

DHK SERIES DHS SERIES



SLIP RING

DHKDHK 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

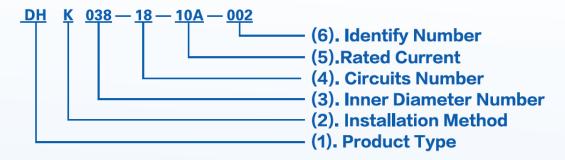
Can be customized specifications

- ■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

Naming description of model



(1).Product type: DH—electric slip ring

(2).Installation method: K-through hole

(3). Through hole product bore diameter

(4). Total circuits

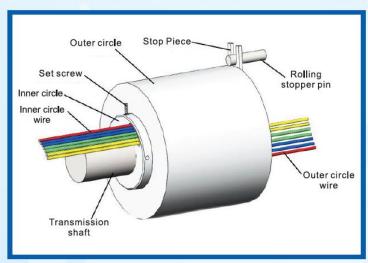
(5). The rated current or it will not be marked if it passes through a different rated current for the circuits.

(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	Outer		The Length (Correspondir	ng To The Sta	andard Num	ber Of Circui	ts (L)		Max number
Model	diameter (ID)	er diameter (0D)	6circuits	12circuits	18circuits	24circuits	30circuits	36circuits	42circuits	42circuits	of circuits
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

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															
Circu	uits				As The Customer Required										
Rota	ting speed				0~100	00rpm									
Work	k temperatu	re			-40°C	~+65	\mathbb{C}								
Work	k humidity				0~959	6									
Ele	ctrical pe	erfor	man	ce											
Rate	d voltage				0~24\	/DC、	250V <i>A</i>	AC/VD	C、44	OVAC					
Rate	d current				2A、5	A、10	A、15	A、25	4						
Volta	age resistan	ce str	ength		Power:	among :	2 rings≥	≥1000V/	AC@50	Hz, Sig	nal: am	ong 2 rir	ngs≥50	0VAC@)50Hz
Insulation resistance				Power: ≥1000MΩ@500VDC, Signal: ≥500MΩ@500VDC											
Dyna	amic resista	nce va	ariation	1	<10mΩ										
Med	chanical	perf	orma	ince											
Cont	act material				Precious metal										
Wire	specification	ns			According To Customer Requirements										
Wire	length				According To Customer Requirements										
Hous	sing materia				Aluminum Alloy										
Torq	ue				1mN · m/ring										
Protection level					IP51-IP68										
					Wire	e Info	orma	ation	Tab	le					
Current	Wire Specs		Color												
2A	AWG26	Red	Yellow	Black	Blue	Green	White	Brown	Gray	Orange	Purple	Light red	Transparent color		
5A	AWG22	Red	Yellow	Black	Blue	Green	White	Brown	Gray	Orange	Purple	Light red	Transparent color	Blue/white	Blue/white
10A	AWG18	Red	Yellow	Black	Blue	Green	White	Brown	Gray	Orange	Purple				

Trustworthy Product with Military Quality

Blue

Blue

Green

Green

White

White



AWG16

AWG14

AWG12

15A

20A

25A

Yellow

Yellow

Yellow

Red

Red

Black

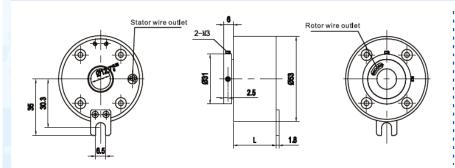
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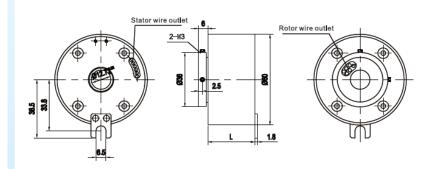
DHK012-I





