



VENETIAN BLINDS

MECHANICAL
DRIVE SOLUTIONS

GEIGER
ANTRIEBSTECHNIK

Venetian blind gear series 434F6..

The crank gear for demanding customers

Venetian blinds have become extremely popular on the international market for sun protection. In order to meet the increasing demand in this area, GEIGER has developed a new gear series 434F6..



High degree of operating convenience

- Optimized gear teeth system and state-of-the-art materials contribute to reduce significantly the operating force. The gear 434F6.. is much easier to operate than the conventional gears used up to now. The crank operation requires up to 30% less effort.



High strength and durability

- Both the **gear teeth** and the **brakes** are designed for high durability and performance. Please refer to our Manufacturer's Declaration on the basis of 10,000 cycles according to the DIN EN 14203 standard.
- An **innovative braking system** ensures that - when exposed to extremely high wind load or to continuous moderate wind - the Venetian blind is held reliably in the desired position.



Wide product range

- GEIGER offers for all components - also built-in a few decades ago - the suitable drive and output profiles. Fixation systems for all Venetian blind head rails are also available.
- The GEIGER complete product range: you only need to deal with just one supplier in the area of drive technology.

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.

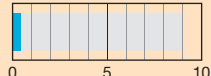
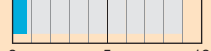
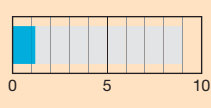
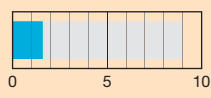
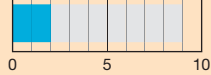
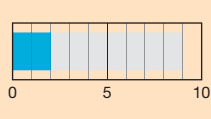
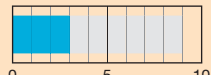
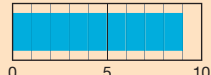
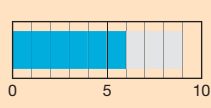
Drawings dimensions

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

			Head rail	Re- duction ratio	Effici- ency	Max. output torque	
	427F6... Chain gear 3:1	P. 220	25 mm	3:1	0,81	0,40 Nm	
	429F... Bevel gear 1:1	P. 223	25 mm	1:1	0,67	0,75 Nm	
	427F... Cord gear 2,6:1	P. 221	40 mm > 50 mm	2,6:1	0,64	1,20 Nm	
	427F2... Cord gear 3,25:1	P. 221	40 mm	3,25:1	0,64	1,60 Nm	
	431F5... Bevel gear 1,2:1	P. 224	40 mm	1,2:1	0,72	2,00 Nm	
	431F1... Bevel gear 1,2:1	P. 224	40 mm	1,2:1	0,55	2,00 Nm	
	434F3... Bevel gear 2:1	P. 226	> 50 mm	2:1	0,57	3,00 Nm	
	434F6... Bevel gear 2:1	P. 226	> 50 mm	2:1	0,72	5,00 Nm	
	434F6... Bevel gear 2:1	P. 227	> 50 mm	2:1	0,72	5,00 Nm	
	433F... Bevel gear 3:1	P. 225	> 50 mm	3:1	0,76	9,00 Nm	
	430F5... Angle gear	P. 231	-	1:1 1,5:1 1:1,5	0,83	6,00 Nm	

Venetian blinds

Rolling shutters

Textile sun protection

System components

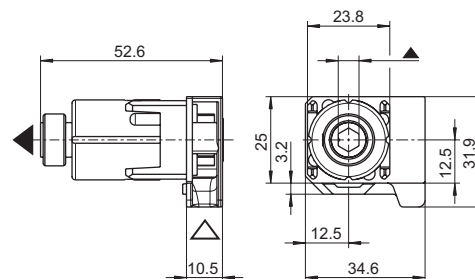
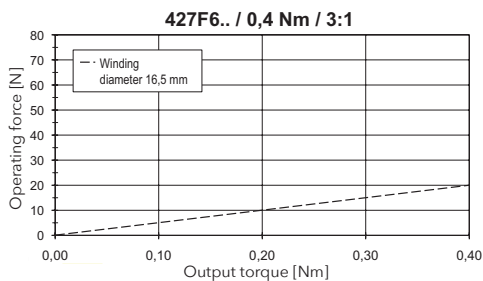
427F6.. | Chain gear 3:1

Application: **Venetian blinds, plissé blinds with 25 mm head rail**

Max. output torque	0,4 Nm
Reduction ratio	3:1
Efficiency	0,81

Features

- Transportation of the chain on the inside of the room means that the entire glazed surface can be used for window shading
- For chains of 4.5 mm in diameter and 6 mm link spacing
- Left and right gear models



