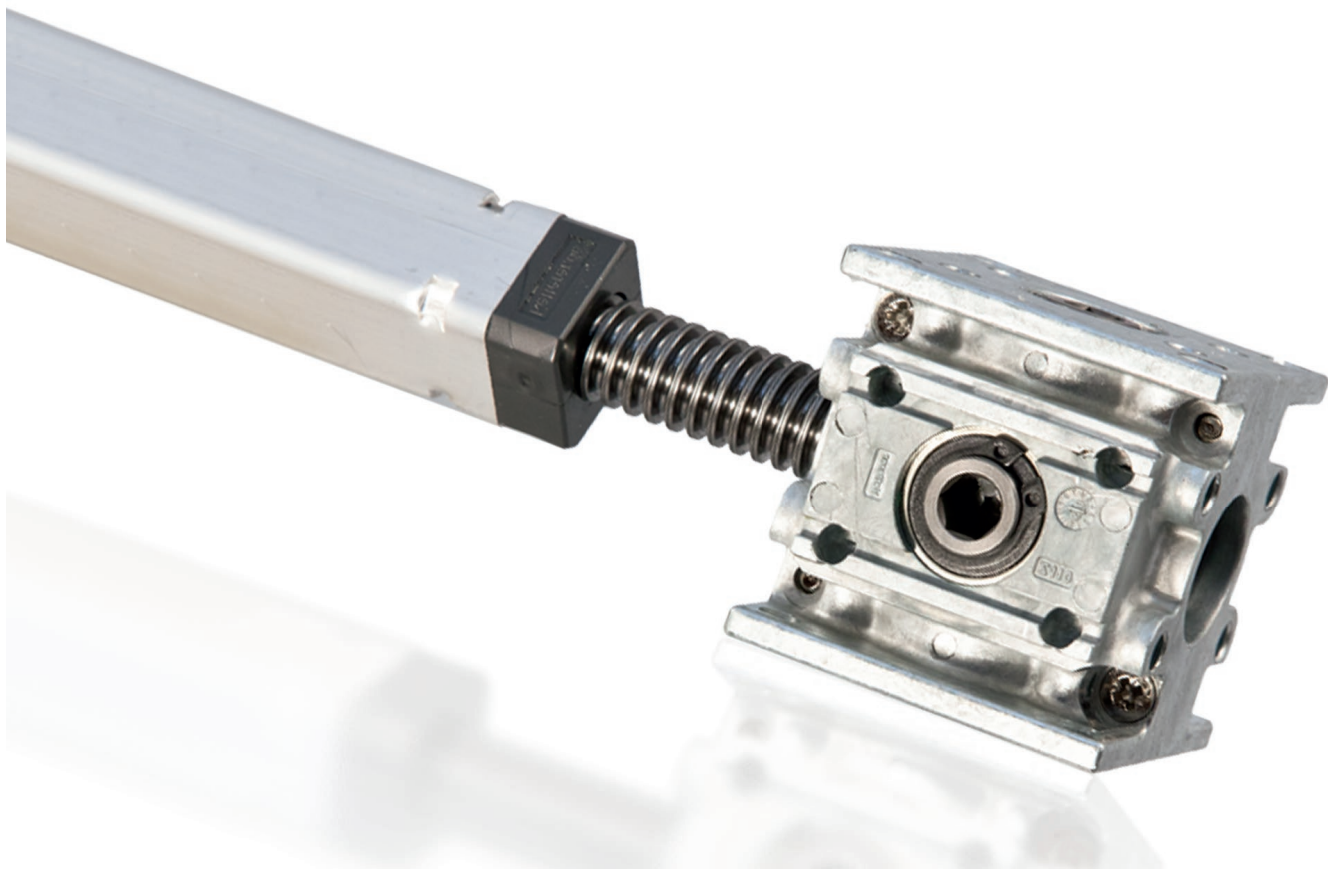


## Lifting Units and Accessories



# WE GET IDEAS MOVING

The spirit of innovation and a sense of ideas beyond the familiar has made us into a pioneering company over more than 185 years.

For a quarter of a century, we have been offering customized drive solutions for office and workplace workstations, as well as for shading systems and building technology.

Through our tradition of innovation, we have succeeded in establishing ourselves as a specialist and problem-solver in numerous areas.



Over 185 years' experience



More than 60 standard solutions for four different market segments



100%  
Made in Black Forest

# THE RIGHT PRODUCT FOR EACH APPLICATION

## Lifting Units

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## Accessories

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# Bevel gear with spindle unit 3010/3011



## Description

Universally applicable lifting unit with bevel gear head for linear drive solutions. Possible applications are height adjustable tables, various adjustment functions for furniture items as well as all manner of linear adjustment in residential and office fields. Simple screw fastenings enable a simple system structure and an uncomplicated assembly.

## Special features

- Maintenance-free
- Ratio in direction of spindle 1.3:1
- Drive torque on gear head for application with several spindle units: max. 3 Nm
- Housing made of glass fiber reinforced plastic
- Hardened steel bevel wheels with robust, reinforced toothing
- Designed for the manual operation
- Variable number of bevel gears for deflection of movement and freely selectable drive position
- Upon request other spindle types can be supplied

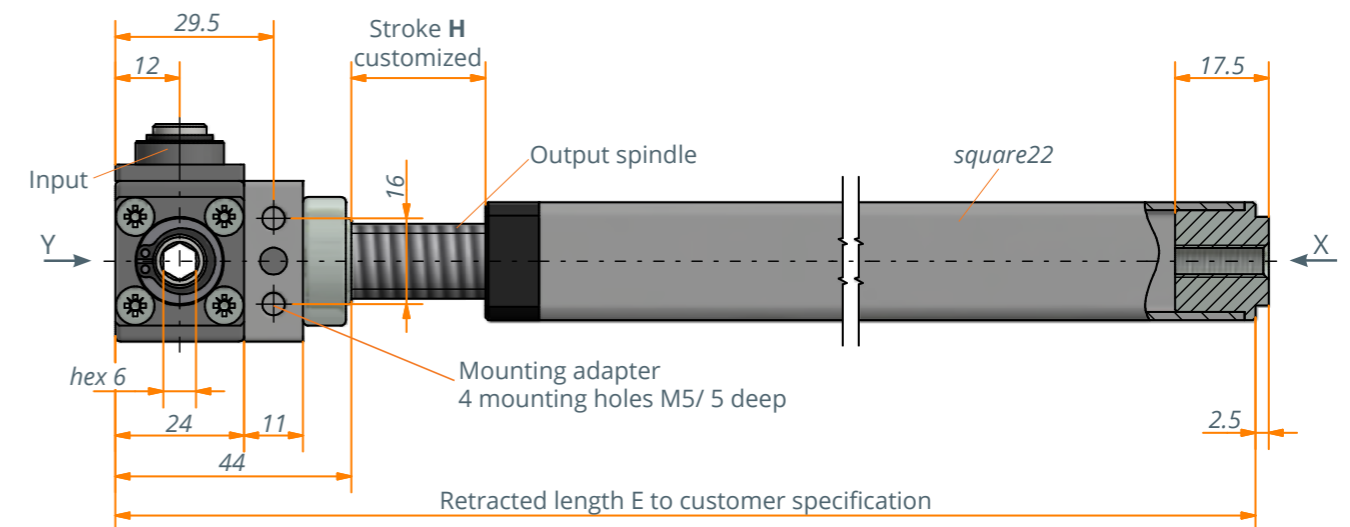
## Variant key

- 3010: variants with right rotating spindles
- 3011: variants with left rotating spindles

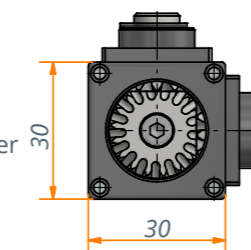
## Technical data

Model	3010	3011
Ratio in direction of spindle	1.3:1	1.3:1
Ratio in direction of deflection	1:1	1:1
Input	hex 6 mm	hex 6 mm
Number of bevel wheels	max. 5	max. 5
Type of spindle	TR14x3 RH	TR14x3 LH
Travel path	2.3 mm/rotation	2.3 mm/rotation
Max. Stroke	retracted length -99 mm	retracted length -99 mm
Max. lifting force	1200 N	1200 N
Required drive torque	1.7 Nm	1.7 Nm
Max. drive torque gear head for several spindle units*	3 Nm	3 Nm

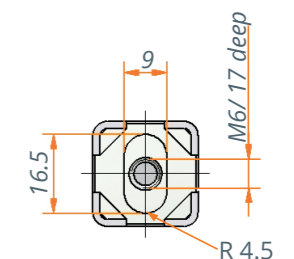
\* See technical notes



View Y



View X (Rotation stop)

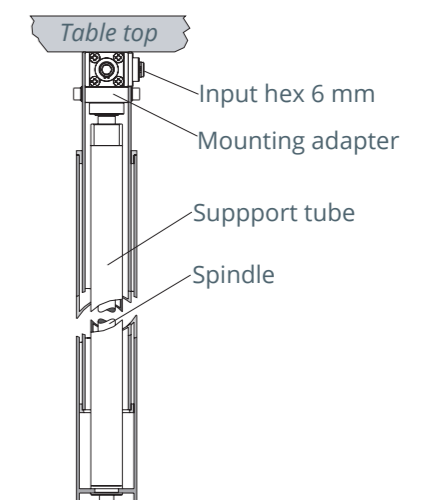


Number of bevel gears for deflection of movement and the drive position are customer specific

## Technical notes

- The lifting units must be protected against lateral forces by a separate guide system.
- Attention: The spindle systems with a spindle pitch  $\geq 3$ mm may not be self-locking. Check the self-locking effect in the application.
- The lifting unit is only pressure loadable.
- If several lifting units are being used simultaneously in the application, note the max. drive torque on gear head of 3 Nm!
- Incorrect dimensioning of the guide system can damage the lifting unit: Please note the design and safety instructions for spindle drives. You will find them at: <https://www.ketterer.de/en/downloads/instructions>

## Application example



# Bevel gear with spindle unit 3014



## Description

Universally applicable lifting unit with bevel gear head for linear drive solutions. Possible applications are height adjustable tables, various adjustment functions for furniture items as well as all manner of linear adjustment in residential and office fields. Simple screw fastenings enable a simple system structure and an uncomplicated assembly.

