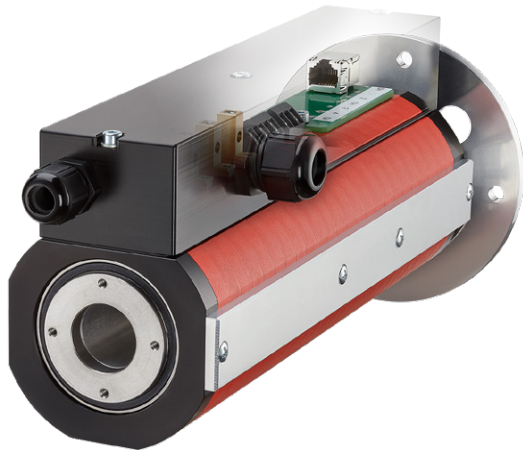


Modular	Industrial Ethernet – 100 MBit/s	SR085IE/SR085SE
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For Industry 4.0 / IIoT concepts.

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

For this purpose, the 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.



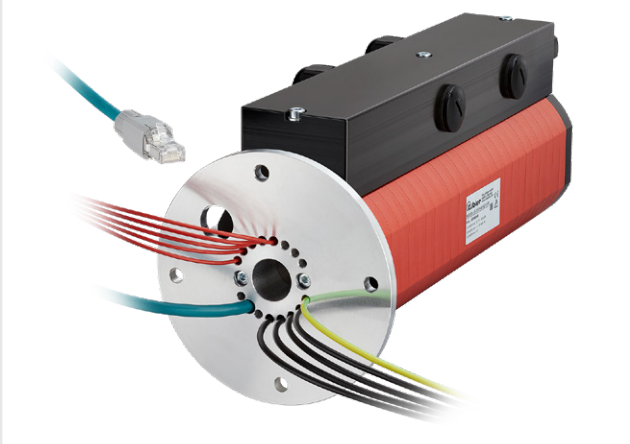
Features

- 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.

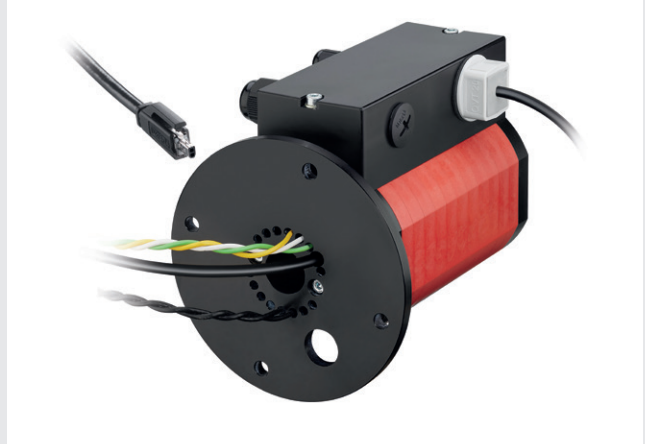
Benefits

- 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



Slip rings

Modular Industrial Ethernet – 100 MBit/s SR085IE/SR085SE

Order code	SR085	XX	-	00	-	XX	-	XX	-	XXXX	-	XXXX				
	Type	a		b		c		d		e	f	g	h	i		k
a Ethernet transmission	IE = four wire Ethernet - 100BASE-TX to IEEE 802.3 SE = two wire SPE - 100BASE-T1 to IEEE 802.3 bw															
b Type of mounting	00 = flange mounting (hollow shaft on request)															
c Number of signal/data channels	00 = no signal/data channels 02 = 2 signal/data channels ... 13 = 13 signal/data channels (other options on request)															
d Number of load channels	00 = no load channels 02 = 2 load channels ... 13 = 13 load channels L3 = 3 load channels + ground PE L4 = 4 load channels + ground PE (others 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															
f Mounting position	0 = any 1 = upright/horizontal 2 = hanging/horizontal															
g Contact material for signal/data channels	0 = no signal channels 3 = silver / precious metal (other options on request)															
h Media lead-through	0 = none Rotation fitting for air with flange mounting C = for 12 mm tube D = for 10 mm tube E = for 8 mm tube (others on request)															
i Protection level	1 = IP50 2 = IP64															
k Version number (options)	V100 = standard V200 = M12 connector on rotor side (only version a = IE)															

