



Reliability for Professionals – Carbon Brushes with Cut-off Device and Signaling Device

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The Carbon Brush – the “heart” of many electric motors

For more than 100 years the carbon brush has been used to transmit power in electric motors, which need to meet today's highest requirements.

Preservation of electric power tools – carbon brushes with integrated cut-off device

If a carbon brush is used beyond its wear limit, increasing commutator sparking can damage the commutator.

Carbon brushes with the integrated cut-off device from Schunk are the intelligent solution, in order to avoid damage to the motor or the entire machine. They have already proven themselves a million fold in demanding use.

Various kinds of systems and sizes are available for each application.

Benefits for the user

- Reliable automatic cut-off of the device
- Protection of the commutator when replaceable carbon brushes are used
- Optimal equipment usage
- Optionally: Possibility for the provision of pre-defined maintenance dates



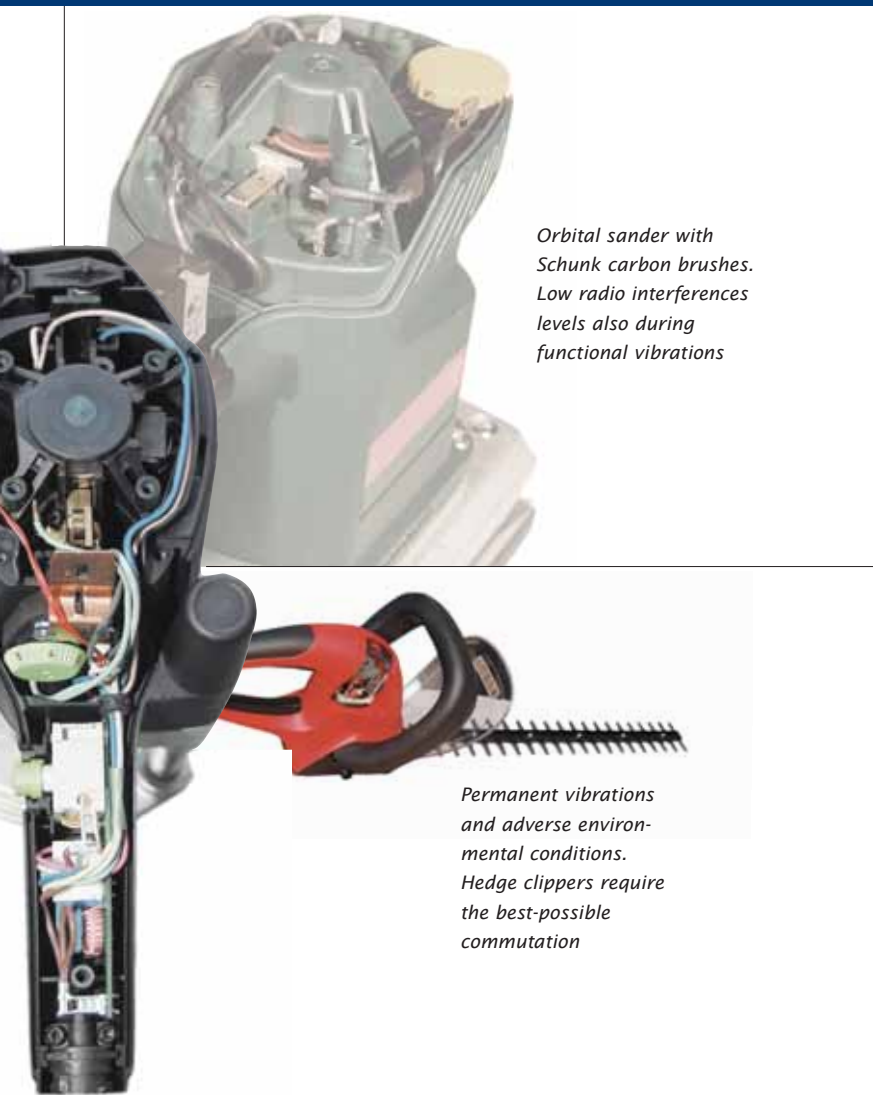
Circular saw. Schunk carbon brushes also guarantee a long operating life at high rotational speeds

Drills and compact rotary hammers. Long service life of the carbon brushes as well as easy servicing are required



Carbon brush with integrated cut-off device

The cut-off device consists of a custom-shaped insulated pin, which is loaded under high tension of a coil spring inside the carbon brush. If the carbon brush wears down to the insulated pin, the spring extends and the insulated pin lifts the carbon brush off the commutator. The current flow is interrupted and the device shuts off.



Orbital sander with Schunk carbon brushes. Low radio interferences levels also during functional vibrations

Permanent vibrations and adverse environmental conditions. Hedge clippers require the best-possible commutation

In case of extreme loads. Carbon brushes with special protection of the commutator

Carbon brushes with integrated cut-off device and signaling device

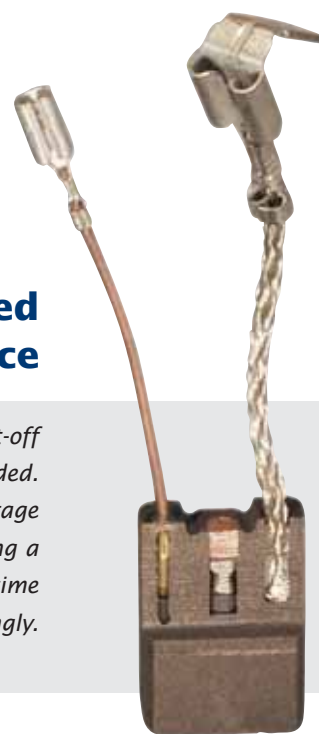
The end of the signaling device is insulated and installed deeper than the cut-off device. If the carbon brush wears down to the alarm wire, the insulation is abraded. An electrical connection is created between wire and commutator and a voltage signal can be measured and processed at the alarm wire, e. g. for connecting a service LED. Therefore the user can still use his tool for a defined amount of time and plan the replacement of the carbon brushes accordingly.

“Intelligent” carbon brushes – carbon brushes with integrated cut-off device and signaling device

If an electric power tool with a cut-off carbon brush switches itself off when the wear limit is reached, this often happens unexpectedly for the user. Spare carbon brushes are not always readily available, which can result in unwanted downtime. However, when using carbon brushes with an additional signaling device, a signal to replace the carbon brush is given in a pre-defined period (approximately 8–10 hours of operation) before reaching the wear limit.

Benefits for the user

- Definable period between signaling and cut-off
- Timely replacement of the brush before equipment outage
- Cost savings by reducing and/or avoiding equipment outage



**Schunk Vienna GmbH –
Center of excellence for
cut-off device and signaling
device carbon brushes**

The Schunk Vienna G.m.b.H is a member of the Schunk-Group, an internationally active technology company with a broad range of services in the field of materials technology and systems technology. Schunk is represented in 28 countries with more than 60 subsidiaries and has approximately 7,900 employees worldwide.

As center of excellence for cut-off device and signaling device carbon brushes and as a long-time OEM supplier to well-known enterprises, we offer you:

- 30 years of experience, research and innovations in the area of the cut-off device and signaling device carbon brushes
- Highest quality standards
- State-of-the-art production technologies
- Sample production
- CAD design suggestions and support for new components

Contact

Take advantage of our experience!

Did we spark your interest?
Our employees will gladly assist you with further information and a personal consultation.

We look forward to your call.

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