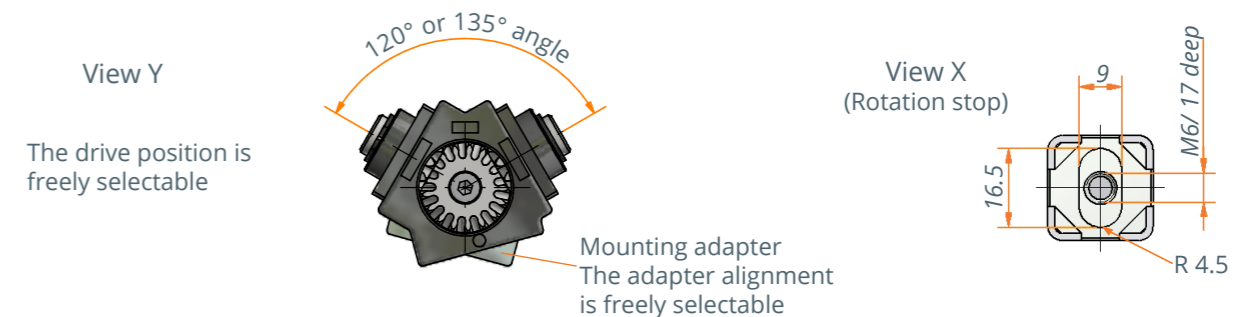
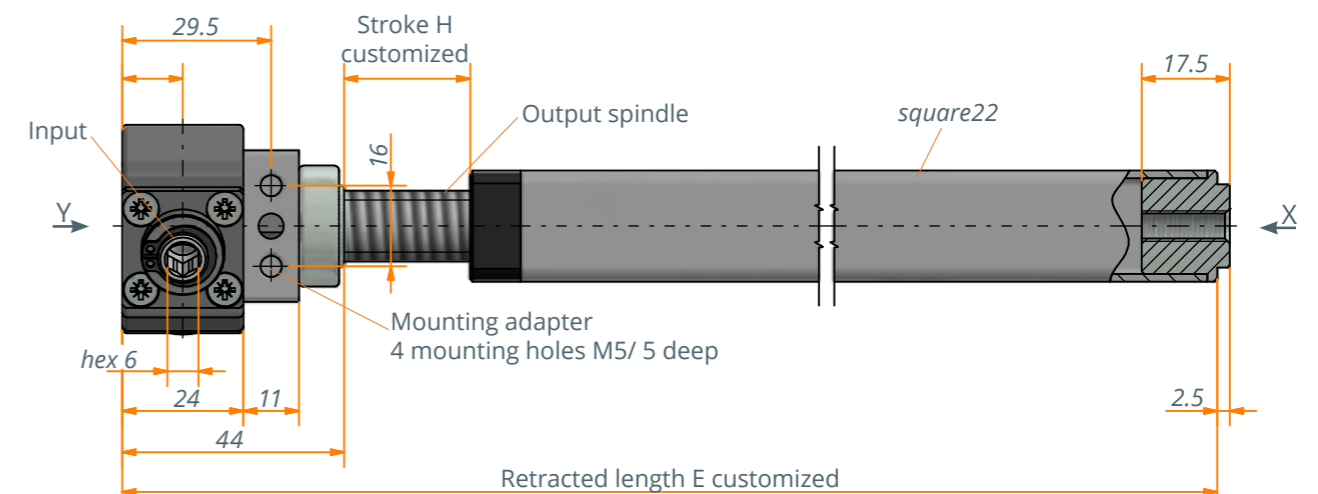
## Special features

- Maintenance-free
- Deflection angle: 120° or 135°,  $i = 1:1$
- Ratio in direction of spindle 1.3:1
- Drive torque on gear head for application with several spindle units: max. 3 Nm
- Hardened steel bevel wheels with robust, reinforced toothing
- Designed for the manual operation
- Upon request other spindle types can be supplied

## Technical data

Model	3014
Ratio in direction of spindle	1.3:1
Ratio in direction of deflection	1:1
Input	hex 6 mm
Number of bevel wheels	3
Type of spindle	TR14x3 RH
Travel path	2.3 mm/rotation
Max. stroke	retracted length -99 mm
Max. lifting force	1200 N
Required drive torque	1.7 Nm
Max. drive torque gear head for several spindle units*	3 Nm

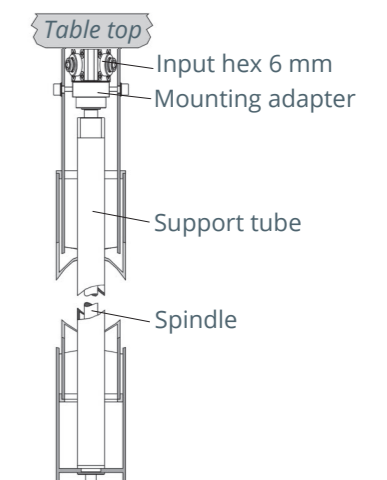
\* See technical notes



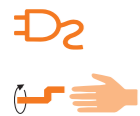
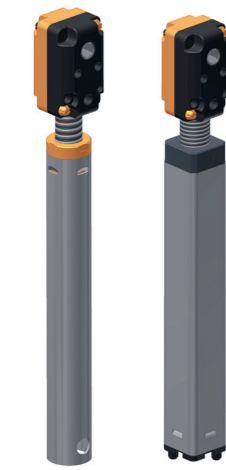
## Technical notes

- The lifting units must be protected against lateral forces by a separate guide system.
- Attention: The spindle systems with a spindle pitch  $\geq 3$  mm may not be self-locking. Check the self-locking effect in the application.
- The lifting unit is only pressure loadable.
- If several lifting units are being used simultaneously in the application, note the max. drive torque on gear head of 3 Nm!
- Incorrect dimensioning of the guide system can damage the lifting unit: Please note the design and safety instructions for spindle drives. You will find them at: <https://www.ketterer.de/en/downloads/instructions>

## Application example



# Bevel gear with spindle unit 3034



## Description

Universally applicable lifting unit with bevel gear head for linear drive solutions. Possible applications are height adjustable tables, various adjustment functions for furniture items as well as all manner of linear adjustment in residential, mobile home or industrial fields.

A simple screw fastening and a hexagonal bolt enable a simple system structure and an uncomplicated assembly.

## Special features

- Maintenance-free
- Very slim size 25.8 mm x 25.8 mm
- Drive torque on gear head for application with several spindle units: max. 3.5 Nm
- Housing made of glass fiber reinforced plastic
- Hardened steel bevel wheels with robust, reinforced toothings
- Support tube round  $\varnothing$  20 mm or square 22 mm
- Suitable for manual use as well as for the electromotive drive

## Variant key

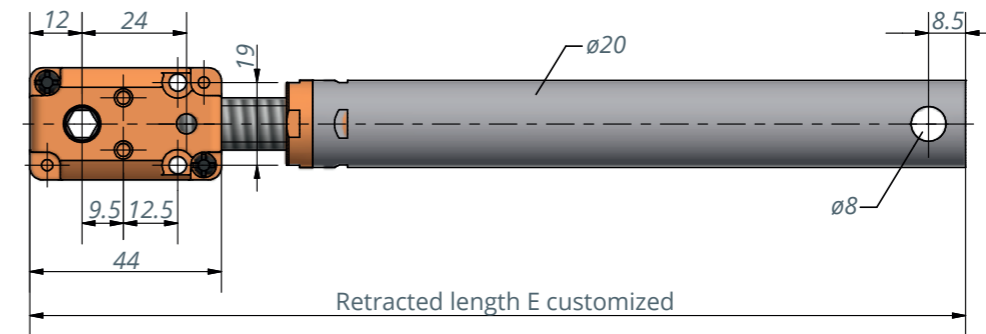
- 3034.00-V01: spindle SG12x16P4 RH with a round support tube
- 3034.00-V02: spindle SG12x16P4 RH with a square support tube
- 3034.00-V03: spindle Tr14x3 RH with a square support tube
- 3034.00-V04: spindle SG14x16P4 RH with a square support tube

## Technical data

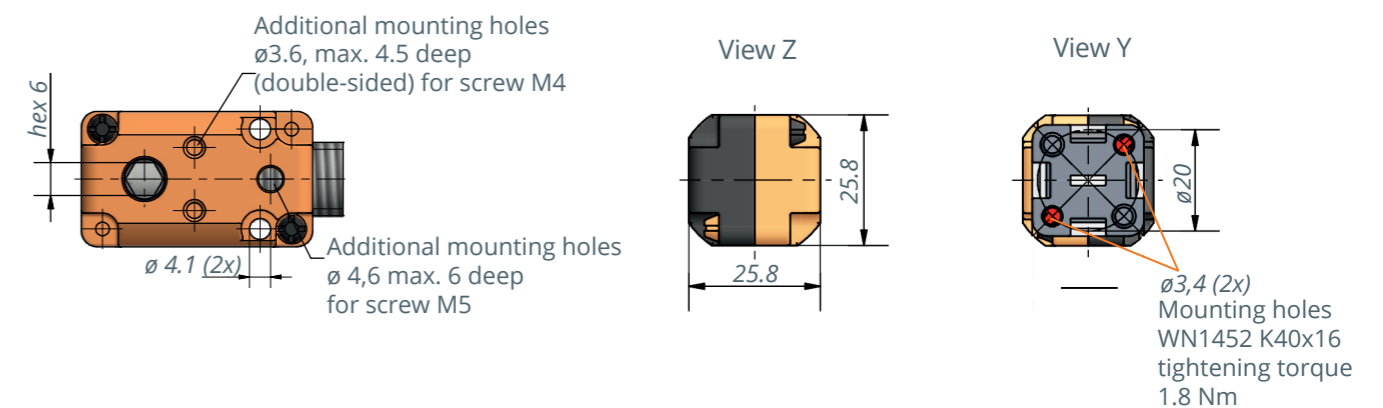
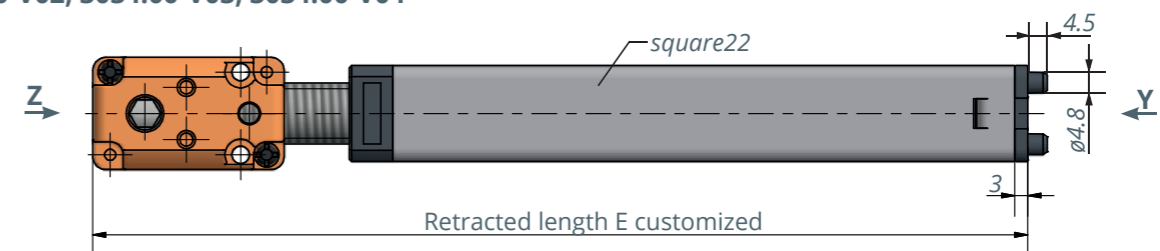
Model	3034.00-V01EXXXHXXX	3034.00-V02EXXXHXXX	3034.00-V03EXXXHXXX	3034.00-V04EXXXHXXX
Ratio	1:1	1:1	1:1	1:1
Input	hex 6 mm	hex 6 mm	hex 6 mm	hex 6 mm
Type of spindle	SG12x16P4 RH	SG12x16P4 RH	TR14x3 RH	SG14x16P4 RH
Travel path	16 mm/rotation	16 mm/rotation	3 mm/rotation	16 mm/rotation
Traverse speed *	32 mm/s	32 mm/s	6 mm/s	32 mm/s
Support tube	round $\varnothing$ 20 mm	square 22 mm	square 22 mm	square 22 mm
Max. stroke	retracted length 90 mm	retracted length 100 mm	retracted length 100 mm	retracted length 100 mm
Max. lifting force	700 N	700 N	700 N	700 N
Required drive torque	3.2 Nm	3.2 Nm	1 Nm	3 Nm

