>50dB	Connector type	FC,SC,ST,SMA, or LC
Maximum rotating speed	100rpm	External size	φ 20x 65mm
Tensile capacity	10N	Product Weight	100g
Starting torque	<0.2Nm	Vibration standard	MIL-STD-167-1A
Life expectancy	100 million-200million revolutions	Impact standard	MIL-STD-8106
Maximum transmission power	23 dBm	IP Protection level	IP60 (IP65 optional)
Working temperature	-40~72℃		

MJN series multi-channel optical fiber rotary joint

MJn series multi-channel optical fiber rotary joint can provide 2~7, 8~12 and 13~19 independent fiber channel options. When the number of channels is greater than 8, the length of the fixed end joint should be appropriately lengthened. For all fiber channels, the insertion loss and return loss remain the same value. The optical fiber rotary joints has no blind spots during rotation. Whether single-mode or multi-mode fiber, the crosstalk index is greater than 60dB.

All channels in MJn can be single-mode fiber, multi-mode fiber or a combination of both. In other words, in the MJn optical fiber rotary joint, three wavelengths of 850nm, 1310nm and 1550nm can be used at the same time.

The insertion loss and return loss of all optical fiber rotary joints are completed by optical fiber fusion splicing. That is, the additional value brought by the optical fiber connector is not included in the test data.



Main parameters			
Wavelength range	Single mode1270~1610nm; Multi-mode850 or 1310nm	Storage temperature	-45~75℃
Insertion loss	<5dB (typical value: 2~3dB)	Package type	Tail output or socket (FC or ST) Maximum 7 channels
Insertion loss variation	± 0.5 to 1dB	Structural material	Stainless steel
Return loss	>45dB	Optic cable spec	Single-mode or multi-mode 3mm outer sheath (Kevlar enhanced)
Channel crosstalk	>50dB(typical value: 63dB)	Connector type	FC,SC,ST,SMA,LC/APC
Maximum rotating speed	200rpm	External size	φ 67mm × 120mm
Tensile capacity	10N	Product Weight	2.5kg
Starting torque	<1Nm	Vibration standard	MIL-STD-167-1A
Life expectancy	100 million revolutions	Impact standard	MIL-STD-810G
Maximum transmission power	23 dBm	IP Protection level	IP 65
Working temperature	-40~65℃		



MXN series multi-channel optical fiber rotary joints

The MXn series multi-channel optical fiber rotary joints include MXnS type with 2~3 independent channels, and MXn type with 4~7 channels. Both of them have the same installation size, but the MXn has a little longer structural length. MXn series structure is exquisite, with ideal optical parameters, low insertion loss, high return loss and low crosstalk.

MXn can be single-mode fiber Channel, multi-mode channel, or a combination of both.

The insertion loss and return loss of all optical fiber rotary joints are achieved by fusing splice optical fibers. That is, the test data does not include the added value of the fiber optic connector.



Main parameters			
Wavelength range	1270~1610nm/Single mode; 850 or 1310nm/Multi-mode	Storage temperature	-45~+75℃
Insertion loss	<5dB (typical value: 2~3dB)	Package type	Tail output or socket (FC or ST) Maximum 3 channels
Insertion loss variation	± 0.5~1dB	Structural material	Stainless steel
Return loss (Single-mode)	>45 dB	Optic cable spec	Single-mode or multi-mode 3mm outer sheath (Kevlar/PVC or armour)
Channel crosstalk	>50dB (typical value: 63dB)	Connector type	FC,SC,ST,SMA,LC or /APC
Maximum rotating speed	300rpm	External size	φ 44 × 136mm
Tensile capacity	10N	Product Weight	around1.5kg
Starting torque	<1Nm	Vibration standard	MIL-STD-167-1
Life expectancy	200 million rounds	Impact standard	MIL-STD-810F
Maximum transmission power	23dBm	IP Protection level	IP 65
Working temperature	-40~65℃		

Pj2 type two-way plastic optical fiber rotary joint

Plastic optical fiber rotary joint has the following characteristics: due to its large aperture, it is easy to couple with fiber, easy to splice, can be easily bent, and is not easy to break. Therefore, it is very popular in short-distance communication systems.

PJ2 connects two independent plastic optical fiber channels at the same time, there is no blind spot when the slip ring rotates. Sophisticated design, PJ2 can be used underwater. Once the fiber is damaged, it is easy to repair, avoiding the replacement of the slip ring itself.

If you need more channels, please refer to the MXn series. For a single channel, you can choose the RPT series.



Main parameters			
Wavelength range	650 nm	Storage temperature	-50~85℃
Insertion loss	<7dB/Channel1, <10dB/Channel2 (Usually<7dB)	Package type	Tail output
Insertion loss variation	<±1dB/Channel1, <±1.5dB/Channel2	Structural material	Stainless steel or aluminum alloy
Return loss	around40dB	Optic cable spec	PMMA Step type, 1mm optical fiber core/2mm outer sheath
Channel crosstalk	>40dB	Connector type	FC,ST,or SMA905
Maximum rotating speed	1000rpm	External size	φ 24 × 130mm
Tensile capacity	20N	Product Weight	around250g
Starting torque	<0.2Nm	Vibration standard	MIL-STD-167-1A
Life expectancy	>200 million rounds	Impact standard	MIL-STD-8106
Maximum transmission power	23dBm	IP Protection level	IP 68
Working temperature	-40~85℃		



JXN series multi-channel optical fiber rotary joint

JXn series multi-channel optical fiber rotary joint can provide 2-7, 8-12 and 13-19 independent fiber channel options. When the number of channels is greater than 8, the length of the fixed end structure is appropriately lengthened. For all fiber channels, the insertion loss and return loss remain the same value. The optical fiber rotary joint has no blind spots during rotation. Whether single-mode or multi-mode fiber, the crosstalk index is more than 60dB.

The JXn series has the same installation diameter as the MJn series. At the same time, the JXn series can provide pressure compensation options, which are suitable for underwater applications. All channels in JXn can be single-mode fiber, multi-mode fiber or a combination of both. In other words, in the JXn optical fiber slip ring, three wavelengths of 850nm, 1310nm and 1550nm can be applied simultaneously.

The insertion loss and return loss of all optical fiber rotary joints are completed by optical fiber fusion splicing. That is, the additional value brought by the optical fiber connector is not included in the test data.



