



# TEXTILE SUN PROTECTION

MECHANICAL  
DRIVE SOLUTIONS

**GEIGER**  
ANTRIEBSTECHNIK

## Awning crank system with spherical hook and plastic eyelet

Application: **all gears with eyelet**

The patented hand-crank system with spherical hook and plastic eyelet allows a smooth and quiet running. The crank handle can be attached and removed easily. No abrasion is generated with the plastic eyelet which was sprayed in a multi-component process and the nickel-plated spherical hook. The traditional oval eyelet in older gears can easily be replaced by a spherical hook system.



## High-quality GEIGER bevel gear 412F5.. with 4,4:1 reduction ratio

**with pluggable drive shaft, externally adjustable end stop, free wheel and spindle**

### Advantages:

- Externally adjustable end stop (setting at the desired point)
- Gear with free wheel, so no risk of incorrect operation
- Various pluggable drive shafts
- Suitable for 78 mm (75.5 mm) or 85 mm (82.5 mm) roller tubes
- Low storage requirement with interchangeable extensions and eyelets

### Installation:

Please fully extend the awning before carrying out the installation. The operating side is easy to identify, as the fixation screw (hex 4 mm) must be visible to the user.

### End stop:

The end stop can be corrected as follows: with fully extended awning loosen the fixation screw (one full turn) and crank the awning to the desired end point - tighten the screw again, ready.



## In modern design and with one-piece bearing - the awning gear 418F5..

The robust gearing made of zinc / aluminium and the storage of all moving parts in plastic slide bushings ensure a long service life. The bearing on the drive (input shaft) is completely integrated into one half of the casing. Thus, the screw is mounted precisely and the gear is protected against the gearing power.

The 9:1 reduction ratio allows a wide range of applications for folding-arm awnings, drop-arm awnings and window awnings.

Three mounting holes on the pitch circle Ø 48 mm ensure excellent hold. The gear is available in 3 colours with a drive shaft in 3 different lengths.



### Colour specifications and printing

The colours shown in the catalogue are indicative only. They can slightly differ from the RAL specifications depending on the surface structure or the base materials being used. The colour fields in the charts may vary from the actual colours due to printing technical reasons.

### Drawings dimensions

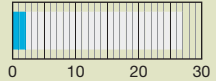
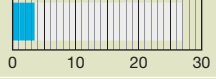
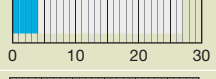
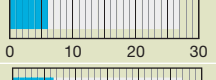
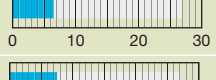
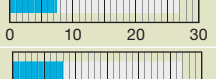
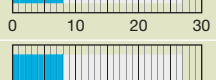
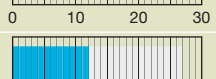
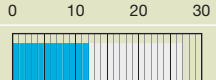
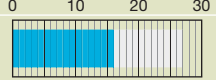
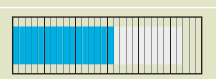
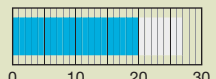
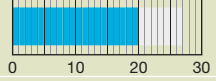
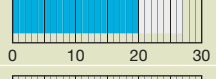
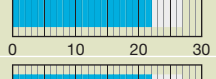
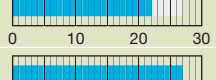
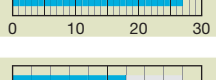
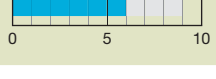
The technical drawings shown in this catalogue are related to one specific product of a series. The drawing dimensions may vary from one item to the other.

We will be happy to provide you with the exact dimensions and drawings for the article you selected.

**Subject to technical modifications and errors**



## Gears - Overview

|                                                                                     |                            |        | Reduction ratio       | Efficiency | Max. output torque |                                                                                       |
|-------------------------------------------------------------------------------------|----------------------------|--------|-----------------------|------------|--------------------|---------------------------------------------------------------------------------------|
|    | 426F6..   Worm gear 2,8:1  | P. 284 | 2,8:1                 | 0,38       | 2,0 Nm             |    |
|    | 414F2..   Worm gear 3:1    | P. 275 | 3:1                   | 0,42       | 3,5 Nm             |    |
|    | 426F7..   Worm gear 3,5:1  | P. 285 | 3,5:1                 | 0,40       | 4,0 Nm             |    |
|    | 462F...   Bevel gear 2,7:1 | P. 285 | 2,7:1                 | 0,69       | 6,0 Nm             |    |
|    | 414F...   Worm gear 4:1    | P. 274 | 4:1                   | 0,40       | 6,5 Nm             |    |
|    | 421F5..   Worm gear 5,33:1 | P. 280 | 5,33:1                | 0,40       | 7,5 Nm             |    |
|    | 409F5..   Bevel gear 2,7:1 | P. 265 | 2,7:1                 | 0,66       | 8,0 Nm             |    |
|   | 414F...   Worm gear 6:1    | P. 275 | 6:1                   | 0,34       | 8,0 Nm             |   |
|  | 409F...   Bevel gear 3:1   | P. 264 | 3:1                   | 0,66       | 12,0 Nm            |  |
|  | 410F...   Bevel gear 3:1   | P. 266 | 3:1                   | 0,68       | 12,0 Nm            |  |
|  | 412F5..   Bevel gear 4,4:1 | P. 270 | 4,4:1                 | 0,66       | 16,0 Nm            |  |
|  | 418F5..   Worm gear 9:1    | P. 279 | 9:1                   | 0,34       | 16,0 Nm            |  |
|  | 416F...   Worm gear 7:1    | P. 276 | 7:1                   | 0,44       | 20,0 Nm            |  |
|  | 418F...   Worm gear 7:1    | P. 278 | 7:1                   | 0,42       | 20,0 Nm            |  |
|  | 421F8..   Worm gear 8:1    | P. 282 | 8:1                   | 0,39       | 20,0 Nm            |  |
|  | 411F1..   Bevel gear 7,8:1 | P. 267 | 7,8:1                 | 0,50       | 22,0 Nm            |  |
|  | 411F5..   Bevel gear 7,8:1 | P. 268 | 7,8:1                 | 0,50       | 22,0 Nm            |  |
|  | 417F...   Worm gear 13:1   | P. 276 | 13:1                  | 0,43       | 27,0 Nm            |  |
|  | 430F5..   Angle gear       | P. 288 | 1:1<br>1,5:1<br>1:1,5 | 0,83       | 6,00 Nm            |  |

Venetian blinds

Rolling shutters

Textile sun protection

System components

## 409F... | Bevel gear 3:1

Application: **Folding-arm awnings, pivot-arm awnings and window awnings**

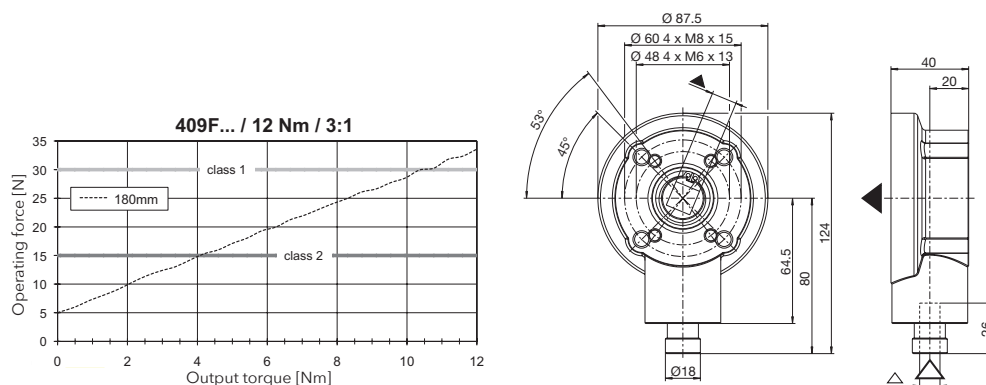
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>12 Nm</b> |
| Reduction ratio    | <b>3:1</b>   |
| Efficiency         | <b>0,66</b>  |

### Characteristics

- Universally applicable due to different caps
- With end stop after max. 14 rotations (available also without end stop)
- Bores for screws M6 (pitch circle 48 mm) and M8 (pitch circle 60 mm)

### Note

- Colours and drive shafts on request
- This GEIGER awning gear is available with oval zinc eyelets, oval or round plastic eyelets in different RAL colours



| Part Nr. | Colour                                            | End stop      | Drive $\Delta$ | Output $\blacktriangle$ |
|----------|---------------------------------------------------|---------------|----------------|-------------------------|
| 409F002  | <input checked="" type="checkbox"/> Bright finish | With end stop | 8 mm           | 13 mm                   |
| 409F004  | <input checked="" type="checkbox"/> Bright finish | With end stop | Zinc           | 13 mm                   |
| 409F050  | <input checked="" type="checkbox"/> Bright finish | With end stop | RAL 7035       | 13 mm                   |

## 409F5.. | Bevel gear 2,7:1

Application: **Pivot-arm awnings, marquisolettes, small folding-arm awnings**

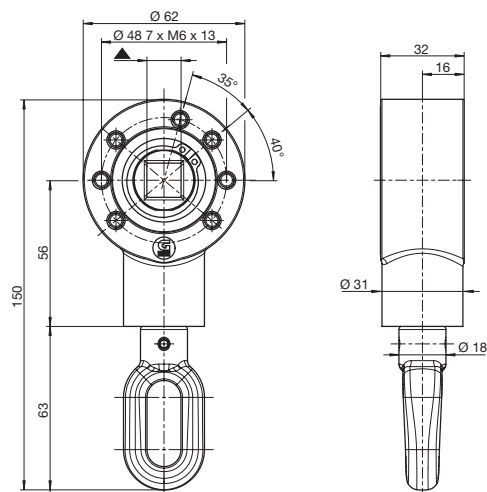
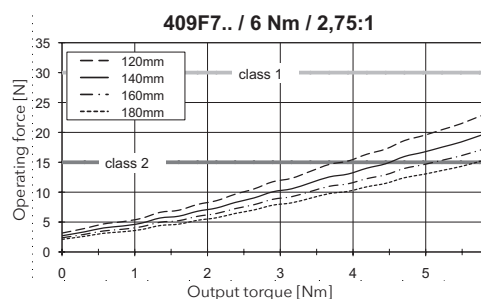
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>8 Nm</b>  |
| Reduction ratio    | <b>2,7:1</b> |
| Efficiency         | <b>0,66</b>  |

### Characteristics

- Pivot-arm awnings, marquisolettes, small folding-arm awnings
- Without end stop
- Bores for screws M6 (pitch circle 48 mm)

### Note

- Colours and drive shafts on request
- This GEIGER awning gear is available with oval zinc eyelets, oval or round plastic eyelets in different RAL colours



| Part Nr. | Colour          | Drive △    | Output ▲ |
|----------|-----------------|------------|----------|
| 409F501  | ☒ Bright finish | ⌚ Zinc     | ⊙ 13 mm  |
| 409F503  | ☒ Bright finish | ⌚ RAL 7035 | ⊙ 13 mm  |
| 409F519  | ☒ Bright finish | ⌚ RAL 7035 | ⊙ 13 mm  |
| 409F504  | ■ RAL 7035      | ⌚ Zinc     | ⊙ 13 mm  |
| 409F505  | ■ RAL 7035      | ⌚ RAL 7035 | ⊙ 13 mm  |
| 409F507  | ■ RAL 9010      | ⌚ RAL 9016 | ⊙ 13 mm  |

## 410F... | Bevel gear 3:1

Application: **Folding-arm awnings**

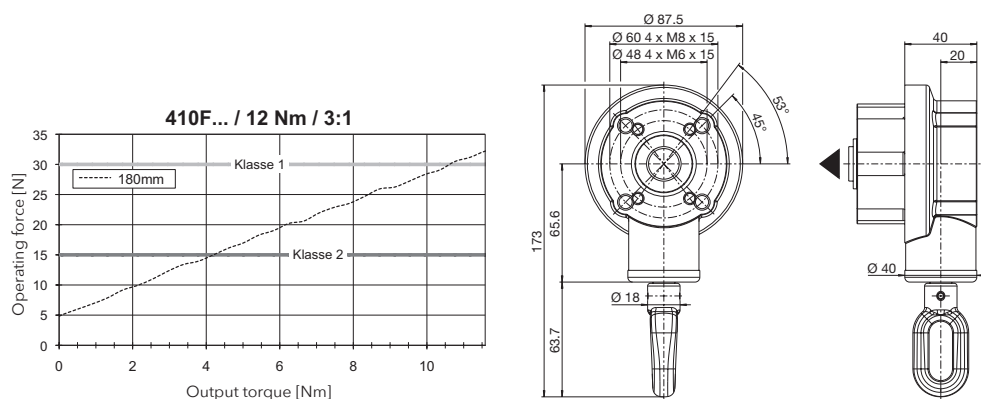
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>12 Nm</b> |
| Reduction ratio    | <b>3:1</b>   |
| Efficiency         | <b>0,68</b>  |