\* In combination with LogicData control box Compact-3

## 3034.00-V01



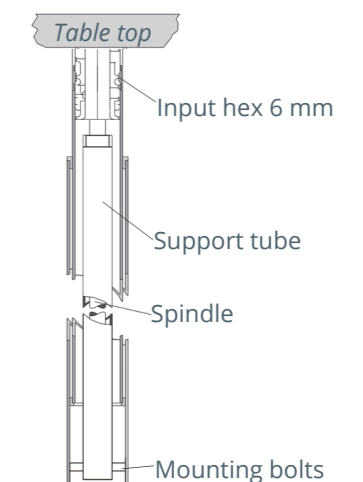
## 3034.00-V02, 3034.00-V03, 3034.00-V04



## Technical notes

- The lifting units must be protected against lateral forces by a separate guide system.
- Attention: The spindle systems with a spindle pitch  $\geq$  3mm may not be self-locking. Check the self-locking effect in the application.
- The lifting unit is only pressure loadable.
- Incorrect dimensioning of the guide system can damage the lifting unit: Please note the design and safety instructions for spindle drives. You will find them at: <https://www.ketterer.de/en/downloads/instructions>
- Installation instructions: use at least 2 M4 screws when fastening. Using bore holes  $\varnothing$  4.1 mm (2x) when doing so, preferable the lifting unit should be supported above on the top side. Connection by means of additional mounting holes  $\varnothing$  3.6 mm for M4 and  $\varnothing$  4.6 for M5 requires top side support.

## Application example



# Bevel gear with spindle unit 3035/ 3036



## Description

Universally applicable lifting unit with bevel gear head for linear drive solutions. Possible applications are height adjustable tables, various adjustment functions for furniture items as well as all manner of linear adjustment in residential, mobile home or industrial fields. A simple screw fastening and a hexagonal bolt enable a simple system structure and an uncomplicated assembly.

## Special features

- Maintenance-free
- Ratio in direction of spindle: 1:1 oder 1.5:1
- Very slim size 35 mm x 35 mm
- Drive torque on gear head for application with several spindle units: max. 4 Nm
- Housing made of glass fiber reinforced plastic
- Hardened steel bevel wheels with robust, reinforced toothing
- Support tube round  $\varnothing$  20 mm or square 22 mm
- Suitable for manual use as well as for electromotive drives

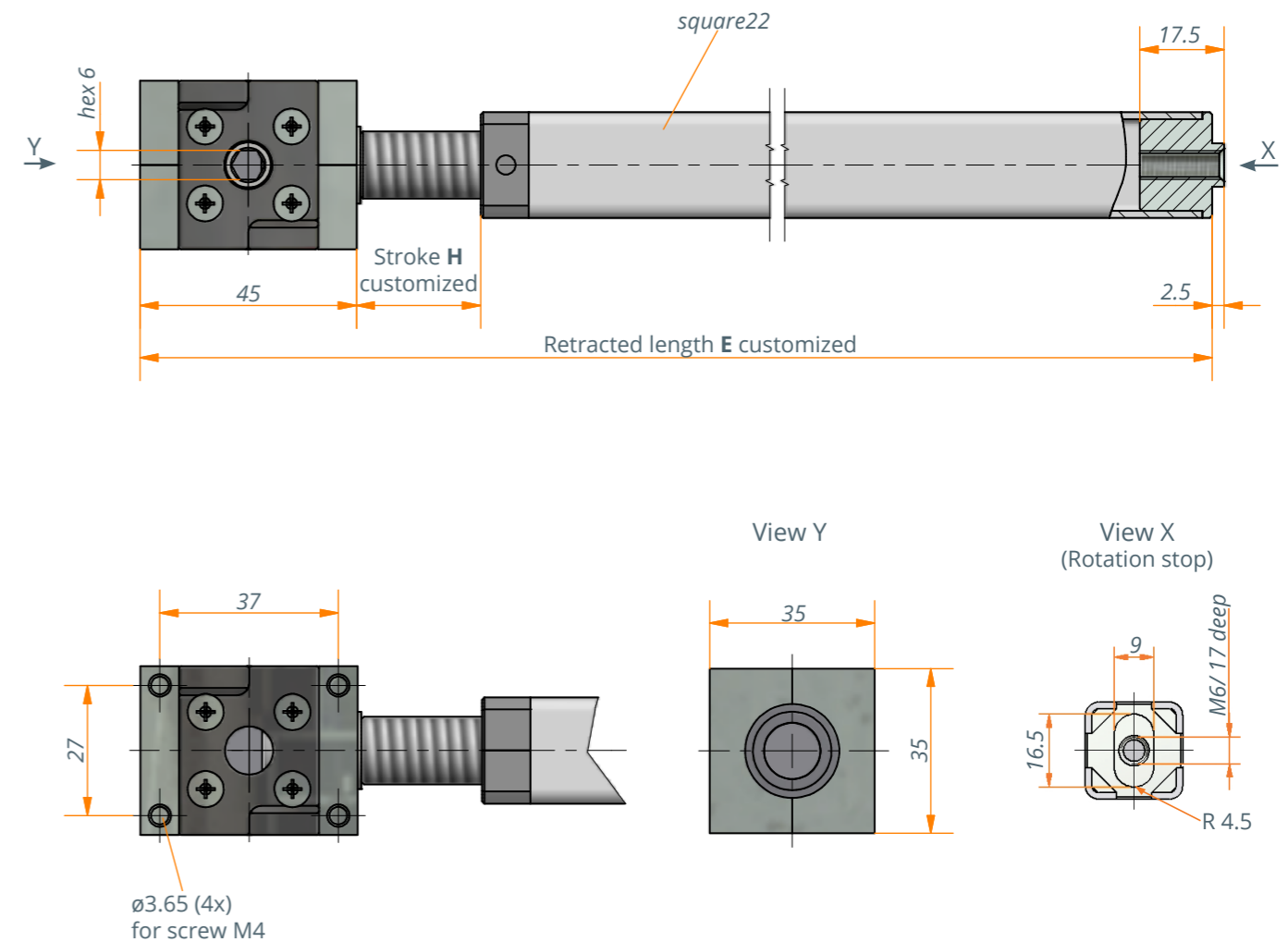


## Technical data

Model	3035	3036
<b>Ratio in direction of spindle</b>	1.5:1	1:1
<b>Input</b>	hex 6 mm	hex 6 mm
<b>Type of spindle</b>	Tr14x3 RH	Tr14x3 RH
<b>Travel path</b>	2 mm/rotation	3 mm/rotation
<b>Traverse speed*</b>	4 mm/s	6 mm/s
<b>Max. stroke</b>	retracted length -105 mm	retracted length -105 mm
<b>Max. lifting force</b>	1000 N	1000 N
<b>Required drive torque</b>	1 Nm	1.3 Nm
<b>Max. drive torque gear ahead for several spindle units**</b>	4 Nm	4 Nm

\* In combination with LogicData control box Compact-3

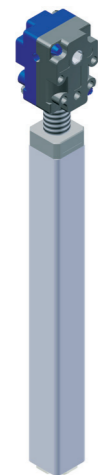
\*\* See technical data



## Technical notes

- The lifting units must be protected against lateral forces by a separate guide system.
- Attention: The spindle systems with a spindle pitch  $\geq$  3 mm may not be self-locking. Check the self-locking effect in the application.
- The lifting unit is only pressure loadable.
- Incorrect dimensioning of the guide system can damage the lifting unit: Please note the design and safety instructions for spindle drives. You will find them at: [https:// www.ketterer.de/en/downloads/instructions](https://www.ketterer.de/en/downloads/instructions)

# Bevel gear with spindle unit 3039



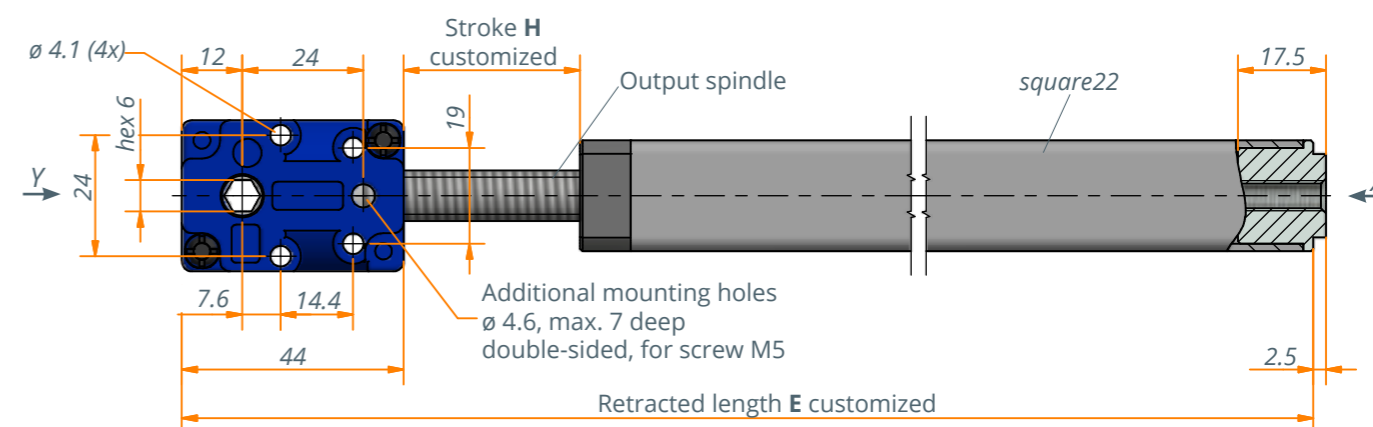
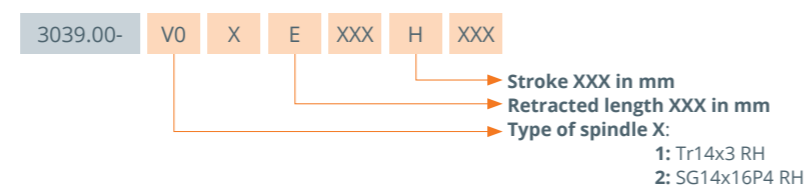
## Description

Universally applicable lifting unit with bevel gear head for linear drive solutions. Possible applications are height adjustable tables, various adjustment functions for furniture items as well as all manner of linear adjustment in residential, mobile home or industrial fields. A simple screw fastening and a hexagonal bolt enable a simple system structure and an uncomplicated assembly.

