



ROTARX[®]

Faston Slip Rings



**High-Performance Power,
Signal and Media Transmission**

COMPACT SLIP RINGS

Our other available catalogues:

COMPACT SLIP RINGS SOLUTIONS (General catalogue)	(256 pages)
CAPSULATED MINIATURE SLIP RINGS	(44 pages)
AUTOMATION SLIP RINGS	(32 pages)
THROUGH-BORE SLIP RINGS	(68 pages)
PANCAKE SLIP RINGS - with Housing - without Housing	(42 pages)
SEPARATE SLIP RINGS	(28 pages)
MINIATURE HYBRID SLIP RINGS	(24 pages)
HYBRID SLIP RINGS - Pneumatic / Liquid + Electric	(72 pages)
HYBRID SLIP RINGS - Ethernet + Electric	(34 pages)
HYBRID SLIP RINGS - USB + Electric	(30 pages)
HYBRID SLIP RINGS - Fiber Optical + Electric	(44 pages)
HYBRID SLIP RINGS - Coax + Electric	(40 pages)
HYBRID SLIP RINGS - HD-SDI (1080p)+ Electric	(26 pages)

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The Company

Quality and Safety

B-COMMAND was founded in 1995. Since more than 20 years the company has put its focus on **production and sales of electro technical components to all parts of the globe.**

In the early years B-COMMAND focused on electro-mechanical control solutions mainly for the national crane market. Throughout the years the sales area was widened to many international countries and the second main product focus became wind power technology. The company started developing and manufacturing of special limit switches for wind turbines which are still one of the major product lines today.

After more than 10 years of growth and success with electro-mechanical products, another different technology division was established: **electrical transmission technology.**

Due to many analogies with electro-mechanical products and many skilled engineers the new technology focus for transmission of power and signals had been implemented.

QUALITY MANAGEMENT
Certification 2017



Production & Warehouse

In the beginning the products for electrical transmission technology included simple slip rings for transmitting small power ratings from fixed to rotating parts into machines.

Today, in times of Industry 4.0 and industrial networks, the program contains more than **20.000 possible solutions with combined power and signal transmission, high-frequency solutions, different housing types and super-miniature solutions.**



Offices of our Headquarters Hamburg

Our technical expertise guarantees the right solution for your applications.

Since more than 10 years the company is certified according to **DIN EN ISO9001:2015 by TÜV in Germany.** All management and production processes are created and approved according to international standards. Especially a **flexible production structure allows short delivery times also for small volume orders or prototypes.**

The purchasing organization of B-COMMAND is internationally targeted. Raw material and production components are sourced from best-rated suppliers worldwide. A network of specialists for all materials is available for developing the best solution for the customers requirements resulting in a perfect fitting product for all individual projects.

B-COMMAND has an international sales network of distributors and sales partners for all regions. Some of the distributors even offer spare parts or series demand products from their own stock in the different countries.

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All activities at B-COMMAND are focused on customer satisfaction. Creating perfect-fitting technical solutions with best quality for marked-based prices – this is our passion.



Slip Rings Technology

Slip rings are essential electromechanical parts of commercial or industrial machinery. They have to ensure transfer of data, media, energy and electrical signals in best possible conditions. This can only be realized by combination of a targeted design process, selection of best raw materials, professional production conditions, 100% quality control and skilled assembling on customer side.