### Characteristics

- Easy operation with small reduction ratio
- Can be inserted directly in the roller tube
- With end stop after max. 14 rotations (available also without end stop)
- Bores for screws M6 (pitch circle 48 mm) and M8 (pitch circle 60 mm)

### Note

- Colours and drive shafts on request
- This GEIGER awning gear is available with oval zinc eyelets, oval or round plastic eyelets in different RAL colours



| Part Nr. | Colour                                            | End stop      | Drive $\Delta$                               | Output $\blacktriangle$ |
|----------|---------------------------------------------------|---------------|----------------------------------------------|-------------------------|
| 410F308  | <input checked="" type="checkbox"/> Bright finish | With end stop | <input checked="" type="checkbox"/> RAL 7035 | Ø 75,5 mm               |
| 410F311  | <input type="checkbox"/> RAL 7035                 | With end stop | <input checked="" type="checkbox"/> RAL 7035 | Ø 75,5 mm               |
| 410F310  | <input type="checkbox"/> RAL 9010                 | With end stop | <input checked="" type="checkbox"/> RAL 9016 | Ø 75,5 mm               |
| 410F361  | <input type="checkbox"/> RAL 9010                 | With end stop | <input checked="" type="checkbox"/> RAL 9016 | Ø 66,5 mm               |

## 411F1.. | Bevel gear 7,8:1

Application: **Large folding-arm awnings**

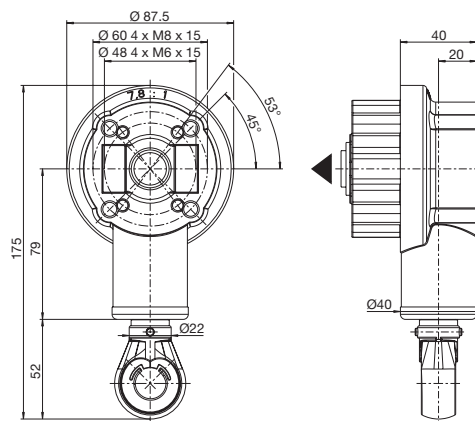
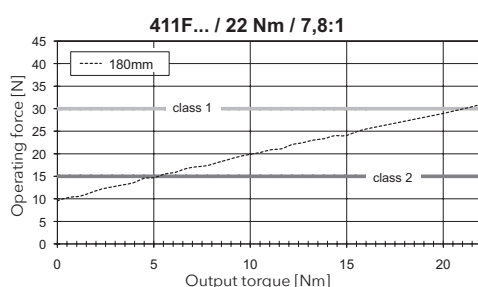
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>22 Nm</b> |
| Reduction ratio    | <b>7,8:1</b> |
| Efficiency         | <b>0,50</b>  |

### Characteristics

- The strongest bevel gear for awnings made by GEIGER
- Can be inserted directly in the roller tube
- With end stop after max. 14 rotations (available also without end stop)
- Bores for screws M6 (pitch circle 48 mm) and M8 (pitch circle 60 mm)

### Note

- Colours and drive shafts on request
- This GEIGER awning gear is available with oval zinc eyelets, oval or round plastic eyelets in different RAL colours



| Part Nr. | Colour                                            | End stop         | Drive $\Delta$ | Output $\blacktriangle$ |
|----------|---------------------------------------------------|------------------|----------------|-------------------------|
| 411F001  | <input checked="" type="checkbox"/> Bright finish | With end stop    | Zinc           | Ø 66,5 mm               |
| 411F002  | <input checked="" type="checkbox"/> Bright finish | With end stop    | Zinc           | Ø 75,5 mm               |
| 411F006  | <input type="checkbox"/> RAL 7035                 | With end stop    | Zinc           | Ø 75,5 mm               |
| 411F007  | <input checked="" type="checkbox"/> Bright finish | Without end stop | Zinc           | Ø 75,5 mm               |
| 411F200  | <input type="checkbox"/> RAL 9010                 | With end stop    | RAL 9010       | Ø 75,5 mm               |
| 411F202  | <input checked="" type="checkbox"/> Bright finish | With end stop    | RAL 7035       | Ø 75,5 mm               |
| 411F211  | <input type="checkbox"/> RAL 7035                 | With end stop    | RAL 7035       | Ø 75,5 mm               |

## 411F5.. | Bevel gear 7,8:1

Application: **Large folding-arm awnings**

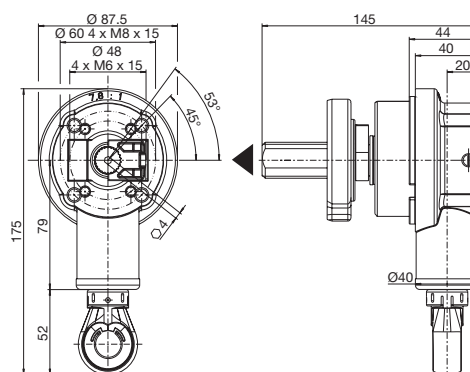
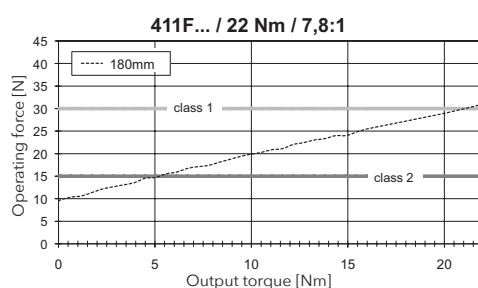
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>22 Nm</b> |
| Reduction ratio    | <b>7,8:1</b> |
| Efficiency         | <b>0,50</b>  |

### Characteristics

- Bevel gear with integrated free-wheel
- Can be inserted directly in the roller tube
- Variably adjustable end stop that can be set from the outside from 0 up to 20 rotations
- Exact positioning of the end stop down to 10 mm / 15°
- Available as right and left side version
- Bores for screws M6 (pitch circle 48 mm) and M8 (pitch circle 60 mm)

### Note

- Colours and drive shafts on request
- This GEIGER awning gear is available with oval zinc eyelets, oval or round plastic eyelets in different RAL colours



| Part Nr. | Colour                            | End stop        | Drive $\Delta$                                                        | Output $\blacktriangle$ |
|----------|-----------------------------------|-----------------|-----------------------------------------------------------------------|-------------------------|
| 411F560  | <input type="checkbox"/> RAL 9010 | Free-wheel left | <input checked="" type="checkbox"/> <input type="checkbox"/> RAL 9016 | Ø 75,5 mm               |



## 412F5..M | ISG | Bevel gear 4,4:1

Application: **Large cassette awnings**

|                    |              |
|--------------------|--------------|
| Max. output torque | <b>16 Nm</b> |
| Reduction ratio    | <b>4,4:1</b> |
| Efficiency         | <b>0,66</b>  |

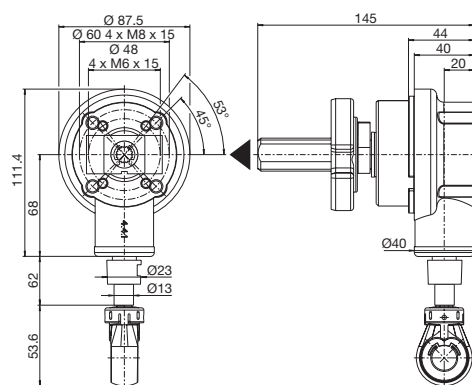
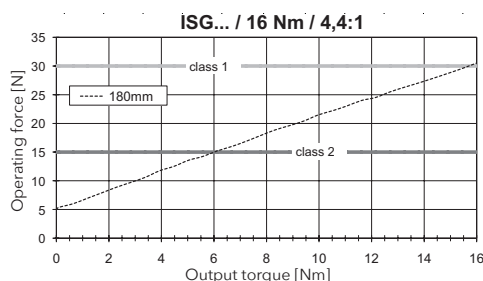


### Characteristics

- Bevel gear with integrated free-wheel
- Can be inserted directly in the roller tube
- End stop variably adjustable from 0 - 20 rotations by the drive shaft
- Exact positioning of the end stop down to 12 mm / 18°
- Available as right and left side version
- Special version up to 50 Nm on request
- Bores for screws M6 (pitch circle 48 mm) and M8 (pitch circle 60 mm)

### Note

- Colours and drive shafts on request
- This GEIGER awning gear is available with oval zinc eyelets, oval or round plastic eyelets in different RAL colours



### Options for awning gear ISG

|                    |                                                                  |
|--------------------|------------------------------------------------------------------|
| Drive              | Round and oval plastic eyelet                                    |
| Output             | 78 mm and 85 mm groove tube                                      |
| Extensions         | On request                                                       |
| Design             | Left and right gear version                                      |
| Housing            | Coated in RAL colours 9010, 7035, 9005 (more colours on request) |
| End position range | 20 rotations (of the awning shaft)                               |
| Precision          | Exact to 12 mm / 18°                                             |

### ISG

| Part Nr. | Colour     | End stop                     | Output ▲  |
|----------|------------|------------------------------|-----------|
| 412F506M | □ RAL 9016 | Free-wheel left, adjustable  | Ø 75,5 mm |
| 412F507M | □ RAL 9016 | Free-wheel right, adjustable | Ø 75,5 mm |
| 412F503M | ■ RAL 9005 | Free-wheel right, adjustable | Ø 82,5 mm |
| 412F502M | ■ RAL 9005 | Free-wheel left, adjustable  | Ø 82,5 mm |
| 412F510M | □ RAL 7035 | Free-wheel right, adjustable | Ø 75,5 mm |
| 412F511M | □ RAL 7035 | Free-wheel left, adjustable  | Ø 75,5 mm |

### ISG with Easy Clip

| Part Nr. | Colour     | End stop                     | Output ▲  |
|----------|------------|------------------------------|-----------|
| 412F508M | □ RAL 9016 | Free-wheel left, adjustable  | Ø 75,5 mm |
| 412F509M | □ RAL 9016 | Free-wheel right, adjustable | Ø 75,5 mm |
| 412F505M | ■ RAL 9005 | Free-wheel right, adjustable | Ø 82,5 mm |
| 412F504M | ■ RAL 9005 | Free-wheel left, adjustable  | Ø 82,5 mm |
| 412F512M | □ RAL 7035 | Free-wheel right, adjustable | Ø 75,5 mm |
| 412F503M | □ RAL 7035 | Free-wheel left, adjustable  | Ø 75,5 mm |

## 412F5.. | Bevel gear 4,4:1

Application: **Large folding-arm awnings**

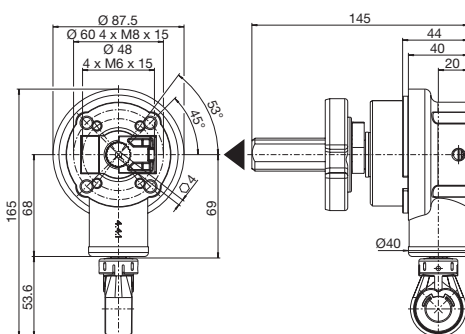
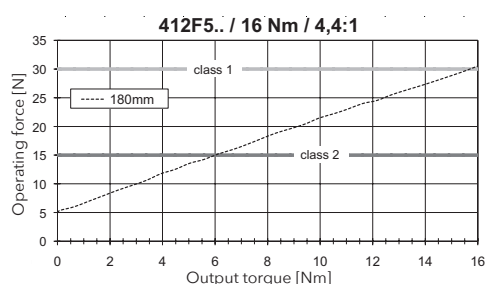
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>16 Nm</b> |
| Reduction ratio    | <b>4,4:1</b> |
| Efficiency         | <b>0,66</b>  |

### Characteristics

- Bevel gear with integrated free-wheel
- Can be inserted directly in the roller tube
- Variably adjustable end stop that can be set from the outside from 0 up to 20 rotations
- Exact positioning of the end stop down to 10 mm / 15°
- Available as right and left side version
- Special version up to 50 Nm on request
- Bore for screws M6 (pitch circle 48 mm) and M8 (pitch circle 60 mm)

