

Slip rings

Modular	Fieldbus – 12 Mbit/s	SR085
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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	
hollow shaft mounting	stator: terminal clamp rotor: screw terminal
flange mounting	stator: terminal clamp rotor: single wires, 2 m [6.56"] (towards the assembly flange)
Voltage/current loading	
load 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
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 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	
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	12 mm [0.31"]

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

Technology in detail

Easily accessible connections



IP64 protection cover



Flange mounting with media lead-through



Media lead-through rotor side



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

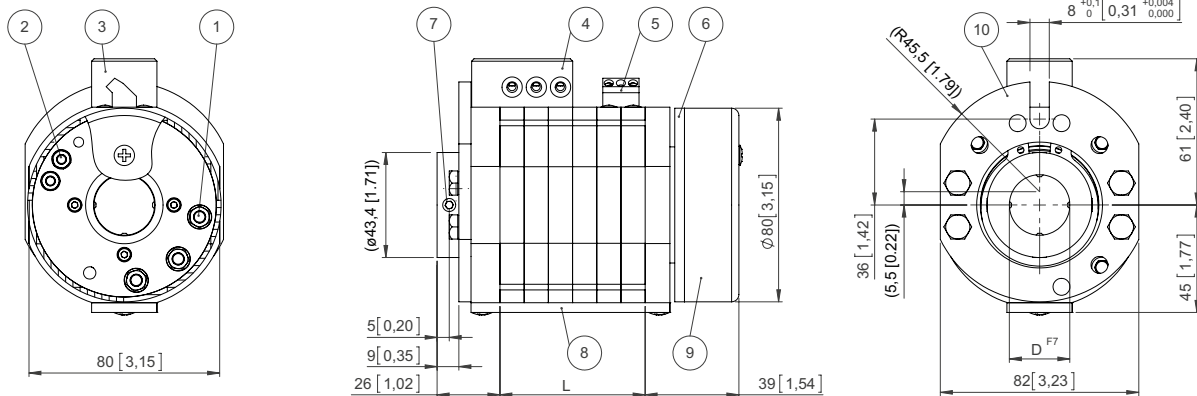
Modular **Fieldbus – 12 Mbit/s** **SR085**

Dimensions

Dimensions in mm [inch]

Standard version

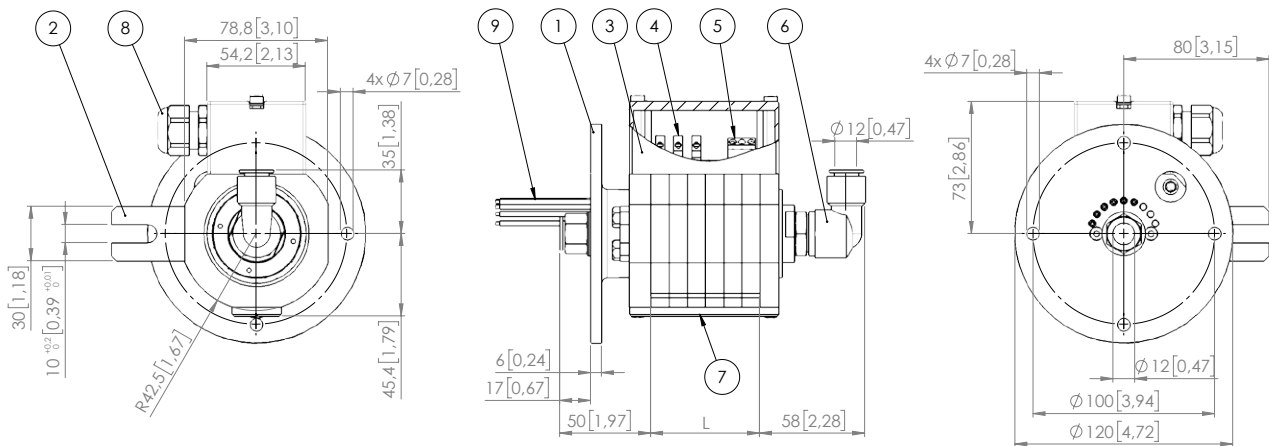
Example: Type SR085-25-02-03-11301-V100
(2 data channels, 3 load channels)



- 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 – Terminal clamp for signal transmission
- 6 – Rotating connection ring
- 7 – 4 x socket set screw DIN 914 M6
- 8 – Maintenance window
- 9 – Protective cover for connections
- 10 – Torque stop

Version with mounting flange and media lead-through

Example: Typ SR085-00-02-03-113C1-V100
(2 data channels, 3 load channels)



- 1 – Mounting flange
- 2 – Torque stop
- 3 – Stator protection cover
- 4 – Terminal clamp for load transmission
- 5 – Terminal clamp for signal transmission
- 6 – Media lead-through (optional)
- 7 – Maintenance window
- 8 – Cable gland load and signal cable
- 9 – Stranded wires for load and signal transmission

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"]