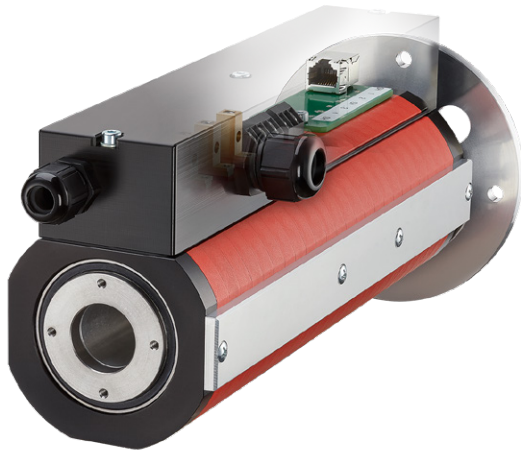


Slip rings

Modular	Industrial Ethernet – 100 MBit/s	SR085IE
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For Industry 4.0 / IIoT concepts.

Reliable transmission of Industrial Ethernet is now also possible in the 85 mm size.

For this purpose, the SR085 slip rings from Kübler have been expanded with a Fast Ethernet module that enables a transmission rate of up to 100 MBit/s. The connection for data transmission is made as standard via a CAT5e cable with RJ45 plug connection. Customer-specific special solutions can also be implemented on request, such as M-type industrial connectors.



<h3>Features</h3> <ul style="list-style-type: none"> • Optional Ethernet module for transmission of all common Industrial Ethernet protocols. • Robust GFK housing in modular design. • Reliable transmission of loads up to 25 A. • Flange mounting or simple plug-on via a hollow shaft. 	<h3>Benefits</h3> <ul style="list-style-type: none"> • Transmission of Industrial Ethernet up to 100 Mbit/s <ul style="list-style-type: none"> - Fast connection via RJ45 connector with CAT5e cable - Quick and easy replacement by user • Individual configuration for all applications. • Prepared for a wide range of applications even with high current load. • The application determines the mechanical connection - the SR085IE slip ring adapts to.
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Order code	SR085IE - 00 - XX - XX - X0XX2 - V100	
<p>a Type of mounting 00 = flange mounting (hollow shaft on request)</p> <p>b Number of signal/data channels¹⁾ (0, 2, 4, 6, 8, 10) 00 = no signal/data channels 02 = 2 signal/data channels ... 10 = 10 signal/data channels (other options on request)</p> <p>c Number of load channels¹⁾ (0, 2, 4, 6, 8, 10) 00 = none 02 = 2 load channels 04 = 4 load channels 06 = 6 load channels L3 = 3 load channels + ground PE L4 = 4 load channels + ground PE (others on request)</p>	<p>d Max. load current 0 = no load channel 1 = 16 A, 240 V AC/DC 2 = 25 A, 240 V AC/DC 3 = 10 A, 400 V AC/DC 4 = 20 A, 400 V AC/DC</p> <p>e Mounting position 0 = any</p> <p>f Contact material for signal/data channels 0 = no signal channels 3 = silver / precious metal (other options on request)</p>	<p>g Media lead-through 0 = none C = air, rotatable connector Flange mounting for 12 mm tube (others on request)</p> <p>h Protection rating 2 = IP64</p> <p>i Version number (options) V100 = standard</p>

1) Combinations of data and load channels > 13 upon request.