### Note

- Colours and drive shafts on request
- This GEIGER awning gear is available with oval zinc eyelets, oval or round plastic eyelets in different RAL colours



| Part Nr. | Colour                                       | End stop                     | Drive $\Delta$                                                        | Output $\blacktriangle$ |
|----------|----------------------------------------------|------------------------------|-----------------------------------------------------------------------|-------------------------|
| 412F552  | <input type="checkbox"/> RAL 9010            | Free-wheel left, adjustable  | <input checked="" type="checkbox"/> <input type="checkbox"/> RAL 9016 | Ø 75,5 mm               |
| 412F553  | <input type="checkbox"/> RAL 9010            | Free-wheel right, adjustable | <input checked="" type="checkbox"/> <input type="checkbox"/> RAL 9016 | Ø 75,5 mm               |
| 412F554  | <input checked="" type="checkbox"/> RAL 7035 | Free-wheel left, adjustable  | <input checked="" type="checkbox"/> <input type="checkbox"/> RAL 7035 | Ø 75,5 mm               |
| 412F555  | <input type="checkbox"/> RAL 7035            | Free-wheel right, adjustable | <input checked="" type="checkbox"/> <input type="checkbox"/> RAL 7035 | Ø 75,5 mm               |
| 412F556  | <input checked="" type="checkbox"/> RAL 9005 | Free-wheel left, adjustable  | <input checked="" type="checkbox"/> <input type="checkbox"/> RAL 9005 | Ø 75,5 mm               |
| 412F557  | <input type="checkbox"/> RAL 9005            | Free-wheel right, adjustable | <input checked="" type="checkbox"/> <input type="checkbox"/> RAL 9005 | Ø 75,5 mm               |
| 412F608  | <input type="checkbox"/> RAL 9010            | Free-wheel left, adjustable  | <input type="checkbox"/> Zinc                                         | Ø 75,5 mm               |
| 412F609  | <input type="checkbox"/> RAL 9010            | Free-wheel right, adjustable | <input type="checkbox"/> Zinc                                         | Ø 75,5 mm               |
| 412F663  | <input type="checkbox"/> RAL 9016            | Free-wheel left, adjustable  | <input checked="" type="checkbox"/> <input type="checkbox"/> RAL 9016 | Ø 75,5 mm               |
| 412F664  | <input type="checkbox"/> RAL 9016            | Free-wheel right, adjustable | <input checked="" type="checkbox"/> <input type="checkbox"/> RAL 9016 | Ø 75,5 mm               |

## 412F5.. | Modular bevel gear 4,4:1

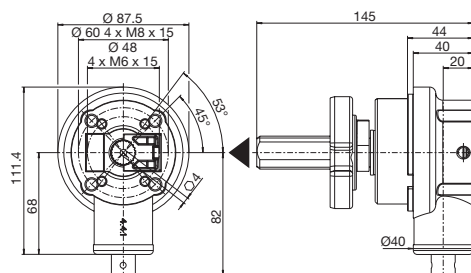
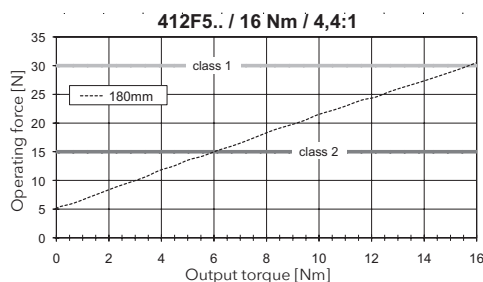
Application: **Large folding-arm awnings**

|                    |              |
|--------------------|--------------|
| Max. output torque | <b>16 Nm</b> |
| Reduction ratio    | <b>4,4:1</b> |
| Efficiency         | <b>0,66</b>  |

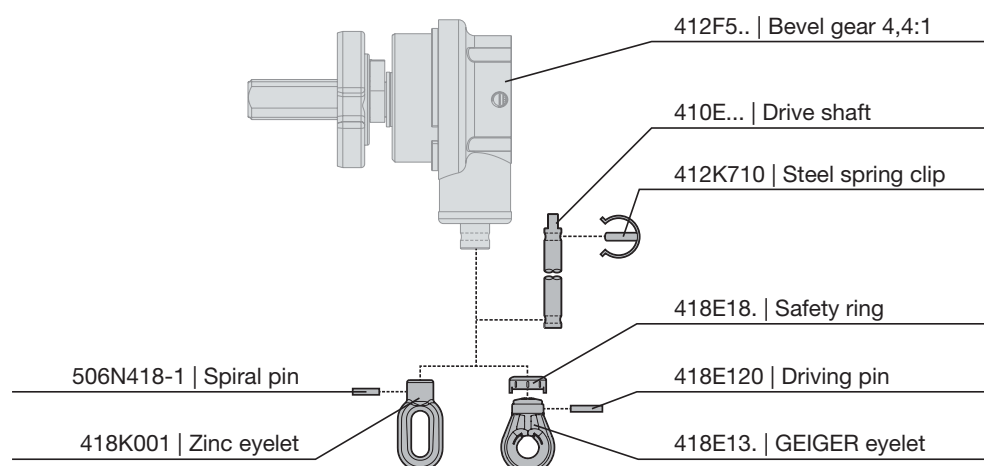


### Characteristics

- Bevel gear with integrated free-wheel
- Can be inserted directly in the roller tube
- Variably adjustable end stop that can be set from the outside from 0 up to 20 rotations
- Exact positioning of the end stop down to 10 mm / 15°
- Available as right and left side version
- Bores for screws M6 (pitch circle 48 mm) and M8 (pitch circle 60 mm)
- Without drive shaft and eyelet



| Part Nr. | Colour     | End stop                     | Output ▲  |
|----------|------------|------------------------------|-----------|
| 412F532  | □ RAL 9016 | Free-wheel right, adjustable | Ø 75,5 mm |
| 412F535  | □ RAL 9016 | Free-wheel left, adjustable  | Ø 75,5 mm |
| 412F543  | □ RAL 9010 | Free-wheel left, adjustable  | Ø 75,5 mm |
| 412F544  | □ RAL 9010 | Free-wheel right, adjustable | Ø 75,5 mm |
| 412F547  | □ RAL 9016 | Free-wheel left, adjustable  | Ø 75,5 mm |
| 412F548  | □ RAL 9016 | Free-wheel right, adjustable | Ø 75,5 mm |
| 412F566  | □ RAL 9010 | Free-wheel right, adjustable | Ø 82,5 mm |
| 412F567  | □ RAL 9010 | Free-wheel left, adjustable  | Ø 82,5 mm |
| 412F569  | ■ RAL 9005 | Free-wheel right, adjustable | Ø 82,5 mm |
| 412F570  | ■ RAL 9005 | Free-wheel left, adjustable  | Ø 82,5 mm |
| 412F604  | ■ RAL 9005 | Free-wheel left, adjustable  | Ø 75,5 mm |
| 412F605  | ■ RAL 9005 | Free-wheel right, adjustable | Ø 75,5 mm |
| 412F657  | □ RAL 7035 | Free-wheel right, adjustable | Ø 75,5 mm |
| 412F658  | □ RAL 7035 | Free-wheel left, adjustable  | Ø 75,5 mm |



## 412K710 | Steel spring clip

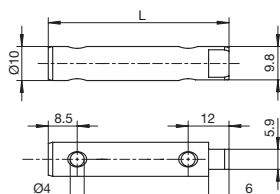


### Characteristics

- Safety clip with stainless steel pin, pin diameter 4 mm
- To fix the drive shaft on the gear

| Part Nr. | Outside-Ø | Length | Surface                              |
|----------|-----------|--------|--------------------------------------|
| 412K710  | 20 mm     | 16 mm  | <input type="checkbox"/> Zinc-plated |

## 410E... | Drive shaft for bevel gear 4,4:1



### Characteristics

- Made of steel with zinc-plated surface
- With two cross holes Ø 4 mm

| Part Nr. | Material | Length [L] | Surface                              |
|----------|----------|------------|--------------------------------------|
| 410E048  | Steel    | 107,0 mm   | <input type="checkbox"/> Zinc-plated |
| 410E022  | Steel    | 127,0 mm   | <input type="checkbox"/> Zinc-plated |
| 410E028  | Steel    | 167,0 mm   | <input type="checkbox"/> Zinc-plated |
| 410E030  | Steel    | 37,5 mm    | <input type="checkbox"/> Zinc-plated |
| 410E126  | Steel    | 48,5 mm    | <input type="checkbox"/> Zinc-plated |
| 410E080  | Steel    | 55,5 mm    | <input type="checkbox"/> Zinc-plated |
| 410E040  | Steel    | 60,5 mm    | <input type="checkbox"/> Zinc-plated |
| 410E128  | Steel    | 78,0 mm    | <input type="checkbox"/> Zinc-plated |
| 410E016  | Steel    | 85,5 mm    | <input type="checkbox"/> Zinc-plated |
| 410E104  | Steel    | 97,0 mm    | <input type="checkbox"/> Zinc-plated |

## 418E13. | GEIGER eyelets



### Characteristics

- High-strength plastic

| Part Nr. | Colour                                       | Material | Interior profile | Cross hole |
|----------|----------------------------------------------|----------|------------------|------------|
| 418E130  | <input type="checkbox"/> RAL 9016            | Plastic  | ○ 10 mm          | 4,1 mm     |
| 418E131  | <input checked="" type="checkbox"/> RAL 9005 | Plastic  | ○ 10 mm          | 4,1 mm     |
| 418E132  | <input type="checkbox"/> RAL 7035            | Plastic  | ○ 10 mm          | 4,1 mm     |

## 418E120 | Driving pin for plastic eyelets



### Characteristics

- To secure the plastic eyelet into the drive shaft (only applicable with safety ring 418F18.)

| Part Nr. | Material        | Outside-Ø | Length | Surface                                           |
|----------|-----------------|-----------|--------|---------------------------------------------------|
| 418E120  | Stainless steel | 4 mm      | 22 mm  | <input checked="" type="checkbox"/> Bright finish |

## 418E18. | Safety ring for plastic eyelets



### Characteristics

- To secure the plastic eyelet through easy rotation (together with locking pin 418E120)

| Part Nr. | Colour                                       |
|----------|----------------------------------------------|
| 418E180  | <input type="checkbox"/> RAL 9016            |
| 418E181  | <input checked="" type="checkbox"/> RAL 9005 |
| 418E182  | <input type="checkbox"/> RAL 7035            |

## 506N418-1 | Spiral pin



### Characteristics

- To secure the tube connection

| Part Nr.  | Material | Outside-Ø | Length | Surface                                         |
|-----------|----------|-----------|--------|-------------------------------------------------|
| 506N418-1 | Steel    | 4 mm      | 18 mm  | <input checked="" type="checkbox"/> Zinc-plated |

## 418K001 | Zinc eyelet



### Characteristics

- Diecast zinc

| Part Nr. | Colour                                            | Material                                 | Interior profile | Cross hole |
|----------|---------------------------------------------------|------------------------------------------|------------------|------------|
| 418K001  | <input checked="" type="checkbox"/> Bright finish | <input checked="" type="checkbox"/> Zinc | 10 mm            | 4 mm       |



## 414F... | Worm gear 4:1

Application: **Pivot-arm awnings, marquisolettes, small folding-arm awnings**

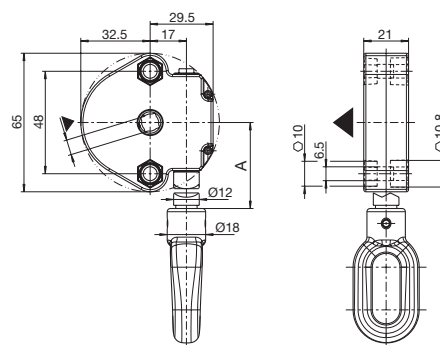
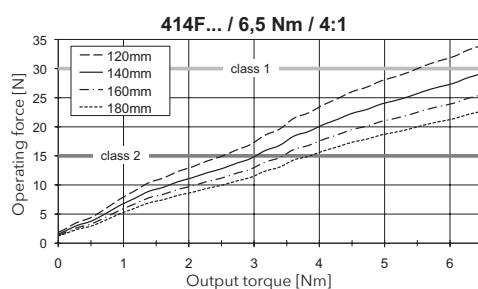
|                    |               |
|--------------------|---------------|
| Max. output torque | <b>6,5 Nm</b> |
| Reduction ratio    | <b>4:1</b>    |
| Efficiency         | <b>0,40</b>   |