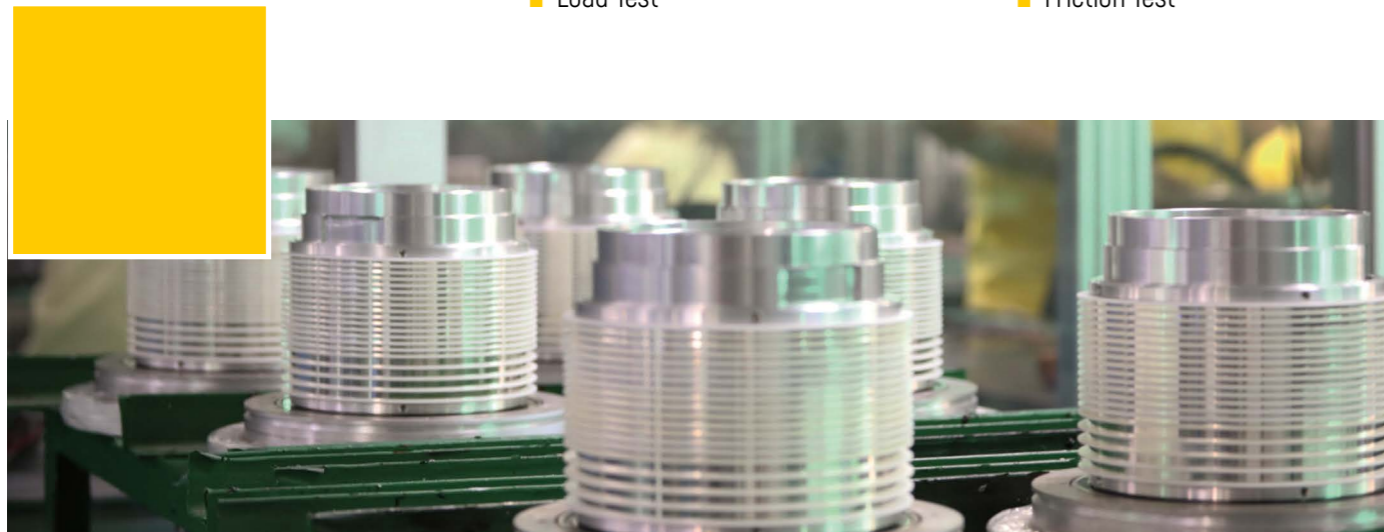


PREMIUM ENGINEERING

With many years experience and a deep knowledge of all relevant engineering disciplines, B-COMMAND engineering team can provide fast and innovative design solutions for customers around the world. Our engineers are constantly developing new designs and use new materials across a wide spectrum of diverse environments.

In order to ensure only premium-quality products B-COMMAND is able to undertake following tests in our in-house laboratory:

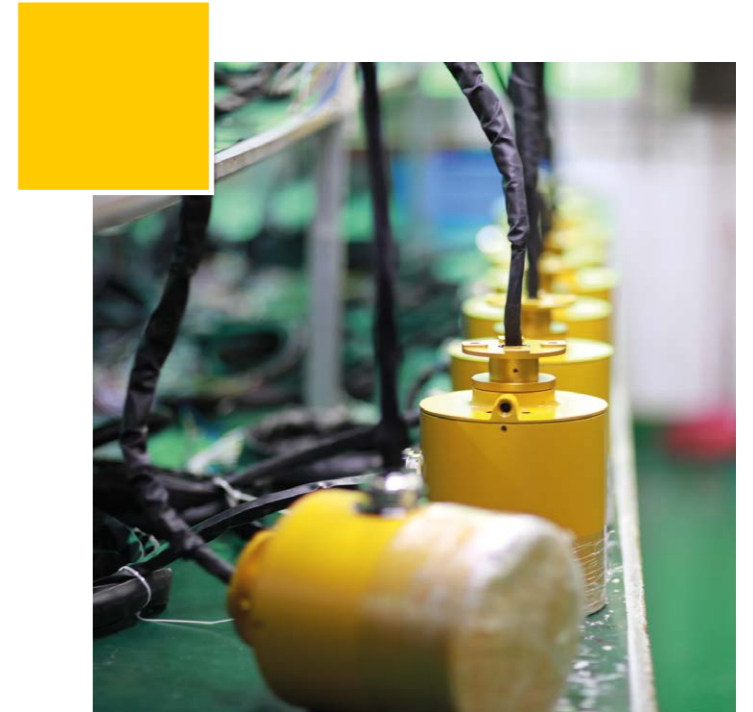
- Humidity Test
- Temperature Test
- Protection Degree Test
- Vibration / Shock Test
- High Pressure / Vacuum Test
- Torque Test
- High Voltage Test
- Large Current Test
- Salt Spray Test
- Load Test
- Electrical Noise Test
- Contact Resistance Test
- Lifetime Test
- Insulation Test
- Frequency Test
- Friction Test