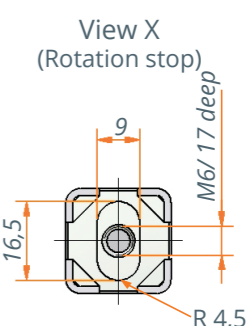
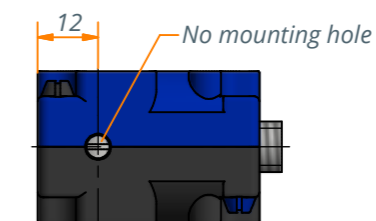
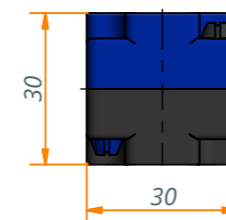
## Special features

- Maintenance-free
- Ratio 1:1
- Max. drive torque on gear head depending on spindle pitch: max. 4 Nm
- Housing made of glass fiber reinforced plastic
- Hardened steel bevel wheels with robust, reinforced toothing
- Suitable for manual use as well as for electromotive drives

## Variant key



View Y



## Technical data

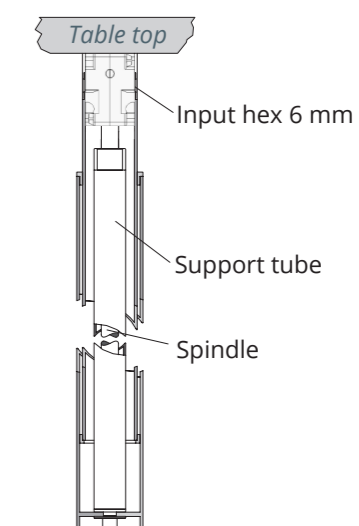
Model	3039.00-V01EXXXHXXX	3039.00-V02EXXXHXXX
Ratio	1:1	1:1
Input	hex 6 mm	hex 6 mm
Type of spindle	Tr14x3 RH	SG14x16P4 RH
Travel path	3 mm/rotation	16 mm/rotation
Traverse speed*	7.5 mm/s	40 mm/s
Max. stroke	retracted length -99 mm	retracted length -99 mm
Max. lifting force	1200 N	800 N
Required drive torque	1.7 Nm	3.5 Nm

\* In combination with LogicData control box Compact-3

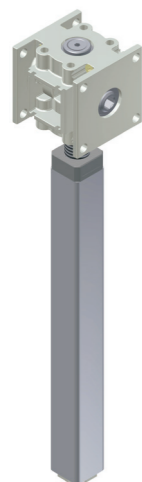
## Technical notes

- The lifting units must be protected against lateral forces by a separate guide system.
- Attention: The spindle systems with a spindle pitch  $\geq 3$ mm may not be self-locking. Check the self-locking effect in the application.
- The lifting unit is only pressure loadable.
- Incorrect dimensioning of the guide system can damage the lifting unit: Please note the design and safety instructions for spindle drives. You will find them at: <https://www.ketterer.de/en/downloads/instructions>
- Installation instructions: Use at least 2 M4 screws when fastening using upper boreholes  $\varnothing 4.1 (4x)$ . When doing so, preferably the lifting unit should be supported above on the top side. Connection by means of additional mounting holes  $\varnothing 4.6$  mm for M5 requires top side support.

## Application example



# Bevel gear with spindle unit 3042/ 3043



## Description

Universally applicable lifting unit with bevel gear head for linear drive solutions. Possible applications are height adjustable tables, various adjustment functions for furniture items as well as all manner of linear adjustment in residential, mobile home or industrial fields. A simple screw fastening and a hexagonal bolt enable a simple system structure and an uncomplicated assembly.

## Special features

- Maintenance-free
- Housing made of die-cast zinc
- Hardened steel bevel wheels with robust, reinforced toothing
- Ratio 1:1
- Drive torque on gear head for application with several spindle units: max. 10 Nm
- Perfect suitable for electromotive drives
- More flexibility through variable number of bevel gears for deflection of movement
- Available in various spindle lengths and pitches

## Variant key

3042: variants with right rotating spindles

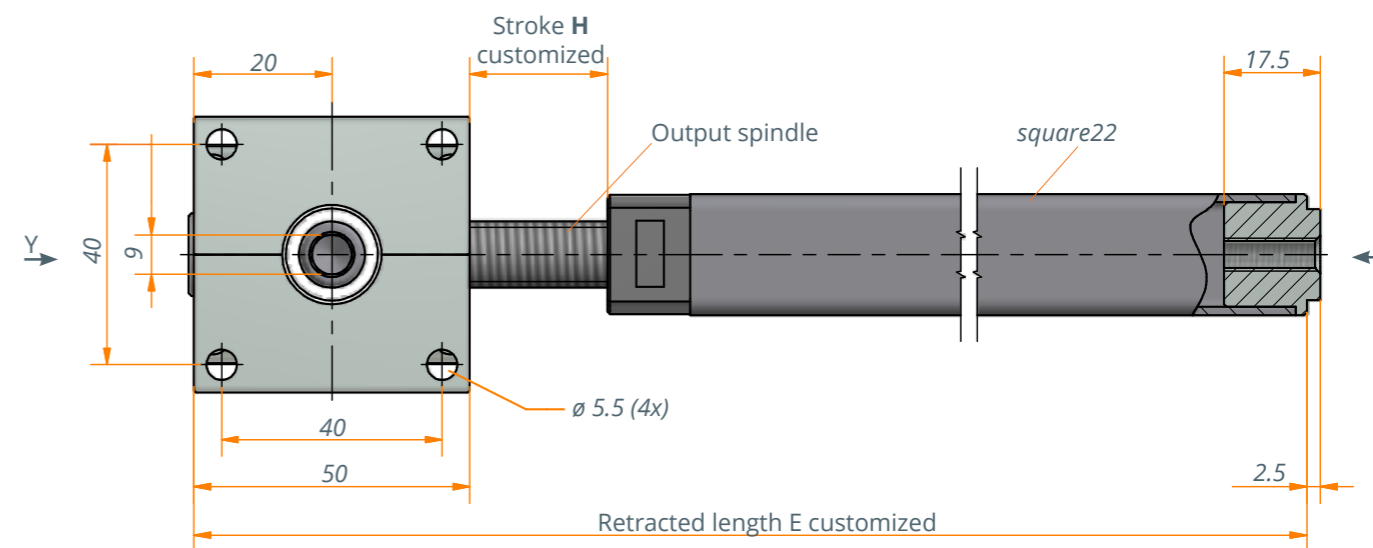
3043: variants with left rotating spindles

## Technical data

Model	3042	3043
<b>Ratio</b>	1:1	1:1
<b>Input</b>	hex 7 mm	hex 7 mm
<b>Number of bevel wheels</b>	max. 3	max. 3
<b>Type of spindle</b>	SG12x12P4 RH clockwise	SG12x12P4 RH counter-clockwise
<b>Travel path</b>	12 mm/rotation	12 mm/rotation
<b>Traverse speed*</b>	24 mm/s	24 mm/s
<b>Max. stroke</b>	retracted length -105 mm	retracted length -105mm
<b>Max. lifting force</b>	1200 N	1200 N
<b>Required drive torque</b>	2.6 Nm	2.6 Nm
<b>Max. drive torque gear ahead for several spindle units**</b>	10 Nm	10 Nm

\* In combination with motor drives 3143.00-200X and LogicData control box Compact-3

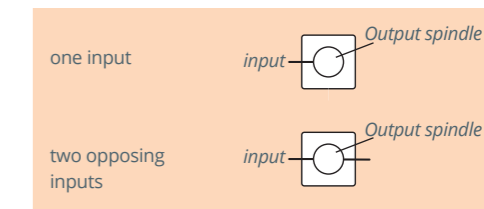
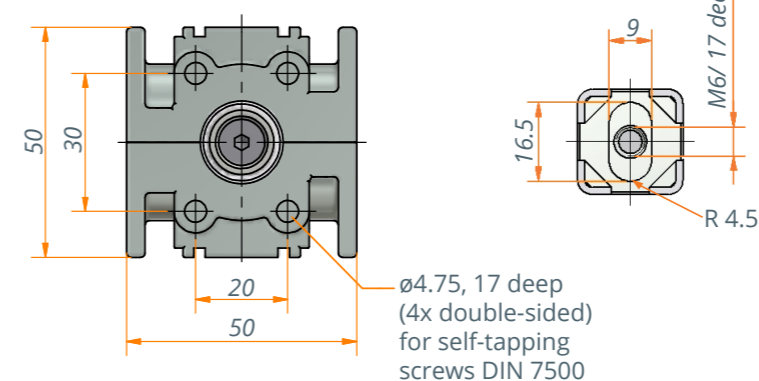
\*\* See technical notes



View Y

View X  
(Rotation stop)

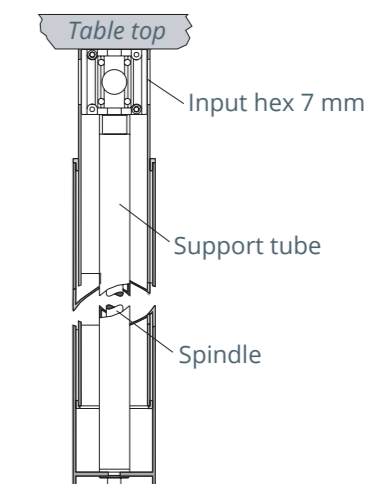
Variants:



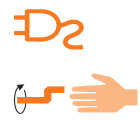
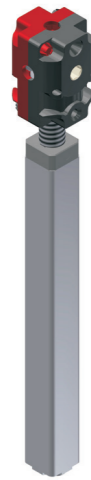
## Technical notes

- The lifting units must be protected against lateral forces by a separate guide system.
- Attention: The spindle systems with a spindle pitch  $\geq 3\text{mm}$  may not be self-locking. Check the self-locking effect in the application.
- The lifting unit is only pressure loadable.
- If several lifting units are being used simultaneously in the application, note the max. drive torque on gear head of 10 Nm!
- Incorrect dimensioning of the guide system can damage the lifting unit: Please note the design and safety instructions for spindle drives. You will find them at: <https://www.ketterer.de/en/downloads/instructions>

## Application example



# Bevel gear with spindle unit 3045



## Description

Universally applicable lifting unit with bevel gear head for linear drive solutions. Possible applications are height adjustable tables, various adjustment functions for furniture items as well as all manner of linear adjustment in residential, mobile home or industrial fields. A simple screw fastening and a hexagonal bolt enable a simple system structure and an uncomplicated assembly.

