Compact | **Power and signal transmission** | **SR060E**



Version V100

Version V200

In general slip rings are used to transmit power, signals or data from a stationary to a rotating platform.

The SR060E is a compact, economical slip ring for up to 3 power and 2 signal transmissions. New innovative contact materials ensure long service life and extremely low-maintenance operation. The round shape with smooth surfaces and high protection level allows easy cleaning.

V200 version:
Additional connection options through implementation of M12 connectors for easiest mounting and maintenance.

Compact

- Dimensions 60 x 98 mm.
- Can be used as a pair starting from just 60 mm shaft distance of the sealing rollers.
- Various component configurations for the transmission paths, max. 3 x load and 2 x signal transmission.
- Easily accessible connections.
- Standard version V100 with load current up to 20 A.
- Version V200 with plug connectors for load and signal connections.

Low-maintenance

- Maintenance cycles only every 100 million revolutions.
- No contact oil required.
- Easy cleaning – high protection level IP64.

Applications for slip rings

Flowpack and blister packaging machines, robots and handling equipment, rotary tables

Order code
for standard versions

SR060E	-	XX	-	X	-	X	-	X	X	2	-	VXXX
Type		a		b		c		d	e	f		g

a *Hollow shaft*
20 = ø 20 mm [0.79“]
25 = ø 25 mm [0.98“]
IN = ø 1 Inch
(others on request)

b *Number of signal / data channels*
0 or 2

c *Number of load channels*
0, 2 or 3

d *Max. load current*
0 = no load channels
1 = 16 A, 240 V AC/DC
2 = 20 A, 240 V AC/DC
(Version V200 max. 12 A)

e *Contact material signal / data channels*
0 = no signal / data channels
3 = silver / precious metal

f *Protection*
2 = IP64

g *Version number (options)*
V100 = without option
V200 = with connectors
other options on request

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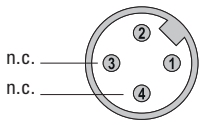
Technical data

Hollow shaft diameter	up to max. ø 25 mm [0.98"]
Voltage/current loading	
load channels	240 V AC/DC, 50/60 Hz, max. 20 A
signal / data channels	48 V AC/DC, 50/60 Hz, max. 2 A
Contact resistance	
load channels	≤ 1 Ohm (dynamic) [1]
signal / data channels	≤ 0.1 Ohm (silver / precious metal) [2]
Insulation resistance	10^3 MOhm (at 500 V DC)
Dielectric strength	1000 V eff. (60 sec.)
Speed max.	500 min^{-1}
Torque	< 0.2 Nm
Service life	typ. 500 million revolutions (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	0 °C ... +75 °C [+32 °F ... +167 °F]
Protection acc. to EN 60529	IP64

Approvals

CE compliant in accordance with	
Low Voltage Directive	2014/35/EU
RoHS Directive	2011/65/EU
UKCA compliant in accordance with	
Low Voltage Regulations	S.I. 2016/1101
RoHS Regulations	S.I. 2012/3032

Type of connection

Connection stator	Load channels	Signal / data channels
Version V100	Flat pin 6.3 x 0.8 mm	Flat pin 2.8 x 0.8 mm
Version V200	M12 connector, 4-pin, S coded, male 	M12 connector, 4-pin, A coded, male 

Connection rotor	Load channels	Signal / data channels
Version V100 / V200	M5 connection screws	M4 connection screws

1) Voltage measurement, ambient temperature, DC series connection, ohmic load, min. 4 A test current.
2) 2-wire resistance measurement, ambient temperature, 6.5-digit digital multimeter or similar, values without testing cable.

