

Slip Rings

Compact SR060



In general slip rings are used to transmit power, signals or data, pneumatic and hydraulic, from a stationary to a rotating platform.

The transmission between the stator and rotor units occurs extremely reliably via sliding contacts.

The SR060 is a compact, economical slip ring for up to 3 power and 2 signal transmissions from a stationary to a rotating platform.

Slip rings

<h3>Compact</h3> <ul style="list-style-type: none"> • Dimensions 60 x 98 mm • Can be used as a pair starting from just 60 mm shaft distance of the sealing rollers • Various component configurations for the transmission paths, max. 3 x power and 2 x signal transmission 	<h3>Efficient</h3> <ul style="list-style-type: none"> • Economical – thanks to minimization of individual components, favourable mounting and component part design to suit • Fully encapsulated in high-grade glass reinforced plastic housing shells • Ideally suited for the heating of sealing drums (rollers) in packaging machines <h3>Application areas for slip rings</h3> <p>Packaging machines, textile machines, robots and handling equipment, pipeline inspection, video surveillance equipment (CCTV), bottling plants, rotary tables</p>
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Standard versions	Delivery time is 10 working days for a maximum of 10 pcs. per delivery. Larger quantities have a delivery time of 15 working days (or alternatively on request).										
<table border="0" style="width: 100%;"> <thead> <tr> <th></th> <th>Signal / data channels</th> <th>Load channels</th> <th>Contact material</th> <th>Order-No.</th> </tr> </thead> <tbody> <tr> <td>Hollow shaft 25 mm [0.98"]</td> <td style="text-align: center;">2 x</td> <td style="text-align: center;">3 x</td> <td style="text-align: center;">silver / precious metal</td> <td style="text-align: center;">SR060-25-2-3-131-V100</td> </tr> </tbody> </table>		Signal / data channels	Load channels	Contact material	Order-No.	Hollow shaft 25 mm [0.98"]	2 x	3 x	silver / precious metal	SR060-25-2-3-131-V100	
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Hollow shaft 25 mm [0.98"]	2 x	3 x	silver / precious metal	SR060-25-2-3-131-V100							

Order code for standard versions	SR060 - XX - X - X - XXX - V100 <small>Type a b c d e f g</small>	
<p>a <i>Hollow shaft</i> 20 = ø 20 mm [0.79"] 22 = ø 22 mm [0.87"] 24 = ø 24 mm [0.94"] 25 = ø 25 mm [0.98"] (other diameters on request)</p>	<p>b <i>Number of signal / data channels</i> 0 or 2</p> <p>c <i>Number of power (load) channels</i> 0, 2 or 3</p>	<p>d <i>Max. current loading</i> 0 = no load channels 1 = 16 A, 240 V AC/DC</p> <p>e <i>Contact material signal / data channels ¹⁾</i> 0 = no signal / data channels 3 = silver / precious metal 4 = silver / bronze</p> <p>f <i>Protection</i> 1 = IP50 2 = IP64</p> <p>g <i>Version number (options)</i> V100 = without option > V100 = option on request</p>

Easily accessible connections



Version with IP64 protection

1) Contact material gold/gold and copper/bronze on request

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Contact material for electrical signal / data transmission

Contact material	Silver / Bronze	Silver / Precious metal
	contact brush	contact brush
Suitable for		
Very low currents and voltages	x	x
Digital and switching signals	x	x
Fieldbus signals		x
High shock and vibration levels	x	x
Intermittent operation (constant contact resistance < 0.1 ohm when stopped and when rotating)		x
Maintenance		
Contact oil not required for maintenance	x	x

Calculation of time intervals for maintenance

Calculation of time intervals for maintenance with contact material silver/precious metal or silver/bronze (Maintenance intervals 100 million revolutions)

$$\frac{100,000,000 \text{ revolutions}}{200 \text{ rpm} \times 60 \text{ min} \times 24 \text{ h}} = 350 \text{ days}$$