Part Nr.	Colour	Output ▲	Installation side	Fixation
427F600	RAL 9016	○ 6 mm	Right	Without cord guide
427F601	RAL 9016	○ 6 mm	Left	Without cord guide
427F606	RAL 9016	○ 5 mm	Right	Without cord guide
427F607	RAL 9016	○ 5 mm	Left	Without cord guide
427F615	RAL 7001	○ 6 mm	Left	Without cord guide
427F616	RAL 9005	○ 6 mm	Left	Without cord guide
427F617	RAL 9005	○ 6 mm	Right	Without cord guide
427F618	RAL 7001	○ 6 mm	Right	Without cord guide
427F660	RAL 9016	○ 6 mm	Right	With cord guide
427F661	RAL 9016	○ 6 mm	Left	With cord guide
427F662	RAL 7001	○ 6 mm	Right	With cord guide
427F663	RAL 7001	○ 6 mm	Left	With cord guide
427F664	RAL 9005	○ 6 mm	Right	With cord guide
427F665	RAL 9005	○ 6 mm	Left	With cord guide
427F666	RAL 9016	○ 5 mm	Right	With cord guide
427F667	RAL 9016	○ 5 mm	Left	With cord guide

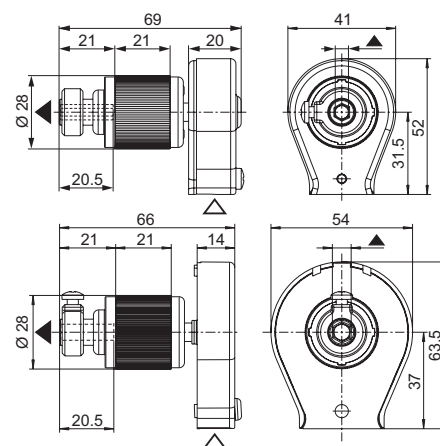
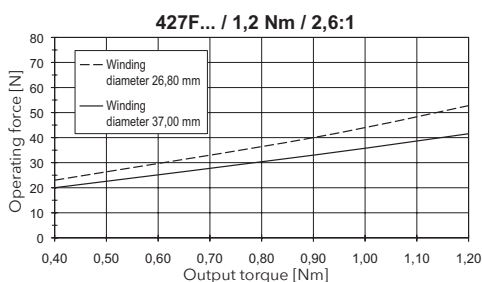
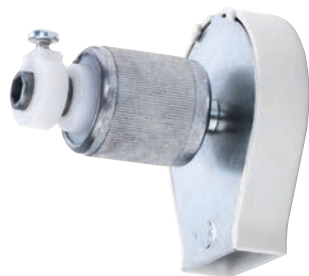
427F... | Cord gear 2,6:1

Application: **Venetian blinds with 40 mm head rail**

Max. output torque	1,2 Nm
Reduction ratio	2,6:1
Efficiency	0,64

Features

- Time-tested and reliable
- Available in two cord wheel diameters (see drawing)
- For cords of 4.5 mm diameter
- Gear models available for installation on left or right
- Suitable gear holders for head rails of various sizes, see gear holder 427F...



Part Nr.	Colour	Drive Δ	Output $\blacktriangle$	Note
427F105	RAL 7035	Small cord wheel	5 mm	Plastic fixation ring
427F106	RAL 7035	Small cord wheel	6 mm	Plastic fixation ring
427F107	RAL 7035	Small cord wheel	7 mm	Plastic fixation ring
427F108	RAL 7035	Large cord wheel	6 mm	Plastic fixation ring
427F109	RAL 7035	Large cord wheel	7 mm	Plastic fixation ring
427F118	RAL 7035	Large cord wheel	5 mm	Plastic fixation ring

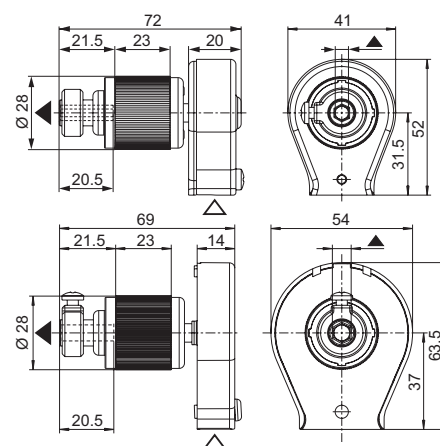
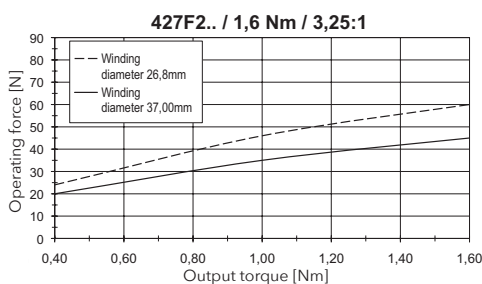
427F2.. | Cord gear 3,25:1

Application: **Venetian blinds with 40 mm head rail**

Max. output torque	1,6 Nm
Reduction ratio	3,25:1
Efficiency	0,64

Features

- Easy operation through higher reduction ratio
- Available in two cord wheel diameters (see drawing)
- For cords of 4.5 mm diameter
- Gear models available for installation on left or right
- Suitable gear holders for head rails of various sizes, see gear holder 427F...