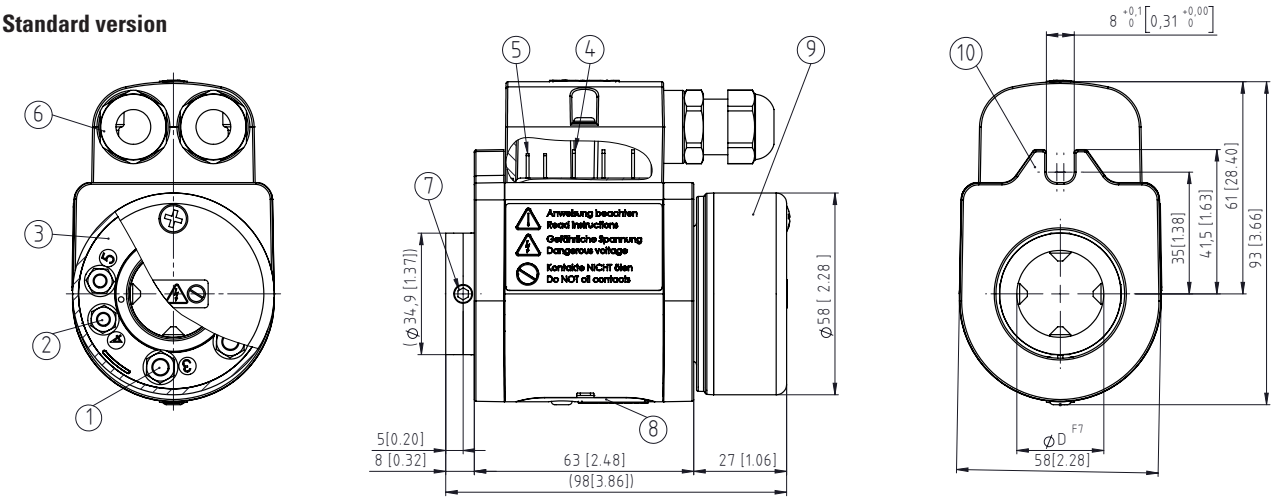
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Dimensions

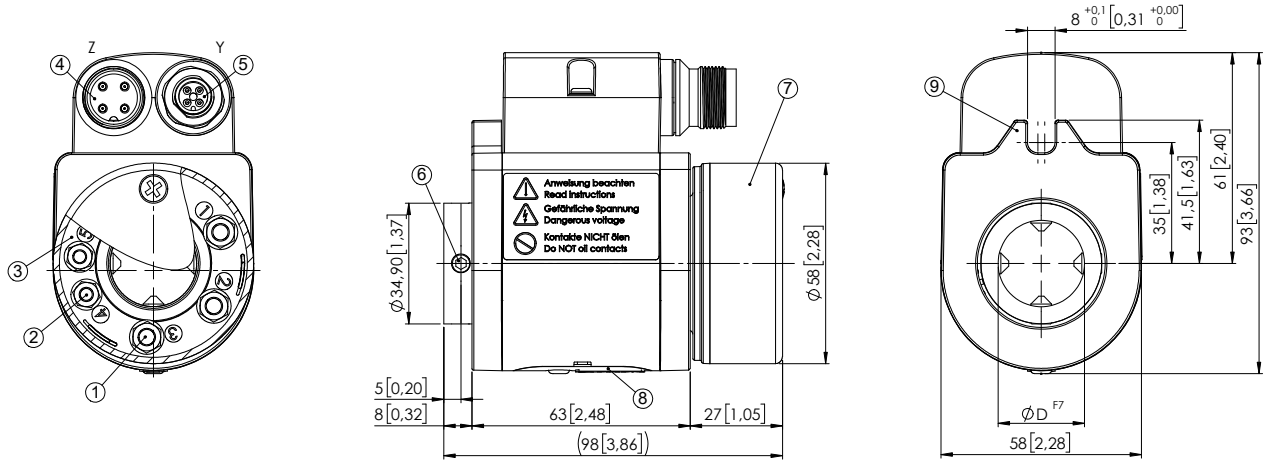
Dimensions in mm [inch]

Standard version



1 – Screw terminal M5 for load transmission (rotor)
2 – Screw terminal M4 for signal transmission (rotor)
3 – Rotating connection ring
4 – Flat pin connection for power transmission 6.3 x 0.8 mm
5 – Flat pin connection for signal transmission 2.8 x 0.8 mm
6 – Protective cover for the stator connections with cable gland M16x1.5
7 – 4 x socket set screw DIN 914 M6x8
8 – Maintenance window
9 – Protective cover for rotation connections
10 – Torque stop

Version V200



1 – Screw terminal M5 for load transmission (rotor)
2 – Screw terminal M4 for signal transmission (rotor)
3 – Rotating connection ring
4 – M12 connector, 4-pin, S coded, male
5 – M12 connector, 4-pin, A coded, male
6 – 4 x socket set screw DIN 914 M6x8
7 – Protective cover for rotation connections
8 – Maintenance window
9 – Torque stop

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