### Characteristics

- The small power package: high performance with minimal gear dimensions
- With end stop after max. 19 rotations (available also without end stop)
- Continuous interior profile at drive and output

### Note

- Colours and drive shafts on request
- This GEIGER awning gear is available with oval zinc eyelets, oval or round plastic eyelets in different RAL colours



| Part Nr. | End stop         | Drive $\Delta$ | Output $\blacktriangle$ | Middle of the gear [A] |
|----------|------------------|----------------|-------------------------|------------------------|
| 414F001  | Without end stop | ○ 6 mm         | ○ 6 mm                  | -                      |
| 414F002  | With end stop    | ○ 6 mm         | ○ 6 mm                  | -                      |
| 414F008  | With end stop    | ○ 6 mm         | ○ 7 mm                  | -                      |
| 414F049  | With end stop    | ⓪ Zinc         | ○ 7 mm                  | 55,5 mm                |
| 414F052  | With end stop    | ⓪ RAL 7035     | ○ 7 mm                  | 55,5 mm                |
| 414F129  | With end stop    | ⓪ RAL 7035     | ○ 7 mm                  | 29,7 mm                |
| 414F254  | With end stop    | ⓪ 9,9 mm       | ○ 7 mm                  | 64,3 mm                |
| 414F260  | Without end stop | ⓪ 9,9 mm       | ○ 7 mm                  | 64,3 mm                |

## 414F... | Worm gear 6:1

Application: **Pivot-arm awnings, marquisolettes, small folding-arm awnings**

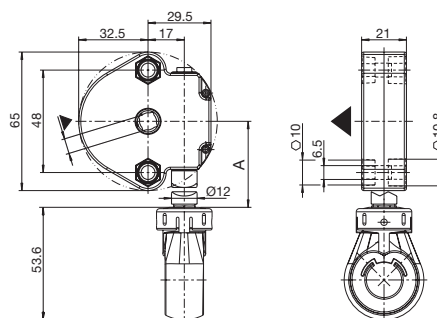
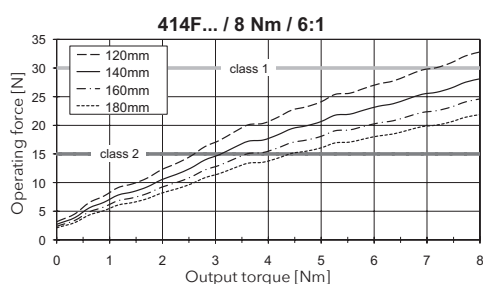
|                    |               |
|--------------------|---------------|
| Max. output torque | <b>8,0 Nm</b> |
| Reduction ratio    | <b>6:1</b>    |
| Efficiency         | <b>0,34</b>   |

### Characteristics

- The small power package: high performance with minimal gear dimensions
- With end stop after max. 19 rotations (available also without end stop)
- Continuous interior profile at drive and output

### Note

- Colours and drive shafts on request
- This GEIGER awning gear is available with oval zinc eyelets, oval or round plastic eyelets in different RAL colours
- Extensions on request



| Part Nr. | End stop         | Drive $\Delta$ | Output $\Delta$ | Middle of the gear [A] |
|----------|------------------|----------------|-----------------|------------------------|
| 414F204  | Without end stop | ○ 6 mm         | ○ 8 mm          | -                      |
| 414F205  | With end stop    | ○ 6 mm         | ○ 8 mm          | -                      |
| 414F608  | Without end stop | ⚙ 9,9 mm       | ○ 7 mm          | 28,7 mm                |
| 414F648  | With end stop    | ⚙ RAL 7035     | ○ 7 mm          | 55,5 mm                |

## 414F2.. | Worm gear 3:1

Application: **Screens, Volants**

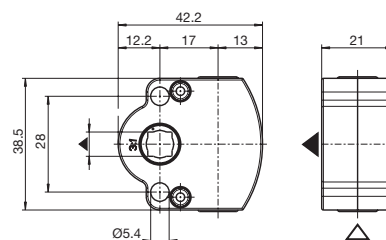
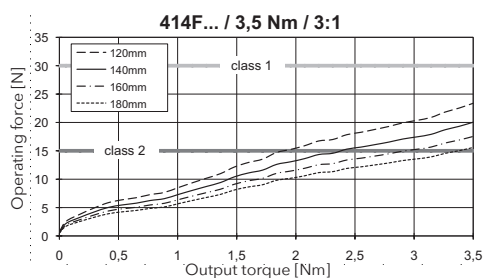
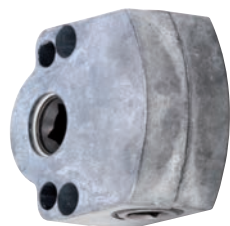
|                    |               |
|--------------------|---------------|
| Max. output torque | <b>3,5 Nm</b> |
| Reduction ratio    | <b>3:1</b>    |
| Efficiency         | <b>0,42</b>   |

### Characteristics

- Small installation dimensions
- Without end stop

### Note

- Free-wheel and prolonged shafts on request
- This GEIGER awning gear is available with oval zinc eyelets, oval or round plastic eyelets in different RAL colours



| Part Nr. | Drive $\Delta$ | Output $\Delta$ | Fixation      |
|----------|----------------|-----------------|---------------|
| 414F220  | ○ 6 mm         | ○ 7 mm          | Ø 5,4 mm TK28 |
| 414F225  | ⚙ RAL 7035     | ○ 7 mm          | M6 TK28       |
| 414F226  | ⚙ RAL 9016     | ○ 7 mm          | M6 TK28       |
| 414F229  | ⚙ RAL 9005     | ○ 7 mm          | M6 TK28       |

TK = reference circle

## 416F... | Worm gear 7:1

Application: **Folding-arm awnings, pivot-arm awnings and window awnings**

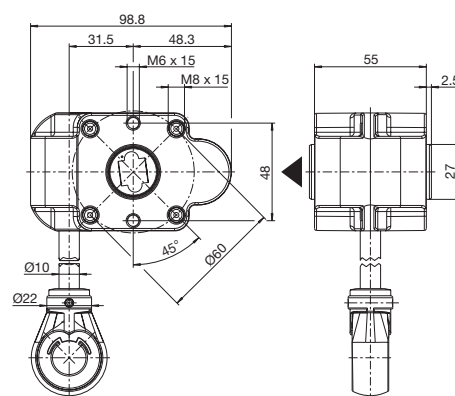
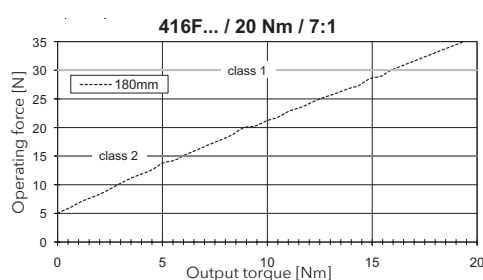
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>20 Nm</b> |
| Reduction ratio    | <b>7:1</b>   |
| Efficiency         | <b>0,44</b>  |

### Characteristics

- Available with/without casing collar
- With end stop after max. 15 rotations (auch ohne Endanschlag lieferbar)

### Note

- Colours and drive shafts on request
- This GEIGER awning gear is available with oval zinc eyelets, oval or round plastic eyelets in different RAL colours



| Part Nr. | Colour                                            | End stop         | Drive $\Delta$ | Output $\blacktriangle$ | Fixation             |
|----------|---------------------------------------------------|------------------|----------------|-------------------------|----------------------|
| 416F001  | <input checked="" type="checkbox"/> Bright finish | Without end stop | Zinc           | 13 mm                   | M6+M8 without collar |
| 416F301  | <input type="checkbox"/> RAL 7035                 | With end stop    | RAL 7035       | 13 mm                   | M6+M8 with collar    |
| 416F305  | <input type="checkbox"/> RAL 9010                 | With end stop    | RAL 9016       | 13 mm                   | M6+M8 with collar    |
| 416F308  | <input type="checkbox"/> RAL 9006                 | With end stop    | RAL 7035       | 13 mm                   | M6+M8 with collar    |

## 417F... | Worm gear 13:1

Application: **Folding-arm awnings and pivot-arm awnings**

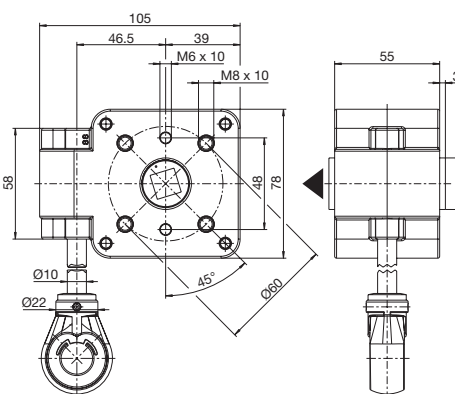
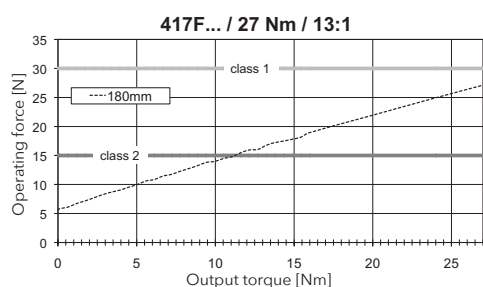
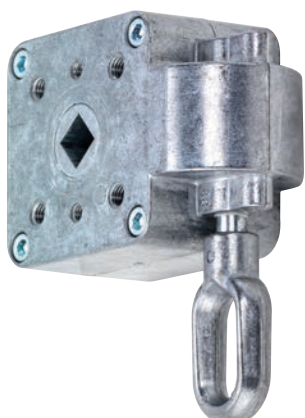
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>27 Nm</b> |
| Reduction ratio    | <b>13:1</b>  |
| Efficiency         | <b>0,43</b>  |

### Characteristics

- Available with/without casing collar
- Without end stop

### Note

- Colours and drive shafts on request
- This GEIGER awning gear is available with oval zinc eyelets, oval or round plastic eyelets in different RAL colours



| Part Nr. | Colour                            | Drive $\Delta$ | Output $\blacktriangle$ | Fixation          |
|----------|-----------------------------------|----------------|-------------------------|-------------------|
| 417F300  | <input type="checkbox"/> RAL 9010 | RAL 9016       | 13 mm                   | M6+M8 with collar |
| 417F327  | <input type="checkbox"/> RAL 7035 | RAL 7035       | 13 mm                   | M6+M8 with collar |

# 417F5.. | Worm gear 13:1

Application: **Folding-arm awnings, pivot-arm awnings and window awnings**

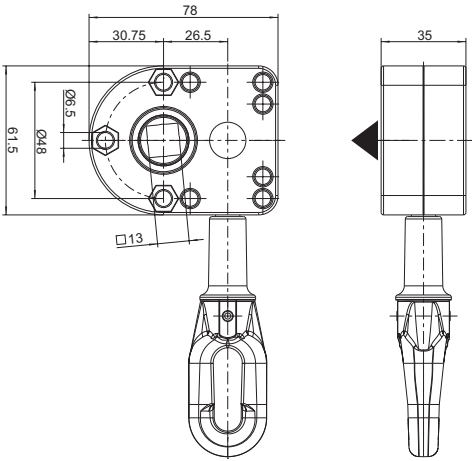
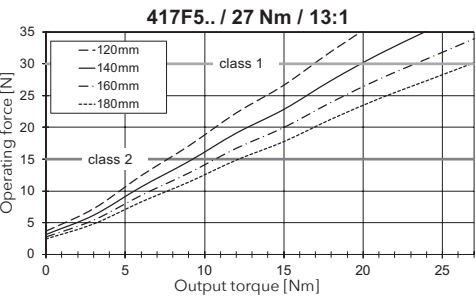
|                    |       |
|--------------------|-------|
| Max. output torque | 27 Nm |
| Reduction ratio    | 13:1  |
| Efficiency         | 0,38  |

### Characteristics

- Without casing collar
- Without end stop

### Note

- More colours and items on request



| Part Nr. | Colour                            | Drive $\Delta$                                                        | Output $\blacktriangle$                   | Fixation       |
|----------|-----------------------------------|-----------------------------------------------------------------------|-------------------------------------------|----------------|
| 417F501  | <input type="checkbox"/> RAL 9010 | <input checked="" type="checkbox"/> <input type="checkbox"/> RAL 9016 | <input checked="" type="checkbox"/> 13 mm | Without collar |