Slip rings

Modular	Industrial Ethernet – 100 MBit/s	SR0851E
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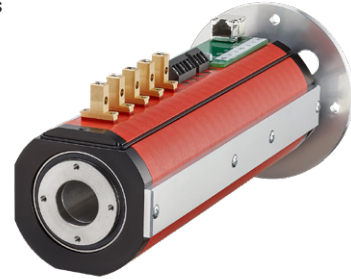
Technical data ¹⁾					
Overall length	dep. on the number of transmission paths				
Hollow shaft diameter	up to ø 30 mm [1.18"]				
Type of connection	<table style="width: 100%; border: none;"> <tr> <td style="padding-right: 10px;">stator</td> <td>screw terminal</td> </tr> <tr> <td>rotor</td> <td>single wires, 2 m [6.56"] (towards the assembly flange)</td> </tr> </table>	stator	screw terminal	rotor	single wires, 2 m [6.56"] (towards the assembly flange)
stator	screw terminal				
rotor	single wires, 2 m [6.56"] (towards the assembly flange)				
Voltage/current loading	<table style="width: 100%; border: none;"> <tr> <td style="padding-right: 10px;">load channels</td> <td>240 V AC/DC, max. 16 A (order option 1) 240 V AC/DC, max. 25 A (order option 2) 400 V AC/DC, max. 10 A (order option 3) 400 V AC/DC, max. 20 A (order option 4)</td> </tr> <tr> <td>signal channels</td> <td>48 V AC/DC, max. 2 A</td> </tr> </table>	load channels	240 V AC/DC, max. 16 A (order option 1) 240 V AC/DC, max. 25 A (order option 2) 400 V AC/DC, max. 10 A (order option 3) 400 V AC/DC, max. 20 A (order option 4)	signal channels	48 V AC/DC, max. 2 A
load channels	240 V AC/DC, max. 16 A (order option 1) 240 V AC/DC, max. 25 A (order option 2) 400 V AC/DC, max. 10 A (order option 3) 400 V AC/DC, max. 20 A (order option 4)				
signal channels	48 V AC/DC, max. 2 A				
Contact resistance	<table style="width: 100%; border: none;"> <tr> <td style="padding-right: 10px;">load channels</td> <td>≤ 1 Ohm (dynamic) ²⁾</td> </tr> <tr> <td>signal / data channels</td> <td>≤ 0.1 Ohm (silver / precious metal) ³⁾</td> </tr> </table>	load channels	≤ 1 Ohm (dynamic) ²⁾	signal / data channels	≤ 0.1 Ohm (silver / precious metal) ³⁾
load channels	≤ 1 Ohm (dynamic) ²⁾				
signal / data channels	≤ 0.1 Ohm (silver / precious metal) ³⁾				
Insulation resistance	10 ³ MOhm, at 500 V DC				
Dielectric strength	1000 V eff. (60 sec.)				
Speed max. (signal / data channels)	800 min ⁻¹ , up to 10 channels (depends on installation position and numbers of channels)				
Service life (signal / data channels)	typ. 500 million revolutions ⁴⁾ (at room temperature) depends on installation position				
Maintenance cycles	first maintenance after 50 million revolutions, all further maintenance intervals after 100 million revolutions				
Maintenance	contact oil not required				
Material pairing	<table style="width: 100%; border: none;"> <tr> <td style="padding-right: 10px;">load channels</td> <td>copper / brass</td> </tr> <tr> <td>signal / data channels</td> <td>silver / precious metal</td> </tr> </table>	load channels	copper / brass	signal / data channels	silver / precious metal
load channels	copper / brass				
signal / data channels	silver / precious metal				
Operating temperature	-35 °C ... +85 °C [-31 °F ... +185 °F]				
Protection acc. to EN 60529	max. IP64				
Transmission paths	max. 20 (> 20 on request)				

Rotatable connector, air	
Air pressure max.	10 bar (150 psi)
Speed max.	up to 800 min ⁻¹
For tube diameter	8 mm ... 12 mm [0.31 ... 0.47"]

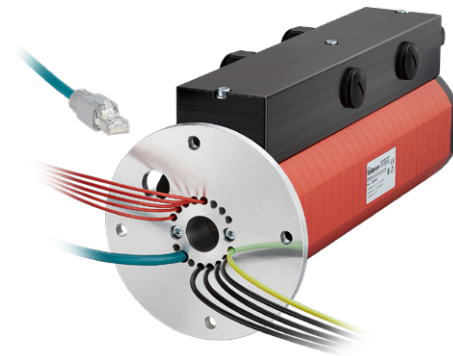
Approvals	
CE compliant in accordance with	
Low Voltage Directive	2014/35/EU
UKCA compliant in accordance with	
Low Voltage Regulations	S.I. 2016/1101

Technology in detail

Easily accessible connections



Pre-wired for load/signal and data connection



1) Data correspond to typical values. However, these may vary considerably depending on the installation situation and application.
 2) Voltage measurement, ambient temperature, DC series connection, ohmic load, min. 4 A test current.
 3) 2-wire resistance measurement, ambient temperature, 6.5-digit digital multimeter or similar, values without testing cable.
 4) Typical values, may vary considerably depending on installation situation and application.

