



ROTOFLUX ESR



## The Company

GAT Gesellschaft für Antriebstechnik mbH is an internationally operating company with 18 sales offices worldwide which offers great competence and reliability with over 30 years of experience in the fluid- and sealing technology industry.

A team of over 100 employees develops, produces and markets rotary unions, electrical slip rings, air-bearing precision spindles, test rig components and systems for internal minimum quantity lubrication.

Technically sophisticated products are not available off-the-shelf. A team of qualified consultant engineers and product specialists is always available to find a competent and quick solution to our customers' problems. We enjoy the trust of customers from engineering companies, plant construction, the automotive, energy production and aeronautics industries and many other branches of industry worldwide.

## The Quality

From the receipt of the raw materials to the release of the final product, our entire production process is subject to the strictest quality controls. For example, when measuring the individual components, a variety of electronic precision measuring instruments are used. Every delivered product is tested on modern, computer-controlled test benches under practical conditions, in order to guarantee the quality and operational reliability of the product. After all, in the end, quality is the deciding factor.



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Gesellschaft für  
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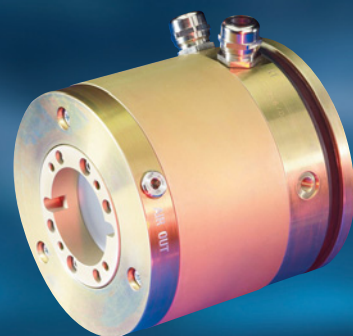
## Slip ring combo series for electricity and air

- High number of poles and high electrical current possible
- Data and signal poles with extremely low noise
- Optional integration of air duct
- Robust and low-maintenance
- Particularly compact construction

[www.gat-mbh.de](http://www.gat-mbh.de)



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## Modular slip ring combo series ESR for electricity and air

Slip rings in the ESR series are used to transfer electrical current and signals, as well as data from the most varied of BUS systems. All slip rings in this series are also available with air ducts. Other media can be transferred through combined use with additional GAT media unions. The ESR slip rings from GAT are characterised by their long lifespan and maintenance intervals.

### High-quality technology

The contact pairing of gold spring wires and gold-plated slide contacts means that the electrical slip rings in the ESR series possess excellent characteristics for the transfer of power currents, signals and data, with a long lifespan and compact construction. The gold/gold technology and perfect surface quality ensure maximum contact quality and low transfer resistance, along with excellent corrosion resistance.

The electrical transfer element of the slip ring is protected by a robust aluminium housing and ball bearings with an additional seal. This construction fulfils the requirements for protection class IP64 (up to IP65 upon request). This means the electrical slip rings in the ESR series are suitable for reliable use in rough applications and under the most adverse conditions.

### Modular system

The modular design of the devices allows you to quickly construct suitable equipment for the required application. By varying the number of poles, the number of contacts per ring and the mechanical and electrical connections, the slip ring can be adapted for a wide variety of customer-specific applications. The basic devices can be equipped appropriately for the required transfer type (BUS/signal), rated current strength and rated voltage.

### Product features

- Permissible transfer of signals, data streams and high currents
- Very low transfer resistance, high contact safety
- Extremely low electrical noise
- Highly wear-resistant due to low contact forces
- Low-maintenance, long lifespan
- Robust and safe to operate even with vibrations and under extreme temperatures

### Technical data

Model	ESR 70	ESR 110	ESR 160	ESR 210
Housing diameter ØG [mm]	70	110	160	210
Max. no. of poles	32	48	80	160
Max. rated current [A]	20	40	50	75
Max. operating voltage [V]	250	750	750	1000
Insulation resistance @500VDC [MΩ]	1000	1000	1000	1000
Max. speed [rpm]	500	200	150	80
Max. air pressure [bar]	10	10	10	10
Installation position	Vertical / horizontal			
Protection class	IP64 (IP65)	IP64 (IP65)	IP64 (IP65)	IP64 (IP65)
Typical lifespan [per million revolutions]	100	100	100	100

## The ESR standard range

Selection of the device type and diameter is based on the desired performance data, while the device length depends on the number of poles. Please discuss your specifications with us.

### Delivery times

Our delivery times are very short, thanks to the modular design of our products. Standard components are equipped individually in accordance with customer requirements.

### Additional combinations for electricity and other media

The ESR electrical slip rings are compatible with all other GAT media rotary unions. We can combine these devices for transferring electrical currents and air with additional components for gas, water and oil. The Rotokombi technology ensures that the optimum sealing system is used for every medium. We use proven systems and tested components, combining them to cover every application according to customers' wishes.

### Area of application

- Bottling plants
- Turntables
- Printing presses
- Conveyors
- Cable drums
- Robotic systems
- Tunnel boring machines
- Packing machines
- Wind turbines

### Benefits of the combo technology

- Modular design
- No restriction of the media that can be transferred
- Individual part components can be exchanged
- Complete solutions in one
- No interface problems between components