Main parameters

Wavelength range	Single-mode 1270-1610nm; multi-mode 850 or 1310nm	Storage temperature	-45~75℃
Insertion loss	< 5dB (typical value: 2-3dB)	Package type	Tail output (FC or ST)
Insertion loss variation	± 0.5 to 1dB	Structural material	Stainless steel
Return loss	> 45dB	Optic cable spec	Single-mode or multi-mode 3mm outer sheath (Kevlar / PVC or armour)
Channel crosstalk	> 50dB (typical value: 63dB)	Connector type	FC, SC, ST, SMA, LC or / APC
Maximum rotating speed	200rpm	External size	φ 67x 122mm
Tensile capacity	10N	Product Weight	2.5kg
Starting torque	< 1Nm	Vibration standard	MIL-STD-167-1
Life expectancy	100 million revolutions	Impact standard	MIL-STD-810F
Maximum transmission power	23dBm	IP Protection level	IP65
Working temperature	-40~65℃		

Application Area



Radio Frequency high speed rotary Joint series

Features

- Specially designed for radio frequency signal transmission, the highest frequency can reach 40GHz
- Coaxial contact design makes the connector have an ultra-wide bandwidth and no cut-off frequency
- Multi-contact structure, effectively reducing relative jitter
- The overall size is small, the connector is plugged and used, and it is easy to install

Can be customized specifications

- Rated current and voltage
- Rated rotating speed
- Operating temperature
- Number of Channels
- Housing material and color
- Dimensions
- Dedicated wire
- Wire exit direction
- Wire length
- Terminal type

Typical application

- Suitable for military and civilian vehicles, radar, microwave wireless rotating platforms



Naming description of model

HS — XX RJ — 001

(3).Identify number

- (2).Channels

- (1).Product type

(1).Product type: HS—Solid shaft slip ring

(2).Channels: RJ-rotary joint, XX-the number of channels

For example: HS-2RJ (2 channel rotary joints)

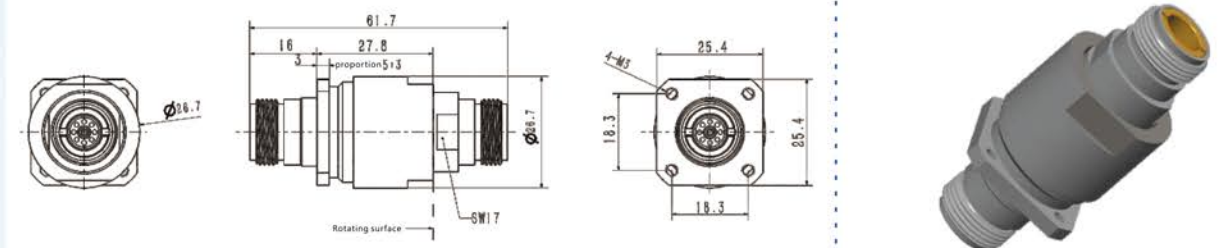
High frequency rotary joints

Main parameters

Channels	can be customized
Working frequency	DC~can be customized
Working temperature	-40℃~+70℃ or others
Maximum rotating speed	0~200rpm or higher
Insertion loss	< 1dB (There will be gaps in data in different frequency bands)
Insertion loss variation	< 0.5dB(There will be gaps in data in different frequency bands)
Standing wave ratio	1.2(There will be gaps in data of different frequency bands)
Standing wave change	< 0.2(There will be gaps in data in different frequency bands)
Structural material	aluminum alloy



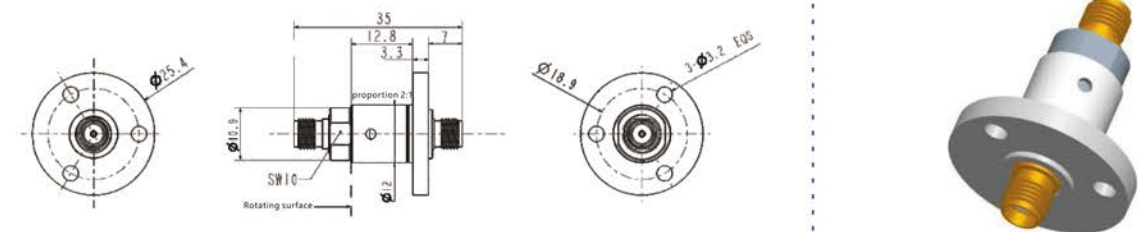
HS-1RJ-001



Technical parameter

Channels	Ch1		
Interface Type	TYPE-N		
Frequency Range	DC-8GHz		
Average power	200W		
Maximum standing wave ratio	1.3		
Standing wave ratio fluctuation value	0.05		
Insertion loss	0.4dB		
Insertion loss variation	0.05dB		
Isolation	50dB		

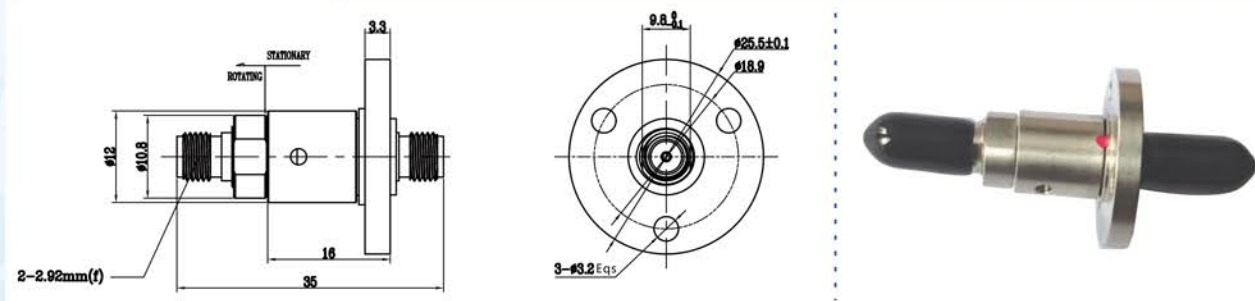
HS-1RJ-002



Technical parameter

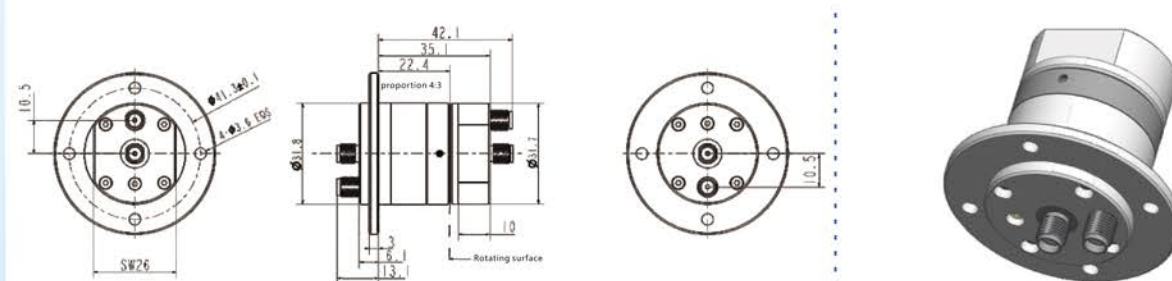
Channels	Ch1		
Interface Type	SMA-f(50Ω)		
Frequency Range	DC-18GHz		
Average power	200W@1G 100W@8G 30W@18G		
Maximum standing wave ratio	1.4		
Standing wave ratio fluctuation value	0.1		
Insertion loss	0.6dB		
Insertion loss variation	0.1dB		
Isolation	50dB		

