

Slip rings

Modular	Contactless signal transmission	SRI085
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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

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

Order code	SRI085 - XX - XX - XX - X 1 XX - V100 <small>Type a b c d e f g h</small>		
a <i>Type of mounting</i> 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)	b <i>Number of sensor channels</i> 01 = 1 x PT100 03 = 3 x PT100 c <i>Number of power channels</i> 01 ... 06 = max. 6 power channels d <i>Max. load current</i> 0 = no load channels 1 = 16 A, 240 V AC/DC 2 = 25 A, 240 V AC/DC	e <i>Interface</i> 1 = output 4 ... 20 mA f <i>Media lead-through</i> 0 = none 6 = air, rotatable connector (up to 300 min ⁻¹)	g <i>Protection rating</i> 1 = IP50 2 = IP64 h <i>Version number (options)</i> V100 = without options >V100 = options on request

Connection technology	Order no.
Cordset, pre-assembled	M12 female connector with coupling nut, 8 pin 2 m [6.56'] PUR cable
Connector, self-assembly (straight)	M12 female connector with coupling nut, 8 pin
	05.00.6051.8211.002M
	05.CMB 8181-0

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.

Easily accessible connections



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Technical data

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

Data transmission	
Data signal	PT100
Measuring range	0°C ... +300°C [+32°F ... + 572°F] (4 ... 20 mA)
Power supply	24 V DC, ±10%
Interface	4 ... 20 mA
Power consumption	max. 250 mA at 24 V DC
Max. load of the current source	400 Ohm
Type of connection	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
Speed	max. 800 min ⁻¹	max. 800 min ⁻¹
Service life	–	typ. 500 million revolutions
Maintenance cycles	maintenance-free	150 million revolutions
Operating temperature	-30°C ... +85°C [-22°F ... +185°F]	-30°C ... +85°C [-22°F ... +185°F]
Protection to EN 60529	max. IP65	max. IP64
Contact material load channel	–	copper/bronze

Rotatable connector, air (media lead-through no. 6)	
Air pressure max.	10 bar (150 psi)
Speed max.	300 min ⁻¹
For tube diameter	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

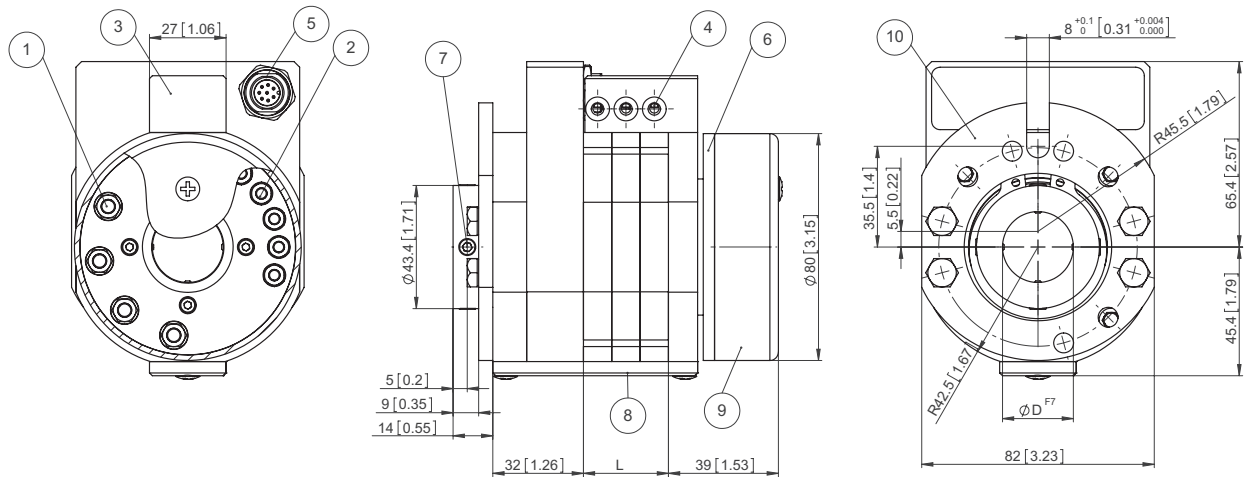
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Dimensions

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