Slip rings

Modular **Industrial Ethernet – 100 MBit/s** **SR085IE**

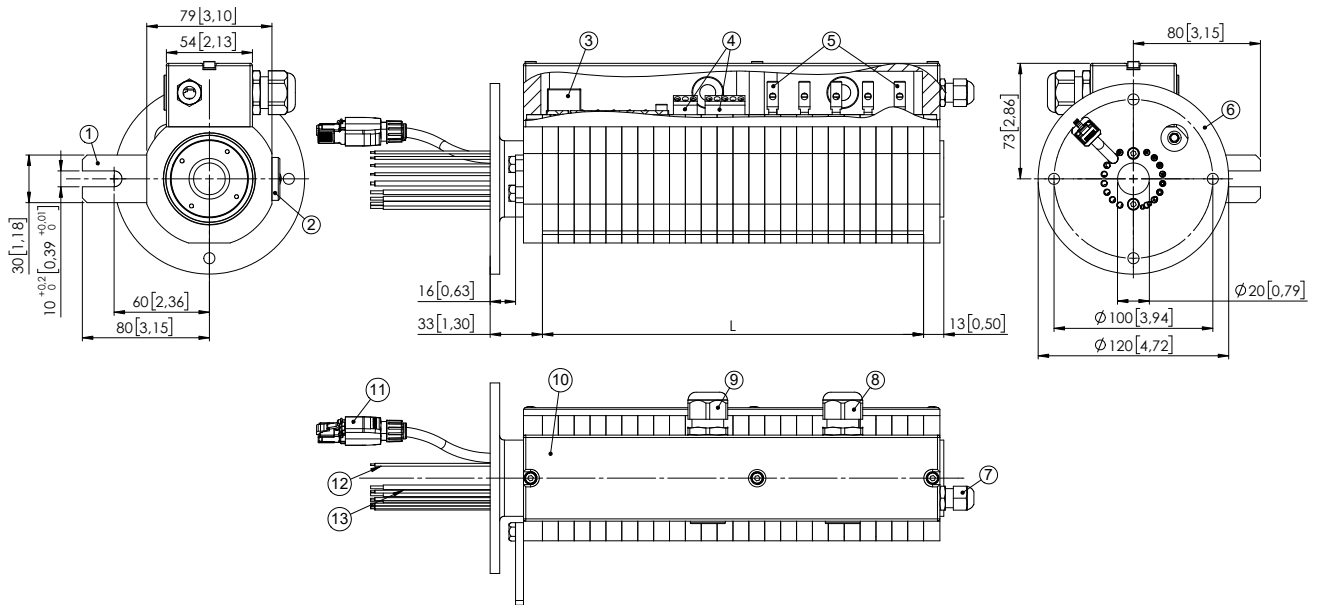
Dimensions

Dimensions in mm [inch]

Version with flange mounting

Example: SR085IE-00-05-05-42302-V100

(Figure with data, signal and load transfer)



- | | | |
|--|---|--|
| 1 – Torque stop | 6 – Mounting flange | 11 – Data cable with RJ45 connector 1 m |
| 2 – Maintenance window | 7 – Cable gland for data cable | 12 – Stranded wire for signal transmission 1 m |
| 3 – RJ45 socket | 8 – Cable gland for load cable | 13 – Stranded wire for load transmission 1 m |
| 4 – Terminal clamp for signal transmission | 9 – Cable gland for signal transmission | |
| 5 – Terminal clamp load transmission | 10 – Stator protection cover | |

Calculation of the overall length

Additional dimensions L	
+ number of signal/data channels (silver / precious metal)	+ 10 mm [0.39"] per data channels
+ number of load channels, order options 1 and 2	+ 10 mm [0.39"] per load channel
+ number of load channels, order options 3 and 4 (10 or 20 A, 400 V)	+ 20 mm [0.79"] per load channel, if only load + 10 mm [0.39"]
+ labyrinth isolation ring for load and signal transmission	+ 10 mm [0.39"]