Venetian blinds

Rolling shutters

Textile sun protection

System components

## 418F... | Worm gear 7:1

Application: **Folding-arm awnings, pivot-arm awnings and window awnings**

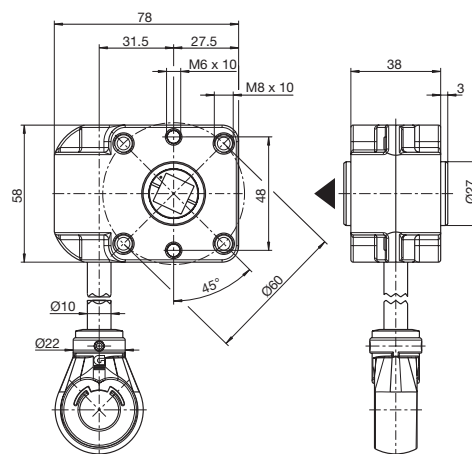
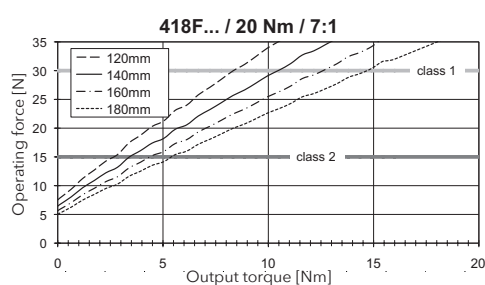
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>20 Nm</b> |
| Reduction ratio    | <b>7:1</b>   |
| Efficiency         | <b>0,42</b>  |

### Characteristics

- Der starke Markisen-Klassiker
- Available with/without casing collar
- Without end stop

### Note

- Colours and drive shafts on request
- Also available with oval eyelet. Further items on request.



| Part Nr. | Colour        | Drive $\Delta$ | Output $\blacktriangle$ | Fixation          |
|----------|---------------|----------------|-------------------------|-------------------|
| 418F300  | RAL 7035      | RAL 7035       | 13 mm                   | M6+M8 with collar |
| 418F301  | RAL 9016      | RAL 9016       | 13 mm                   | M6+M8 with collar |
| 418F302  | RAL 9010      | RAL 9016       | 13 mm                   | M6+M8 with collar |
| 418F306  | Bright finish | RAL 7035       | 13 mm                   | M6+M8 with collar |
| 418F312  | RAL 8019      | RAL 9005       | 13 mm                   | M6+M8 with collar |
| 418F604  | RAL 9010      | RAL 9016       | 13 mm                   | M6+M8 with collar |
| 418F624  | RAL 7035      | RAL 7035       | 13 mm                   | M6+M8 with collar |

## 418F5.. | Worm gear 9:1

Application: **Folding-arm awnings, pivot-arm awnings and window awnings**

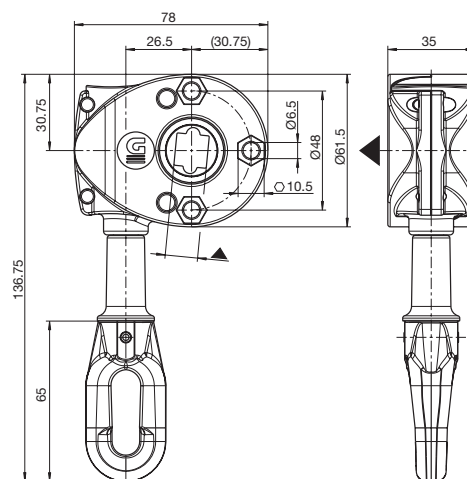
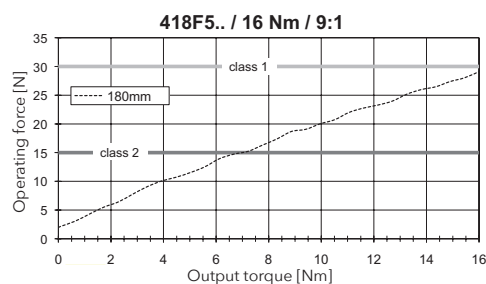
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>16 Nm</b> |
| Reduction ratio    | <b>9:1</b>   |
| Efficiency         | <b>0,34</b>  |

### Characteristics

- Available with/without casing collar
- Without end stop

### Note

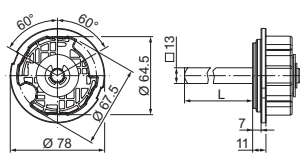
- Colours and drive shafts on request



| Part Nr. | Colour     | Drive $\Delta$ | Output $\blacktriangle$ | Middle of the gear [A] |
|----------|------------|----------------|-------------------------|------------------------|
| 418F500  | □ RAL 9010 | □ RAL 9016     | ○ 13 mm                 | 41,0 mm                |
| 418F501  | □ RAL 9010 | □ RAL 9016     | ○ 13 mm                 | 68,5 mm                |
| 418F502  | □ RAL 9010 | □ RAL 9016     | ○ 13 mm                 | 98,5 mm                |
| 418F510  | ■ RAL 7035 | ■ RAL 7035     | ○ 13 mm                 | 41,0 mm                |
| 418F511  | ■ RAL 7035 | ■ RAL 7035     | ○ 13 mm                 | 68,5 mm                |
| 418F512  | ■ RAL 7035 | ■ RAL 7035     | ○ 13 mm                 | 98,5 mm                |



## 418F3.. | Free wheel for round tube with groove profile 70 mm

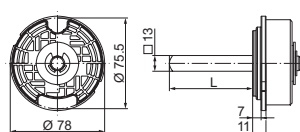


### Characteristics

- Free wheel for round tube with groove profile 70 mm
- For worm gear 418F...
- Prevents that the cloth is wound up the wrong way
- Additional lengths for square insert on request

| Part Nr. | Drive $\Delta$     | Output $\blacktriangle$ | Note             |
|----------|--------------------|-------------------------|------------------|
| 418F362  | ■ 13 mm, L = 69 mm | Ø 66,5 mm               | Free-wheel left  |
| 418F363  | ■ 13 mm, L = 69 mm | Ø 66,5 mm               | Free-wheel right |

## 418F3.. | Free wheel for round tube with groove profile 78 mm



### Characteristics

- Free wheel for round tube with groove profile 78 mm
- For worm gear 418F...
- Prevents that the cloth is wound up the wrong way
- Additional lengths for square insert on request

| Part Nr. | Drive $\Delta$     | Output $\blacktriangle$ | Note             |
|----------|--------------------|-------------------------|------------------|
| 418F369  | ■ 13 mm, L = 45 mm | Ø 75,5 mm               | Free-wheel left  |
| 418F370  | ■ 13 mm, L = 45 mm | Ø 75,5 mm               | Free-wheel right |
| 418F364  | ■ 13 mm, L = 69 mm | Ø 75,5 mm               | Free-wheel left  |
| 418F365  | ■ 13 mm, L = 69 mm | Ø 75,5 mm               | Free-wheel right |

## 421F5.. | Worm gear 5,33:1

Application: **Pivot-arm awnings, marquisolettes, vertical awnings**

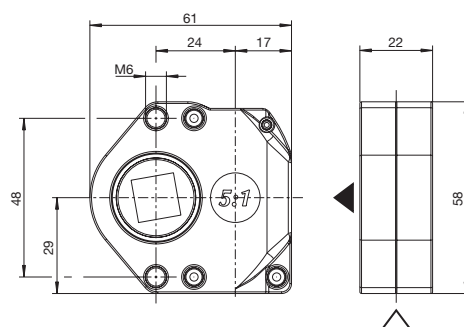
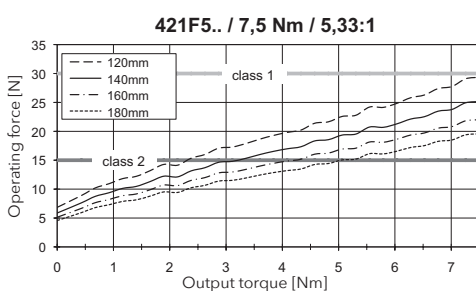
|                    |               |
|--------------------|---------------|
| Max. output torque | <b>7,5 Nm</b> |
| Reduction ratio    | <b>5,33:1</b> |
| Efficiency         | <b>0,40</b>   |

### Characteristics

- Without end stop
- Housing and worm wheel made out of diecast zinc
- Continuous interior profile at drive and output

### Note

- Coloured versions on request
- Designs with extensions, mounted universal joints, zinc or plastic eyelets or 8 mm square adaptor on request



| Part Nr. | Drive $\Delta$ | Output $\blacktriangle$ |
|----------|----------------|-------------------------|
| 421F504  | ○ 6 mm         | ○ 13 mm                 |
| 421F542  | ○ 7 mm         | ○ 13 mm                 |

## 421F5.. | Worm gear 5,33:1 with end stop

Application: **Pivot-arm awnings, marquoisettes, vertical awnings**

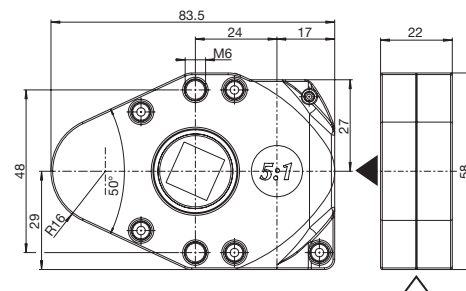
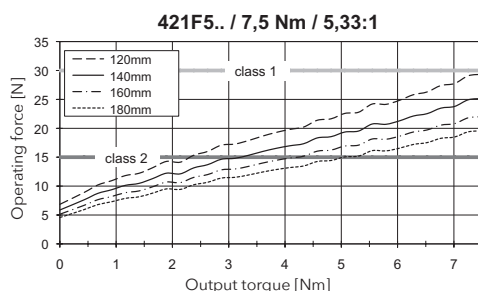
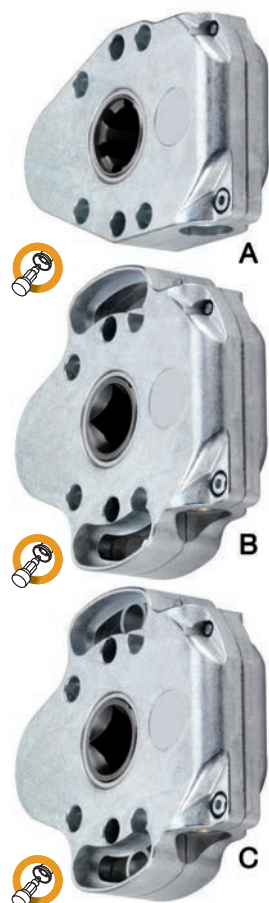
|                    |               |
|--------------------|---------------|
| Max. output torque | <b>7,5 Nm</b> |
| Reduction ratio    | <b>5,33:1</b> |
| Efficiency         | <b>0,40</b>   |

### Characteristics

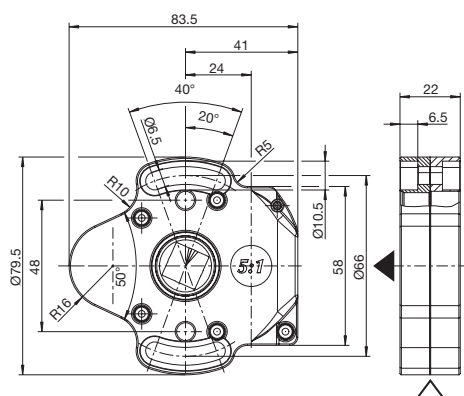
- With end stop
- Diecast zinc housing, worm wheel out of steel
- Continuous interior profile at drive and output
- Available in three different housing designs

### Note

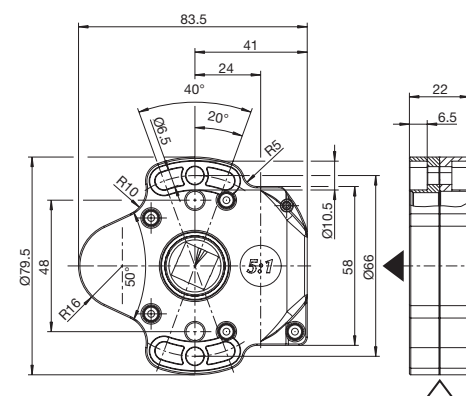
- Coloured versions on request
- Designs with extensions, mounted universal joints, zinc or plastic eyelets or 8 mm square adaptor on request