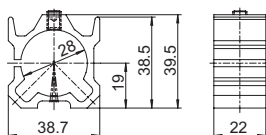


Part Nr.	Colour	Drive Δ	Output $\blacktriangle$	Note
427F209	RAL 7035	Small cord wheel	5 mm	Plastic fixation ring
427F206	RAL 7035	Small cord wheel	6 mm	Plastic fixation ring
427F207	RAL 7035	Small cord wheel	7 mm	Plastic fixation ring
427F208	RAL 7035	Small cord wheel	6 mm	Steel fixation ring

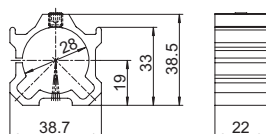
427F... | Gear holder

Features

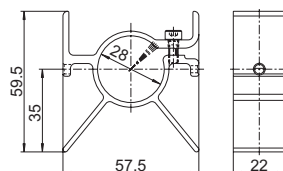
- For cord gear 427F...
- For chain gear 427F...
- For bevel gear 431F1..
- Extruded aluminium profile or high-strength plastic



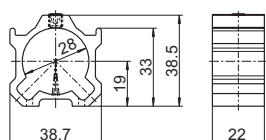
Part Nr.	Material	Ext. dimensions	Axle height
427F150	Aluminium	38,7 X 38,5 mm	19 mm



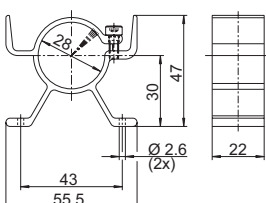
Part Nr.	Material	Ext. dimensions	Axle height
427F151	Aluminium	38,7 X 33 mm	19 mm



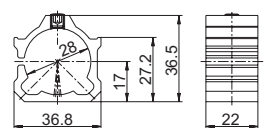
Part Nr.	Material	Ext. dimensions	Axle height
427F152	Aluminium	57,5 X 59,5 mm	35 mm



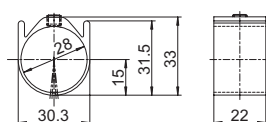
Part Nr.	Material	Ext. dimensions	Axle height
427F156	Aluminium	38,7 X 33 mm	19 mm



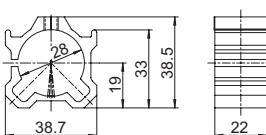
Part Nr.	Material	Ext. dimensions	Axle height
427F157	Aluminium	55,5 X 47 mm	30 mm



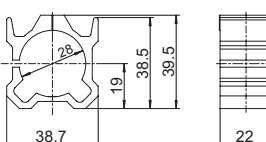
Part Nr.	Material	Ext. dimensions	Axle height
427F159	Aluminium	36,8 X 27,2 mm	17 mm



Part Nr.	Material	Ext. dimensions	Axle height
427F160	Aluminium	30,3 X 35,5 mm	15 mm



Part Nr.	Material	Ext. dimensions	Axle height
427F180	Plastic	38,7 X 33 mm	19 mm



Part Nr.	Material	Ext. dimensions	Axle height
427F181	Plastic	38,7 X 38,5 mm	19 mm

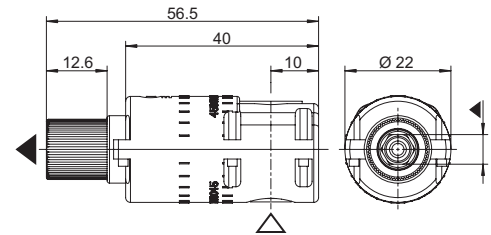
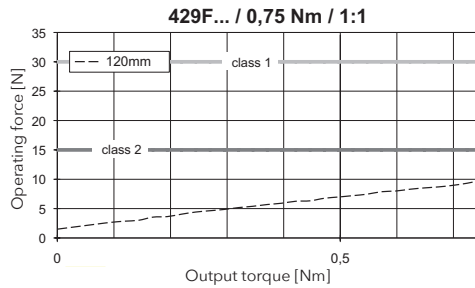
429F... | Bevel gear 1:1

Application: **Venetian blinds with 25 mm head rail**

Max. output torque	0,75 Nm
Reduction ratio	1:1
Efficiency	0,67

Features

- Diecast zinc housing
- Insertable interior profile at input shaft, enabling use of just one gear model for same direction of rotation whether installed on left or right
- Alternatively available with pre-mounted universal joint
- Without end stop
- Matching gear holder 429F100

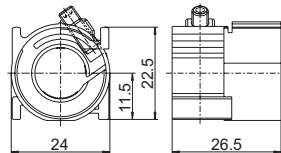


Part Nr.	Drive Δ	Output $\blacktriangle$	Installation side
429F027	6 mm	5 mm	-
429F028	6 mm	6 mm	-
429F030	6 mm	5 mm	-
429F031	6,8 mm	5 mm	Left
429F033	9,9 mm	6 mm	Right
429F034	9,9 mm	6 mm	Left
429F037	6,8 mm	6 mm	Right
429F045	6,8 mm	5 mm	Left
429F051	9,9 mm	5 mm	Right

