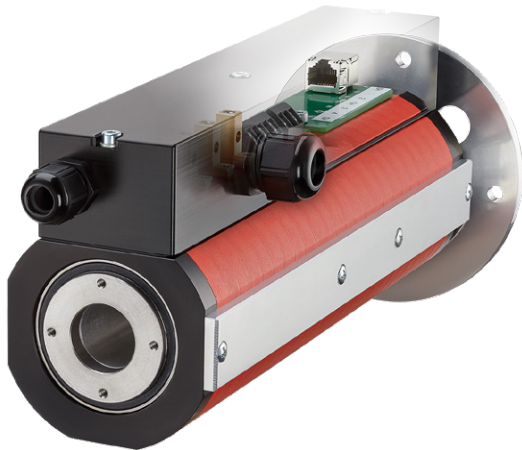




For Industry 4.0 / IIoT concepts.

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

For this purpose, the SR085IE/SR085SE 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 can be made via a shielded two-wire twisted-pair Ethernet cable. Customer-specific special solutions can also be implemented on request, such as M-type industrial connectors.



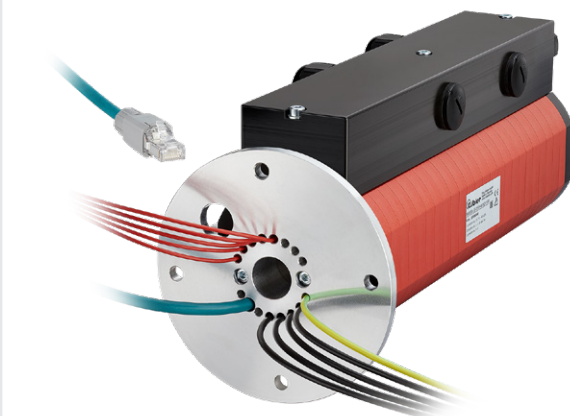
Features

- Optional Single Pair Ethernet module for the 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.

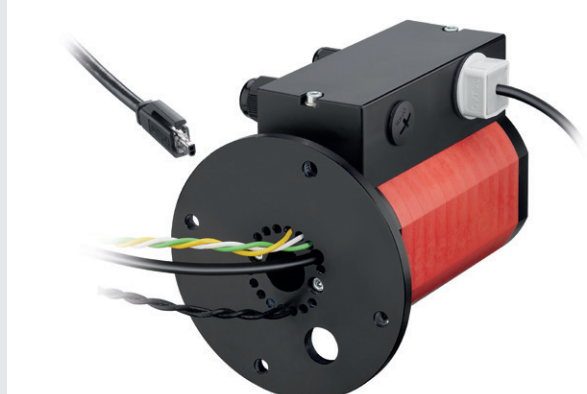
Benefits

- Transmission of Industrial Ethernet up to 100 Mbit/s
 - Fast connection via RJ45, M12 or Single Pair Ethernet in accordance with IEC 63171-2 (R&M / Phoenix) or IEC 63171-6 (Harting) on the stator side 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 slip ring adapts.

Standard Fast Ethernet transmission 100 Mbit/s



Fast Ethernet transmission with SPE (Single-Pair-Ethernet) 100 MBit/s



Modular	Industrial Ethernet – 100 MBit/s	SR085IE/SR085SE
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Order code		SR085													XX	-	XX	-	XX	-	XX	-	X	0	X	X	2	-	V100	
		Type													z		a		b		c	d		e	f	g	h	i		k
z Ethernet transmission IE = four wire Ethernet 100BASE-TX to IEEE 802.3 SE= two wire SPE 100BASE-T1 to IEEE 802.3 bw		d Number of load channels 0 = none 1 = 1 load channel 2 = 2 load channels ... 9 = 9 load channels A = 10 load channels B = 11 load channels (other options on request)													g Contact material for signal / data channels 0 = no signal channels 3 = silver / precious metal (others on request)															
a Type of mounting 00 = flange mounting (hollow shaft on request)															h Media rotary feedthrough (rotor connection) 0 = none Air, rotation screw connection C = tube Ø 12 mm D = tube Ø 10 mm E = tube Ø 8 mm															
b Number of signal/data channels (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)		e 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													i Protection 2 = IP64															
c Number of PE channels 0 = none A = 1 PE channel B = 2 PE channels (other options on request)		f Mounting position 0 = any													k Version number V100 = standard (without options) Other options on request: - M12 connector - SPE connector															