Housing design A (TK 48 mm)



Housing design B (TK 66 mm)



Housing design C (TK 66 mm with fixation)

### Options for worm gear 5,33:1 with end stop

|                |                                                       |
|----------------|-------------------------------------------------------|
| Drive          | ○ 6 mm and ○ 7 mm, continuous interior profile        |
| Output         | ○ or ⚙ 13 mm and ⚙ 16 mm, continuous interior profile |
| Pitch circle Ø | 48 mm, 66 mm and 66 mm with fixation                  |
| Colours        | Bright finish or powder-coated                        |

### Housing design A

| Part Nr. | Drive △ | Output ▲ |
|----------|---------|----------|
| 421F556  | ○ 6 mm  | ⚙ 16 mm  |
| 421F557  | ○ 7 mm  | ⚙ 16 mm  |
| 421F558  | ○ 7 mm  | ○ 13 mm  |
| 421F559  | ○ 6 mm  | ○ 13 mm  |

### Housing design B

| Part Nr. | Drive △ | Output ▲ |
|----------|---------|----------|
| 421F552  | ○ 6 mm  | ⚙ 16 mm  |
| 421F553  | ○ 7 mm  | ⚙ 16 mm  |
| 421F554  | ○ 7 mm  | ○ 13 mm  |

### Housing design C

| Part Nr. | Drive △ | Output ▲ |
|----------|---------|----------|
| 421F561  | ○ 6 mm  | ⚙ 16 mm  |
| 421F562  | ○ 7 mm  | ⚙ 16 mm  |
| 421F563  | ○ 7 mm  | ○ 13 mm  |
| 421F564  | ○ 6 mm  | ○ 13 mm  |

## 421F8.. | Worm gear 8:1

Application: **Pivot-arm awnings, marquisolettes, vertical awnings**

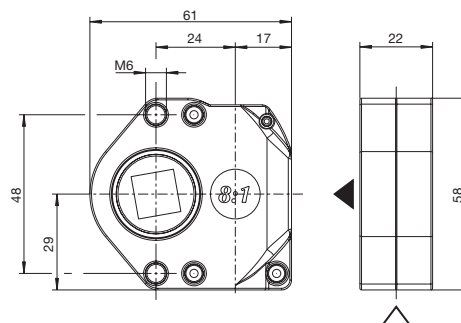
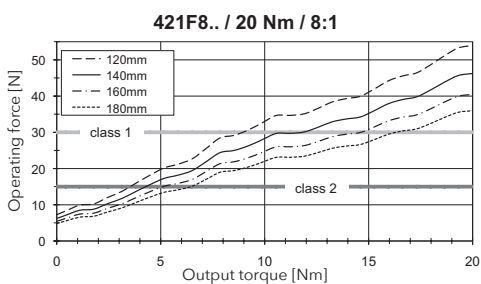
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>20 Nm</b> |
| Reduction ratio    | <b>8:1</b>   |
| Efficiency         | <b>0,39</b>  |

### Characteristics

- Without end stop
- Diecast zinc housing
- Worm and worm wheel out of steel
- Continuous interior profile at drive and output

### Note

- Coloured versions on request
- Designs with extensions, mounted universal joints, zinc or plastic eyelets or 8 mm square adaptor on request



| Part Nr. | Drive $\Delta$ | Output $\blacktriangle$ |
|----------|----------------|-------------------------|
| 421F804  | 6 mm           | 13 mm                   |
| 421F842  | 7 mm           | 13 mm                   |
| 421F892  | 7 mm           | 10 mm                   |

## 421F8.. | Worm gear 8:1 with end stop

Application: **Pivot-arm awnings, marquisolettes, vertical awnings**

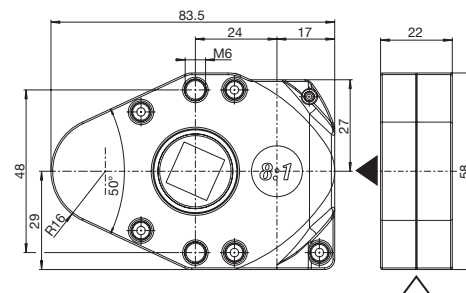
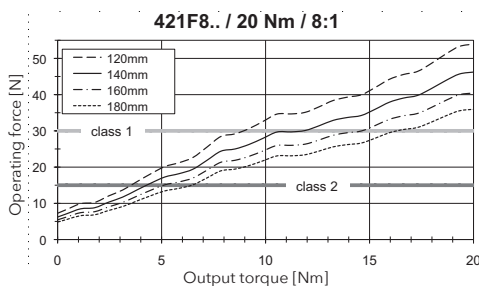
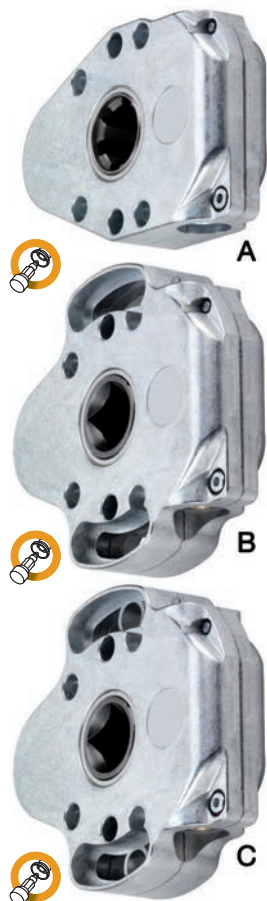
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>20 Nm</b> |
| Reduction ratio    | <b>8:1</b>   |
| Efficiency         | <b>0,39</b>  |

### Characteristics

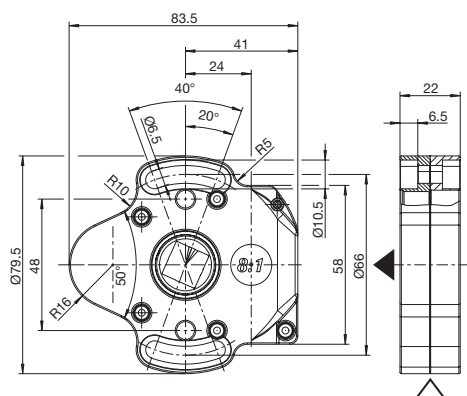
- With end stop
- Diecast zinc housing, worm wheel out of steel
- Continuous interior profile at drive and output
- Available in three different housing designs

### Note

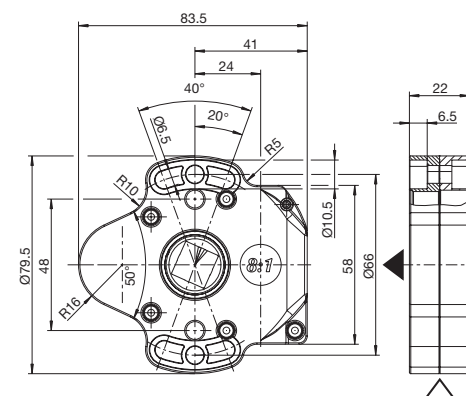
- Coloured versions on request
- Designs with extensions, mounted universal joints, zinc or plastic eyelets or 8 mm square adaptor on request



Housing design A (TK 48 mm)



Housing design B (TK 66 mm)



Housing design C (TK 66 mm with fixation)

### Options for worm gear 8:1 with end stop

|                |                                                       |
|----------------|-------------------------------------------------------|
| Drive          | ○ 6 mm and ○ 7 mm, continuous interior profile        |
| Output         | ○ or ⚙ 13 mm and ⚙ 16 mm, continuous interior profile |
| Pitch circle Ø | 48 mm, 66 mm and 66 mm with fixation                  |
| Colours        | Bright finish or powder-coated                        |

### Housing design A

| Part Nr. | Drive △ | Output ▲ |
|----------|---------|----------|
| 421F855  | ○ 6 mm  | ⚙ 16 mm  |
| 421F856  | ○ 7 mm  | ⚙ 16 mm  |
| 421F857  | ○ 7 mm  | ○ 13 mm  |
| 421F861  | ○ 6 mm  | ○ 13 mm  |

### Housing design B

| Part Nr. | Drive △ | Output ▲ |
|----------|---------|----------|
| 421F851  | ○ 6 mm  | ⚙ 16 mm  |
| 421F853  | ○ 7 mm  | ○ 13 mm  |

### Housing design C

| Part Nr. | Drive △ | Output ▲ |
|----------|---------|----------|
| 421F862  | ○ 6 mm  | ⚙ 16 mm  |
| 421F863  | ○ 7 mm  | ⚙ 16 mm  |
| 421F864  | ○ 7 mm  | ○ 13 mm  |
| 421F865  | ○ 6 mm  | ○ 13 mm  |

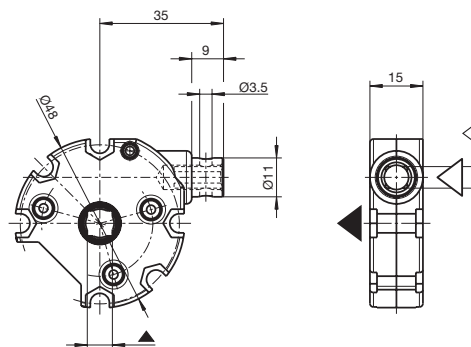
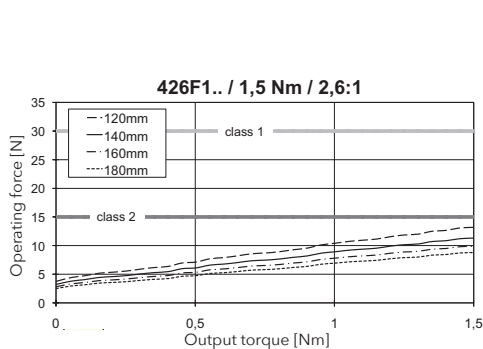
## 426F1.. | Worm gear 2,6:1

Application: **Screens, Volants**

|                    |               |
|--------------------|---------------|
| Max. output torque | <b>1,5 Nm</b> |
| Reduction ratio    | <b>2,6:1</b>  |
| Efficiency         | <b>0,37</b>   |

### Characteristics

- Diecast zinc housing
- Endless worm made out of special brass
- Worm wheel made out of heat treatable steel
- Brake spring made out of spring steel
- Without end stop



| Part Nr. | Drive $\Delta$ | Output $\blacktriangle$ |
|----------|----------------|-------------------------|
| 426F100  | 6 mm           | 7 mm                    |
| 426F101  | 6 mm           | 7 mm                    |

## 426F6.. | Worm gear 2,8:1

Application: **Screens, Volants**

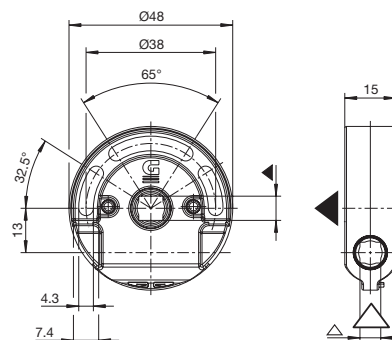
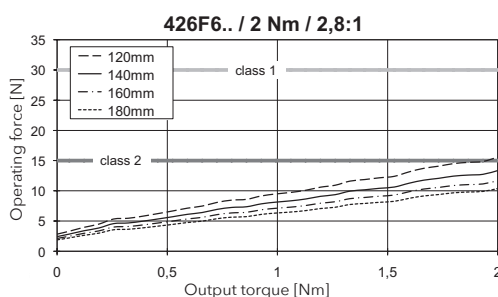
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>2 Nm</b>  |
| Reduction ratio    | <b>2,8:1</b> |
| Efficiency         | <b>0,38</b>  |

### Characteristics

- Small installation dimensions (only 15 mm wide), ideal for use in tight spaces
- Without end stop
- Continuous interior profile at drive and output

### Note

- Also available with oval eyelet and eyelet prolongations. Further items on request.
- Alternatively available with pre-mounted universal joint



| Part Nr. | Drive $\Delta$ | Output $\blacktriangle$ |
|----------|----------------|-------------------------|
| 426F600  | 6 mm           | 7 mm                    |
| 426F604  | 7 mm           | 7 mm                    |
| 426F611  | 6 mm           | 7 mm                    |
| 426F615  | 6 mm           | 6 mm                    |