## Special features

- Maintenance-free
- Ratio 1:1 and 1:2
- Drive torque on gear head for application with several spindle units: max. 5.5 Nm
- Housing made of glass fiber reinforced plastic
- Hardened steel bevel wheels with robust, reinforced toothing
- Suitable for manual use as well as for electromotive drives
- Ideal for the high performance drive 3143.00

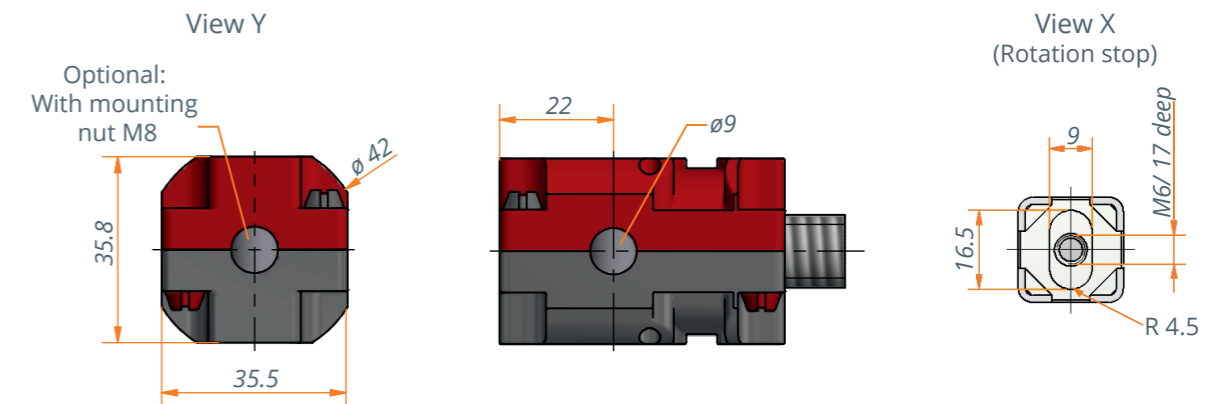
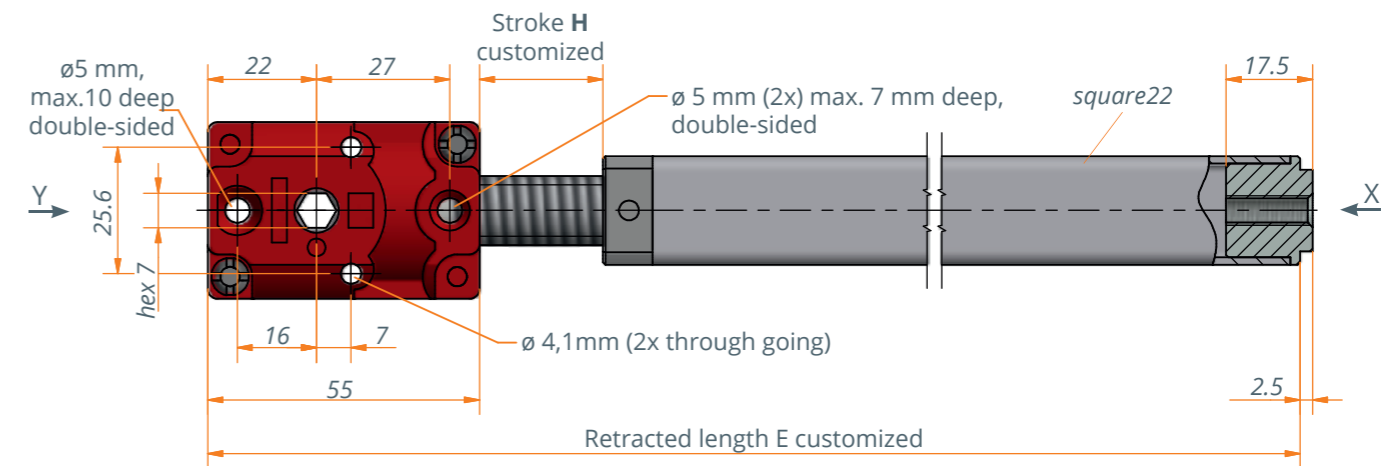
## Variant key

3045.00-V01: Spindle SG14x16P4 RH and i= 1:1  
 V02: Spindle Tr14x3 RH and i= 1:1  
 V03: Spindle Tr14x3 RH and i= 1:2  
 Stroke HXXX and retracted length EXXX are customized

## Technical data

Model	3045.00-V01EXXXHXXX	3045.00-V02EXXXHXXX	3045.00-V03EXXXHXXX
<b>Ratio</b>	1:1	1:1	1:2
<b>Input</b>	hex 7 mm	hex 7 mm	hex 7 mm
<b>Type of spindle</b>	SG12x16P4 RH	Tr14x3 RH	TR14x3 RH
<b>Travel path</b>	16 mm/rotation	3 mm/rotation	6 mm/rotation
<b>Traverse speed*</b>	32 mm/s	6 mm/s	12 mm/s
<b>Max. stroke</b>	retracted length -110 mm	retracted length -110 mm	retracted length -110 mm
<b>Max. lifting force</b>	1200 N	1200 N	1200 N
<b>Required drive torque</b>	4.5 Nm	1.7 Nm	3.5 Nm

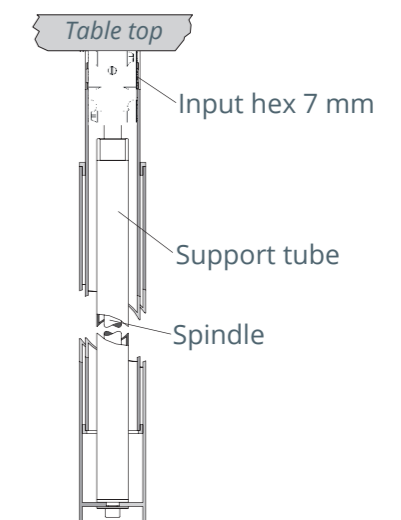
\* In combination with motor drive 3143.00-200X and LogicData control box Compact-3



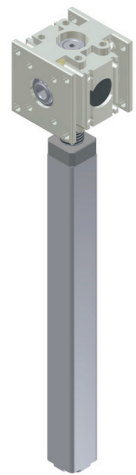
## Technical notes

- The lifting units must be protected against lateral forces by a separate guide system.
- Attention: The spindle systems with a spindle pitch  $\geq 3$  mm may not be self-locking. Check the self-locking effect in the application.
- The lifting unit is only pressure loadable.
- Incorrect dimensioning of the guide system can damage the lifting unit: Please note the design and safety instructions for spindle drives. You will find them at: <https://www.ketterer.de/en/downloads/instructions>

## Application example



# Bevel gear with spindle unit 3070/ 3071



## Description

Universally applicable lifting unit with bevel gear head for linear drive solutions. Possible applications are various adjustment functions for furniture items as well as all manner of linear adjustment in residential, mobile home or industrial fields. Particularly appropriate as a component for "heavy load solutions" for office furniture and workplace applications. The designs with up to four drive wheels offer broad application opportunities for the lifting unit and high flexibility in system design.

## Special features

- Maintenance-free
- Ratio in direction of spindle 1.83:1
- Housing made of die-cast-zinc
- Hardened steel bevel wheels with robust, reinforced toothing
- Drive torque on gear head for application with several spindle units: max. 6 Nm
- Suitable for electromotive drives
- High flexibility through variable number of drive wheels for deflection of movement
- Available in different spindle pitches and with customer specific spindle lengths