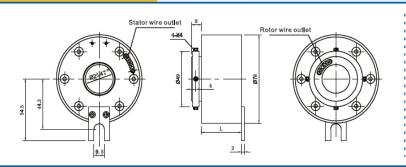
The main para	The main parameters						
Number of circuits	According to requirements of customers	Working temperature	- 40℃~+65℃				
Rated current	2A、5A	Working humidity	<70%				
Rated voltage	0~240VAC/VDC	Protection level	IP54				
Insulation resistance	≥1000MΩ@500VDC	Housing material	Aluminum A ll oy				
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



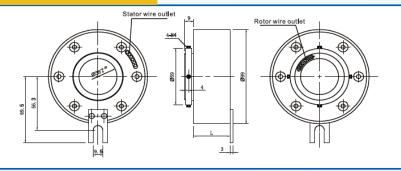


The main parameters						
Number of circuits	According to requirements of customers	Working temperature	- 40℃~+65℃			
Rated current	2A、5A、10A、15A、20A	Working humidity	<70%			
Rated voltage	0~240VAC/VDC	Protection level	IP54			
Insulation resistance	≥1000MΩ@500VDC	Housing material	Aluminum Alloy			
Insulator 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			



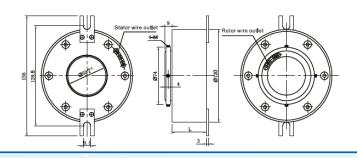


The main parameters						
Number of circuits	According to requirements of customers	Working temperature	- 40℃~+65℃			
Rated current	2A、5A、10A、15A、20A	Working humidity	<70%			
Rated voltage	0~240VAC/VDC	Protection level	IP54			
Insulation resistance	≥1000MΩ@500VDC	Housing material	Aluminum Alloy			
Insulator 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			



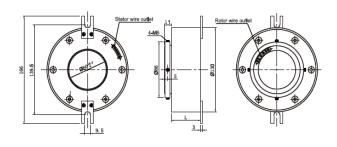


The main para	The main parameters						
Number of circuits	According to requirements of customers	Working temperature	- 40℃~+65℃				
Rated current	2A、5A、10A、15A、20A	Working humidity	<70%				
Rated voltage	0~240VAC/VDC	Protection level	IP54				
Insulation resistance	≥1000MΩ@500VDC	Housing material	Aluminum 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				



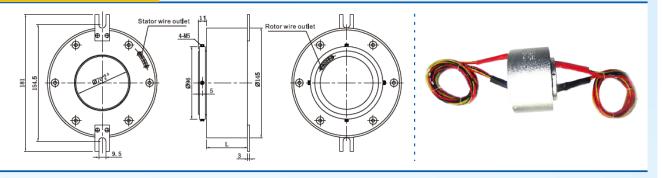


The main parameters						
Number of circuits	According to requirements of customers	Working temperature	- 40℃~+65℃			
Rated current	2A、5A、10A、15A、20A	Working humidity	<70%			
Rated voltage	0~240VAC/VDC	Protection level	IP54			
Insulation resistance	≥1000MΩ@500VDC	Housing material	Aluminum Alloy			
Insulator 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			

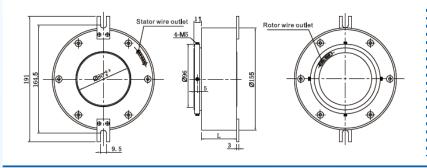




The main parameters						
Number of circuits	According to requirements of customers	Working temperature	-40°C~+65°C			
Rated current	2A、5A、10A、15A、20A	Working humidity	<70%			
Rated voltage	0~240VAC/VDC	Protection level	IP54			
Insulation resistance	≥1000MΩ@500VDC	Housing material	Aluminum Alloy			
Insulator 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			

