

General

Technical details

Wampfler - a competent partner

For many years Wampfler has provided a wide range of rotary transmissions. This is constantly being extended in order to also meet the developments in signal and data transmission.

Wampfler has developed a comprehensive standard programme that is able to offer optimum solutions. The standard programme enables the creation of slip ring bodies of any number of poles up to 100 for power and data/signal currents. Amperages up to 1200 A and voltage up to 24 kV are possible. The range of slip rings covers diameters from 30 mm to 320 mm. Combinations with additional rotary transmissions for liquid media

(water, hydraulic oil, oil, etc.) and gases (compressed air, argon, etc.) are possible. Slip ring bodies can be supplied either as open slip ring bodies to be built in customers' requirements or in a housing of impact-resistant plastic or sheet metal.

Data Transmission

The transmission of analogue signals of 0 to 20 mA and 0 to 10 V are possible as standard.

In addition digital signals up to max. 500 kBaud have been proven in operation in data transmission on industrial busses such as Interbus-S and Profibus. For Baud rates exceeding 500 kBaud and video transmissions, slip ring bodies are available using special high-quality materials.

Note: The quality of data transmis-

sion strongly depends on the structure of the complete data network. Some important factors which need to be considered in the layout of the complete system are the supply cables, their arrangement and screening, the number of terminal boxes, exterior interference factors, the type of automation devices and their conformity with each other.

Accessories

- heaters
- extension units for end coders and potentiometers
- sight windows and doors for heavy slip ring body housings

Special constructions

Our experts would be pleased to advise on special requirements, such as diameters > 10 m high

rotation speed, extreme operating conditions, optical fibres (LWL), high-voltage, etc.

Easy assembly and maintenance

Wampfler slip ring bodies are simple to mount and to maintain. The connections are easy to access and the current collectors are easy to replace.

On request rings and current collectors can be completely pre-wired to built-in terminal boxes.

CE Identification

All types are in accordance with IEC/VDE standards.

Programme

Type	Standard programme			Characteristics	Page
	I [mA / A]	U ¹⁾ [V]	Ring- ϕ [mm]		
ES/GS30	mA - 16 A	400 (415)	30	Suitable for data transmission	5
ES/GS45/1	mA - 25 A	400 (415)	45	Suitable for data transmission	6
ES/GS45/3	25 A	1000	45		7
ES18	mA - 25 A	630 (690)	102	Suitable for data transmission	8
GS18	mA - 25 A	630 (690)	102	Suitable for data transmission	9
ES/GS45/2	47 A	1000	45		10
ES/GS13	50 A	1000	85		11
ES/GS15	90 A	1000	85		12
ES/GS16	100 A	1000	110		13
ES/GS19	150 A	1000	132		14
ES/GS21	250 A	1000	210		15
ES/GS29	400 A	1000	210		16
ES185	mA - 47 A	1000	185	Suitable for data transmission	17
ES/GS260	mA - 47 A	1000	260	Suitable for data transmission	18
ES170, 220, 330, 450	mA - 47 A	630 (690)	170/200/330/455	Suitable for data transmission	19
GS323	400 A	1000	320		20
GS19/13/18			Combination		21

1) The voltages apply for slip ring bodies, installed in systems (parts of systems) that are not directly fed by the low-voltage net (VDE 0110-1/1997-04: 2.2.1.1.2, table 4). On systems (part of systems) with direct feeding from the low-voltage net, the values in brackets are permissible for alternating voltage (VDE 0110-1/1997-04: 2.2.1.1.1, table 3b).

Applications



Slip ring body in building machines



Rotating die-casting equipment of Krauss-Maffei Kunststofftechnik (Munich); in operation at Johnson Control Interiors (Lüneburg)

A developed and comprehensive standard programme

Some examples for the application of slip ring bodies: rotary cranes, water treatment works, roundabouts, manipulators, rotary tables, antenna arrays, theatre stages, packing machines, cable reels.



Slip ring body in elevating platforms