ROTARX - MINIATURE SLIP RINGS

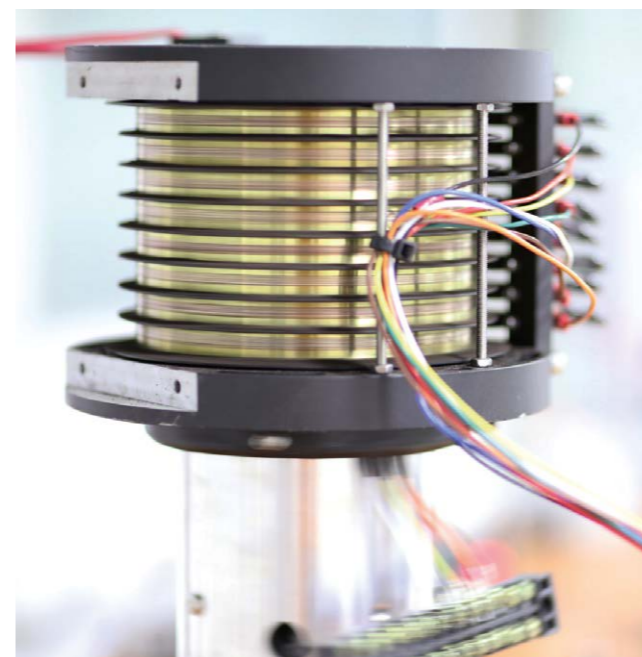
TOTAL QUALITY CONTROL

High production depth is the key to total quality control. Therefore B-COMMAND has established extended electrical and mechanical production capabilities. Different automatic and semi-automatic multiple axis CNC machining centers, grinding machines, milling machines and coating machines offer a wide range of mechanical options during production process. Only experts with long-term knowledge are operating our machinery in order to grant best quality products for our customers.



FLEXIBILITY

For B-COMMAND flexibility is not just a word, it is the basis of our organization. Flexible sales and R&D structures with capacity for extensive project inquiries from our customers are as well allocated as flexible production structures with high-volume series production and also fast-track options for small volume orders.



WWW.ROTARX.COM

INNOVATION

The willingness of lifelong-learning and permanent interest in new technological trends sets our engineering team apart. Industrial communication and electrical complexity of everyday life have moved to a new level and they are still developing fast. We keep an eye on all new technologies, new applications, new materials and forward-looking innovations which can improve or re-invent our products.

Slip Rings Applications



WIND POWER TECHNOLOGY

- Small Wind Turbines
- Multi-MW-Turbines
- Signal & Power Transmission



AEROSPACE TECHNOLOGY

- Drones
- Radars
- Thermal Imaging



ROBOTIC TECHNOLOGY

- Production Robots
- Inspection Robots
- Packaging Robots



CAMERA TECHNOLOGY

- TV-Cameras
- Security Cameras
- Inspection Cameras



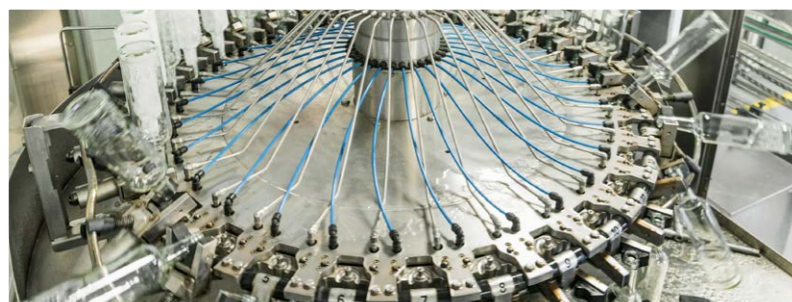
CRANE TECHNOLOGY

- Post Cranes
- Tower Cranes
- Mobile Cranes



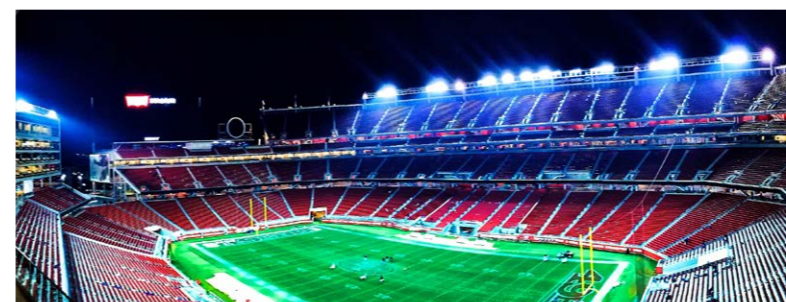
AMUSEMENT TECHNOLOGY

- Pendulum Rides
- Observation Wheel
- Merry-Go-Round



PACKAGING TECHNOLOGY

- Packaging Robots
- Filling Machines
- Capping Machines



STAGE TECHNOLOGY

- Rotating Stages
- Rotating Lights
- Revolving Platforms

RX-FAS Series

PRODUCT CODE

RX	-	FAS	BBB	-	DD	E	-	FFF	GG	S
		1	2		3	4		5	6	7

Example: RX-FAS033-373-00402S
 (1) Faston Slip Ring with (2) Outer Diameter 33mm, (3) Length approx. 37mm (4) Power transmission 15A, (5) 4 rings for power transmission, (6) 2 rings for signal transmission, (7) Standard Version

