



# GEIGER Bevel gears 444F... and 446F...

## Product Datasheet



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## GEIGER bevel gears 444F... and 446F... – with reversible direction of rotation for left and right installation!

The bevel gears of the GEIGER series 444F... and 446F... have proven their reliability millions of times. Now these successful series have been updated with a very sophisticated design. Thanks to a built-in function switching over the rotation direction, each gear can be installed in the future either on the left-hand side or the right-hand side of the window: An innovative solution that has been patented and that greatly facilitates the assembly.

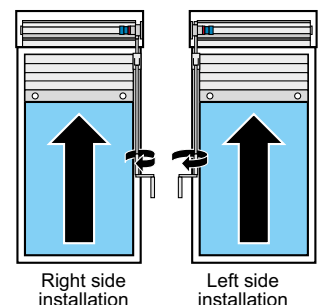
### Benefits and advantages

It is very easy to change the rotation direction of the bevel gear. The elaborated mechanism requires neither a complicated conversion nor any tool.

A reliable lock prevents accidental switching. Since the gear has a continuous interior profile at the drive, the rotation direction of the crank rod remains the same on each installation side.

The mechanical inner workings of the gear is almost unchanged, all previous advantages such as fast operation , free wheel clutch or long life time are preserved.

#### Same direction of rotation



For gears pre-set for right fitting, turn tube drive to the right ...



... until the latching elements of the overrun clutch are released and the switch mechanism is free.



Turn switch mechanism to the left until it stops ...



... and turn tube drive to the left until the latching elements of the overrun clutch snap into place.



## Made by GEIGER

GEIGER relies on Germany as production location:  
The GEIGER bevel gears, like all GEIGER products, are designed and produced in Bietigheim-Bissingen.

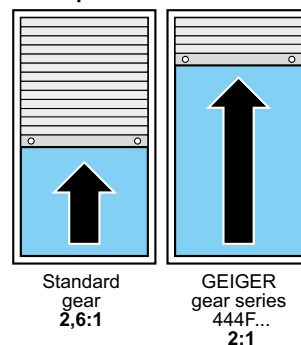
This situation allows an optimal combination of R & D, manufacturing processes and quality management.

## Proven functionalities

### Fast operation

The ratios 2:1 or 3:1 are extremely user-friendly: fast and easy opening/closing of the curtain.

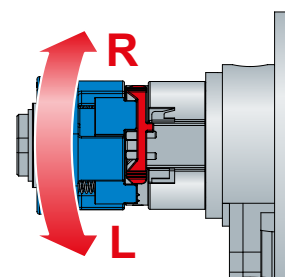
#### Fast operation



### Tool free switching

No tools required ! Fast and easy switching of the rotation direction.

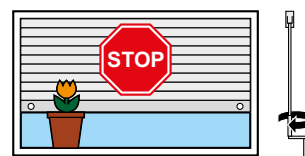
#### Tool free switching



### Free wheel clutch

If the curtain runs against the window sill or any obstacle: The GEIGER freewheel clutch triggers reliably. This system offers complete safety while lowering the number of unnecessary customer service calls.

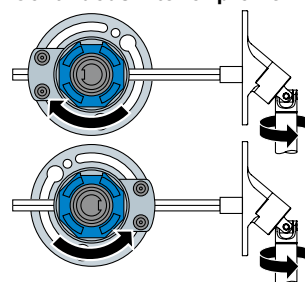
#### Free wheel clutch



### Continuous interior profile at the drive

If the curtain runs against the window sill or any obstacle: the GEIGER freewheel clutch triggers reliably. This system offers complete safety while lowering the number of unnecessary customer service calls.

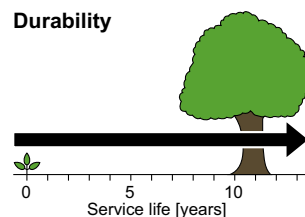
#### Continuous interior profile



### Durability

GEIGER bevel gears are designed to achieve more than 10.000 rotations.  
This corresponds to a lifetime of over 10 years depending on the frequency of use.

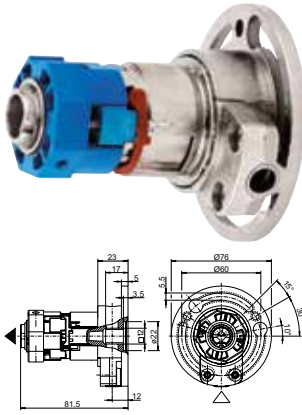
#### Durability



## 444F6.. | Bevel gear 2:1

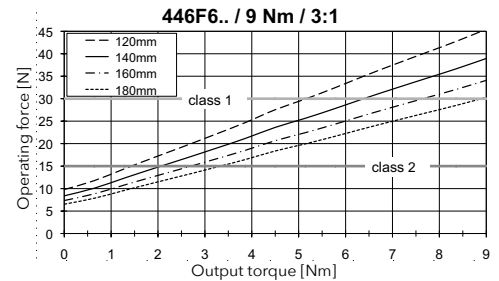
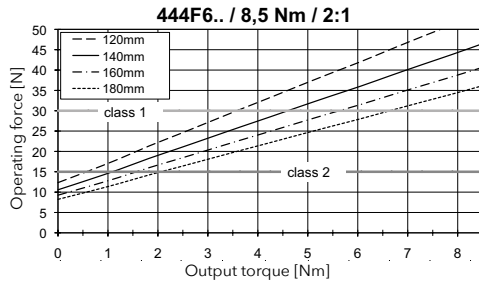
## 446F6.. | Bevel gear 3:1

