

# Slip rings

## For the rotary transmission of current and signals

### Slip rings IST-SR060

#### Description:

The SR060 is a compact, economical slip ring for up to 3 load and 2 signal transmissions from a stationary to a rotating platform. The transmission between the stator and rotor units occurs extremely reliably via sliding contacts.

#### Advantages and benefits:

- Various component configurations for the transmission paths, max. 3 x load and 2 x signal transmission
- Fully encapsulated in high-grade glass reinforced plastic housing shells
- Ideally suited for the heating of sealing drums (rollers) in packaging machines
- Can be used as a pair starting from just 60 mm shaft distance of the sealing rollers
- Economical – thanks to minimization of individual components, advantages in mounting and component part design to suit



#### Application areas for Slip Rings:

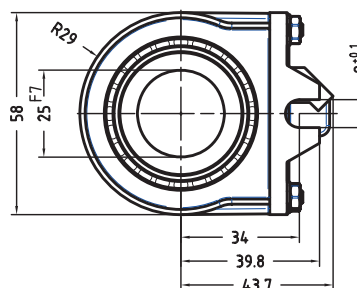
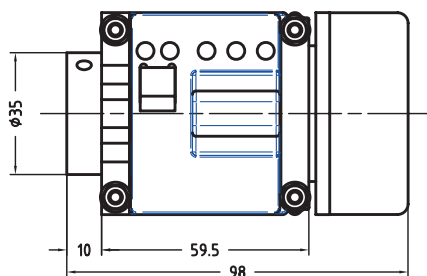
- Packaging machines
- Textile machines
- Robots and handling equipment
- Cranes
- Pipeline inspection systems
- Video surveillance (CCTV) equipment
- Fairground rides
- Bottling plants
- Rotary tables

#### Technical Data (standard version):

Dimensions:	see drawing
Overall length:	dependent on the number of transmission paths
Hollow shaft diameter:	up to max. $\varnothing$ 25 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:	$\leq 1 \text{ Ohm}$
Contact resistance signal channel:	$\leq 0.1 \text{ Ohm}$
Insulation resistance at 500 V DC:	$10^3 \text{ MOhm}$
Dielectric strength:	1000 V eff. (60 sec.)
Speed:	max. 500
Operating temperature:	$0^\circ \dots 75^\circ \text{C}$
Protection rating:	IP 50
Service life:	> 500 Mio. revolutions
Maintenance cycles:	approx. 50 Mio. revolutions

#### Dimensions:

##### Example Type IST-SR060



#### Fully encapsulated housing:



#### Easily accessible connections:



#### Order code:

**IST-SR060-XX-X-X-V01**

Product group: slip ring

Size:  $\varnothing$  60 mm

Hollow shaft diameter\*

18 =  $\varnothing$  18 mm

20 =  $\varnothing$  20 mm

24 =  $\varnothing$  24 mm

25 =  $\varnothing$  25 mm

\* other diameters on request

Version number V01 (Standard)

Number of load transmission paths (max. 3)

Number of signal transmission paths (max. 2)

# 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



#### 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.

#### Technical Data (standard version):

Dimensions:	see drawing
Overall length:	dependent on the number of transmission paths
Bore diameter:	up to $\varnothing$ 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:	$\leq 1 \text{ Ohm}$
Contact resistance signal channel:	$\leq 0.1 \text{ Ohm}$
Insulation resistance at 500 V DC:	$10^5 \text{ MOhm}$
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

#### 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

#### Modular construction system:



#### Practical maintenance window:



#### Secure connections:



#### Easily accessible connections:



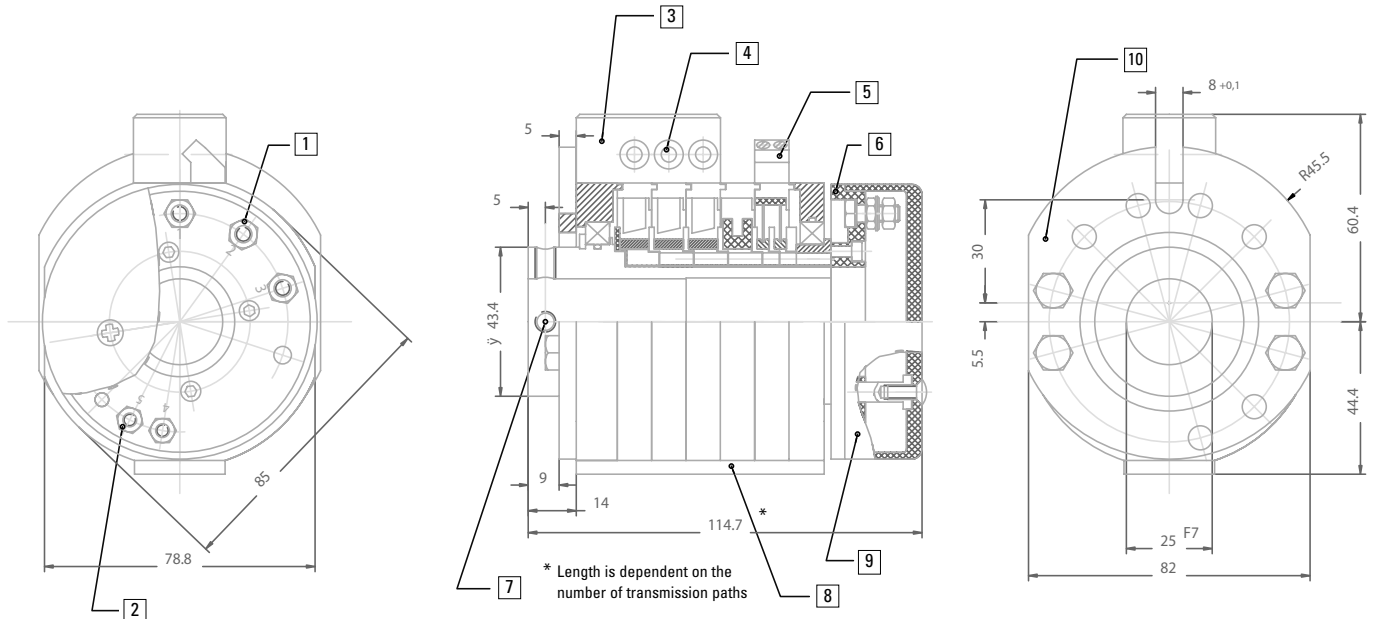
# Slip rings

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

### Slip rings IST-SR085

#### 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