1	Series	FAS - Faston Slip Rings		
2	Outer Diameter	From 32.9mm to 45mm (see drawings for details)		
3	Length	From 28.6mm to 52mm (see drawings for details)		
4	Power Level		1 - 25A	
			2 - 14A	
			3 - 15A	
			4 - 20A	
5	Number of Power Circuits	From 2 rings to 6 rings		
6	Number of Signal Circuits	0 rings or 2 rings		
7	Version		S - Standard	
			C - Customized	

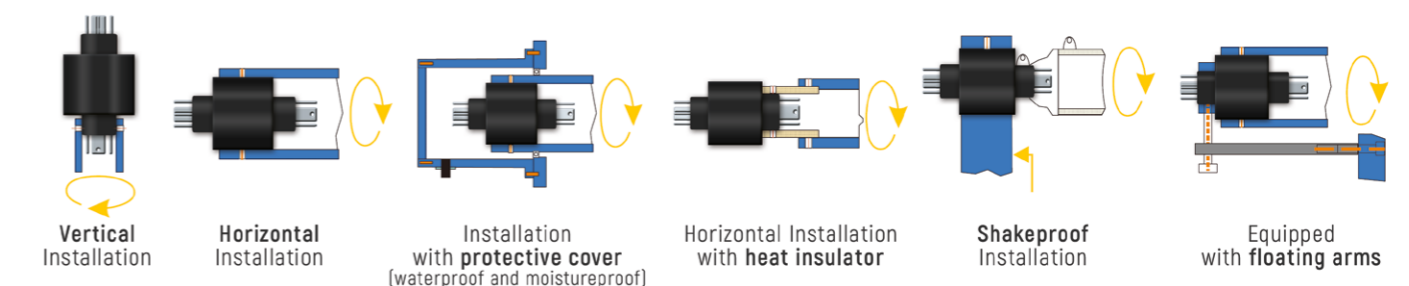
SPECIFICATIONS

FASTON SLIP RING SPECIFICATIONS	
NUMBER OF CIRCUITS	2-6 for power transmission 2 for signal transmission

ELECTRICAL SPECIFICATIONS	
CURRENT RATING	- Power transmission circuits: 14A / 15A / 20A / 25A (See product tables for details) - Signal transmission circuits: 5A
VOLTAGE RATING	380VAC/DC
ELECTRICAL NOISE	- Type FAS045: max 35mΩ - All other types: max 10mΩ
INSULATION RESISTANCE	- Type FAS045: ≥500 MΩ @ 500 VDC - All other types: ≥1000 MΩ @ 500 VDC
DIELECTRIC STRENGTH	- Type FAS045: 1000VAC @ 50Hz, 60s - All other types: 500VAC @ 50Hz, 60s
CONNECTING WAY	Silver plated pin

MECHANICAL SPECIFICATIONS	
WORKING LIFE	50 Million Revs
ROTATING SPEED	0-300 rpm
TEMPERATURE RANGE	-20°C to +60°C
OPERATING HUMIDITY	0-60% RH
CONTACT MATERIAL	Precious Metal
HOUSING MATERIAL	Engineering plastic
PROTECTION DEGREE	IP51 (higher or lower on request)

SCHEME DRAWING



Signal & Power
 Long Life
 Easy Integration
 RoHS2 CE

Faston slip rings are very compact solutions with fiber brush technology and high power ratings. The cable connection on rotor and stator side is done by faston connectors directly at the housing. Faston connectors avoid the use of welds that may affect the reading of thermocouple signals. The slip ring is very easy to install and due to the faston connectors it can also be replaced very easy in case of maintenance or repair.

We offer faston slip rings with thermoplastic housing material from 2 to 8 rings. The customer can choose between power rings for 14A, 15A, 20A, 25A or signal rings for 5A each. The housing diameters reach from 32,9mm to 46mm.

We offer standardized & modularized design and fully customizable products according to the special requirements of customers in different applications.

If you have specific customized requirements, please feel free to consult us in order to create the most suitable recommendation for your specification.