## 426F7.. | Worm gear 3,5:1

Application: **Screens, Volants**

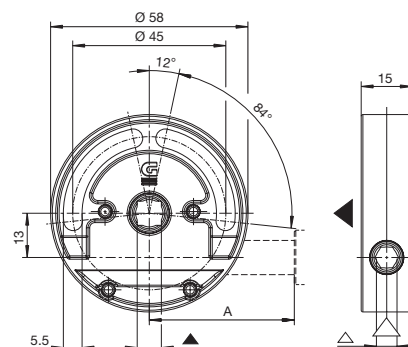
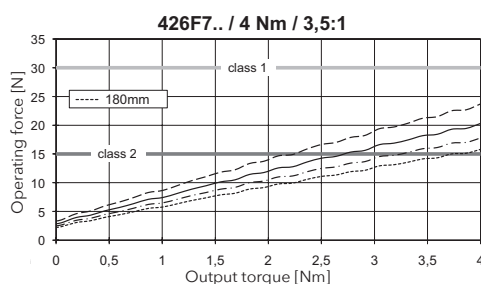
|                    |              |
|--------------------|--------------|
| Max. output torque | <b>4 Nm</b>  |
| Reduction ratio    | <b>3,5:1</b> |
| Efficiency         | <b>0,40</b>  |

### Characteristics

- Small installation dimensions (only 15 mm wide), ideal for use in tight spaces
- Without end stop
- Continuous interior profile at drive and output

### Note

- Also available with oval eyelet and eyelet prolongations. Further items on request.
- Alternatively available with pre-mounted universal joint



| Part Nr. | Drive $\Delta$ | Output $\blacktriangle$ | Middle of the gear [A] |
|----------|----------------|-------------------------|------------------------|
| 426F700  | 6,0 mm         | 7 mm                    | -                      |
| 426F701  | 9,9 mm Ø16 mm  | 7 mm                    | 37                     |
| 426F702  | 9,9 mm, Ø16 mm | 7 mm                    | 43                     |

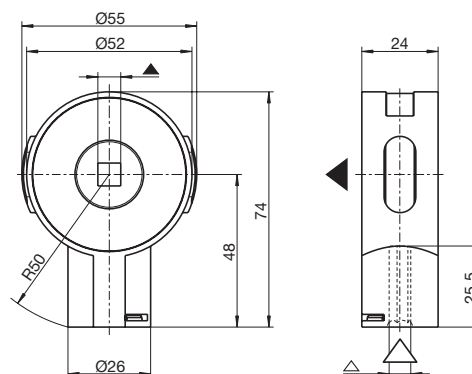
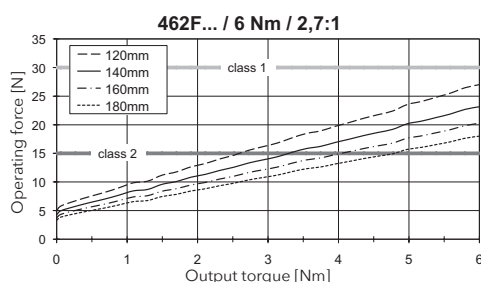
## 462F... | Bevel gear 2,7:1

Application: **Screens, Volants**

|                    |              |
|--------------------|--------------|
| Max. output torque | <b>6 Nm</b>  |
| Reduction ratio    | <b>2,7:1</b> |
| Efficiency         | <b>0,69</b>  |

### Characteristics

- Same direction of rotation whether installed on left or right
- Only for universal drive
- Connecting piece for 8 mm square, see 462F093
- Without end stop



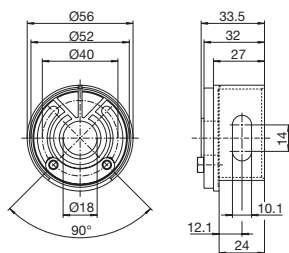
| Part Nr. | End stop         | Drive $\Delta$ | Output $\blacktriangle$ |
|----------|------------------|----------------|-------------------------|
| 462F007  | Without end stop | 6 mm           | 12 mm                   |
| 462F013  | Without end stop | 6 mm           | 10,2 mm                 |
| 462F021  | Without end stop | 6 mm           | 14 mm                   |



## 462F075 | Gear holder

### Characteristics

- Made of plastic

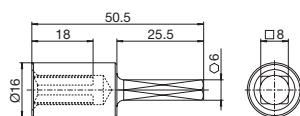


| Part Nr. | Material | Fixation  |
|----------|----------|-----------|
| 462F075  | Plastic  | Pivotable |

## 462F093 | Connection piece for gear 462F...

### Characteristics

- Inside 8 mm or 6 mm square for spherical bearing drive
- Outer 6 mm hexagonal
- Made of steel
- Zinc-plated

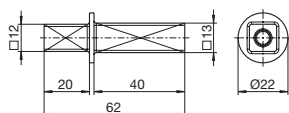


| Part Nr. | Drive | Output |
|----------|-------|--------|
| 462F093  | 8 mm  | 6 mm   |

## 462F080 | Connection piece

### Characteristics

- Diecast zinc



| Part Nr. | Drive | Output |
|----------|-------|--------|
| 462F080  | 12 mm | 13 mm  |

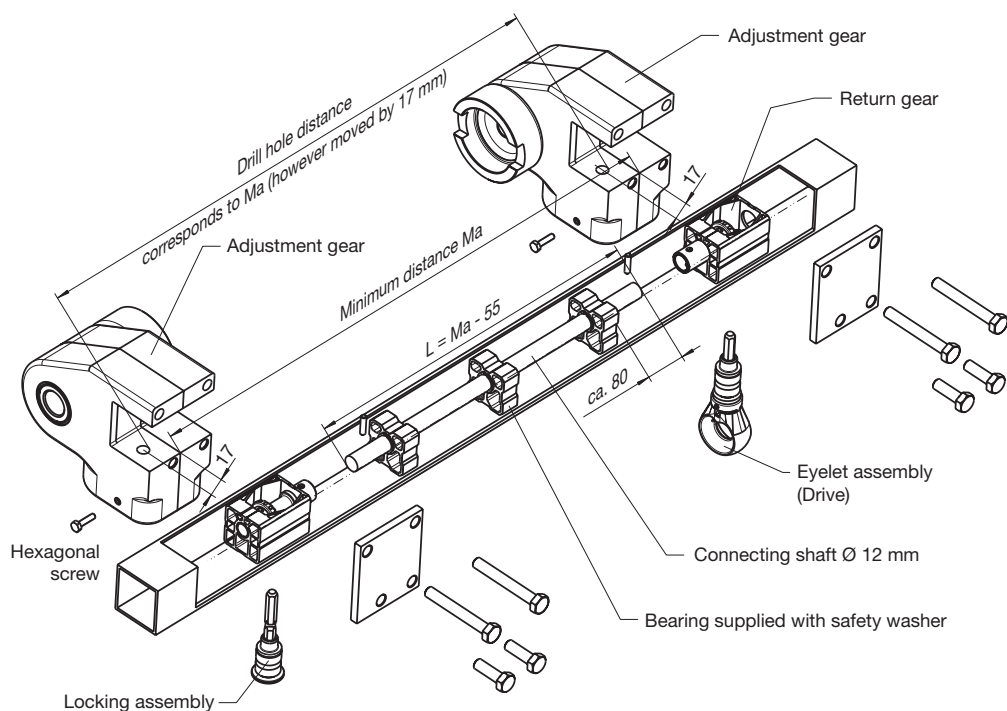
## 482F... | Angle adjustment gear

Application: **Folding-arm awnings**



### Characteristics

- Supplied as a complete assembly kit (without connecting shaft)
- Further colours on request
- For all 40 x 40 mm support tubes with a wall thickness of 2 or 2.5 mm
- Adjustable through drive by crank handle
- Preset to 7°, swivel range 55°
- Easy and quick assembly, installation instructions on request
- Also available with oval eyelet. Further items on request.



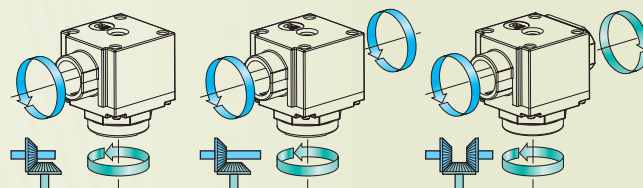
| Part Nr. | Colour                                            | End stop | Drive $\Delta$                    |
|----------|---------------------------------------------------|----------|-----------------------------------|
| 482F131  | <input type="checkbox"/> RAL 9010                 | 55°      | <input type="checkbox"/> RAL 9016 |
| 482F150  | <input type="checkbox"/> RAL 9006                 | 55°      | <input type="checkbox"/> RAL 7035 |
| 482F156  | <input type="checkbox"/> RAL 7035                 | 55°      | <input type="checkbox"/> RAL 7035 |
| 482F157  | <input type="checkbox"/> RAL 9016                 | 55°      | <input type="checkbox"/> RAL 9016 |
| 482F212  | <input checked="" type="checkbox"/> Bright finish | 55°      | <input type="checkbox"/> RAL 7035 |

## Angle gear 430F5..

Universal angle gear system for a great number of applications.

The compact gear unit is available with two or three drives/outputs. Each internal profile can be used as a drive or output. The zinc die-cast housing is stainless. The gear wheels are made out of steel and are put in plastic bushes. A fixation plate with 2 holes (pitch circle Ø 51,5 mm) is optionally available.

The angle gear 430F5.. is robust and extremely hardwearing and offers the usual GEIGER high quality standards with maximum operating convenience.



Angle gear with one drive and one output.

One continuous insert allows for example the operation of two Venetian blinds in the same direction.

Angle gear with one drive and two outputs or two drives and one output.

## 430F5.. | Angle gear

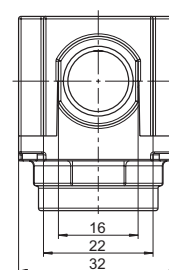
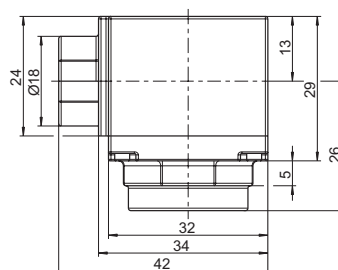
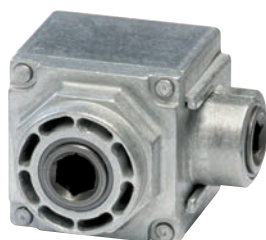
|                    |                                |
|--------------------|--------------------------------|
| Max. output torque | <b>6 Nm</b>                    |
| Reduction ratio    | <b>1:1<br/>1,5:1<br/>1:1,5</b> |
| Efficiency         | <b>0,83</b>                    |

### Characteristics

- Diecast zinc housing, worm wheel out of steel
- Plastic bearing bushes
- With one drive and one output

### Note

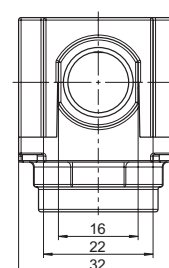
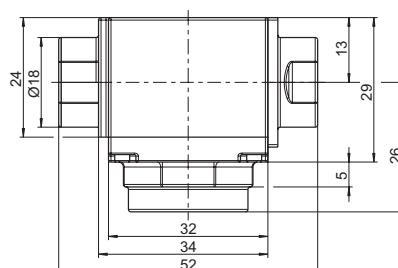
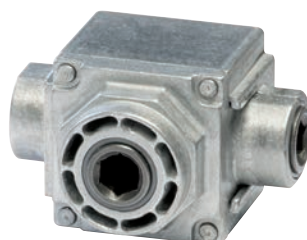
- Other drive/output combinations on request
- Also available as emergency gear (max. 10 Nm)



| Part Nr. | Drive/output profile | Reduction ratio | Drive(s)/output(s) |
|----------|----------------------|-----------------|--------------------|
| 430F550  | ○ 7mm                | 1 : 1           | 2                  |
| 430F551  | ○ 7mm                | 1,5 : 1         | 2                  |
| 430F552  | ○ 7mm                | 1 : 1,5         | 2                  |

### Characteristics

- As stated above, but with one drive and two outputs or two drives and one output

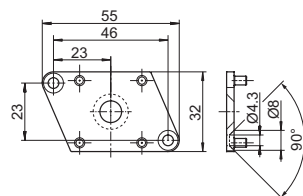
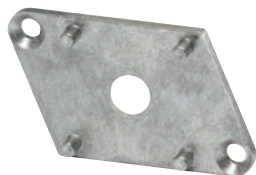


| Part Nr. | Drive/output profile | Reduction ratio | Drive(s)/output(s) |
|----------|----------------------|-----------------|--------------------|
| 430F553  | ○ 7mm                | 1 : 1           | 3                  |
| 430F554  | ○ 7mm                | 1,5 : 1         | 3                  |
| 430F555  | ○ 7mm                | 1 : 1,5         | 3                  |

## 430F503 | Fixing plate

### Characteristics

- Countersunk screw incl. (M6 x 16 mm, zinc-plated, with screw lock) for fixation on the gear
- For horizontal and vertical installation
- Adapted for angle gear 430F5



Part Nr.

