Modular | SRI085 | Contactless signal transmission

In general slip rings are used to transmit 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.

Flexible and rugged

- Modular construction system, power and signal/data channels can be combined as desired
- Rugged GFPC housing (glass-reinforced polycarbonate) for industrial usage

Maintenance-free

- Signal / data channels maintenance-free by means of inductive coupling
- Long service life

Applications

Packaging machines, rotary tables, balancing machines and textile machines

Standard versions

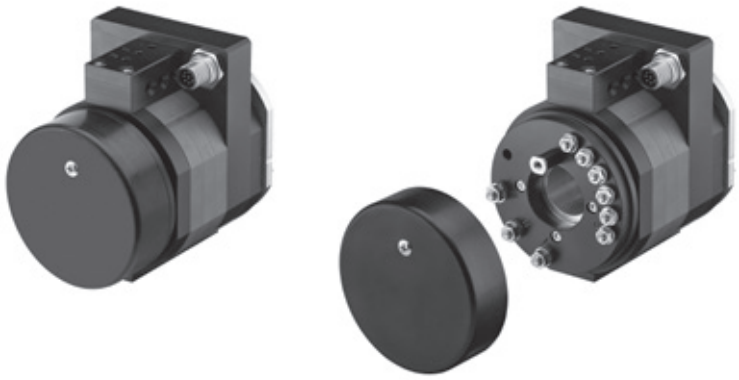
	Signal / data channels	*Load channels*	*max. load current*	*Order No.*
Hollow shaft 25 mm [0.98"]	3 x	4 x	16 A, 240 V AC/DC	**SRI085-25-03-04-1101-V100**

Other options on request:
- Hollow shaft up to ø 30 mm [1.18"]
- Number of data channels – max. 3 PT100 pairs
- Number of load channels – max. 6 channels
- Protection max. IP64

Connection technology		Order No.
Connector, self-assembly (straight)	M12 female connector with coupling nut	**05.CMB 8181-0**
Cordset, pre-assembled	M12 female connector with coupling nut, 2 m PUR cable	**05.00.6051.8211.002M**

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



Modular | SRI085 | Contactless signal transmission

Technical data

Power transmission	
Current carrying capacity voltage / current	max. 240 V / 16 A max. 240 V / 25 A
Contact resistance	< 1 Ohm
Insulation resistance	< 10^3 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%
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 rpm	max. 800 rpm
Service life	–	typ. 500 million revolutions
Maintenance cycles	maintenance-free	100 million revolutions
Operating temperature	-30°C ... +85°C [-22°F ... +185°F]	-30°C ... +85°C [-22°F ... +185°F]
Protection	max. IP64	max. IP50
Contact material load channel	–	copper/bronze

Terminal assignment

Interface	Flange connector M12, 8 pin							
1	Signal:	channel 2, PT100	channel 3, PT100	channel 3, 0 V	0 V	+24 V	channel 1, PT100	channel 1, 0 V	channel 2, 0 V
	Pin:	1	2	3	4	5	6	7	8

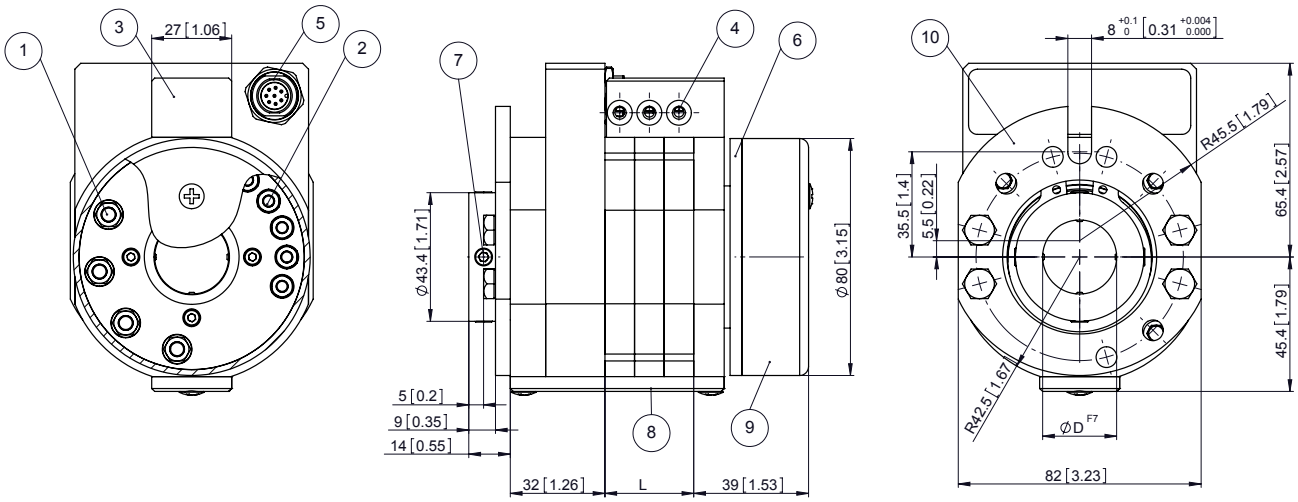
Top view of mating side, male contact base

Flange connector M12, 8 pin

Dimensions

Dimensions in mm [inch]

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



1 – Screw terminal M5 for power 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