

# Slip rings

<b>Modular</b>	<b>Contactless signal transmission</b>	<b>SRI085</b>
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In general slip rings are used to transmit electrical power, signals or data, pneumatic and hydraulic, from a stationary to a rotating platform.

In the SRI085, signal transmission occurs by means of a contactless inductive coupling. This ensures the data channels without maintenance requirements.

The construction is modular and offers the greatest flexibility in a variety of applications.

Slip rings

<b>Flexible and rugged</b>	<b>Maintenance-free</b>
<ul style="list-style-type: none"> <li>Modular construction system, load and signal/data channels can be combined as desired.</li> <li>Rugged GFPC housing (glass-reinforced polycarbonate) for industrial usage.</li> <li>Low signal noise.</li> </ul>	<ul style="list-style-type: none"> <li>Signal / data channels maintenance-free by means of inductive coupling.</li> <li>Long service life.</li> </ul>
<b>Applications</b>	
Packaging machines, rotary tables and textile machines	

<b>Order code</b>	<b>SRI085</b>	<b>-XX-</b>	<b>-XX-</b>	<b>-XX-</b>	<b>-X1X1-</b>	<b>V100</b>		
	Type	a	b	c	d e f g	h		
<b>a</b> Type of mounting		<b>b</b> Number of sensor channels	<b>c</b> Number of power channels	<b>d</b> Max. load current	<b>e</b> Interface	<b>f</b> Media lead-through	<b>g</b> Protection rating	<b>h</b> Version number (options)
20 = hollow shaft, ø 20 mm [0.79"] 24 = hollow shaft, ø 24 mm [0.94"] 25 = hollow shaft, ø 25 mm [0.98"] 30 = hollow shaft, ø 30 mm [1.18"] IN = hollow shaft, ø 1" (other options on request)		01 = 1 x PT100 03 = 3 x PT100	01 ... 06 = max. 6 power channels	0 = no load channels 1 = 16 A, 240 V AC/DC	1 = output 4 ... 20 mA	0 = none 6 = air, rotatable connector (up to 300 min <sup>-1</sup> )	1 = IP50	V100 = without options >V100 = options on request

Connection technology	Order no.
<b>Connector, self-assembly (straight)</b>	M12 female connector with coupling nut <b>05.CMB 8181-0</b>
<b>Cordset, pre-assembled</b>	M12 female connector with coupling nut, 2 m [6.56'] PUR cable <b>05.00.6051.8211.002M</b>

Additional connectors can be found in the connection technology section or in the connection technology area of our website at: [www.kuebler.com/connection\\_technology](http://www.kuebler.com/connection_technology).

## Easily accessible connections



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<b>Technical data</b>
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Load transmission	
<b>Current carrying capacity</b> voltage / current	max. 240 V / 16 A max. 240 V / 25 A
<b>Contact resistance</b>	< 1 Ohm
<b>Insulation resistance</b>	< 10 <sup>8</sup> MOhm
<b>Dielectric strength</b>	1000 V eff.

Data transmission	
<b>Data signal</b>	PT100
<b>Measuring range</b>	0°C ... +300°C [+32°F ... + 572°F] (4 ... 20 mA)
<b>Power supply</b>	24 V DC, ±10%
<b>Interface</b>	4 ... 20 mA
<b>Power consumption</b>	max. 250 mA at 24 V DC
<b>Max. load of the current source</b>	400 Ohm
<b>Type of connection</b>	Flange connector M12, A coded (terminal assignment see connection table)

Mechanical characteristics		
	only data transmission SRI085-XX-0X-00-010X-V100	mixed data and load transmission SRI085-XX-XX-XX-X101-V100
<b>Speed</b>	max. 800 min <sup>-1</sup>	max. 800 min <sup>-1</sup>
<b>Service life</b>	–	typ. 500 million revolutions
<b>Maintenance cycles</b>	maintenance-free	150 million revolutions
<b>Operating temperature</b>	-30°C ... +85°C [-22°F ... +185°F]	-30°C ... +85°C [-22°F ... +185°F]
<b>Protection to EN 60529</b>	max. IP65	max. IP50
<b>Contact material load channel</b>	–	copper/bronze

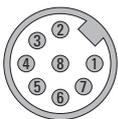
Rotatable connector, air (media lead-through no. 6)	
<b>Air pressure max.</b>	10 bar (150 psi)
<b>Speed max.</b>	300 min <sup>-1</sup>
<b>For tube diameter</b>	8 mm [0.31"]

## Terminal assignment

Number of sensor channels	Flange connector M12, 8 pin								
1 x PT100	Signal:	–	–	–	0 V	24 VDC	channel 1, PT100	channel 1, 0 V	–
	Pin:	1	2	3	4	5	6	7	8

Number of sensor channels	Flange connector M12, 8 pin								
3 x PT100	Signal:	channel 2, PT100	channel 3, PT100	channel 3, 0 V	0 V	24 VDC	channel 1, PT100	channel 1, 0 V	channel 2, 0 V
	Pin:	1	2	3	4	5	6	7	8

## Top view of mating side, male contact base



Flange connector M12, 8 pin

# Slip rings

**Modular**

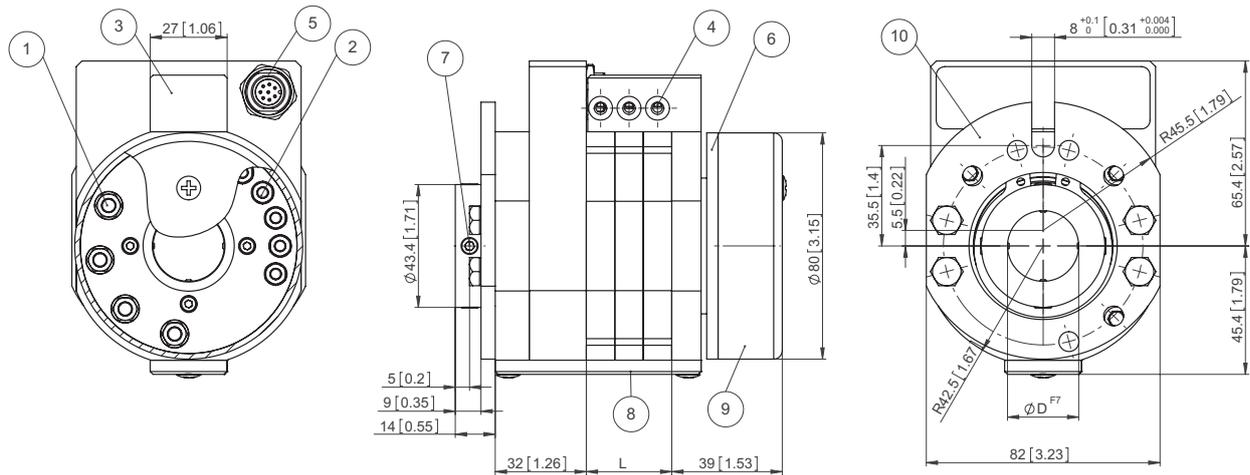
**Contactless signal transmission**

**SRI085**

## Dimensions

Dimensions in mm [inch]

Example: SRI085-25-03-03-1101-V100



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

- 4 – Wire lead-in for power possible on both sides
- 5 – Flange connector M12, A coded
- 6 – Rotating connection ring
- 7 – 4 x socket set screw DIN 914 M6

- 8 – Maintenance window
- 9 – Protective cover for connections
- 10 – Torque stop