429F1.. | Gear holder

Features

- High-strength plastic



Part Nr.	Material	Ext. dimensions	Axle height
429F100	Plastic	24,0 X 22,5 mm	11,5 mm

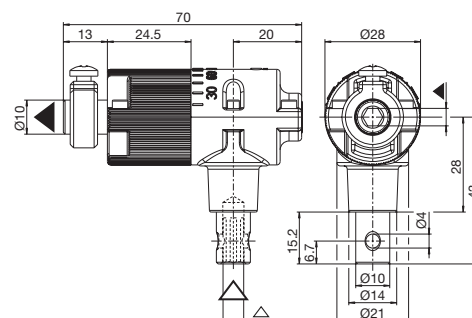
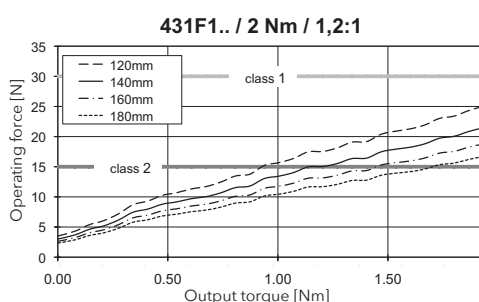
431F1.. | Bevel gear 1,2:1

Application: **Venetian blinds with 40 mm head rail**

Max. output torque	2,0 Nm
Reduction ratio	1,2:1
Efficiency	0,55

Features

- Diecast zinc housing
- Continuous interior profile at output shaft, enabling central installation if desired
- Left or right gear models with same direction of rotation for installation on left or right
- Alternatively available with pre-mounted universal joint
- Without end stop
- Suitable gear holders for head rails of various sizes, see gear holder 427F..



Part Nr.	Drive Δ	Output $\blacktriangle$	Installation side
431F100	○ 6 mm	○ 5 mm	Right
431F101	○ 6 mm	○ 6 mm	Right
431F103	○ 6 mm	○ 6 mm	Right
431F106	○ 6 mm	○ 6 mm	Left

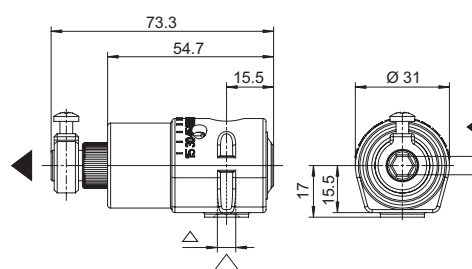
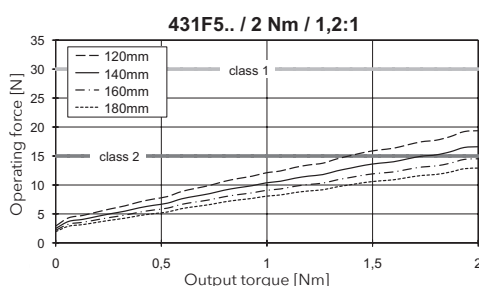
431F5.. | Bevel gear 1,2:1

Application: **Venetian blinds with 40 mm head rail**

Max. output torque	2,0 Nm
Reduction ratio	1,2:1
Efficiency	0,72

Features

- Housing made out of high-strength plastic
- Continuous interior profile at output shaft, enabling central installation if desired
- Insertable interior profile at input shaft, enabling use of just one gear model for same direction of rotation whether installed on left or right
- Alternatively available with pre-mounted universal joint
- Without end stop
- Suitable gear holders for head rails of various sizes, see gear holder 431F..

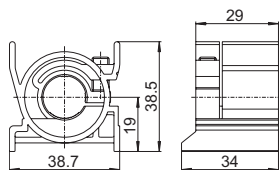


Part Nr.	Drive Δ	Output $\blacktriangle$	Installation side
431F550	○ 6 mm	○ 6 mm	Left/Right
431F555	⊗ 9,9 mm	○ 6 mm, no continuous profile	Left
431F557	⊗ 9,9 mm	○ 6 mm, no continuous profile	Right
431F559	○ 6 mm	○ 6 mm	Left/Right

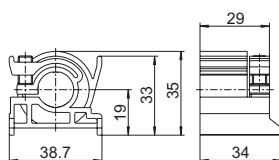
431F... | Gear holder

Features

- High-strength plastic



Part Nr.	Ext. dimensions	Axle height
431F507	38,7 X 38,5 mm	19 mm



Part Nr.	Ext. dimensions	Axle height
431F508	38,7 X 33 mm	19 mm

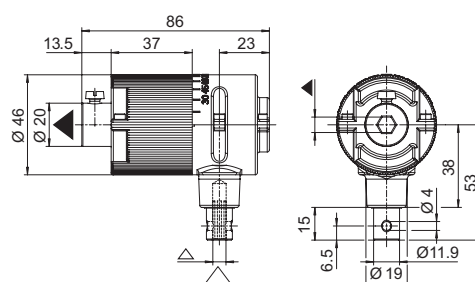
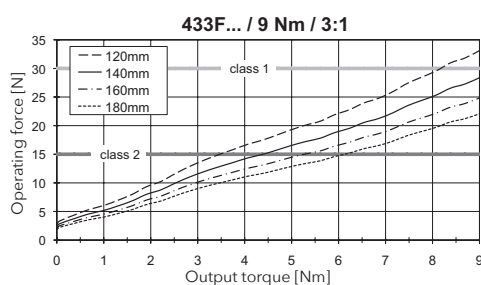
433F... | Bevel gear 3:1