## Variant key

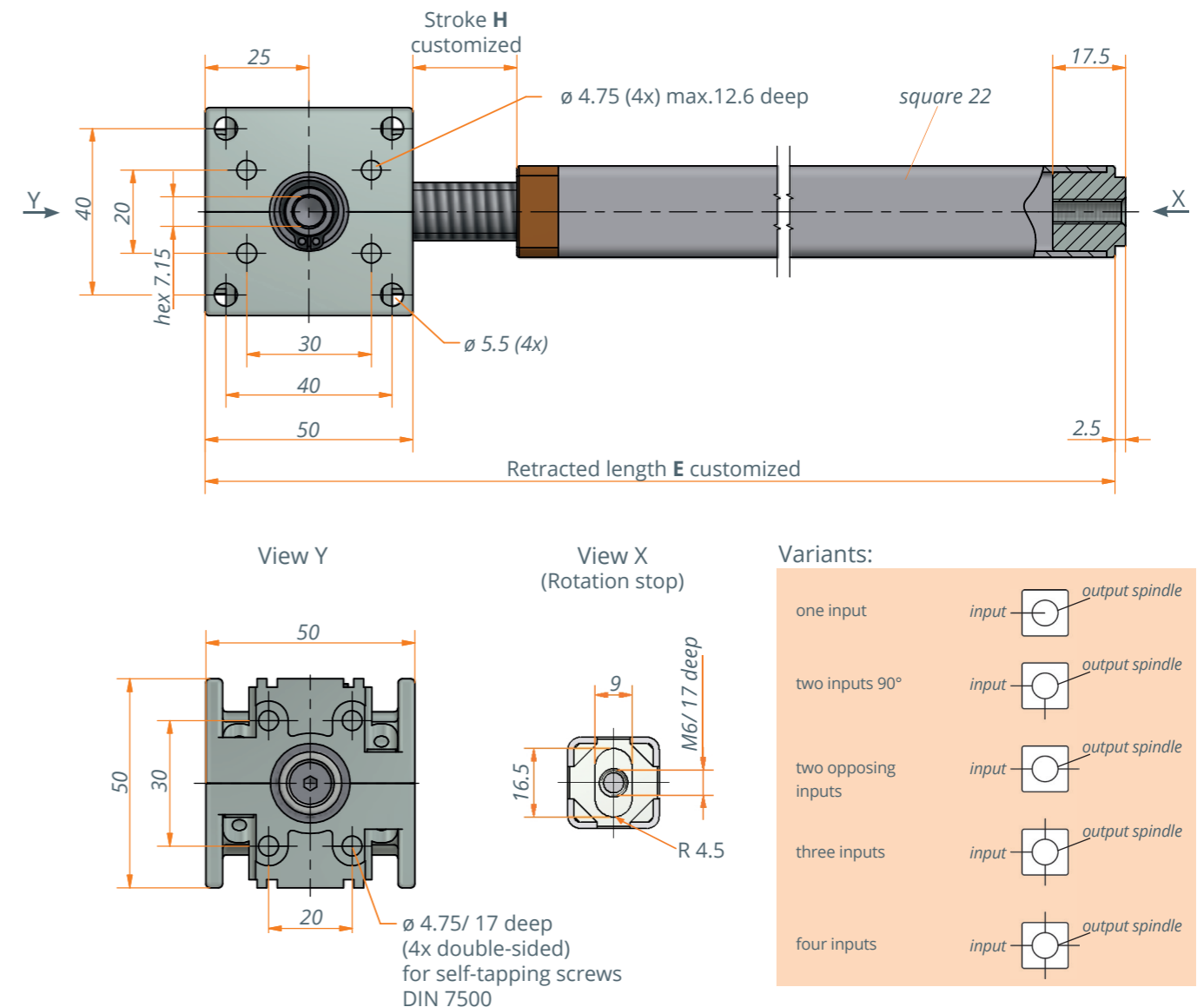
3070: variants with right rotating spindles

3071: variants with left rotating spindles

## Technical data

Model	3070	3071
Ratio in direction of spindle	1.83:1	1.83:1
Input	hex 7 mm	hex 7 mm
Number of Inputs	max. 5	max. 5
Type of spindle	SG12x12P4 RH clockwise	SG12x12P4 RH counter-clockwise
Travel path	6.6 mm/rotation	6.6 mm/rotation
Traverse speed*	13 mm/s	13 mm/s
Max. stroke	retracted length -105 mm	retracted length -105mm
Max. lifting force	1200 N	1200 N
Required drive torque	2 Nm	2 Nm
Max. drive torque gear head for several spindle units	10 Nm	10 Nm

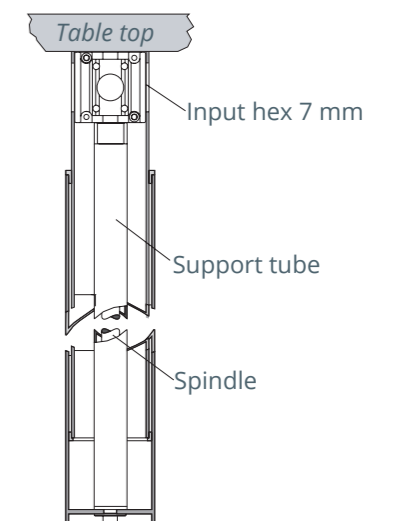
\* In combination with motor drive 3143.00-200X and LogicData control box Compact-3



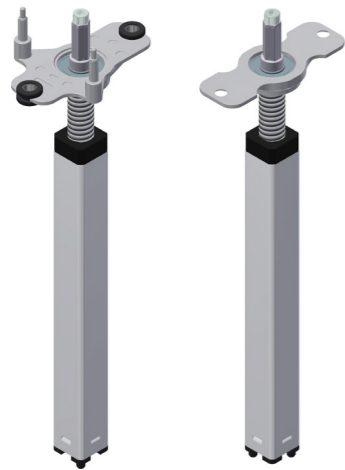
## Technical notes

- The lifting units must be protected against lateral forces by a separate guide system.
- Attention: The spindle systems with a spindle pitch  $\geq 3$  mm may not be self-locking. Check the self-locking effect in the application.
- The lifting unit is only pressure loadable.
- If several lifting units are being used simultaneously in the application, note the max. drive torque on gear head of 10 Nm!
- Incorrect dimensioning of the guide system can damage the lifting unit: Please note the design and safety instructions for spindle drives. You will find them at: <https://www.ketterer.de/en/downloads/instructions>

## Application example



# Spindle unit with motoradapter 3130.14



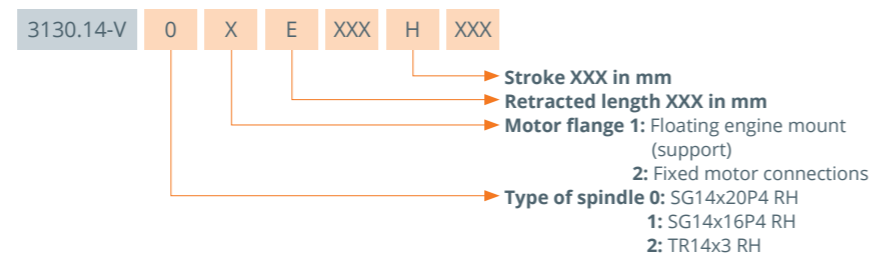
## Description

Universally applicable lifting unit with bevel gear head for linear drive solutions. Possible applications are height adjustable tables, various adjustment functions for furniture items as well as all manner of linear adjustment in residential, mobile home or industrial fields. The lifting unit is available in different spindle pitches with customer specific spindle lengths and can be combined with most Ketterer drives.

## Special features

- Ideal for the drives: 3312.00/ 3133.00 / 3133.48 /3130.00
- Available in customized spindle lengths
- Simple mounting
- Connection to the drive hex 9 mm

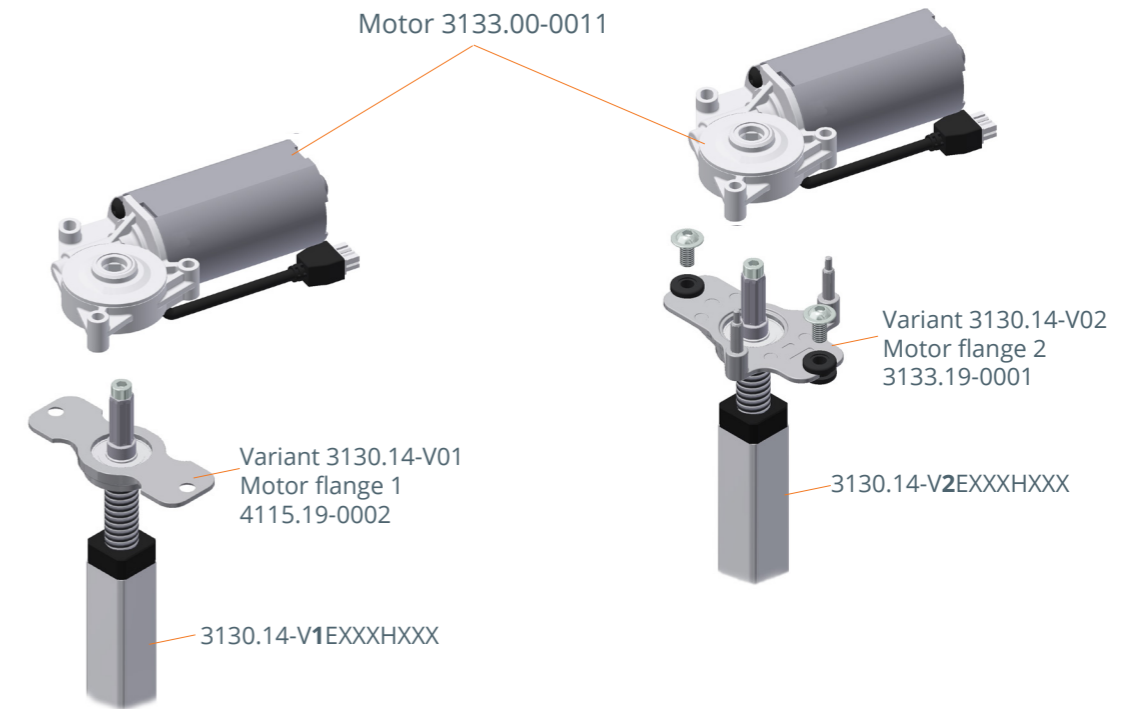
## Variant key



## Technical data

Model	3130.14-V01EXXXHXXX 3130.14-V02EXXXHXXX	3130.14-V11EXXXHXXX 3130.14-V12EXXXHXXX	3130.14-V21EXXXHXXX 3130.14-V22EXXXHXXX
Type of spindle	SG14x20P4 RH	SG14x16P4 RH	TR14x3 RH
Travel path	20 mm/rotation	16 mm/rotation	3 mm/rotation
Traverse speed*	40 mm/s*	32 mm/s*	6 mm/s*
Max. stroke	retracted length -64 mm	retracted length -64 mm	retracted length -64 mm
Max. lifting force	900 N	900 N**	900 N**
Required drive torque	3.5 Nm	3.4 Nm	1.1 Nm

\* In combination with motor 3133 and LogicData control box Compact-3  
 \*\* Max. lifting force is defined by maximum breaking point of the weakest components



## Technical notes

- The lifting units must be protected against lateral forces by a separate guide system.
- Attention: The spindle systems with a spindle pitch  $\geq 3$ mm may not be self-locking. Check the self-locking effect in the application.
- The lifting unit is only pressure loadable.
- Incorrect dimensioning of the guide system can damage the lifting unit: Please note the design and safety instructions for spindle drives. You will find them at: <https://www.ketterer.de/en/downloads/instructions>