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 screw terminal rotor single wires, 1 m [3.28'] (towards the assembly flange)
Voltage/current loading	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	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 13 channels (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 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. 13 (> 13 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

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/SR085SE
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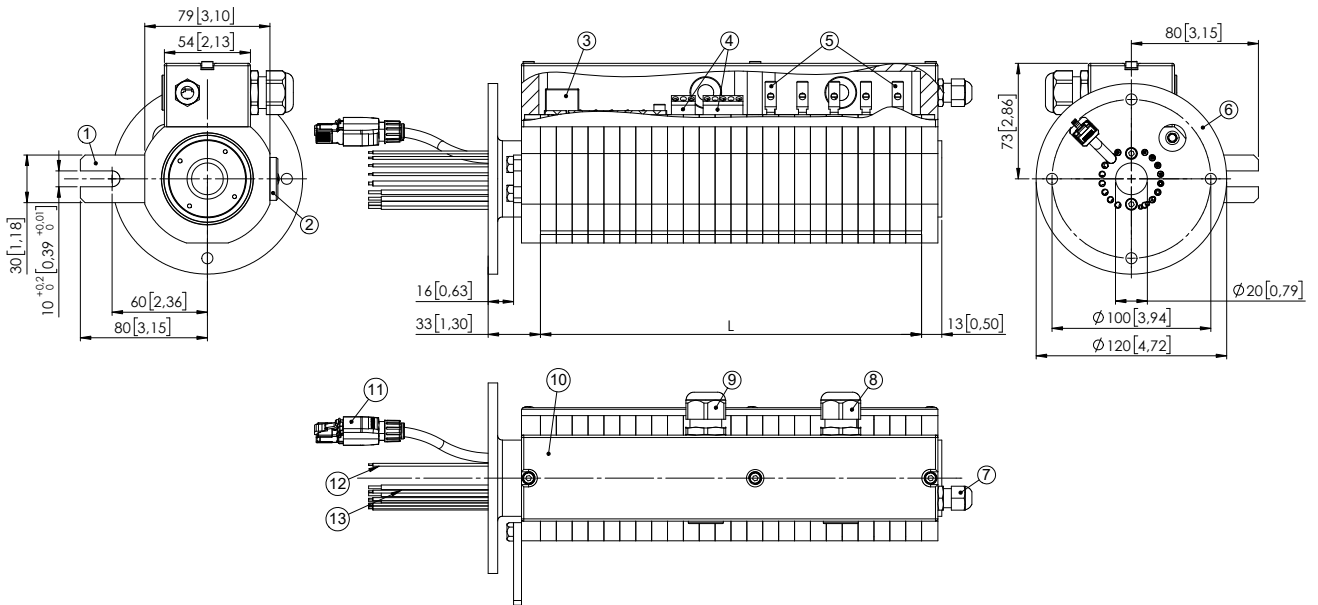
Dimensions

Dimensions in mm [inch]

Version with flange mounting

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

(Figure with data, signal and load transfer)



- | | | |
|--|--|---|
| <ul style="list-style-type: none"> 1 – Torque stop 2 – Maintenance window 3 – RJ45 socket 4 – Terminal clamp for signal transmission 5 – Terminal clamp load transmission | <ul style="list-style-type: none"> 6 – Mounting flange 7 – Cable gland for data cable 8 – Cable gland for load cable 9 – Cable gland for signal transmission 10 – Stator protection cover | <ul style="list-style-type: none"> 11 – Data cable with RJ45 connector 1 m
(Also with M12 plug connector on stator side) 12 – Stranded wire for signal transmission 1 m 13 – Stranded wire for load transmission 1 m |
|--|--|---|

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"]