ADVANTAGES

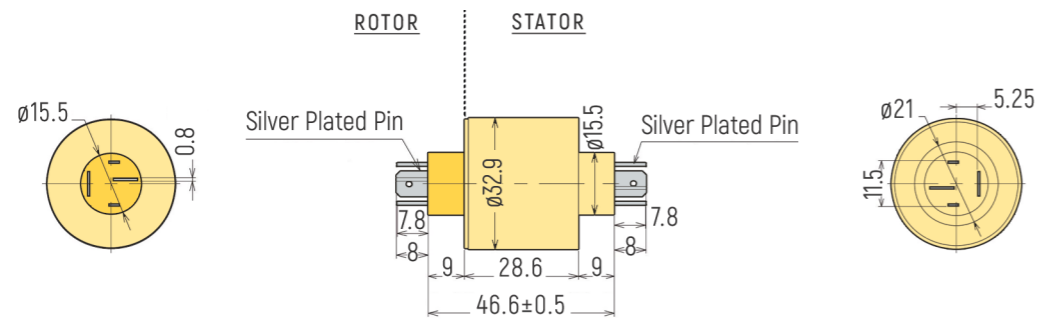
- + Low Contact Resistance
- + Long Lifetime
- + Maintenance Free
- + 360° Continuous Rotation
- + Power & Signal Transmission
- + Fast Installation & Maintenance due to Pin-Connection
- + Small & Compact Design
- + Low Torque

MAIN APPLICATIONS

- > Wind Turbines
- > Flow-Line Equipment
- > Rotating Working Platforms
- > Hose & Cable Reels
- > Moving Head Projectors
- > Control Systems
- > Packaging Machines

RX-FAS033

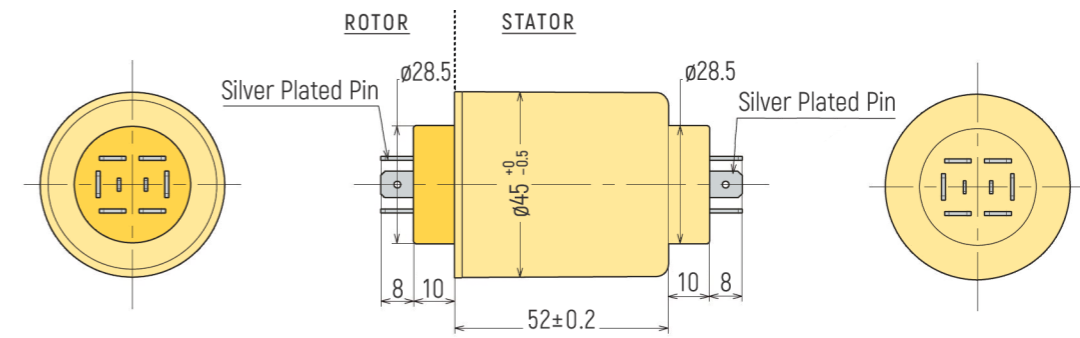
Number of Circuits: 4



MODEL	LENGTH (mm)	OD (mm)	NUMBER OF CIRCUITS	
			Power 14A	Signal / 5A
RX-FAS033-292-00202S	28.6	32.9	2	2

RX-FAS045

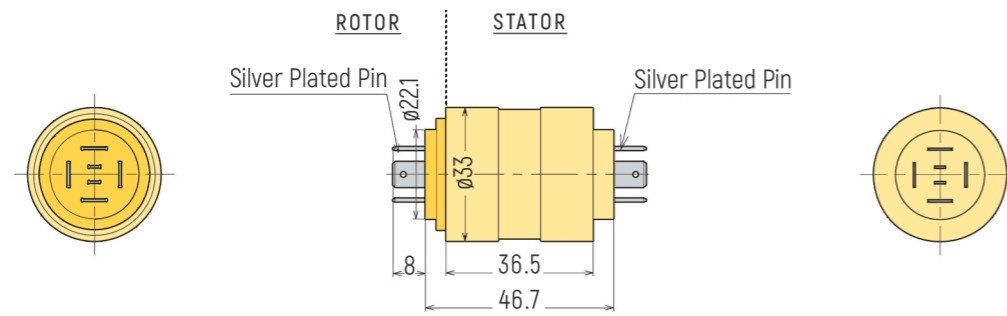
Number of Circuits: 8



MODEL	LENGTH (mm)	OD (mm)	NUMBER OF CIRCUITS	
			Power 20A	Signal / 5A
RX-FAS045-524-00602S	52	45	6	2