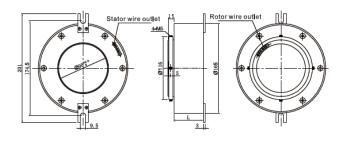


meters		
According to requirements of customers	Working temperature	- 40℃~+65℃
2A、5A、10A、15A、20A	Working humidity	<70%
0~240VAC/VDC	Protection level	IP54
≥1000MΩ@500VDC	Housing material	Aluminum Alloy
1500VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal
<10m Ω	Lead wire specification	Colored Teflon insulated & tinned stranded flexible wire
0~600rpm	Lead wire length	500mm+20mm
	According to requirements of customers $2A$, $5A$, $10A$, $15A$, $20A$ $0~240VAC/VDC$ $\geq 1000M \Omega @500VDC$ $1500VAC@50Hz$, $60s$, $2mA$ $< 10m \Omega$	According to requirements of customers Working temperature 2A、5A、10A、15A、20A Working humidity 0~240VAC/VDC Protection level ≥ 1000M Ω @500VDC Housing material 1500VAC@50Hz, 60s, 2mA Electrical contact material < 10m Ω



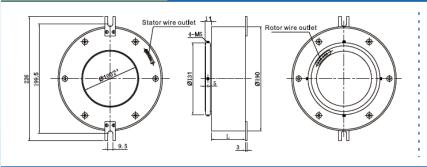


The main para	ameters		
Number of circuits	According to requirements of customers	Working temperature	-40°C~+65°C
Rated current	2A、5A、10A、15A、20A	Working humidity	<70%
Rated voltage	0~240VAC/VDC	Protection level	IP54
Insulation resistance	≥1000MΩ@500VDC	Housing material	Aluminum Alloy
Insulator strength	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





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			





The main para	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				

DHSDHS 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

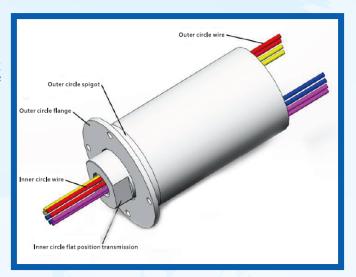
DHS series slip ring installation manual:

Inner circle transmission mode:

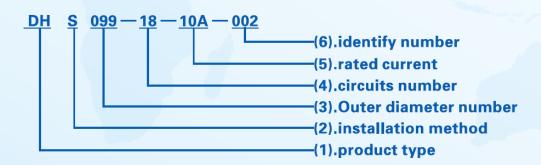
Use the equipment transmission fork to clamp the slip ring flat position of the shaft head to achieve synchronous rotation.

Outer circle transmission mode:

Use slip ring outer circle spigot and flange round hole to fix with customers' equipment with screws.

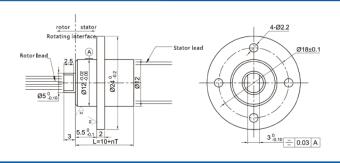


Naming description of model



- (1).Product type: DH—electric slip ring.
- (2).Installation method: S—solid shaft slip ring.
- (3). Outer diameter of solid shaft slip ring.
- (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: DHS099-36-20A-002 has two sets of products with the same name, the cable length, connector, installation method, etc. are different, you can add the identification number: DHS099-36-20A-002; if there are more of this model in the future, and so on -003, -004, etc.

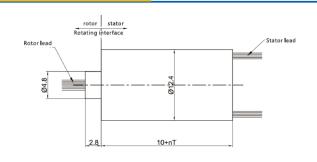
DHS012-6-1A





The main para	The main parameters			
Circuits	6 rings	Working temperature	-20℃~+70℃	
Rated current	1A	Working humidity	≤70%	
Rated voltage	0~240VAC/VDC	Protection level	IP51	
Insulation resistance	≥100MΩ@500VDC	Structural material	Stainless steel	
Insulator strength	220VAC@50Hz, 60s, 2mA	Electrical contact material	Precious metal	
Dynamic resistance variation	≤20mΩ	Lead wire specification	5A per circuits with AF-0.35 mm², rest with AF-0.15 mm²	
Rotating speed	0~100rpm	Lead wire length	500mm+20mm	