HS-1RJ-003



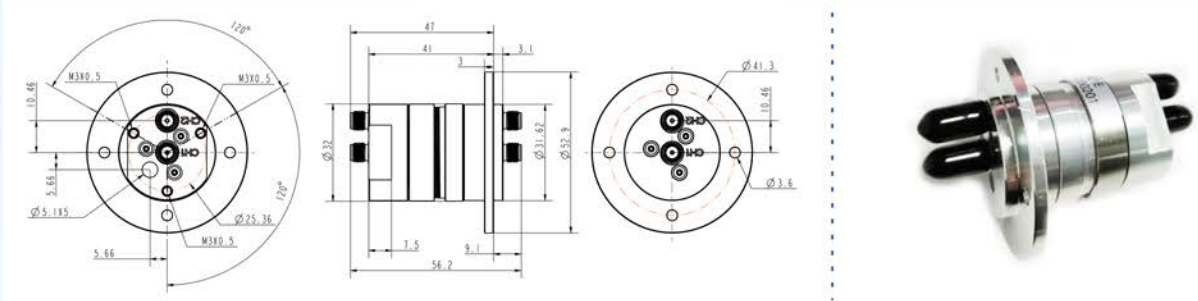
Technical parameter	
Channels	Ch1
Interface Type	SMA-f(50Ω)
Frequency Range	DC-40GHz
Average power	5W @ DC-1GHz/2w @10-18GHz/1W @18-40GHz
Maximum standing wave ratio	1.4 @ DC-18GHz/1.7 @18-26.5GHz/1W @2.0@ 26.5-40GHz
Standing wave ratio fluctuation value	0.15
Insertion loss	0.5dB @ DC-18GHz/1.0dB @18-26.5GHz/1.2dB @ 2.0@ 26.5-40GHz
Insertion loss variation	0.1dB
Isolation	50dB

HS-2RJ-001



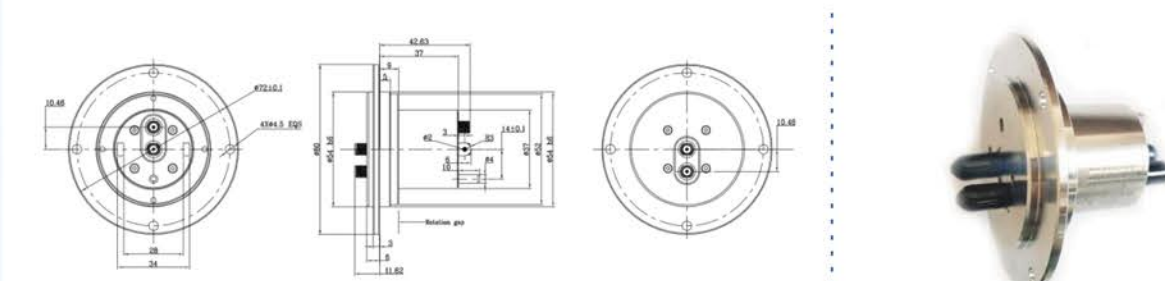
Technical parameter			
Channels	Ch1	Ch2	
Interface Type	SMA-f(50Ω)	SMA-f(50Ω)	
Frequency Range	DC-4.5GHz	DC-4.5GHz	
Average power	50W	10W	
Maximum standing wave ratio	1.3	1.6	
Standing wave ratio fluctuation value	0.05	0.1	
Insertion loss	0.3dB	0.5dB	
Insertion loss variation	0.05dB	0.1dB	
Isolation	50dB	50dB	

HS-2RJ-002



Technical parameter			
Channels	Ch1	Ch2	
Interface Type	SMA-f(50Ω)	SMA-f(50Ω)	
Frequency Range	DC-4.5GHz	DC-4.5GHz	
Average power	100W	10W	
Maximum standing wave ratio	1.2	1.5	
Standing wave ratio fluctuation value	0.05	0.2	
Insertion loss	0.25dB	0.3dB	
Insertion loss variation	0.05dB	0.15dB	
Isolation	50dB	50dB	

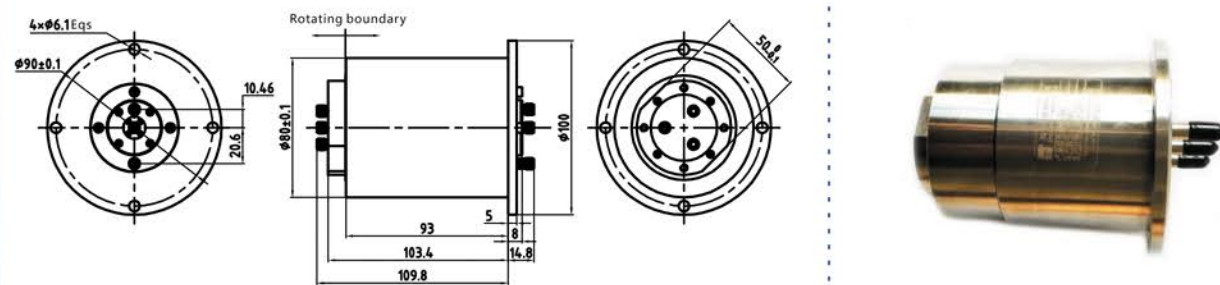
HS-2RJ-003



Technical parameter			
Channels	Ch1	Ch2	
Interface Type	SMA-f(50Ω)	SMA-f(50Ω)	
Frequency Range	DC-6GHz	DC-6GHz	
Average power	50W	10W	
Maximum standing wave ratio	1.35	1.5	
Standing wave ratio fluctuation value	0.1	0.15	
Insertion loss	1.5dB	1.5dB	
Insertion loss variation	0.15dB	0.15dB	
Isolation	60dB	60dB	



HS-3RJ-001



Technical parameter			
Channels	Ch1	Ch2	Ch3
Interface Type	SMA-f(50Ω)	SMA-f(50Ω)	SMA-f(50Ω)
Frequency Range	DC-4GHz	DC-4GHz	DC-3GHz
Average power	100W	20W	30W
Maximum standing wave ratio	1.35	1.5	1.5
Standing wave ratio fluctuation value	0.1	0.15	0.15
Insertion loss	0.6dB	0.8dB	1.0dB
Insertion loss variation	0.05dB	0.1dB	0.1dB
Isolation	50dB	50dB	50dB