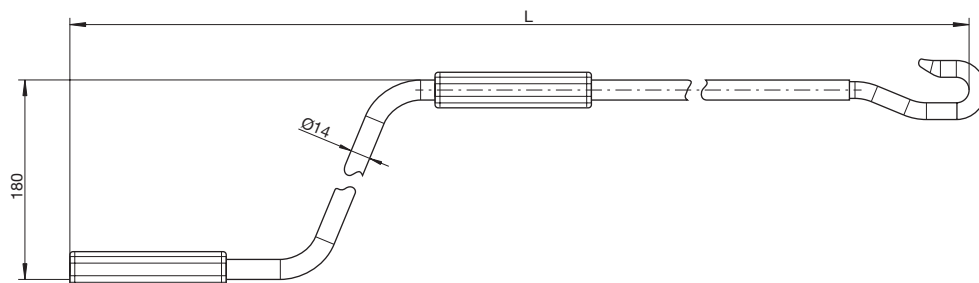
430F503

## 511F9.. | Crank handle



### Characteristics

- 2-part crank handle made of steel (composed of hook and tube)
- Powder-coated (RAL 7035 or RAL 9010)
- Available in various lengths, working radius 180 mm
- One-piece grips made of high strength plastic matching the crank colour
- The crank handle is fitted with a conventional hook for oval eyelets



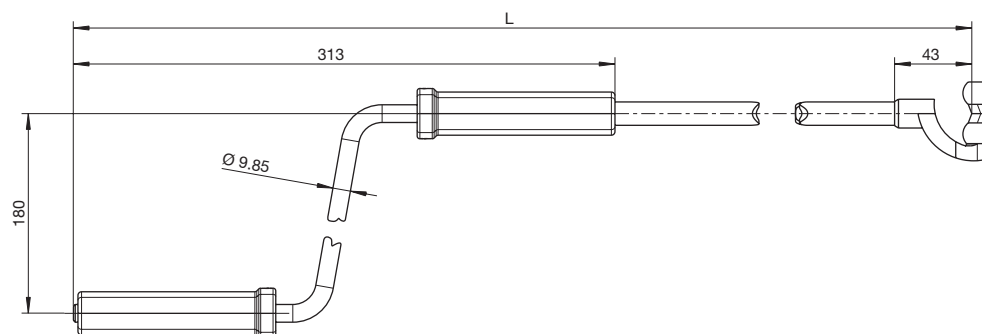
| Part Nr. | Colour                                                                                       | Length [L] | Grips design | Grips colour                                                                                |
|----------|----------------------------------------------------------------------------------------------|------------|--------------|---------------------------------------------------------------------------------------------|
| 511F950  |  RAL 7035   | 1000 mm    | Polygon      |  Grey    |
| 511F951  |  RAL 7035   | 1200 mm    | Polygon      |  Grey    |
| 511F952  |  RAL 7035   | 1400 mm    | Polygon      |  Grey    |
| 511F953  |  RAL 7035   | 1600 mm    | Polygon      |  Grey    |
| 511F954  |  RAL 7035   | 1800 mm    | Polygon      |  Grey    |
| 511F955  |  RAL 7035  | 2000 mm    | Polygon      |  Grey   |
| 511F956  |  RAL 7035 | 2200 mm    | Polygon      |  Grey  |
| 511F957  |  RAL 7035 | 2400 mm    | Polygon      |  Grey  |
| 511F970  |  RAL 9010 | 1000 mm    | Polygon      |  White |
| 511F971  |  RAL 9010 | 1200 mm    | Polygon      |  White |
| 511F972  |  RAL 9010 | 1400 mm    | Polygon      |  White |
| 511F973  |  RAL 9010 | 1600 mm    | Polygon      |  White |
| 511F974  |  RAL 9010 | 1800 mm    | Polygon      |  White |
| 511F975  |  RAL 9010 | 2000 mm    | Polygon      |  White |
| 511F976  |  RAL 9010 | 2200 mm    | Polygon      |  White |
| 511F977  |  RAL 9010 | 2400 mm    | Polygon      |  White |

## 512F... | Crank handle



### Characteristics

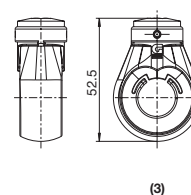
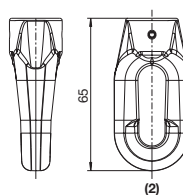
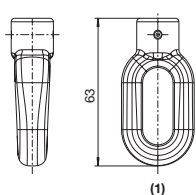
- 3-part crank handle made of steel (composed of hook, tube and crank)
- Zinc-plated or powder-coated (further colours on request)
- Available in various lengths, working radius 180 mm
- Diecast spherical hook, nickel-plated
- Two-part grips made of high strength plastic (black, angular)
- The intelligent awning crank for round eyelets



| Part Nr. | Colour                                                                                          | Length [L] | Grips design | Grips colour                                                                                |
|----------|-------------------------------------------------------------------------------------------------|------------|--------------|---------------------------------------------------------------------------------------------|
| 512F010  |  Zinc-plated   | 1000 mm    | Two-part     |  Black   |
| 512F011  |  Zinc-plated   | 1200 mm    | Two-part     |  Black   |
| 512F012  |  Zinc-plated   | 1400 mm    | Two-part     |  Black   |
| 512F013  |  Zinc-plated   | 1600 mm    | Two-part     |  Black   |
| 512F014  |  Zinc-plated | 1800 mm    | Two-part     |  Black |
| 512F015  |  Zinc-plated | 2000 mm    | Two-part     |  Black |
| 512F016  |  Zinc-plated | 2200 mm    | Two-part     |  Black |
| 512F230  |  RAL 9010    | 1000 mm    | Two-part     |  Black |
| 512F231  |  RAL 9010    | 1200 mm    | Two-part     |  Black |
| 512F232  |  RAL 9010    | 1400 mm    | Two-part     |  Black |
| 512F233  |  RAL 9010    | 1600 mm    | Two-part     |  Black |
| 512F234  |  RAL 9010    | 1800 mm    | Two-part     |  Black |
| 512F235  |  RAL 9010    | 2000 mm    | Two-part     |  Black |
| 512F236  |  RAL 9010    | 2200 mm    | Two-part     |  Black |
| 512F250  |  RAL 7035    | 1000 mm    | Two-part     |  Black |
| 512F251  |  RAL 7035    | 1200 mm    | Two-part     |  Black |
| 512F252  |  RAL 7035    | 1400 mm    | Two-part     |  Black |
| 512F253  |  RAL 7035    | 1600 mm    | Two-part     |  Black |
| 512F254  |  RAL 7035    | 1800 mm    | Two-part     |  Black |
| 512F255  |  RAL 7035    | 2000 mm    | Two-part     |  Black |
| 512F256  |  RAL 7035    | 2200 mm    | Two-part     |  Black |



## 418E2.. | Zinc-plated and plastic eyelets



### Oval zinc-plated eyelet (1)

| Part Nr. | Colour          | Material | Interior profile | Cross hole |
|----------|-----------------|----------|------------------|------------|
| 416F105  | ☒ Bright finish | ■ Zinc   | Ø 15 mm          | 4 mm       |
| 418K001  | ☒ Bright finish | ■ Zinc   | Ø 10 mm          | 4 mm       |
| 418K002  | ☒ Bright finish | ■ Zinc   | Ø 12 mm          | 4 mm       |
| 420K003  | ☒ Bright finish | ■ Zinc   | Ø 16 mm          | 4 mm       |

### Oval plastic eyelet with bore Ø 12 mm (2)

| Part Nr. | Colour     | Material  | Interior profile | Cross hole |
|----------|------------|-----------|------------------|------------|
| 418E210  | ☐ RAL 9016 | ■ Plastic | Ø 12 mm          | 4 mm       |
| 418E211  | ■ RAL 9005 | ■ Plastic | Ø 12 mm          | 4 mm       |
| 418E212  | ▒ RAL 7035 | ■ Plastic | Ø 12 mm          | 4 mm       |

### Oval plastic eyelet with inner hexagonal (also for Ø 10 mm) (2)

| Part Nr. | Colour     | Material  | Interior profile | Cross hole |
|----------|------------|-----------|------------------|------------|
| 418E230  | ☐ RAL 9016 | ■ Plastic | ○ 10 mm          | 4 mm       |
| 418E231  | ■ RAL 9005 | ■ Plastic | ○ 10 mm          | 4 mm       |
| 418E232  | ▒ RAL 7035 | ■ Plastic | ○ 10 mm          | 4 mm       |

### Round plastic eyelet with bore Ø 12 mm (3)

| Part Nr. | Colour     | Material  | Interior profile | Cross hole |
|----------|------------|-----------|------------------|------------|
| 418E110  | ☐ RAL 9016 | ■ Plastic | Ø 12 mm          | 4,1 mm     |
| 418E111  | ■ RAL 9005 | ■ Plastic | Ø 12 mm          | 4,1 mm     |
| 418E112  | ▒ RAL 7035 | ■ Plastic | Ø 12 mm          | 4,1 mm     |

### Round plastic eyelet with inner hexagonal (also for Ø 10 mm) (3)

| Part Nr. | Colour     | Material  | Interior profile | Cross hole |
|----------|------------|-----------|------------------|------------|
| 418E130  | ☐ RAL 9016 | ■ Plastic | ○ 10 mm          | 4,1 mm     |
| 418E131  | ■ RAL 9005 | ■ Plastic | ○ 10 mm          | 4,1 mm     |
| 418E132  | ▒ RAL 7035 | ■ Plastic | ○ 10 mm          | 4,1 mm     |

### Round plastic eyelet with inner hexagonal 7 mm (3)

| Part Nr. | Colour     | Material  | Interior profile | Cross hole |
|----------|------------|-----------|------------------|------------|
| 418E170  | ☐ RAL 9016 | ■ Plastic | ○ 7 mm           | 3 mm       |
| 418E171  | ■ RAL 9005 | ■ Plastic | ○ 7 mm           | 3 mm       |
| 418E172  | ▒ RAL 7035 | ■ Plastic | ○ 7 mm           | 3 mm       |

### Round plastic eyelet for angle adjustment gear (3)

| Part Nr. | Colour     | Material  | Interior profile | Cross hole |
|----------|------------|-----------|------------------|------------|
| 418E140  | ☐ RAL 9016 | ■ Plastic | ○ 10 mm          | 3 mm       |
| 418E141  | ■ RAL 9005 | ■ Plastic | ○ 10 mm          | 3 mm       |
| 418E142  | ▒ RAL 7035 | ■ Plastic | ○ 10 mm          | 3 mm       |

## 418E18. | Safety ring for plastic eyelets



### Characteristics

- To secure the plastic eyelet through easy rotation (together with locking pin 418E120)

| Part Nr. | Colour                                       |
|----------|----------------------------------------------|
| 418E180  | <input type="checkbox"/> RAL 9016            |
| 418E181  | <input checked="" type="checkbox"/> RAL 9005 |
| 418E182  | <input type="checkbox"/> RAL 7035            |

## 418E120 | Driving pin for plastic eyelets



### Characteristics

- To secure the plastic eyelet into the drive shaft (only applicable with safety ring 418E18.)

| Part Nr. | Material        | Outside-Ø | Length | Surface                                           |
|----------|-----------------|-----------|--------|---------------------------------------------------|
| 418E120  | Stainless steel | 4 mm      | 22 mm  | <input checked="" type="checkbox"/> Bright finish |

## 506N418-1 | Spiral pin



### Characteristics

- To secure the tube connection

| Part Nr.  | Material | Outside-Ø | Length | Surface                              |
|-----------|----------|-----------|--------|--------------------------------------|
| 506N418-1 | Steel    | 4 mm      | 18 mm  | <input type="checkbox"/> Zinc-plated |