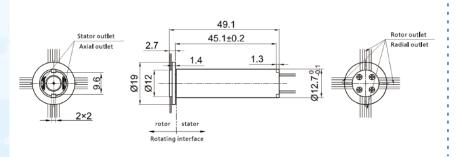
DHS012-18-2A





The main parameters			
Circuits	18 rings ,can be customized	Working temperature	- 40℃~+65℃
Rated current	2A	Working humidity	≤70%
Rated voltage	0~240VAC/VDC	Protection level	IP51
Insulation resistance	≥250MΩ@250VDC	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 mm², rest with AF-0.15 mm²
Rotating speed	0~100rpm	Lead wire length	500mm+20mm

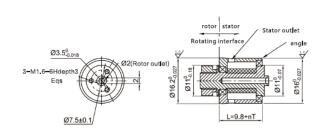
DHS013-50





The main para	The main parameters			
Circuits	50 rings,can be customized	Working temperature	-40°C~+80°C	
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 mm², rest with AF-0.05 mm²	
Rotating speed	0~300rpm	Lead wire length	300mm+15mm	

DHS016-6-1A

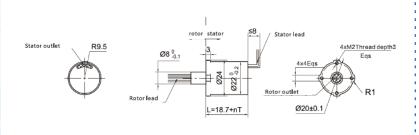






The main parameters				
Circuits	6 rings,can be customized	Working temperature	- 40℃~+65℃	
Rated current	1A	Working humidity	≤70%	
Rated voltage	0~240VAC/VDC	Protection level	IP51	
Insulation resistance	≥100M \(\Omega \)@500VDC	Structural material	Stainless steel	
Insulator strength	500VAC@50Hz, 60s, 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	

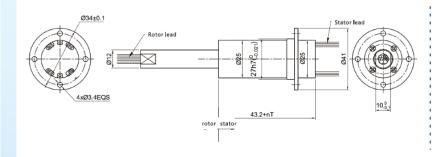
DHS022-15





The main para	The main parameters				
Circuits	15 rings,can be customized	Working temperature	-40°C~+65°C		
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		

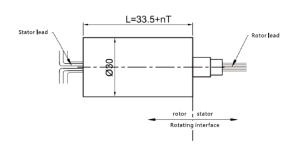
DHS025-30-002





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 mm², rest with AF-0.15 mm²
Rotating speed	0~300rpm	Lead wire length	200mm+15mm

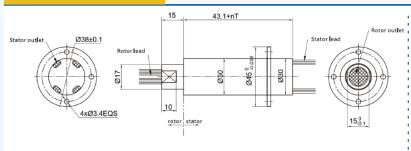
DHS030-6





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

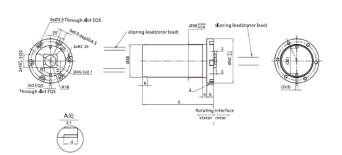
DHS030-42





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	

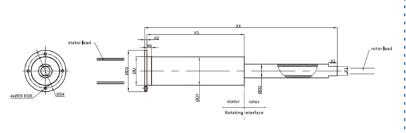
DHS039-23-004





The main para	ameters		
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	≥100M \(\Omega \)@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 mm², AF-0.15 mm², AFPF-0.15 mm²
Rotating speed	0~300rpm	Lead wire length	500mm+20mm

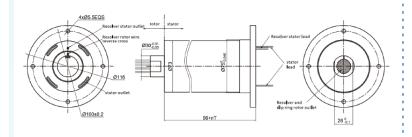
DHS050-101





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 mm² , 10A with AF-0.75 mm², AF-0.15 mm²	
Rotating speed	0~300rpm	Lead wire length	500mm+20mm	

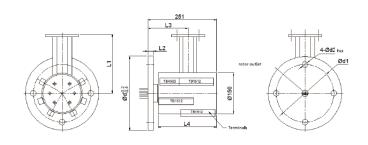
DHS075-35





The main para	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	≥200M \(\Omega \)@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 mm² , AF-0.15 mm²	
Rotating speed	0~60rpm	Lead wire length	500mm+20mm *	

DHS150-73





The main para	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		



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