Application Area



Hybrid slip ring

Features

- Fiber optic-electric power & signal mixing group
- small volume
- Light weight

Can be customized specifications

- Leadwire length
- Channel quantity
- Fiber type
- Fiber optic connector

Typical application

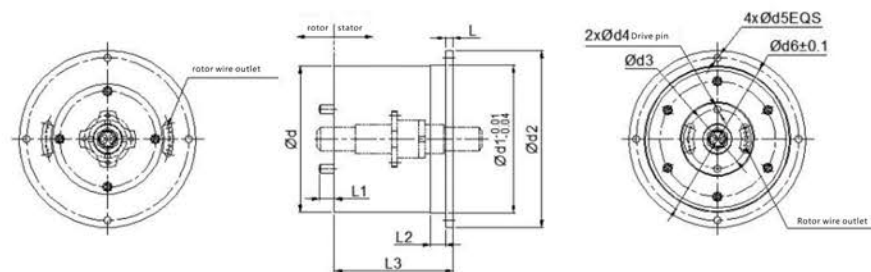
- Remote control system, digital and analog signal transmission and control
- Radar, antenna system
- Video surveillance system





Optic fiber-electric combination

DHS100-18-4F



Technical Parameter

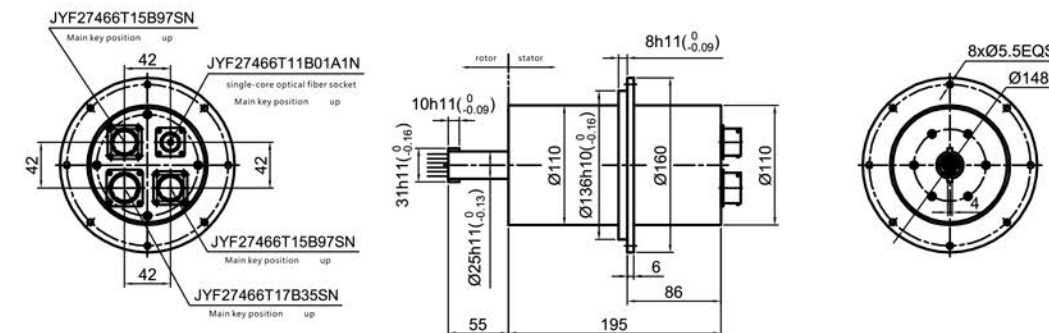
Number of channels	18	Work rotating speed	0~ 300rpm
Rated current	Power : 6 channels 15A ; signal : 12 channels 2A;	Protection level	IP51
Operating Voltage	0~440VAC/240VDC	Structural material	Aluminum alloy
contact resistance variation	< 10m Ω	Working humidity	< 70%
Insulation resistance	≥ 1000M Ω @1000VDC	Electrical contact material	Precious metal
Dielectric strength	1000VAC@50Hz, 60s, 2mA	Leadwire specification	15A with AFP-2×0.75mm , 2A with AFP-2×0.15mm
Working temperature	-40℃~+65℃	Leadwire length	Rotor: 500mm+20mm; Stator: 500mm+20mm

Indicator Information

Number of channels	4	Insertion loss	< 5dB
Working wavelength	1310nm ~ 1550nm	Insertion loss variation	≤ ± 1.3dB
Fiber type	single-mode fiber	Return loss	> 45dB
Connector type	LC	Pigtail length	500mm+20mm



DHS110-42-1F



Technical Parameter

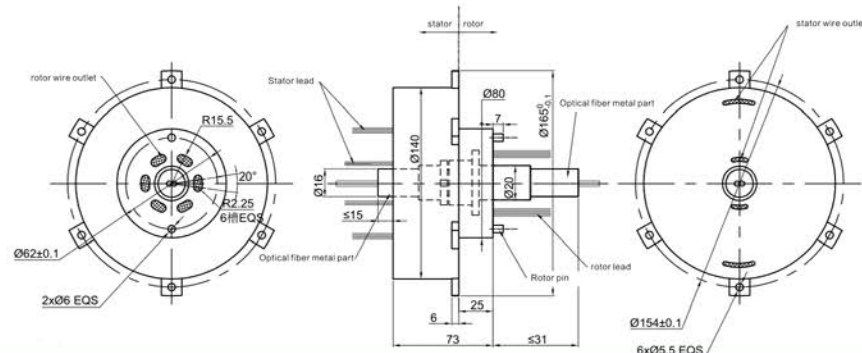
Number of channels	42	Working temperature	-20℃~+80℃
Rated current	4 channels 25A, 4 channels 20A, 30 channels 4A, Video ring 4 channels	Working humidity	< 70%
Rated voltage	0~440VAC/240VDC	Protection level	IP65
Insulation resistance	≥ 1000M Ω @1000VDC	Structural material	Q235A
Dielectric strength	1000VAC@50Hz, 60s, 1mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10m Ω	Leadwire specification	Aviation plug-in (with lineAF-0.15RG3.6)
Rotating speed	0~100rpm	Leadwire length	Rotor: 2500mm+50mm, Stator: 500mm+20mm

Indicator Information

Number of channels	1	Insertion loss	< 4dB
Working wavelength	1310nm ~ 1550nm	Housing material	Stainless steel
Fiber type	single-mode fiber	Optical cable type	3 single-mode optical cable
Connector type	LC	Pigtail length	Rotor: 400mm~420mm , Stator: Aviation plug-in : JYF27466T11B01A1N



DHS140-36-2F



Technical Parameter

Number of channels	36	Working temperature	-20℃~+80℃
Rated current	3 channels 15A, 2 channels 30A, signal 31 channels 1A	Working humidity	< 70%
Rated voltage	0~440VAC/240VDC	Protection level	IP51
Insulation resistance	≥ 1000MΩ @ 1000VDC	Structural material	Aluminum alloy+ Stainless steel
Insulator strength	1000VAC@50Hz, 60s, 1mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10mΩ	Leadwire specification	15A with AFP-0.35mm ² , 30A with AF-0.3mm ²
Rotating speed	0~100rpm	Leadwire length	Rotor: 2500mm+50mm, Stator: 500mm+20mm

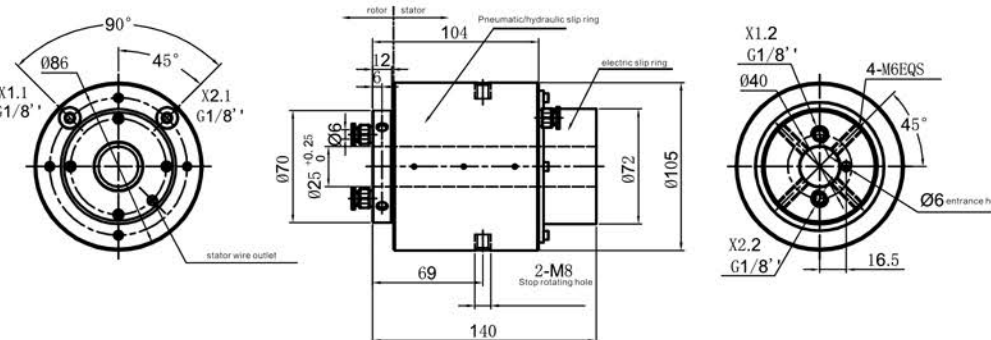
Indicator Information

Number of channels	2	Insertion loss	< 5dB
Working wavelength	1310nm ~ 1550nm	Insertion loss variation	≤ ± 1.3dB
Fiber type	single-mode fiber	Return loss	> 45dB
Connector type	stator SC/PC, rotor SC/PC	Pigtail length	Stator: 300mm+500mm, Rotor: 900mm+500mm