Reduction ratio	2:1 3:1
Efficiency	0,65 0,61



### Features

- Easy operation with small reduction ratio
- Left-hand and right-hand design for the same direction of rotation when installed on the left or right
- Free wheel prevents the shutter curtain from being rolled up incorrectly
- 6 mm hexagonal drive on request



Part Nr.	End stop	Drive $\triangle$	Output $\nabla$
444F635	Free wheel clutch left/right	$\bigcirc$ 6 mm continuous profile	$\bullet$ 36,7 mm
446F635	Free wheel clutch left/right	$\bigcirc$ 6 mm continuous profile	$\bullet$ 36,7 mm

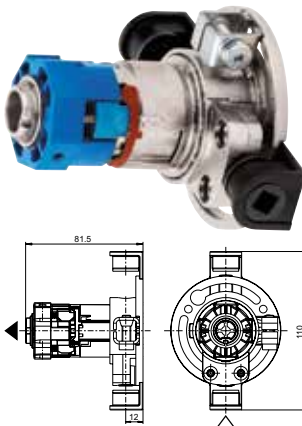
### Options for bevel gears 444F6.. and 446F6..

Drive	$\bigcirc$ 6 mm and $\bigcirc$ 6 mm continuous profile
Output	$\bullet$ 38 mm, 50 mm, 60 mm (see adaptor)
Release torque	ca. 0,34 Nm or ca. 1,2 Nm (optional)
Housing design	Standard, with trunnion or with quick assembly system
Pitch circle diameter	$\varnothing$ 60 mm

## 444F7.. | Bevel gear 2:1 with quick assembly system 2:1

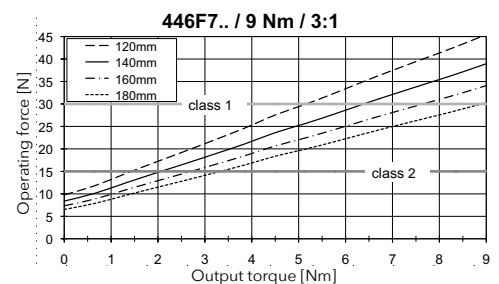
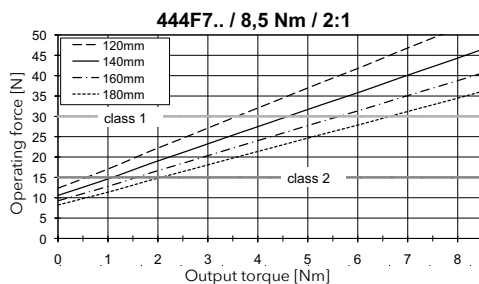
## 446F7.. | Bevel gear 2:1 with quick assembly system 3:1

Reduction ratio	2:1 3:1
Efficiency	0,65 0,61



### Features

- Quick assembly system: fixation of the gear with the trunnion
- Two bearings support the output shaft and reduce the radial forces to a minimum.
- No need to drill the brackets
- Easy adjustment of the gear without tools
- Available with complete mounting kit



Part Nr.	End stop	Drive $\triangle$	Output $\nabla$
444F735	Free wheel clutch left/right	$\bigcirc$ 6 mm continuous profile	$\bullet$ 38 mm
446F735	Free wheel clutch left/right	$\bigcirc$ 6 mm continuous profile	$\bullet$ 38 mm

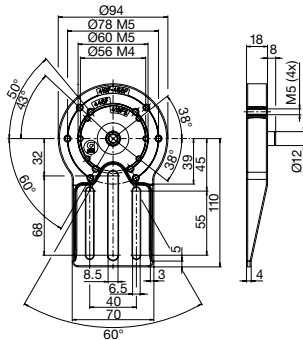
### Important notes concerning the installation of the gear

- To axially secure the rolling shutter shaft on the gear, you can use Spax screws with max. 3.9 x 6.5 mm.
- Use terminal screws (Allen 3) with min. 3- 4 Nm to ensure a secure lock on the pin of the side part.
- An additional transport protection is possible using optional adhesive strips. Please contact us for details.

# 444F800 | Universal gear holder

## Features

- Height adjustable: oblong holes for fixation with stud bolts
- Suitable for gears 444F... and 446F...



Part Nr.	
444F800	

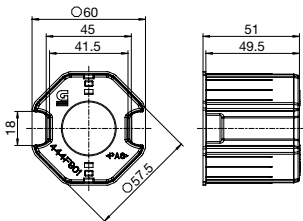
# 444F90. | Adaptation ring

## Features

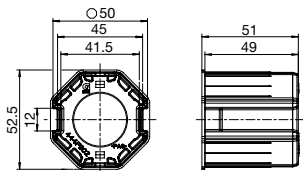
- High-strength plastic
- For the adaptation of the gear output to the shutter shaft
- Suitable for gears 444F..., 446F... and 456F... with output profile 36,7 or 38 mm

## Note

- Please note that the torque is modified when using the shaft adapter



Part Nr.	Drive $\triangle$	Output $\nabla$
444F901	● 38 mm	● 60 mm



Part Nr.	Drive $\triangle$	Output $\nabla$
444F902	● 38 mm	● 50 mm



The name GEIGER Antriebstechnik is synonymous world-wide for drive solutions in the sun protection area.

Today we are with about 250 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.