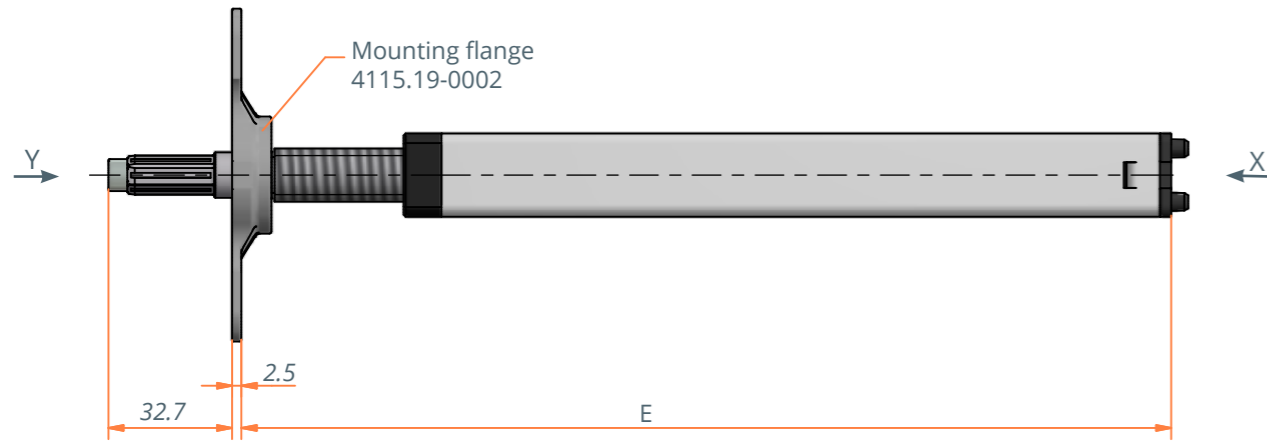
## Dynamic self-locking limits\* of current Ketterer drives with lifting unit 3130.14

	3130.14-V0X.. SG14x20P4	3130.14-V1X.. SG14x16P4	3130.14-V2X.. Tr14x3
with 3133.00	900 N	900 N	900 N
with 3133.48	700 N	900 N	900 N
with 3130.00 (with felt brake)	900 N	900 N	900 N (also a variant without a brake)
mit 3112.00-1XXX	-	400 N	900 N

\* The limits are determined in combination with LogicData control box Compact-3

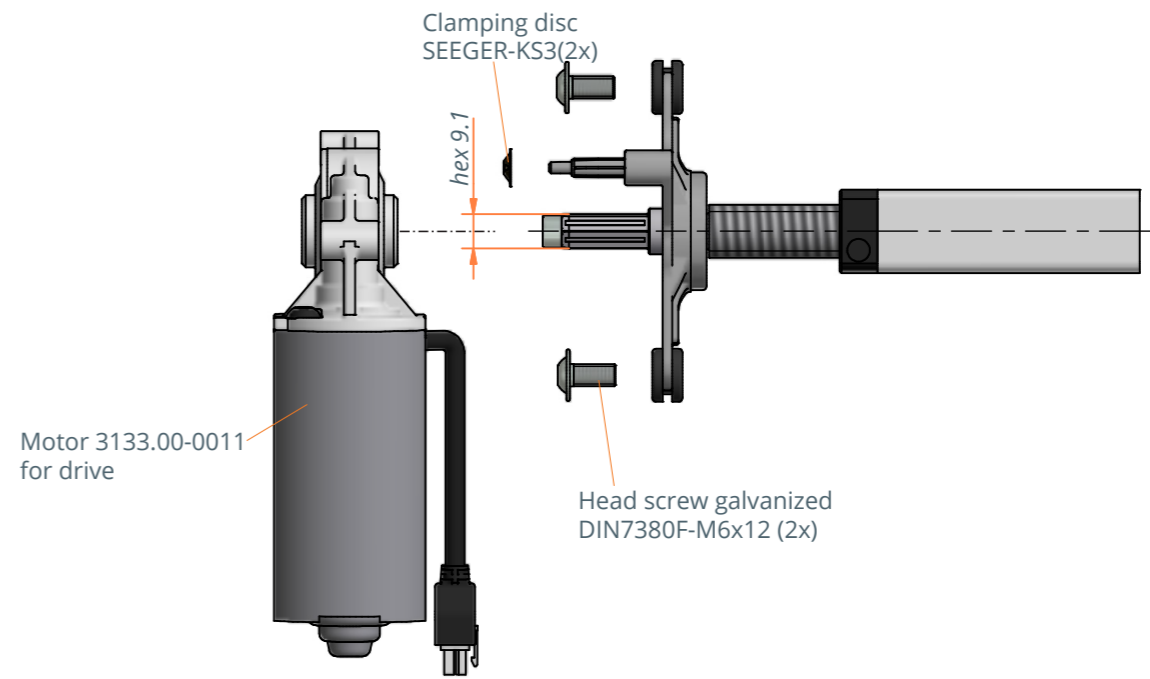
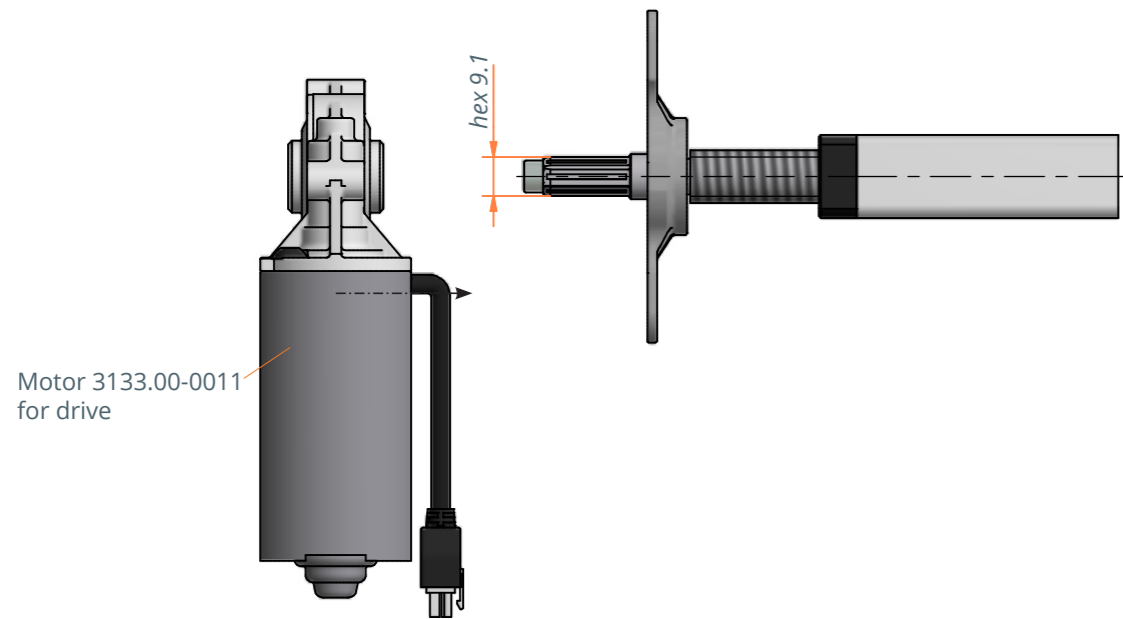
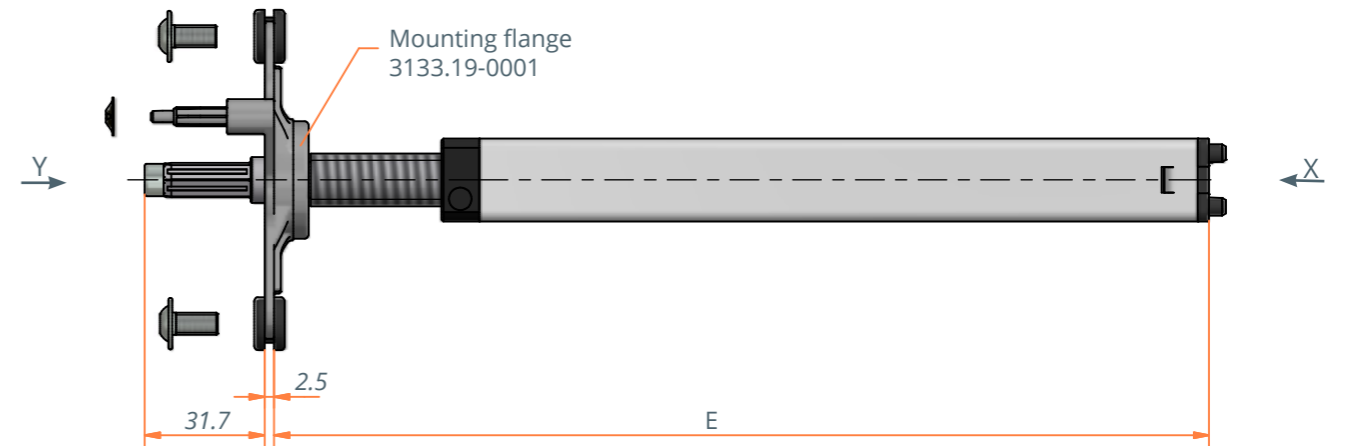
**Variants**

3130.14-V01EXXXHXXX  
 3130.14-V11EXXXHXXX  
 3130.14-V21EXXXHXXX

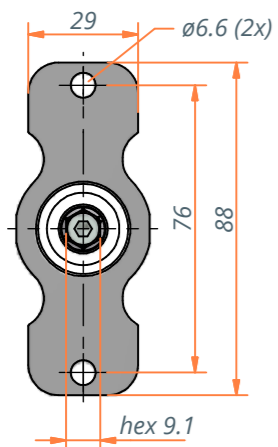


**Variants**

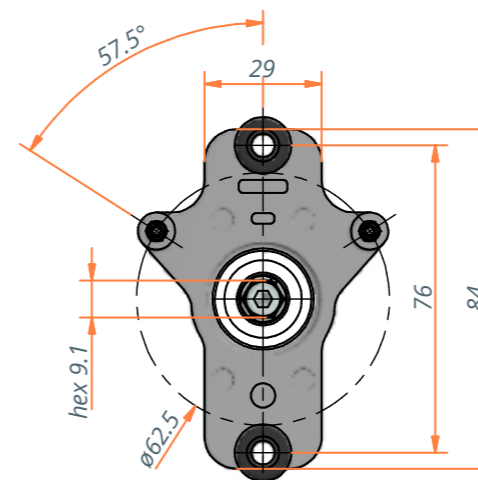
3130.14-V02EXXXHXXX  
 3130.14-V12EXXXHXXX  
 3130.14-V22EXXXHXXX



View Y

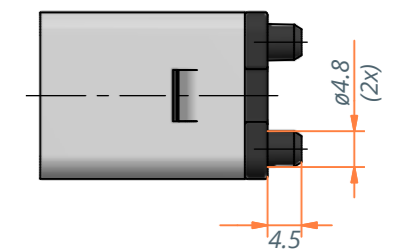
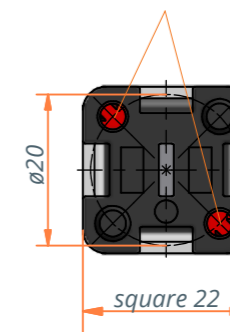