Combination of pneumatic, hydraulic and electrical

DHK025-5A-1Q-1Y



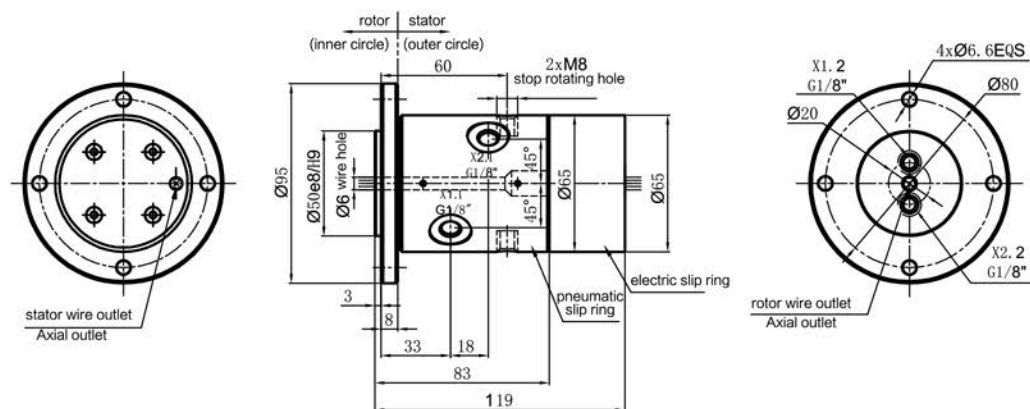
Technical Parameter

Number of channels	according to customer's actual requirements	Rotating speed	0~300rpm
Rated current	2A/5A/10A	Working temperature	-20℃~+80℃
Rated voltage	0~440VAC/240VDC	Working humidity	< 70%
Insulation resistance	≥ 500MΩ @ 500VDC	Protection level	IP51
Insulator strength	500VAC@50Hz, 60s, 2mA	Structural material	aluminum alloy
Dynamic resistance variation	< 10mΩ	Electrical contact material	Precious metal

Technical Parameter

Number of channels	according to customer's actual requirements
Interface thread	G1/8"
Flow hole size	φ 5
Working medium	cooling water、compressed air
Working pressure	1Mpa
Working speed	≤200rpm
Working temperature	-30℃~+80℃

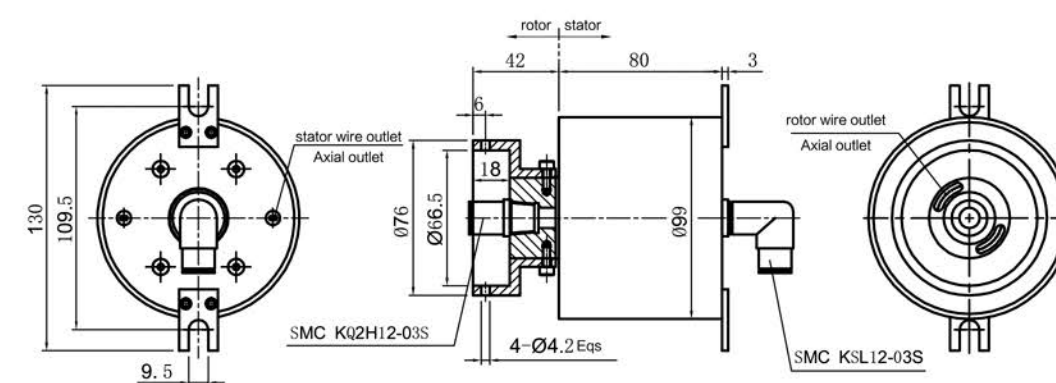
DHS065-4-2Q



Technical Parameter			
Number of channels	according to customer's actual requirements	Rotating speed	0~100rpm
Rated current	4 channels 2A(2 groups of sensor signals)	Working temperature	-20℃~+80℃
Rated voltage	0~440VAC/240VDC	Working humidity	<70%
Insulation resistance	≥500MΩ@500VDC	Protection level	IP51
Insulator strength	500VAC@50Hz, 60s, 2mA	Structural material	aluminum alloy
Dynamic resistance variation	<10mΩ	Electrical contact material	Precious metal

Technical Parameter	
Number of channels	according to customer's actual requirements
Interface thread	G1/8"
Flow hole size	φ 6
Working medium	compressed air
Working pressure	0.7Mpa
Working speed	≤100rpm
Working temperature	−30℃~+80℃

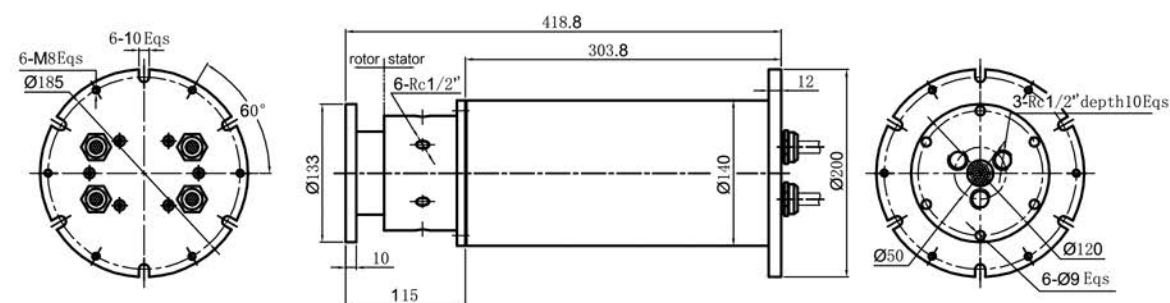
DHS099-24-1Q



Technical Parameter			
Number of channels	according to customer's actual requirements	Rotating speed	0~300rpm
Rated current	2A/channel	Working temperature	-20℃~+80℃
Rated voltage	0-440VAC/240VDC	Working humidity	<70%
Insulation resistance	≥500MΩ@500VDC	Protection level	IP55
Insulator strength	500VAC@50Hz, 60s, 2mA	Structural material	aluminum alloy
Dynamic resistance variation	<10mΩ	Electrical contact material	Precious metal

Technical Parameter	
Number of channels	according to customer's actual requirements
Interface thread	G1/8"
Flow hole size	φ 12
Working medium	compressed air
Working pressure	1Mpa
Working speed	≤200rpm
Working temperature	-30℃~+80℃

