Datasheet coreSPC

Screw Pile Control System

Features

- **Robust torque sensor** with wireless Bluetooth data transmission
- **Simple app for Android & iOS –**available for download
- **Live display** of torque, rotational speed, and orientation as a visual assistance system
- **Automatic documentation** of all process-relevant data (PDF & log file)

Applications

- Monitoring the installation of screw foundations under various soil conditions
- Automated measurement during the installation process for seamless documentation
- Reliable proof of correct pile foundation for approval by clients, construction managers, and inspectors

Description

Precise sensor technology, intuitive live display, and automated documentation ensure that your pile foundation process is transparent, safe, and verifiably correct. The sensor system is immediately ready for use with its intuitively designed app for iOS and Android. Live feedback of torque, rotational speed, and orientation provides increased safety and control during installation. The app creates automatic reports for entire installation projects or individual piles. The sensor is compatible with various drives and screwdrivers. The entire system is Made in Germany, with fast recalibration and provision of a loan unit available at any time.

The sensor is suitable for use on the following machines:

- Hand-held drives
- Excavator-guided drives
- Special machines (impact devices with rotary head)
- Soil drilling machines for hybrid procedures

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coreSPC Variants

Variante	SPC-6	SPC-12	SPC-25	SPC-40
Calibration torque torsion (Nm)	6.000	12.000	25.000	40.000
A (mm)	188	230	230	256
B (mm)	110	140	140	140
C (mm)	155,5	196	194,7	219
Number of drill holes	8	8	12	12 (additional SPC-25 pattern; 30° offset)
D (mm)	M14	M16	Ø 17	Ø 22
E (mm) (installation hole)	22	26	-	-
F (mm) (through hole)	14,2	16,2	Ø 17	Ø 22
Weight (kg)	5,6	8,1	10,2	12,5
Max. battery operating time (h)	> 250	> 250	>250	>250
Permissible static overload	140%	140%	140%	140%

