



**In the development phase –
Prototypes available**

Datasheet: Prototype

GEIGER PROTECTOR-System – Protection and flexibility for interior roller blinds

Introduction

The new GEIGER PROTECTOR-System combines for the first time the advantages of a crank drive with the simplicity of a system with chains/cords. The considerable advantage of a precise and rapid end position adjustment can now be transferred to the crank drive by the PROTECTOR-System.

Problem and solution

Complaint Nr. 1: operating error „up“ excluded

PROBLEM:

The blind is moved up until the bottom rail disappears into the cassette. It is then difficult to “free” the roller blind. The bottom rail must be manually pulled out or the cassette has to be opened.

SOLUTION:

The **GEIGER PROTECTOR-System** protects the hanging so that the bottom rail can no longer disappear into the cassette.

Complaint Nr. 2: operating error „down“ excluded

PROBLEM:

The crank is turned the wrong way because there is no end stop in the lower end position. The wrong side of the fabric is facing up; this is not optically appealing and can lead to damage under continuous operation.

SOLUTION:

The **GEIGER PROTECTOR-System** prevents a „wrong winding up“ of the roller blind in the lower end position.

Setting of the lower position with high precision

PROBLEM:

The customer requires an accurate setting of the lower end position – this might be a problem especially when several blinds are mounted side by side. Adjustable end stops are only realisable together with a spindle lock in the top box. This is costly and time-consuming.

SOLUTION:

The **GEIGER PROTECTOR-System** allows the exact setting of the lower end position - at any time, also after installation. The setting of the spindle lock is not necessary.

Overview: advantages of the crank drive

+ Lifetime & Quality:

Crank drives are designed for a lifetime of over 10,000 cycles. They are thus much more robust than a system with chains/cords.

+ Security:

In terms of security, crank drives are superior to all other types of drives. They are toddler-friendly: strangulation danger – unlike a system with chains/cords – may be completely excluded.

+ Hygiene:

A crank drive can be cleaned at any time and thus retains its attractive appearance for years.

+ Removal option:

In order to prevent abuse, cranks can be temporarily removed, for example in public buildings, and re-attached if needed.



Flexibility: lower end position can be modified at any time

PROBLEM:

Subsequent client requests are sometimes complex to meet : for example the modification of the roller blind length.

SOLUTION:

Never has the setting of the lower position been so easy as with the **GEIGER PROTECTOR-System** .The lower end position can be precisely readjusted and changed -no dismantling of the system and no additional tools - easy, fast and flexible.

Reduce production time: no spindle lock

PROBLEM:

The production cost of a blind with pre-set end positions is considerable. The spindle lock must be mounted, the curtain must be moved to the end position and the stops of the spindle lock must be fixed.

SOLUTION:

The lower endpoint is set with the **PROTECTOR System** and can be changed at any time – without spindle lock. The production time is the same, the **PROTECTOR System** offers significant operating advantages including greater convenience.

Additional customer benefits and Product advantages

Incorrect operation excluded

An incorrect operation of the **PROTECTOR System** is not possible because of the integrated free wheel clutch. Damages to the system caused by improper operation may be excluded.

Made by GEIGER / Made in Germany - A solid product

Reduction in reclamation costs

Customer service and support operations are an expensive undertaking for the sun protection manufacturers. The **GEIGER PROTECTOR-System** offers complete safety and helps reduce your complaint rate.

Inner sun protection - GEIGER develops with the **PROTECTOR-System** an innovation that provides a competitive advantage to sunscreen manufacturers and specialist companies. With the **PROTECTOR-System**, you are one step ahead in the competition.

Production site Germany – GEIGER relies on Germany as production location. The **GEIGER PROTECTOR-System** is entirely developed and manufactured in Germany.

The development is going on ...

GEIGER goes full blast in the development of the **PROTECTOR-System**. This is the key to your success in today's marketplace, where innovative products sets you apart and maintain your competitive advantage. Do support this project in order to turn it into a marketable product. You still have the opportunity to customize the product to your specific needs.



The name GEIGER Antriebstechnik is synonymous worldwide for drive solutions in the sun protection area.

Today we are with about 300 employees one of the leading manufacturers of mechanical and electrical drives for Venetian blinds, awnings and rolling shutters.

GEIGER is a well-known, mid-sized company which offers worldwide drive components for the sun protection systems.



Conception of the PROTECTOR-System

Application range

- Roller blinds with / without cassette
- Roller blinds with worm gear 426F... or 414F... (additional worm gears are possible)
- Roller blinds with max. 2 Nm output torque
- Roller blinds with end position range of max. 33 rotations
- Roller blinds with shaft bearing with axial suspension (opposite gear)

Set up

PROTECTOR can easily be plugged on the GEIGER gears 426F... and 414F... **PROTECTOR** then provides a one-sided end stop and a two-way free wheel clutch.

End stop for the lower end position

PROTECTOR provides a stable end stop to define the lower end position.

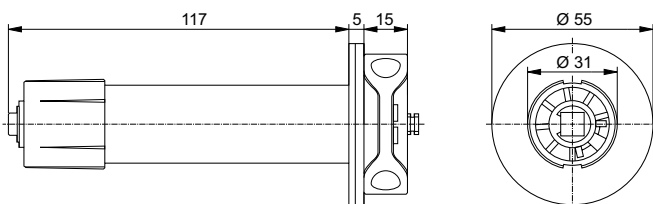
GEIGER free wheel clutch

The GEIGER free wheel clutch ensures that the bottom rail does not slip into the cassette after reaching the upper end position. The crank motion is „disconnected“. This eliminates the rotational movement of the shaft and thus the danger of a „disappearing bottom rail“.

In addition, the free wheel clutch ensures - when reaching the lower end position - the separation of the gear and the roller tube.

Dimensions and technical data

Drawing (current prototype)



There will be a universal variant that can be assembled 2 ways – right-hand or left-hand – either by GEIGER or by the customer. A pre-set end stop is possible.

Roller tubes

- All roller tubes > 29 mm inner diameter can be realized
- Prototypes for roller tubes 34 and 40 mm outside diameter are available

Design options

- Pre-assembly with left / right end stops / central position is possible
- End position range > 33 rotations can be implemented if required
- Plug-in carrier (standard carrier with pluggable adapters for other roller tubes)
- System can be applied to outdoor sun protection / vertical awnings



Worm gear 426F..



Worm gear 414F..



GEIGER crank handle with plastic pressure piece - Durable and comfortable.

Assembly / Installation instructions



Place the **PROTECTOR-System** (in upper end stop position) into the roller tube.



Fix the drive plate on the gear and secure.



Fix the roller tube on the gear



Clip the spring shaft bearing in the box



„Uncouple“ the drive plate and the **PROTECTOR-System** with the adjustment tool



Crank the roller blind in the lower end position and remove the adjustment tool.



The lower end position is set. **Ready!**