DHS140-45-1Q



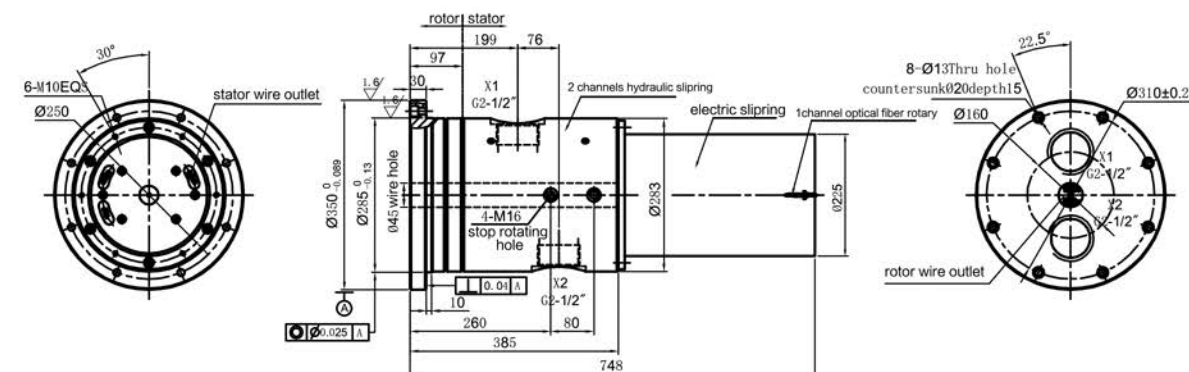
Main parameter

Number of channels	according to customer's actual requirements	Rotating speed	0~100rpm
Rated current	10A/channel	Working temperature	-20℃~+80℃
Rated voltage	0-440VAC/240VDC	Working humidity	<70%
Insulation resistance	≥500MΩ@500VDC	Protection level	IP65
Insulator strength	500VAC@50Hz, 60s, 1mA	Structural material	Q235A
Dynamic resistance variation	<10mΩ	Electrical contact material	Precious metal

Technical Parameter

Number of channels	according to customer's actual requirements
Interface thread	G1/8"
Flow hole size	Air inlet: ϕ 6, Air outlet: ϕ 10
Working medium	compressed air
Working pressure	1Mpa
Working speed	≤ 200 rpm
Working temperature	$-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$

DHS225-38-2Y-1F



Main parameter

Number of channels	according to customer's actual requirements	Working temperature	-40℃~+60℃
Rated current	2 channel 400A	Storage temperature	-55℃~+70℃
Rated voltage	0~440VAC/240VDC	Working humidity	≤95%(25℃)
Insulation resistance	1000MΩ@1000VDC	Protection level	IP54
Insulator strength	1500VAC@50Hz, 60s, 1mA	Structural material	Q235A
Dynamic resistance variation	< 10mΩ	Electrical contact material	Precious metal
Rotating speed	10rpm		

Technical Parameter

Number of channels	according to customer's actual requirements
Interface thread	G2-1/2"
Flow hole size	φ 51
Working medium	Water glycol
Working pressure	1Mpa
Working speed	≤20rpm
Working temperature	-30℃~+80℃



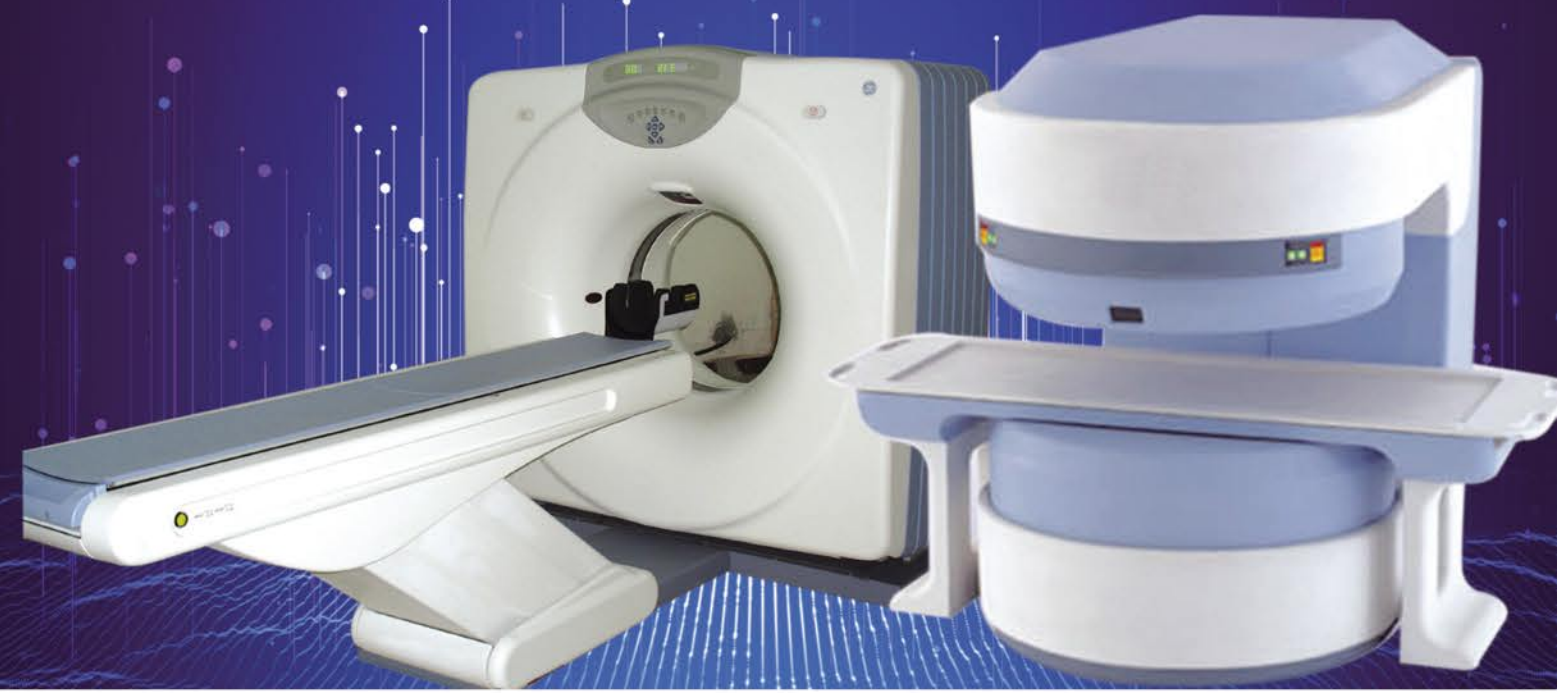
Slip ring series for special industries



Technical Parameter	
Number of channels	according to customer's actual requirements
Interface thread	G3/8"
Flow hole size	φ 10
Working medium	compressed air
Working pressure	1.1Mpa
Working speed	≤30rpm
Working temperature	−30℃~+80℃