Application: Venetian blinds with 50 mm head rail

Max. output torque	9,0 Nm
Reduction ratio	3:1
Efficiency	0,76

Features

- Our most efficient gear in the Venetian blind range
- Diecast zinc housing
- Continuous interior profile at output shaft, enabling central installation if desired
- Left or right gear models with same direction of rotation for installation on left or right
- Suitable gear holders for head rails of various sizes, see gear holder 432F...
- Without end stop



Part Nr.	Drive Δ	Output $\blacktriangle$	Installation side
433F001	6 mm, trunnion $\varnothing$ 11,9 mm	7 mm	Right
433F002	6 mm, trunnion $\varnothing$ 11,9 mm	7 mm	Left
433F003	6 mm, trunnion $\varnothing$ 11,9 mm	14 mm	Right
433F004	6 mm, trunnion $\varnothing$ 11,9 mm	14 mm	Left
433F011	6 mm, trunnion $\varnothing$ 11,9 mm	6 mm	Right
433F012	6 mm, trunnion $\varnothing$ 11,9 mm	6 mm	Left
433F025	6 mm, trunnion $\varnothing$ 11,9 mm	12 mm	Right
433F026	6 mm, trunnion $\varnothing$ 11,9 mm	12 mm	Left

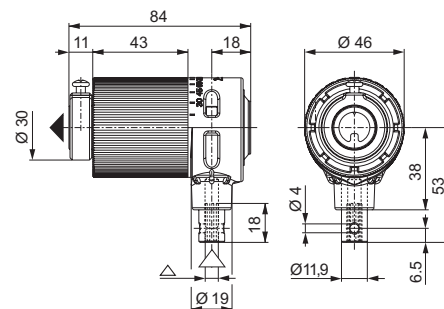
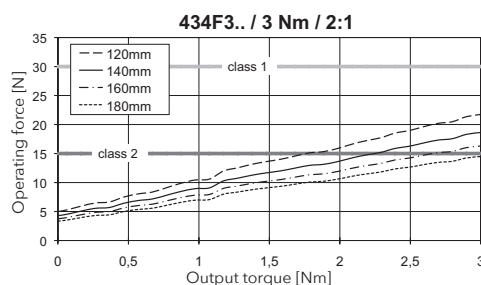
434F3.. | Bevel gear 2:1

Application: **Venetian blinds with 50 mm head rail**

Max. output torque	3,0 Nm
Reduction ratio	2:1
Efficiency	0,57

Features

- Housing made out of high-strength plastic
- Continuous interior profile at output shaft, enabling central installation if desired
- Left or right gear models with same direction of rotation for installation on left or right
- Without end stop
- Suitable gear holders for head rails of various sizes, see gear holder 432F...



Part Nr.	Drive Δ	Output $\blacktriangle$	Installation side
434F314	6 mm, trunnion Ø 11,9 mm	14 mm	Left
434F315	6 mm, trunnion Ø 11,9 mm	14 mm	Right
434F360	6 mm, trunnion Ø 11,9 mm	12 mm	Right
434F361	6 mm, trunnion Ø 11,9 mm	12 mm	Left
434F364	6 mm, trunnion Ø 11,9 mm	7 mm	Right
434F366	6 mm, trunnion Ø 11,9 mm	7 mm	Left
434F369	6 mm, trunnion Ø 11,9 mm	7 mm	Left
434F370	6 mm, trunnion Ø 11,9 mm	7 mm	Right

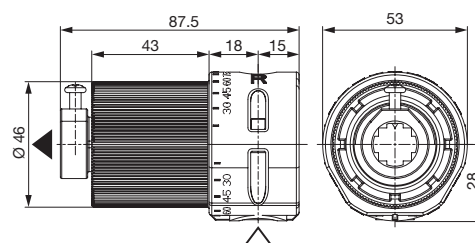
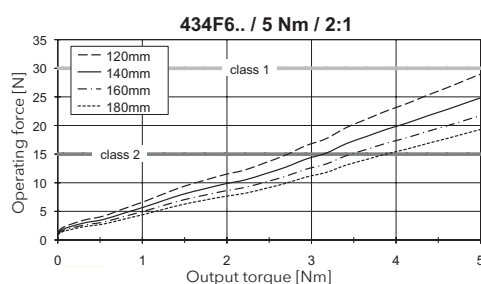
434F6.. | Bevel gear 2:1