Fig. 1: SPC-6 & SPC-12

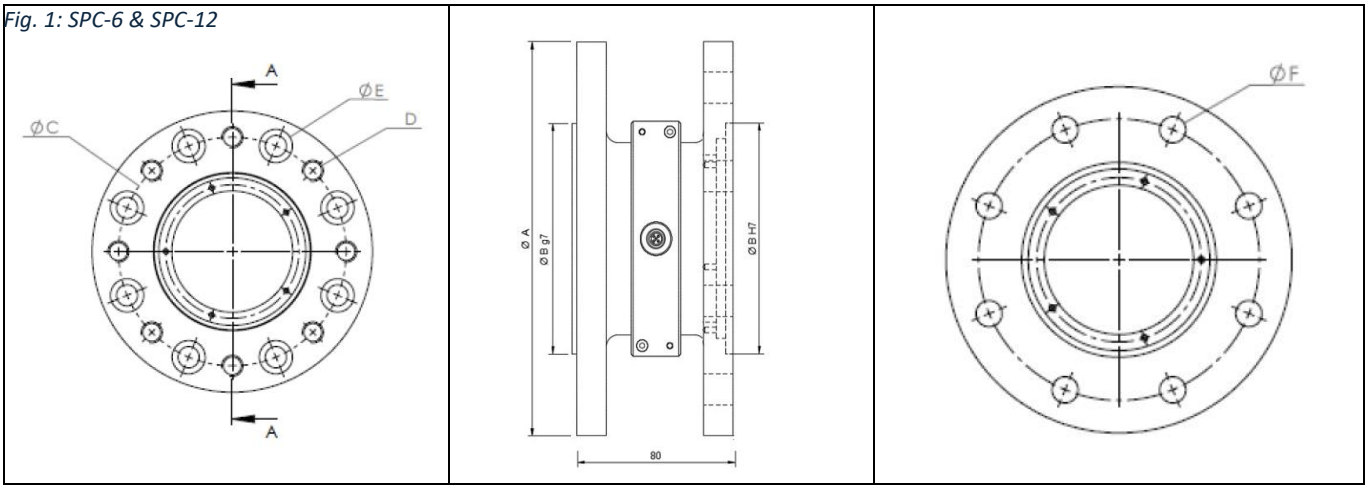
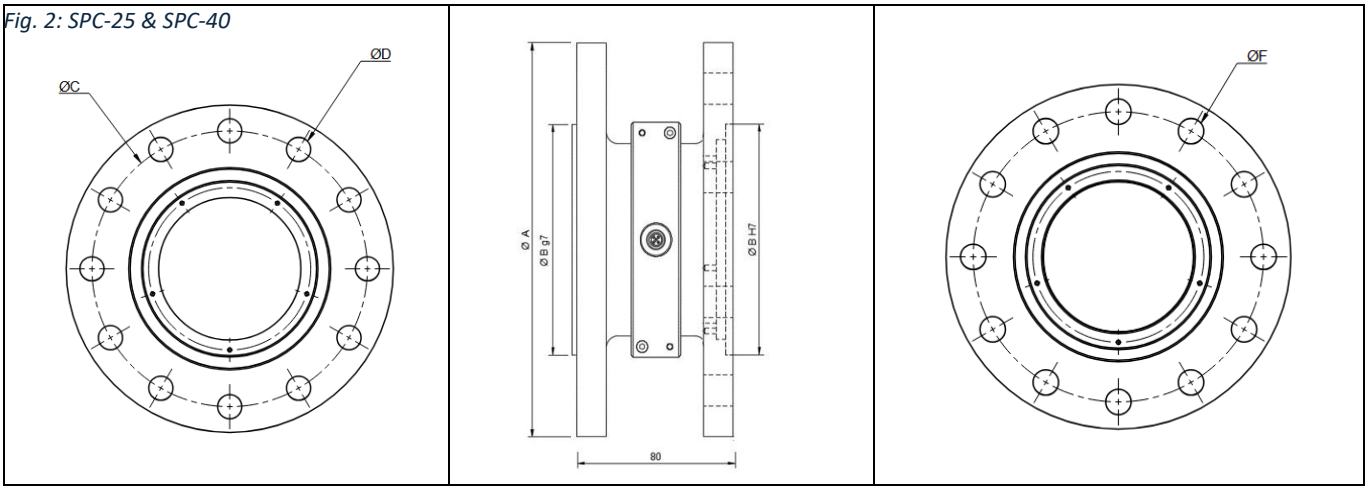