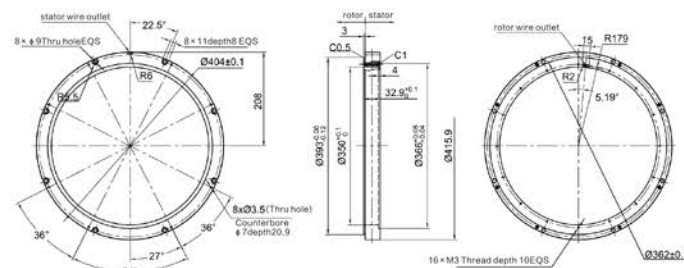
- Industrial Machine—Machining Center, Rotating Table
- Medical testing equipment and industrial instrumentation
- Emergency lighting equipment, robots
- Exhibition/display equipment, advertising rotating table
- Military—civilian dual—purpose flight pod, radar antenna equipment

- structure size
- Installation method
- Operating temperature
- Protection level
- Rated Current
- Voltage range
- Number of channels
- Signal type





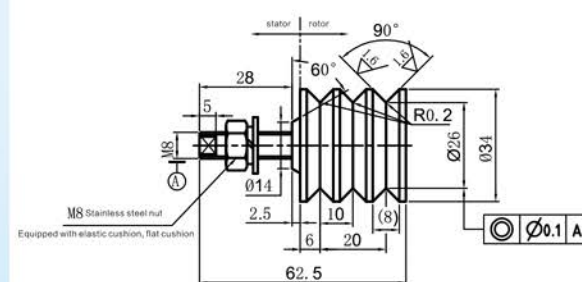
DHK350-3-15A



Main parameter

Number of channels	3 channels	Working humidity	<98%(No condensation)
Rated current	3 channels15A	Protection level	IP51
Rated voltage	0-380VAC/240VDC	Electrical contact material	Precious metal
Insulation resistance	$\geq 1000M\Omega$ @1000VDC	Weight	$\leq 2.8Kg$
Insulator strength	1500VAC@50Hz, 60s, 1mA	Leadwire specification	3 Channels 15A uses 2 AWG14# Teflon wires + shielding net + outer sheath
Dynamic resistance variation	< 10m Ω	Leadwire length	rotor: 600mm+20mm; stator: 1000mm+50mm
Work rotating speed	0~100rpm	Rotating torque	$\leq 0.3N \cdot m$
Working temperature	-55℃~+70℃	Work life	4 million revolutions

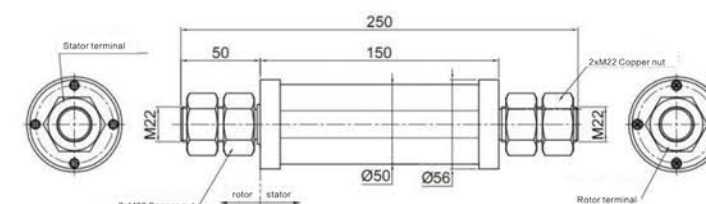
DHS034-1-10A



Main parameter

Number of channels	1	Working temperature	-20℃~+80℃
Rated current	10A	Working humidity	<95%(No condensation)
Rated voltage	0-240VDC	Protection level	IP54
Insulation resistance	$\geq 500M\Omega$ @500VDC	Housing material	316L stainless steel
Insulator strength	500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10m Ω	Leadwire length	The stator uses M8 wiring studs
Rotating speed	400rpm	Rotating torque	$\leq 0.02N \cdot m$

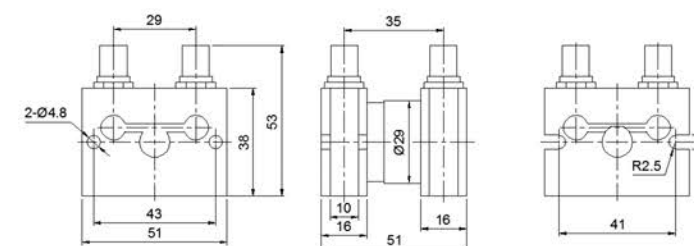
DHS060-1-1000A



Main parameter

Number of channels	1
Rated current	1000A
Rated voltage	0 ~ 440VAC/DC
The stator uses M8 wiring studs	M22

DHS029-3

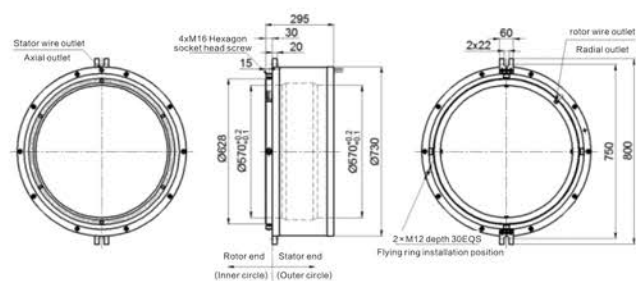


Technical Parameter

Number of channels	3	Working temperature	-20℃~+80℃
Rated current	2A / 3 channels(300MHz)	Working humidity	< 70%
Rated voltage	0-240VAC/VDC	Protection level	IP51
Insulation resistance	$\geq 500M\Omega$ @500VDC	Housing material	Aluminum alloy
Insulator strength	500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
Dynamic resistance variation	< 10m Ω	Leadwire specification	use AWG26 # single-core shielded wire
Rotating speed	0~100rpm	Leadwire length	500mm+20mm



DHK570F-11



Main parameter

Number of channels	11 channels	Working humidity	<70%
Rated current	Power: 2 channels 10A (24V) network signal 9 channels 2A	Protection level	Ip65
Rated voltage	0-240VAC/VDC	Electrical contact material	Precious metal
Insulation resistance	≥500MΩ @500VDC	Weight	≤220Kg
Insulator strength	500VAC@50Hz, 60s, No breakdown, no flicker	Leadwire specification	2 channels use 2 AWG14# color Teflon insulation, 9 channels use 1 ultra-category 5 network cable;
Dynamic resistance variation	<10mΩ	Leadwire length	rotor: 6000mm+1000mm; stator: 4000mm+1000mm
Work rotating speed	0-5rpm		
Working temperature	-20℃~+80℃		

Application Area



Optical transceiver

typical application

- Photoelectric pod
- Photoelectric ball
- Emergency lighting equipment, robots
- Visual monitoring system
- Photoelectric radar

Can be customized specifications

- Structural materials
- Dimensions
- Operating temperature
- Protection level
- signal type
- Number of channels