Application: **Venetian blinds with 50 mm head rail**

Max. output torque	5,0 Nm
Reduction ratio	2:1
Efficiency	0,72

Features

- Housing made out of high-strength plastic
- Continuous interior profile at output shaft, enabling central installation if desired
- Insertable interior profile at input shaft, enabling use of just one gear model for same direction of rotation whether installed on left or right
- Suitable gear holders for head rails of various sizes, see gear holder 432F...
- Without end stop



Part Nr.	Drive Δ	Output $\blacktriangle$
434F615	6 mm continuous interior profile	6 mm
434F625	6 mm continuous interior profile	12 mm
434F620	6 mm continuous interior profile	14 mm
434F606	6 mm continuous interior profile	12 mm
434F608	6 mm continuous interior profile	7 mm
434F607	6 mm continuous interior profile	14 mm
434F604	8 mm continuous interior profile	14 mm

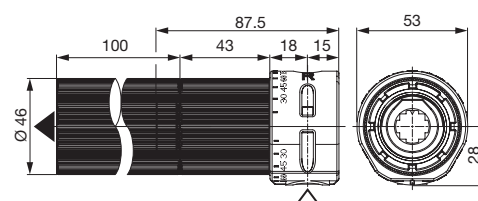
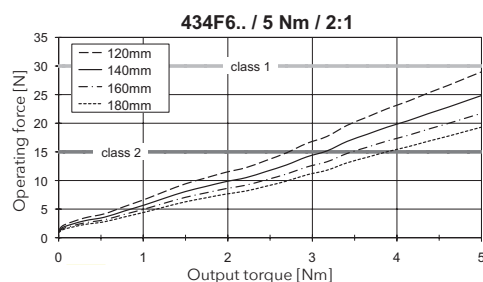
434F6.. | Bevel gear 2:1 with mounted extension

Application: **Venetian blinds with 50 mm head rail**

Max. output torque	5,0 Nm
Reduction ratio	2:1
Efficiency	0,72

Features

- Housing made out of high-strength plastic
- Continuous interior profile at output shaft, enabling central installation if desired
- Insertable interior profile at input shaft, enabling use of just one gear model for same direction of rotation whether installed on left or right
- Suitable gear holders for head rails of various sizes, see gear holder 432F...
- Without end stop

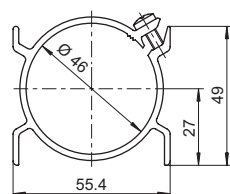


Part Nr.	Drive Δ	Output $\blacktriangle$
434F616	8 mm continuous interior profile	14 mm
434F630	6 mm continuous interior profile	14 mm

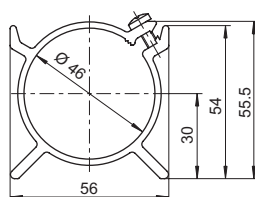
432F... | Gear holder

Features

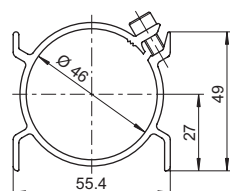
- Made of high-strength plastic or extruded aluminium profile
- Gear holders 432F120 and 432F121 are delivered with separate screws



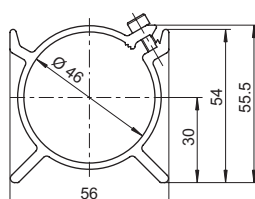
Part Nr.	Material	Ext. dimensions	Axle height
432F110	Aluminium	55,4 X 49 mm	27 mm



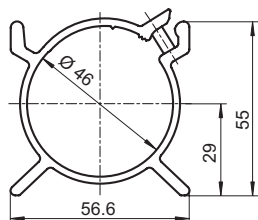
Part Nr.	Material	Ext. dimensions	Axle height
432F114	Aluminium	56 X 54 mm	30 mm



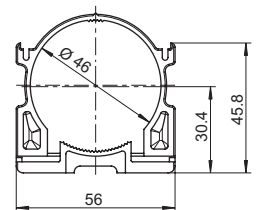
Part Nr.	Material	Ext. dimensions	Axle height
432F115	Aluminium	55,4 X 49 mm	27 mm



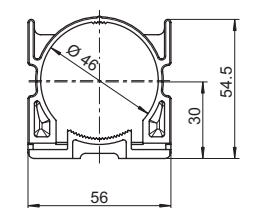
Part Nr.	Material	Ext. dimensions	Axle height
432F116	Aluminium	56 X 54 mm	30 mm



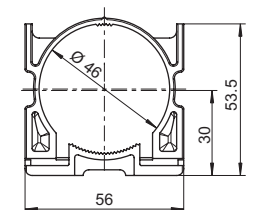
Part Nr.	Material	Ext. dimensions	Axle height
432F118	Aluminium	56,6 X 55 mm	29 mm



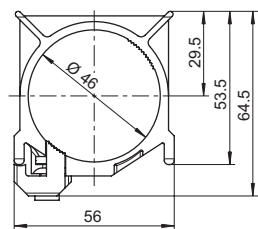
Part Nr.	Material	Ext. dimensions	Axle height
432F120	Plastic	56 X 45,8 mm	30,4 mm