RX-FAS033

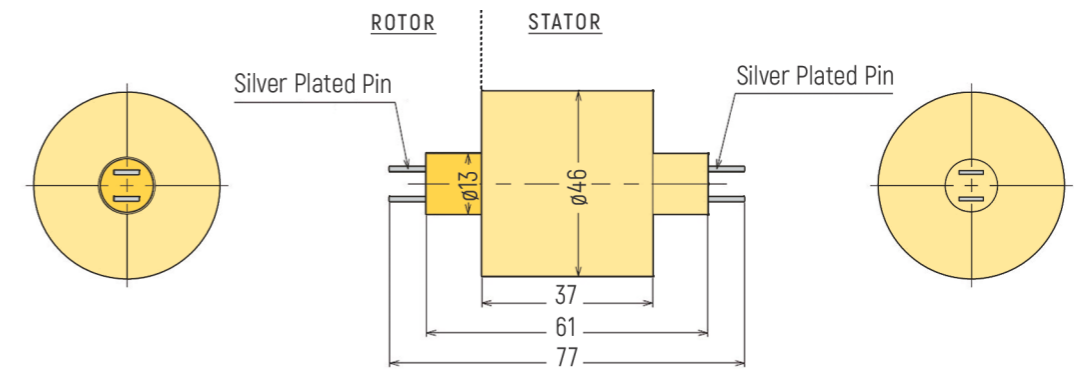
Number of Circuits: 6



MODEL	LENGTH (mm)	OD (mm)	NUMBER OF CIRCUITS	
			Power 15A	Signal / 5A
RX-FAS033-373-00402S	36.5	33	4	2

RX-FAS046

Number of Circuits: 2



MODEL	LENGTH (mm)	OD (mm)	NUMBER OF CIRCUITS	
			Power 25A	Signal / 5A
RX-FAS046-371-00200S	37	46	2	-

Customized Slip Rings



HYBRID SLIP RING FOR WATER, POWER AND SIGNAL TRANSMISSION

- 12 x 10A power, 1 x gigabit Ethernet, 1 x water leadthrough
- Harting connector for power lines
- Housing material aluminium

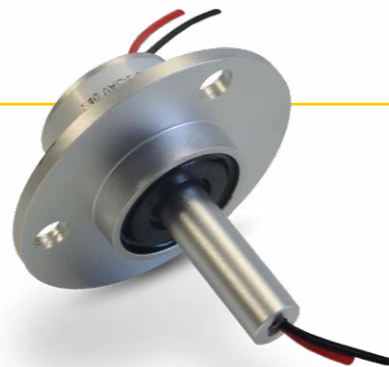


MEDIUM SIZE SLIP RING WITH MASSIVE FLANGE

- Axial cable outtake rotor, radial cable outtake stator
- Steel housing in customized color
- Special cable protection sleeve

MINIATURE METAL HOUSING WITH ELONGATED ROTOR SHAPE

- Special rotor design acc. to customer specification
- 4 x 2A signal rings
- Protection degree IP65



LARGE SLIP RING FOR MARITIME APPLICATIONS

- Outer diameter 14 meters, inner diameter 0.7 meters
- Housing material steel, color similar to maritime vessel
- Inspection porthole

MEDIUM SIZE SLIP RING WITH MASSIVE FLANGE

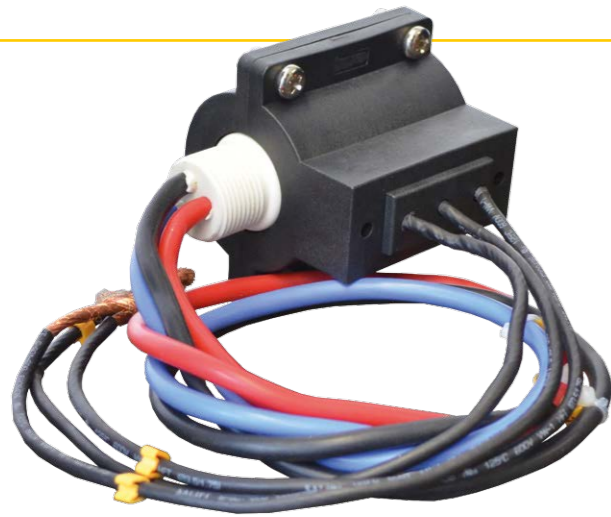
- Aluminium rotor flange with customized boreholes
- Flange thickness 13mm
- Protection degree IP65



HYBRID MEDIUM SIZE HOLLOW-SHAFT SLIP RING

- 10 x 10A signal transmission + EtherCat signals
- Massive housing for heavy-duty-applications
- Special flange and double-anti-rotation-tabs