Technical data

Hollow shaft diameter	up to max. \varnothing 25 mm [0.98"]
Voltage/current loading	
load channels	240 V AC/DC, max. 16 A
signal channels	48 V AC/DC, max. 2 A
Contact resistance (dynamic only with contact material copper/bronze and silver/bronze)	
load channel	\leq 1 Ohm
signal channel	\leq 0.1 Ohm
Insulation resistance	10^3 Ohm (at 500 V DC)
Dielectric strength	1000 V eff. (60 sec.)
Speed max.	500 rpm

Service life	typ. 500 million revolutions (depends on installation position)
Maintenance cycles	first maintenance after 50 million revolutions, all further maintenance intervals after 100 million revolutions
Material pairing load channels	copper / bronze
Operating temperature	0° ... +75°C [+32°F ... +167°F]
Protection	max. IP64
Standards	VDE 0110 and VDE 0295/6.92

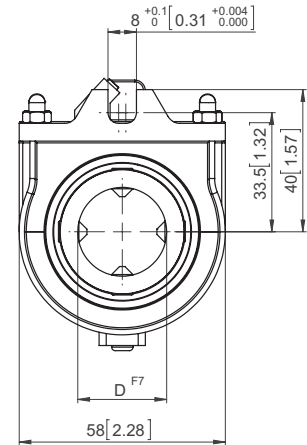
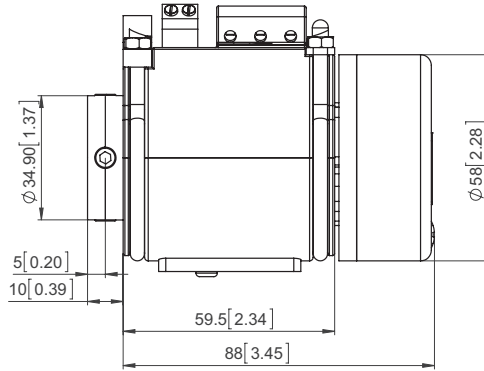
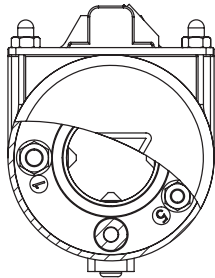
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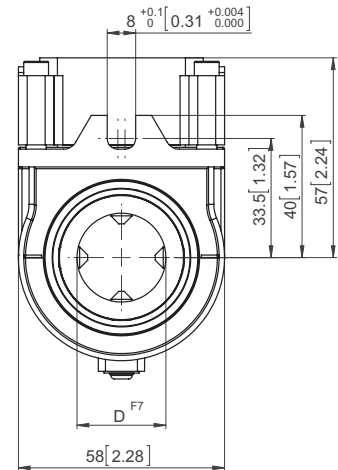
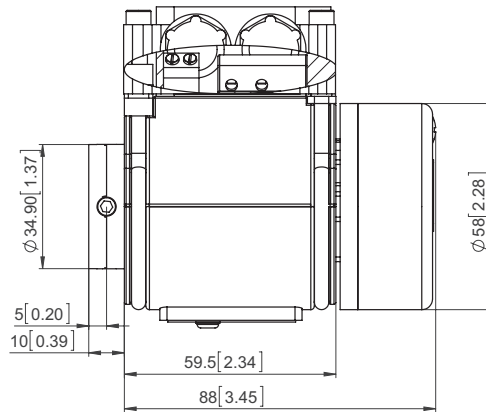
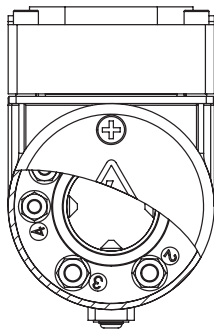
Dimensions

Dimensions in mm [inch]

Version IP50



Version IP64



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|--|---|--------------------------------------|
| 1 – Screw terminal M5 for power transmission | 4 – Wire lead-in for power possible on both sides | 8 – Maintenance window |
| 2 – Screw terminal M4 for signal transmission | 5 – Terminal clamp for signal transmission | 9 – Protective cover for connections |
| 3 – Terminal clamp for power without wire protection, with shock-hazard touch protection | 6 – Rotating connection ring | 10 – Torque stop |
| | 7 – 4 x socket set screw DIN 914 M6 | |