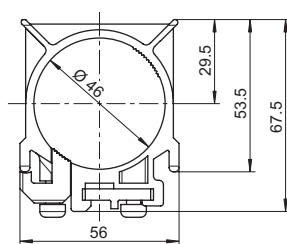
Part Nr.	Material	Ext. dimensions	Axle height
432F121	Plastic	56 X 54,5 mm	30 mm



Part Nr.	Material	Ext. dimensions	Axle height
432F124	Plastic	56 X 53,5 mm	30 mm



Part Nr.	Material	Ext. dimensions	Axle height
432F130	Plastic	56 X 53,5 mm	29,5 mm



Part Nr.	Material	Ext. dimensions	Axle height
432F132	Plastic	56 X 53,5 mm	29,5 mm

With cord guide

712F1.. | Spindle stops made of aluminium

Application: **Venetian blinds with 40 mm/50 mm head rail (e.g.: 57 x 51 mm, 58 x 56 mm)**

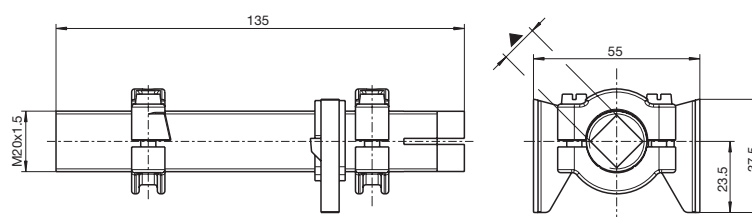


Features

- Limits the upward and downward motion of the blinds, thus preventing damage in the event of incorrect operation
- Driven by an orientation shaft, see profiles on table below (further profiles on request)
- Two adjustable end stops
- Max. drive torque of 25 Nm (tested according to DIN 14203 7/c) with a tightening moment of the stop screw of 4.0 Nm
- Maximum 50 turns until lock operates
- Spindle made of aluminium, stops and nut made out of diecast zinc
- Rust-proof

Note

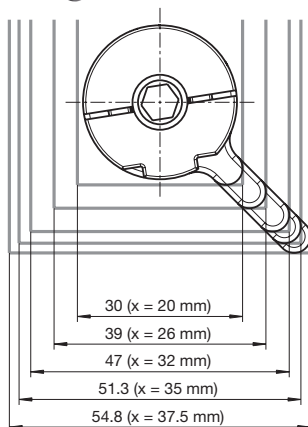
- Recommended for gears 433F... and 434F6..
- Only suitable for manual operation
- Operation with third-party products and electric drives must be tested by the customer



Part Nr.	Interior profile ▲	Driving nut
712F125	○ 12 mm	55 X 37,5 mm
712F128	○ 7 mm	55 X 37,5 mm
712F145	⦿ 14 mm	55 X 37,5 mm

712F... | Spindle stops made of aluminium

Application: **Venetian blinds with 30 mm/55 mm head rail**

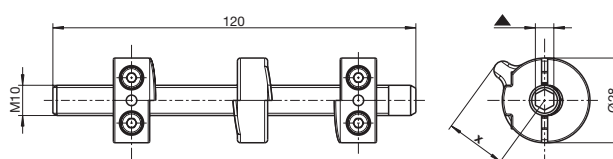


Features

- Limits the upward and downward motion of the blinds, thus preventing damage in the event of incorrect operation
- Driven by an orientation shaft, see profiles on table below (further profiles on request)
- Two adjustable end stops
- Max. drive torque of 5,0 Nm with a tightening moment of the stop screw of 3.0 Nm
- Maximum 50 turns until lock operates
- Spindle made of aluminium, stops and nut made out of diecast zinc
- Rust-proof

Note

- Recommended for gears 431F1.. and 431F5..
- Only suitable for manual operation
- Operation with third-party products and electric drives must be tested by the customer



Part Nr.	Interior profile ▲	Driving nut [x]
712F521	○ 6 mm	Tab holder 20 mm
712F628	○ 6 mm	Tab holder 26 mm
712F632	○ 6 mm	Tab holder 32 mm
712F635	○ 6 mm	Tab holder 35 mm
712F735	○ 7 mm	Tab holder 35 mm
712F637	○ 6 mm	Tab holder 37,5 mm

712F65. | Spindle stops

Application: **Venetian blinds with 25 mm head rail (e.g.: 25 x 25 mm)**

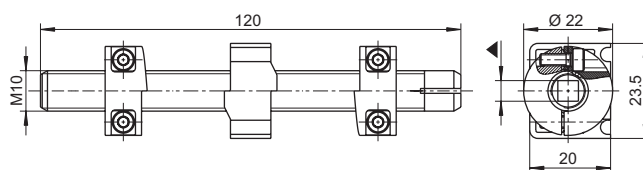


Features

- Limits the upward and downward motion of the blinds, thus preventing damage in the event of incorrect operation
- Driven by an orientation shaft, see profiles on table below (further profiles on request)
- Two adjustable end stops
- Max. drive torque of 2,5 Nm with a tightening moment of the stop screw of 1,5 Nm
- Maximum 50 turns until lock operates
- Spindle made of aluminium, stops made out of diecast zinc, nut made of plastic
- Rust-proof