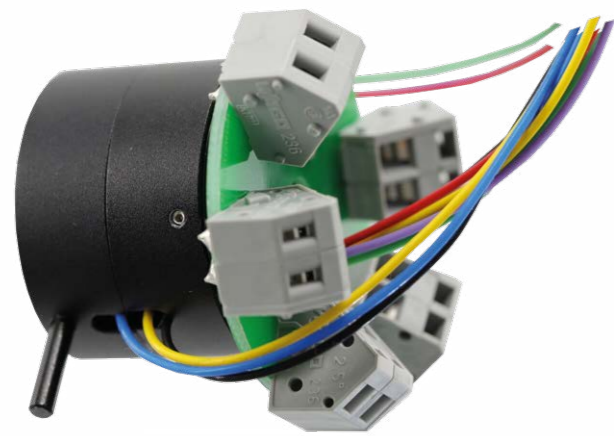
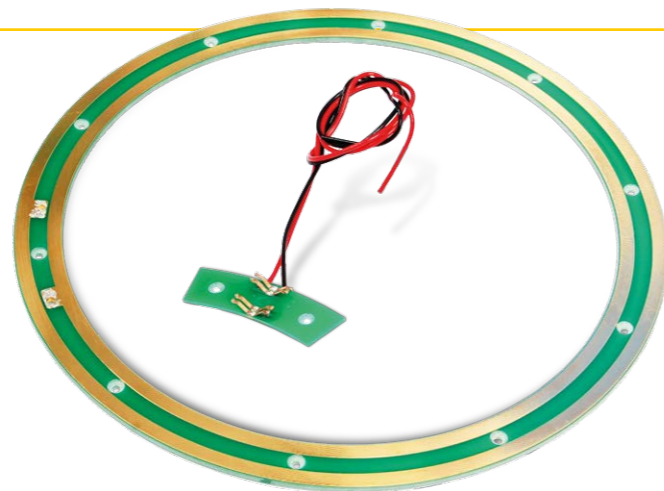


MINIATURE POWER SLIP RING WITH CUSTOMIZED HOUSING

- 3 x 63A power transmission on minimum space
- Special plastic housing
- Cable color code according to customer requirement

PANCAKE SLIP RING WITHOUT HOUSING

- Special diameter according to customer machine
- 2 rings for power transmission
- Brushholder with customized fixing holes and cable



MINIATURE SIZE SLIP RING WAGO CONNECTORS ON PCB

- 16 x 2A signal transmission
- Customized PCB with WAGO connectors for cable connection
- Special housing design with anti-rotation-bar

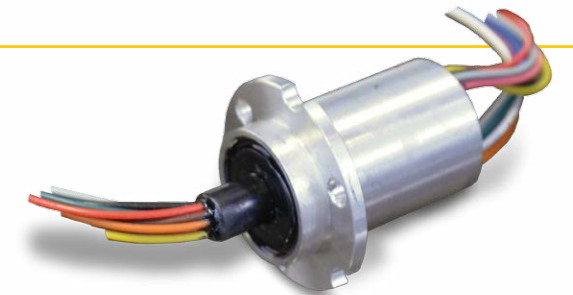
HYBRID MEDIUM SIZE SLIP RING WITH FIBER OPTIC AND COAX TRANSMISSION

- Customized housing shape with special rotor design
- Gearwheel teeth shape integrated in rotor design
- FORJ Fiber Optic + COAX transmission



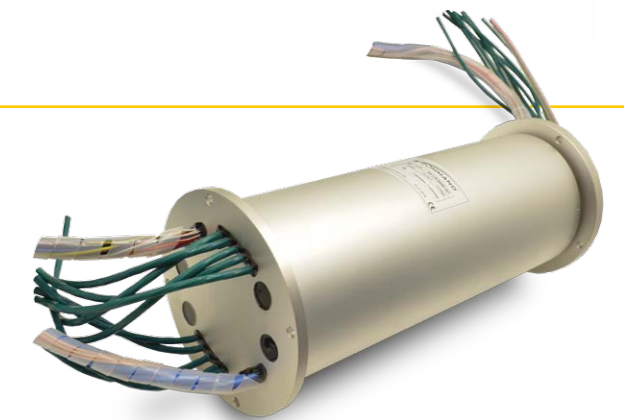
MINIATURE SLIP RING WITH CUSTOMIZED FLANGE

- 10 x 2A signal transmission
- Flange position and shape customized
- Cable color code according to customer requirement



LARGE METAL HOUSING WITH POWER / DATA TRANSMISSION

- Dimensions housing according to customer specification
- 86 Rings (63A, 32A, 16A, HD-SDI, EtherCat, Analogue)
- Special CAT7E data-cable with 10 meter length