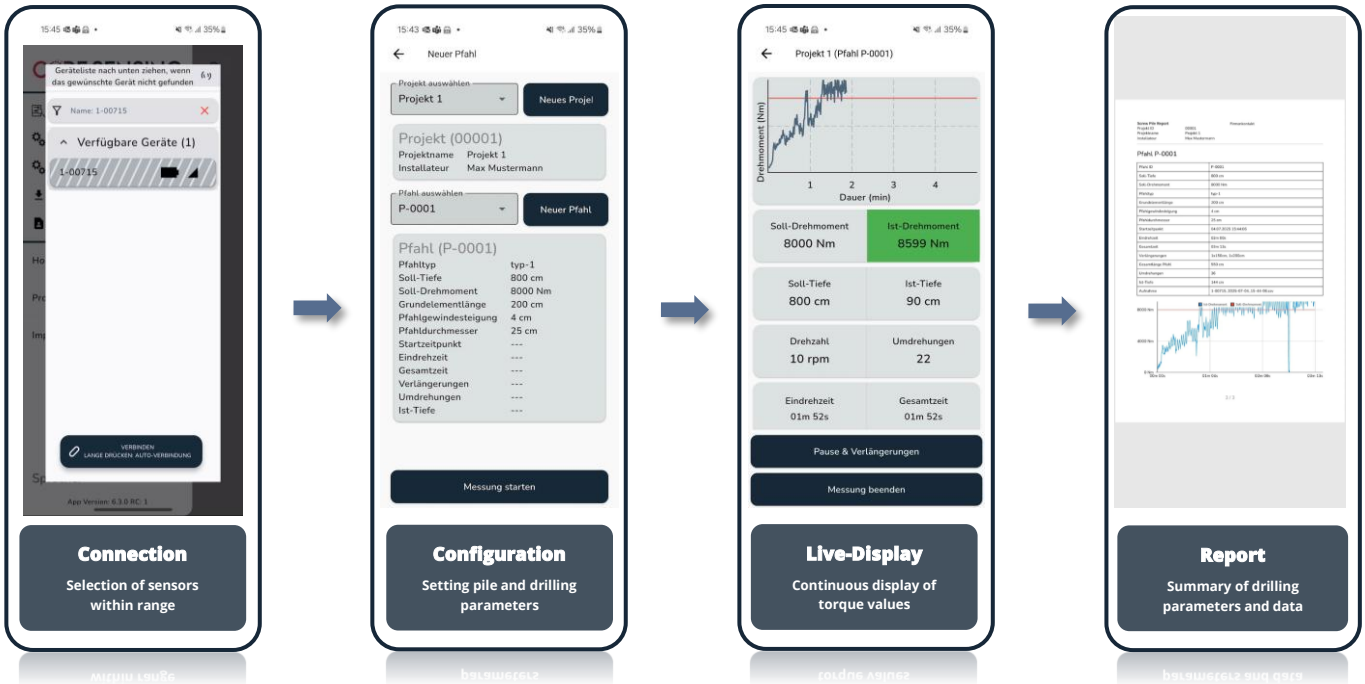
Fig. 2: SPC-25 & SPC-40



Technical Data		
Sampling rate	10	Hz
Torque accuracy (relative to nominal value	99	%
Speed sensor measuring range	0...80	rpm
Speed sensor accuracy	<0,5	%
Data transmission frequency band	2.45	GHz
Bluetooth version	Bluetooth Low Energy 4.2	
Maximum range	20	m
Energy storage (Li-Ion battery)	5200	mAh
Measurement duration (per battery charge at 20°C)	240	hours
Standby duration (typical)	>1	year
Temperature range	-20...60	°C
ESD	4	kV
Protection class	IP67	

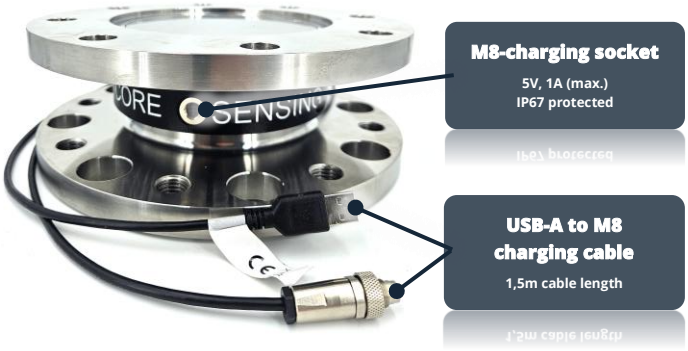
App for iOS und Android Devices

The app for live display and documentation of sensor data is available **free of charge** in the App Store and Play Store and is compatible with smartphones and tablets running iOS 13 and Android 13 or higher.



Battery Operation and Charging Options

The integrated battery can be charged using the included power supply unit and a 1.5m USB-A to M8 cable. The IP67 charging socket is easily accessible in the center of the flange, even when installed. Charging can also be performed using any mobile power bank with USB-A connection. Maximum charging time is 10 hours. Current charge level is displayed in the app.



Scope of delivery

Included in delivery:

- Torque measuring flange in variant coreSPC-6, SPC-12, SPC-25, or SPC-40
- Power supply unit (230V to 5V USB-A, 15W) and charging cable USB-A to M8, 1.5m length
- Robust transport case
- Documentation (factory calibration certificate, quick guide with link to operating manual and app)

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