Single channel Gigabit Ethernet optical transceiver

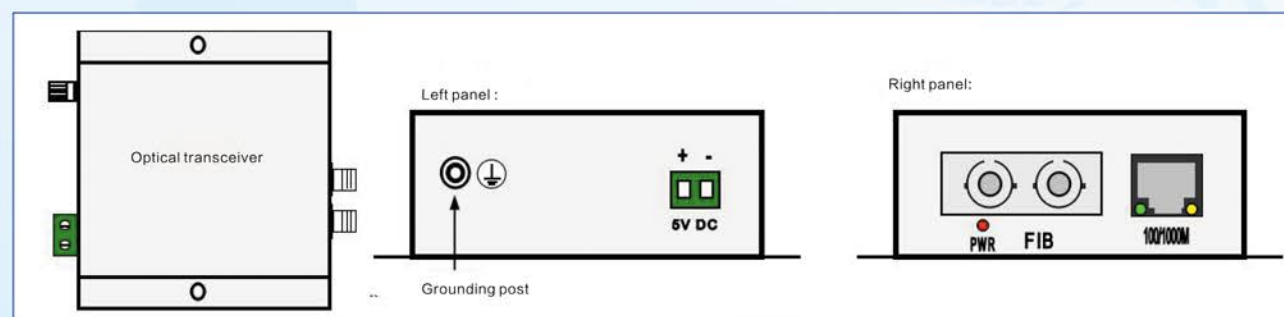
Technical parameter

Physical interface	1 channel, shielded Super Category 5 RJ45 seat, automatic flip
Connecting cable Category	5 unshielded twisted pair
Electrical interface Support	compatible with international IEEE802.3, IEEE802.3u 1000M, full or half duplex Ethernet standard, support TCP/IP protocol.

Specific parameters of optical interface

Optical fiber interface	SC/PC (optional)
Optical wavelength	transmitting: 1270nm; receive: 1290nm (optional)
Communication distance	0~5KM
Fiber type	single mode single fiberl (optional)
Dimensions	76(l) × 70(w) × 28(h)mm (can be customized)
Working temperature	-40~+85℃, 20~90RH%+
Working Voltage	5VDC

Appearance diagram and signal definition description



Indicator light description

PWR:	Power indicator light is on when the power is connected normally
+ : DC power supply “ + ”	
- : DC power supply “ - ”	
FIB	Optical fiber interface
100/1000M	Ethernet interface
There are two lights on the Ethernet RJ45 port:	
Yellow light	Ethernet link indicator light, on means the link is normal, flashing with data
Green light	Optical fiber link indicator/activity light, on means the link is normal, flashing is data transmission

Field Weapon System

Application description

Field KVM optical transceivers are specially used for remote control of field operations, with extremely low latency and reliable performance guarantee. The chassis are all reinforced and waterproof and dustproof, suitable for remote KVM control data access in harsh outdoor environments. The transmitted data is mainly 1394, USB, PS/2, DVI and other signals.

Product Description

- Support 1394, DVI, USB, PS/2 and other signal composite transmission;
- Very low transmission delay;
- Miniaturized design, easy to carry in the field;
- Highly reliable and robust connector;
- High-level IP waterproof and dustproof packaging grade, anti-acid, alkali and salt spray corrosion, anti-vibration;
- Built-in surge and electrostatic protection, three-level lightning protection design;
- Strong anti-electromagnetic interference ability;
- Can be customized.



Field Weapon System

Application description

The field portable optical transceiver is light, compact and easy to carry. The chassis is designed with reinforcement and waterproof and dustproof, which is suitable for temporary data access in the harsh environment of the field. The data transmitted are mainly video, audio, Ethernet, telephone, RS-232/485, E1 and other signals.

Product Description

- Support video, audio, Ethernet, telephone, RS-232/485, E1 and other multiple signal composite transmission;
- Miniaturized design, easy to carry in the field;
- Highly reliable and firm connector;
- High-level IP waterproof and dustproof packaging grade, anti-salt-alkali and salt spray corrosion, anti-vibration;
- Built-in surge and static protection, three-level lightning protection design;
- Strong anti-electromagnetic interference ability;
- Can be customized.





Field Weapon System

Application description

Generally, a star-shaped network is adopted. Communication vehicles distributed in various places transmit high-definition video, audio, telephone, Ethernet, and data signals to the command center through field optical cables, and then remotely command the entire combat system through the seats of the command center.

Product Description

- Support high-definition video image, telephone, Ethernet and other signal composite transmission;
- Highly reliable and firm connector;
- High-level IP waterproof and dustproof packaging grade, anti-salt-alkali and salt spray corrosion, anti-vibration;
- Built-in surge and static protection, three-level lightning protection design;
- Strong anti-electromagnetic interference ability;
- Can be customized.



Radar monitoring system

Application description

Generally, a star-shaped network is adopted, and the data signals such as TTL, analog voltage, Ethernet, telephone, RS-485 and other data generated by the front-end radar are transmitted to the field command center through the radar remote display extension and the field optical cable installed in the supporting cabin of the radar vehicle. The remote control display terminal of the radar, so that the front-end position can be operated synchronously through the operation seats of the command center.

Product Description

- Support TTL, analog voltage, Ethernet, telephone, RS-485 and other signal composite transmission;
- Highly reliable and firm connector;
- High-level IP waterproof and dustproof packaging grade, anti-salt-alkali and salt spray corrosion, anti-vibration;
- Built-in surge and static protection, three-level lightning protection design;
- Strong anti-electromagnetic interference ability;
- Can be customized.



Radar monitoring system

Application description

Generally, point-to-point networking is adopted, and the optical transceiver transmits the synchronous RS-232 signal of the airport radar to the dispatching tower through the optical fiber, and then dispatches the aircraft taking off and landing at the airport through the seat station of the tower dispatching center.

Product Description

- Support synchronous RS-232, telephone, E/M relay and other multiple signal composite transmission;
- Highly reliable and firm connector;
- High-level IP waterproof and dustproof packaging grade, anti-acid, alkali and salt spray corrosion, anti-vibration;
- Built-in surge and static protection, three-level lightning protection design;
- Strong anti-electromagnetic interference ability;
- Can be customized.



Marine Battleship System

Application description

The core of the warship/submarine radar optical transmission system center is the optical switch, which is responsible for connecting the radar equipment, the intelligence database system and the radar image processing system. The serial port/Ethernet converter is responsible for converting the serial port data of gyroscopes, GPS, depth detectors and other devices into Ethernet signals to connect to the system.

Product Description

- Photoelectric port can be customized;
- Support RS-232/485 serial port, WEB and SNMP network management;
- Highly reliable and firm connectors are optional, anti-vibration;
- High-level IP waterproof and dustproof packaging grade is optional, resistant to acid, alkali and salt spray corrosion;
- Built-in surge and static protection, three-level lightning protection design;
- Strong anti-electromagnetic interference ability.



- Convert multiple serial port data to Ethernet signal;
- Highly reliable and firm connectors are optional, anti-vibration;
- High-level IP waterproof and dustproof packaging grade is optional, resistant to acid, alkali and salt spray corrosion;
- Built-in surge and static protection, three-level lightning protection design;
- Strong anti-electromagnetic interference ability;
- Can be customized.