MINIATURE SLIP RING WITH 128 RINGS

- Aluminium housing with rotor flange
- 128 signal rings for data transmission
- Protection degree IP65



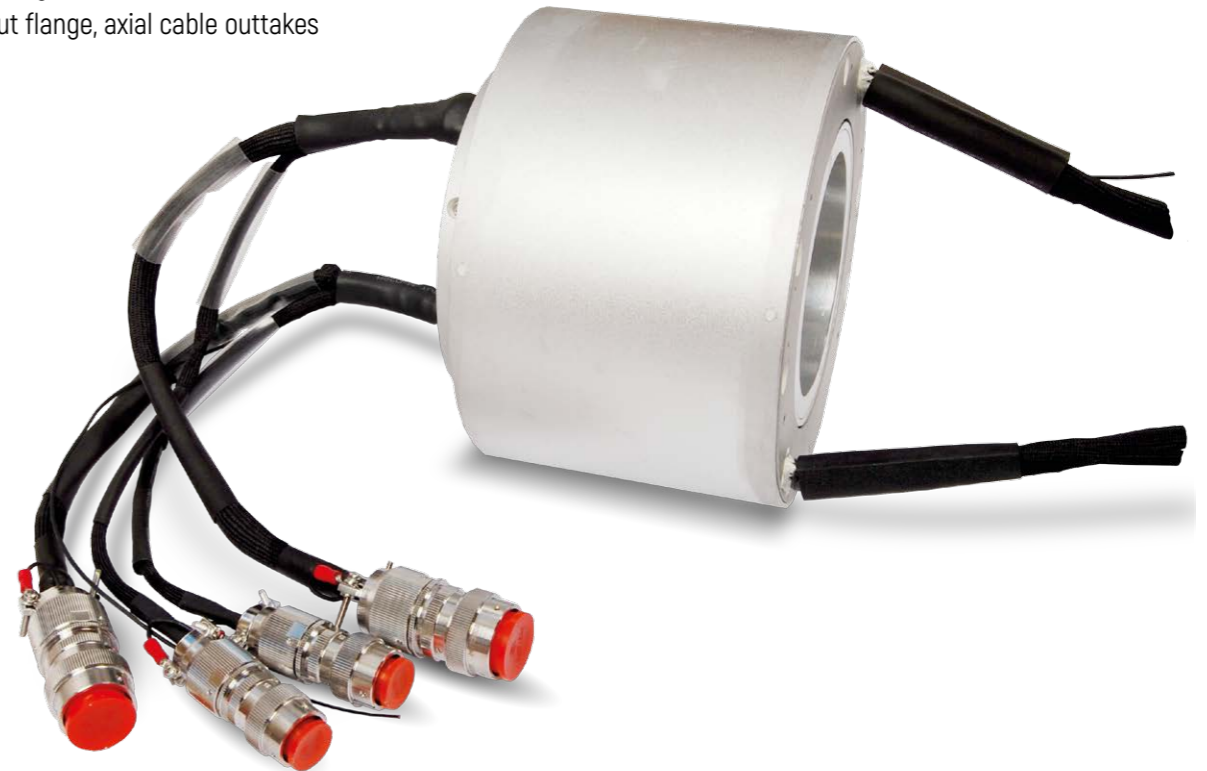


SLIP RING WITH INTEGRATED CONNECTORS

- Customized fixation boreholes
- Customized connectors and cable with connectors
- Double anti-rotation-tab on stator side

MEDIUM SIZE HOLLOW-SHAFT SLIP RING WITH CONNECTORS

- 4 x customized connectors for signal transmission
- Aluminium housing with 150mm free inner diameter
- Housing without flange, axial cable outtakes



HYBRID MEDIUM SIZE SLIP RING WITH DOUBLE COAX LINE AND POWER TRANSMISSION

- Customized metal housing without flange
- 2 x COAX lines + several power rings
- Special cable protection sleeve and cable fixation

HYBRID MEDIUM SIZE SLIP RING WITH FIBER OPTIC AND POWER LINES

- Customized aluminium housing without flange
- FORJ Fiber Optic + power transmission
- Stainless steel rotor with cable protection sleeve



HYBRID MINIATURE SLIP RING FOR VIRTUAL REALITY APPLICATIONS

- Plastic housing with customized flange
- Power and data transmission by USB and HDMI
- Connectors on rotor and stator side for easy usage





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