Note

- Recommended for gear 429F0..
- Only suitable for manual operation
- Operation with third-party products and electric drives must be tested by the customer



Part Nr.	Interior profile ▲	Driving nut
712F651	○ 5 mm	23,5 X 20 mm
712F652	○ 5 mm	23,5 X 20 mm
712F653	○ 6 mm	23,5 X 20 mm

712F2.. | Spindle stops made of plastic

Application: **Venetian blinds with 50 mm head rail (e.g.: 57 x 51 mm, 58 x 56 mm)**

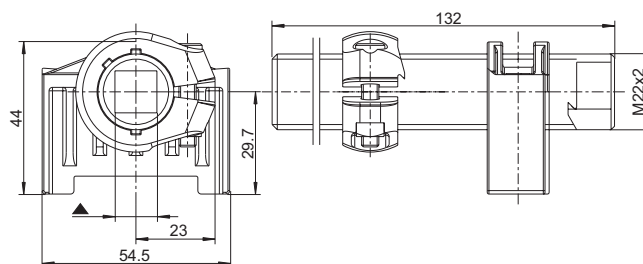


Features

- Driven by an orientation shaft, see profiles on table below (further profiles on request)
- Limits the upward and downward motion of the blinds, thus preventing damage in the event of incorrect operation
- One adjustable end stop
- Max. drive torque of 16,0 Nm (tested according to DIN 14203 7/c) with a tightening moment of the stop screw of 4,5 Nm
- Maximum 42 turns until lock operates
- Spindle, stop and stop ring made of high-strength plastic
- Rust-proof

Note

- Recommended for gears 434F3.. and 434F6..
- Only suitable for manual operation
- Operation with third-party products and electric drives must be tested by the customer



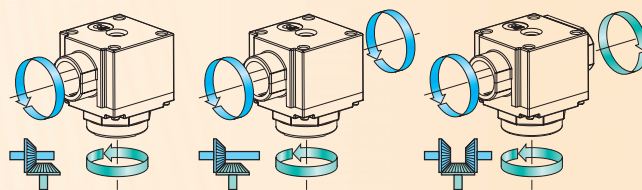
Part Nr.	Interior profile ▲	Driving nut
712F200	○ 12 mm	54,5 x 29,7 mm
712F201	○ 14 mm	54,5 x 29,7 mm
712F203	○ 8 mm	54,5 x 29,7 mm
712F210	○ 7 mm	54,5 x 29,7 mm

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

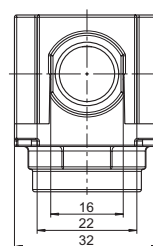
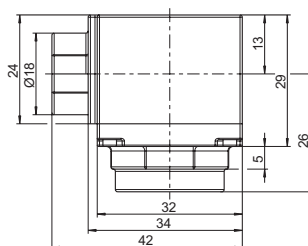
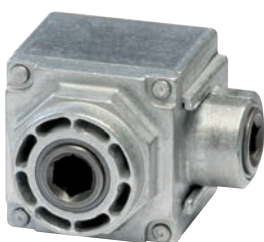
Max. output torque	6 Nm
Reduction ratio	1:1 1,5:1 1:1,5
Efficiency	0,83

Features

- Zinc die-cast housing, steel gear wheels
- Plastic bearing bushes
- With one drive and one output

Note

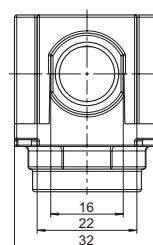
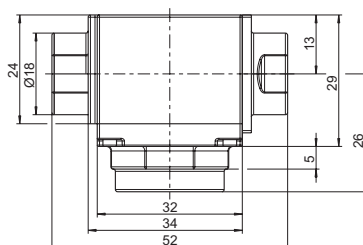
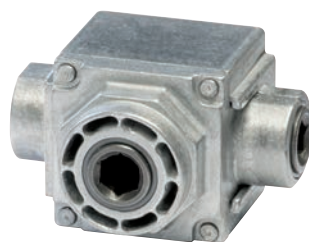
- Other drive/output combinations on request
- Also available as emergency gear (max. 10 Nm)



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

Features

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

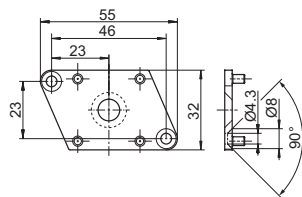
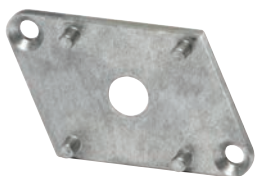


Part Nr.	Drive/output profile	Reduction ratio	Drive(s)/output(s)
430F553	○ 7mm	1 : 1	3
430F554	○ 7mm	1,5 : 1	3
430F555	○ 7mm	1 : 1,5	3

430F503 | Fixation plate

Features

- 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