

Slip rings

For the rotary transmission of load current, signals, pneumatics and hydraulics

Slip rings IST-SR085

Description:

In general slip rings are used to transmit power, signal or data from a stationary to a rotating platform. The transmission between the stator and rotor takes place via sliding contacts and is extremely reliable. The construction is modular and offers the greatest flexibility in a variety of applications.

Advantages and benefits:

- Rugged design for industrial use
- Modular system construction, load and signal channels can be combined selectively
- GFPC housing (glass-reinforced polycarbonate) 30% glass fibre content
- Long service life and long maintenance cycles
- Individually replaceable brush rings
- Customised versions easily available
- Separate signal channels
- Fieldbus signals such as Profibus, CANopen etc. up to 12 MB



Application areas for Slip Rings:

- Packaging machines
- Textile machines
- Robots and handling equipment
- Cranes
- Pipeline inspection systems
- Video surveillance (CCTV) equipment
- Fairground rides
- Bottling plants
- Rotary tables

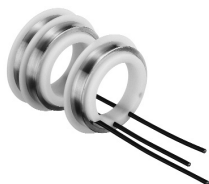
Safety-Trans™-Design:

- Two-cavity system for load and signal transmission
- Labyrinth seal
- High vibration resistance

- 1 Copper graphite for high abrasion resistance
- 2 Platinum/Gold alloy (50% Gold content)
- 3 Separate signal channels with contact guide



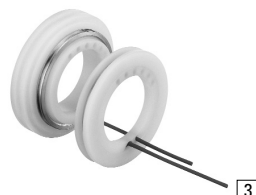
Stator ring with pick-off spring for load currents.



Insulator with slip ring for load currents.



Stator ring with pick-off spring for signal currents.



Insulator with slip ring for signal currents.

Modular construction system:



Practical maintenance window:



Secure connections:



Easily accessible connections:



Technical Data (standard version):

Dimensions:	see drawing
Overall length:	dependent on the number of transmission paths
Bore diameter:	up to Ø 30 mm
Current loading:	max. 16 A (at 240 V AC)
Voltage/current loading:	240 V AC (dependent on the current loading)
Contact resistance load channel:	≤ 1 Ohm
Contact resistance signal channel:	≤ 0.1 Ohm
Insulation resistance at 500 V DC:	10 ⁹ MOhm
Dielectric strength:	1000 V eff. (60 sec.)
Speed:	max. 800 1/min
Operating temperature:	0 ... 80 °C
Protection rating:	IP 50 up to IP 64 on request
Service life:	> 500 Mio. revolutions
Maintenance cycles:	approx. 50 Mio. revolutions
Number of rings:	approx. 20

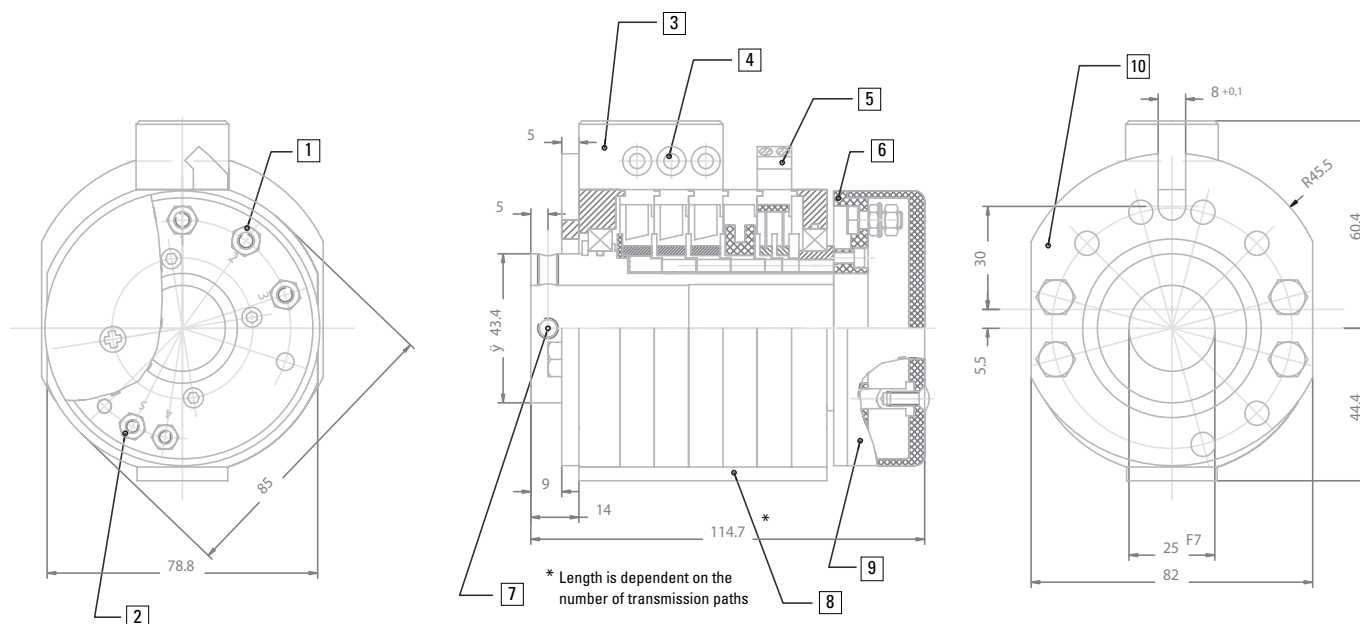
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Dimensions:

Example type IST-SR085-2-3-V14



- 1 Screw terminal M5 for load transmission
- 2 Screw terminal M4 for signal transmission
- 3 Terminal clamp for load without wire protection, with shock-hazard touch protection

- 4 Wire lead-in for load possible on both sides
- 5 Terminal clamp for signal transmission
- 6 Rotating connection ring
- 7 4 x socket set screw DIN 914 M6x10

- 8 Window for maintenance
- 9 Protective cover for connections
- 10 Torque stop

Standard version:

Protection rating IP 50, Signal rings (if present) on the connection side for horizontal mounting and mounting from underneath, terminal connections, for tolerances see dimensional drawing

Order code:

for standard versions

IST-SR085-XX-XX-VXX

Type series

Number of data channels
(only in pairs, e.g. 2, 4, 6*)

Version number

V19: Standard version with hollow shaft 20 mm
V14: Standard version with hollow shaft 25 mm
V38: Standard version with hollow shaft 30 mm
V39: Standard version with hollow shaft 1 Inch

Number of power channels*

Accessories: Maintenance set (comprises brush and contact oil for signal contacts) IST-MS-01

* 20 combination max., for example 4 data channels and 16 power channels

Options on request:

- Pneumatics, hydraulics transmission
- Current 40 A
- Voltage 400 V AC
- Other mounting positions
- Higher protection rating
- Mounting from above
- Load rings 400 V/16 A
- Load rings 240 V AC/25 A