Technical data ¹⁾	
Overall length	dep. on the number of transmission paths
Flange diameter	120 mm [4.72"]
Hollow shaft	on request
Type of connection	stator rotor screw terminal / RJ45 female connector single wires, 1 m [3.28"] / RJ45 male connector (towards the assembly flange)
Voltage/current loading	load channels signal channels 240 V AC/DC, max. 16 A 240 V AC/DC, max. 25 A 400 V AC/DC, max. 10 A 400 V AC/DC, max. 20 A 48 V AC/DC, max. 2 A
Contact resistance	load channels signal / data channels $\leq 1 \text{ Ohm (dynamic)}^{2)}$ $\leq 0.1 \text{ Ohm (silver / precious metal)}^{3)}$
Insulation resistance	$10^3 \text{ MOhm, at } 500 \text{ V DC}$
Dielectric strength	$1000 \text{ V eff. (60 sec.)}$
Speed max. (signal / data channels)	800 min^{-1} (depends on operating conditions and numbers of channels)
Service life (signal / data channels)	typ. 500 million revolutions ⁴⁾ (at room temperature) depends on operating conditions
Maintenance cycles	first maintenance after 50 million revolutions, all further maintenance intervals after 100 million revolutions
Maintenance	contact oil not required
Material pairing	load channels signal / data channels copper / brass silver / precious metal
Operating temperature	$-35 \text{ }^\circ\text{C} \dots +85 \text{ }^\circ\text{C} [-31 \text{ }^\circ\text{F} \dots +185 \text{ }^\circ\text{F}]$
Protection acc. to EN 60529	max. IP64
Transmission paths	max. 13 (> 13 on request)

Rotatable connector, air	
Air pressure max.	10 bar (150 psi)
For tube diameter	8 mm ... 12 mm [0.31 ... 0.47"]

Approvals	
CE compliant in accordance with	
Low Voltage Directive	2014/35/EU

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.

Modular

Industrial Ethernet – 100 MBit/s

SR085IE/SR085SE

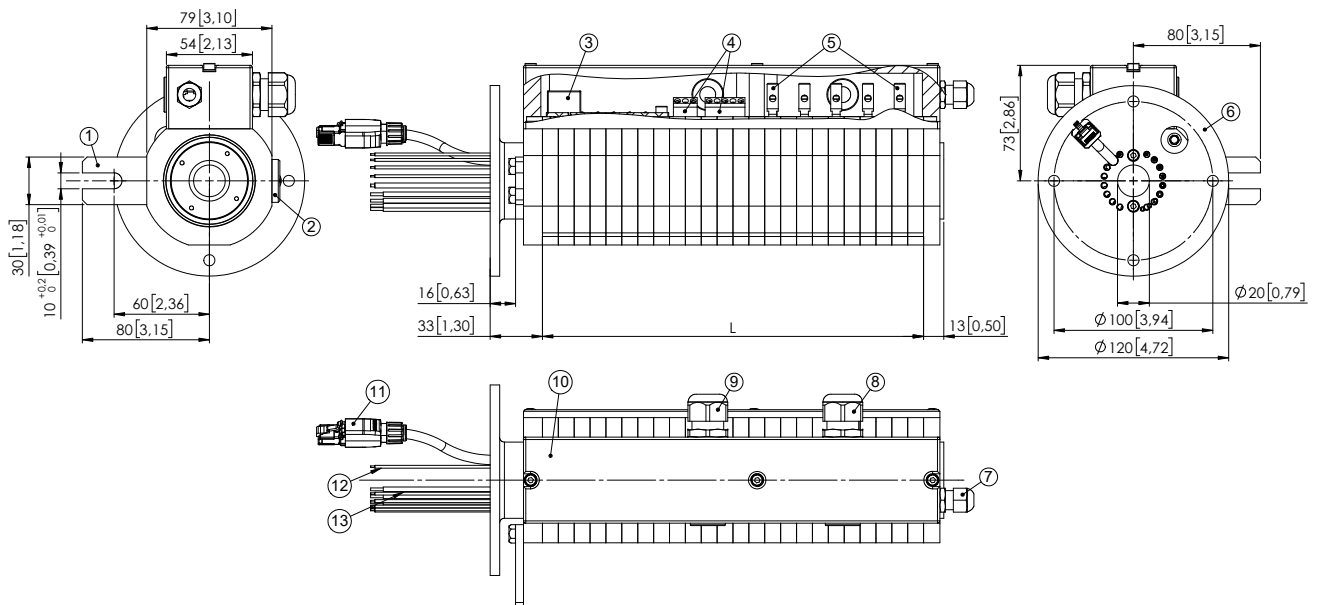
Dimensions

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
(Also with M12 plug connector) |
| 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"]