View Y



View X

ø3.4 (2x) mounting holes  
 for screw WN1452 K40x16  
 tightening torque 1.8 Nm



# Bevel gear with spindle unit 3824

## Description

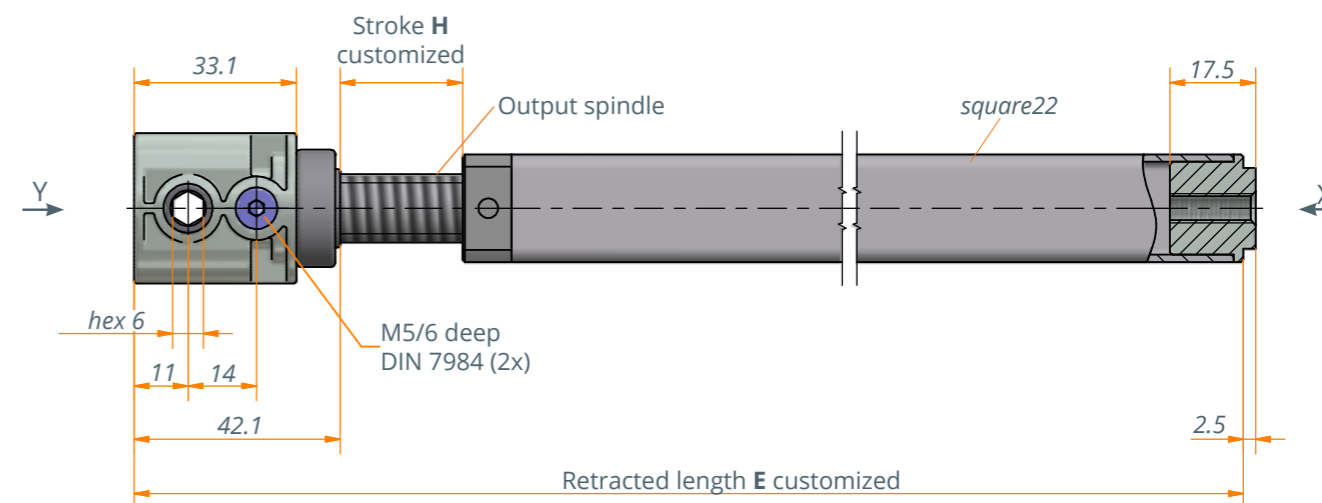
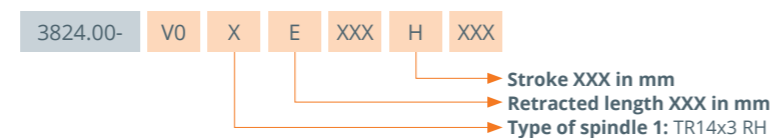
Lifting unit with bevel gear head for linear drive solutions. The gear is ideal for installation in round tubes with inside diameter of 31 mm. For other tube dimensions the housing can be adapted where appropriate quantities are required.

Possible applications are height adjustable tables as well as various adjustment functions for other furniture items

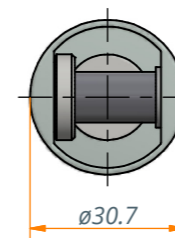
## Special features

- Maintenance-free
- Ratio 1:1
- Drive torque on gear head for application with several spindle units: max. 3 Nm
- Housing made of die-cast-zinc
- Hardened steel bevel wheels with robust, reinforced toothing
- Suitable for manual use as well as for the electromotive drive
- Various spindle length and spindle pitches available

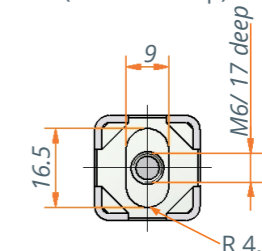
## Variant key



View Y



View X  
(Rotation stop)



## Technical data

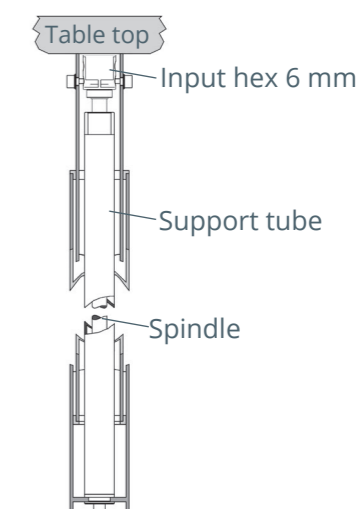
Model	3824.00-V01EXXXHXXX
Ratio	1:1
Input	hex 6 mm
Type of spindle	TR14x3 RH
Travel path	3 mm/rotation
Traverse speed*	6 mm/ s
Max. stroke	retracted length -98 mm
Max. lifting force	1200 N
Required drive torque	2 Nm

\* In connection with motor 3143.00 - 200X and LogicData control box Compact-3

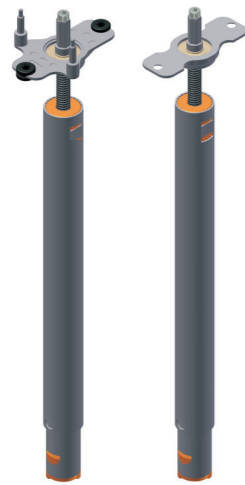
## Technical notes

- The lifting units must be protected against lateral forces by a separate guide system.
- Attention: The spindle systems with a spindle pitch  $\geq 3$  mm may not be self-locking. Check the self-locking effect in the application.
- The lifting unit is only pressure loadable.
- Incorrect dimensioning of the guide system can damage the lifting unit: Please note the design and safety instructions for spindle drives. You will find them at: [https:// www.ketterer.de/en/downloads/instructions](https://www.ketterer.de/en/downloads/instructions)

## Application example



# Synchronous telescopic spindle unit 4115.14



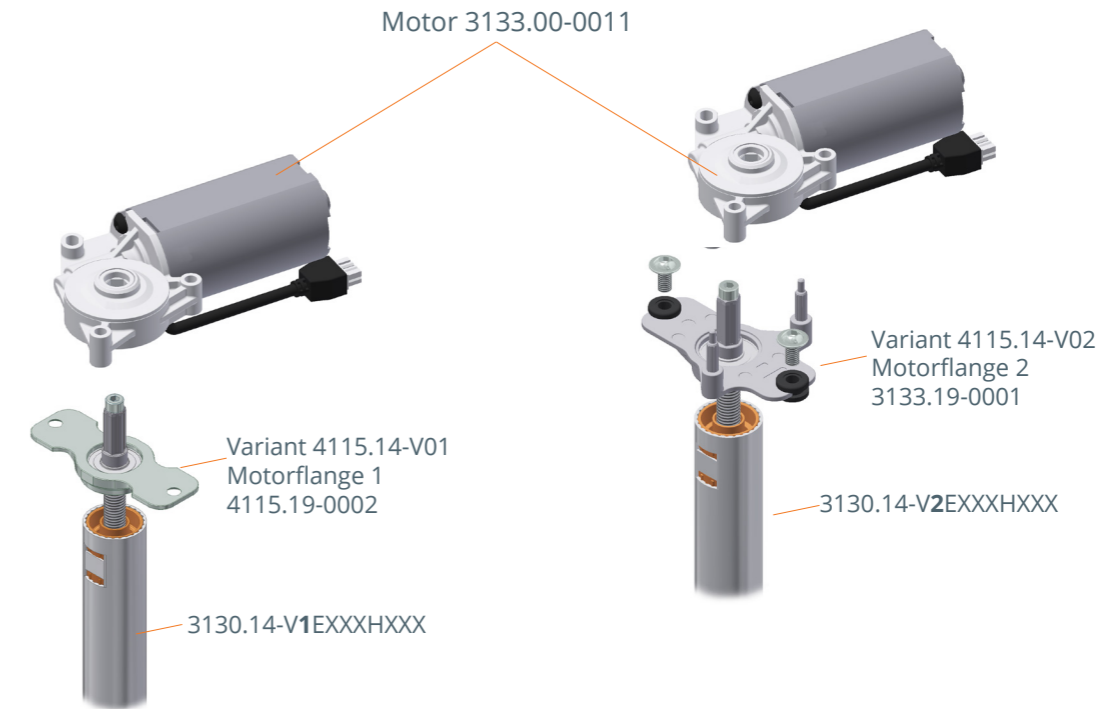
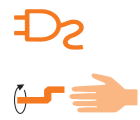
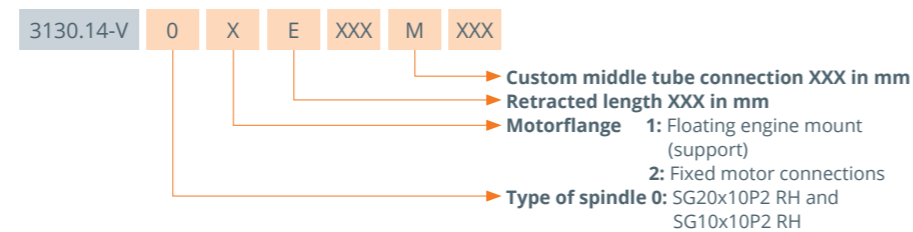
## Description

Twofold telescopic lifting unit with bevel gear head for various linear drive solutions. Ideal for electromotive sit-stand workplace applications or wherever an infinite linear adjustment is required at a high speed, maximum stroke with a minimum installation dimension. The lifting unit is available in different spindle lengths.

## Special features

- Double speed through synchronous telescope design
- Maximum stroke with minimum installation dimension
- Ideal for electromotive drives
- Available in different spindle lengths

## Variant key



## Technical data

Model	4115.14-V02EXXXMXXX	4115.14-V01EXXXMXXX
Type of spindle	SG20x10P2 RH SG10x10P2 RH	SG20x10P2 RH SG10x10P2 RH
Travel path	20 mm/rotation synchronous spindle movement	20 mm/rotation synchronous spindle movement
Traverse speed*	40 mm/s*	40 mm/s*
Retracted length E	customized min. 476 mm, max. 560 mm	customized min. 476 mm, max. 560 mm
Stroke H**	720 mm	720 mm
Max. lifting force	dyn. 900 N stat. 900 N	dyn. 900 N stat. 900 N
Required max. drive torque	3.3 Nm	3.3 Nm

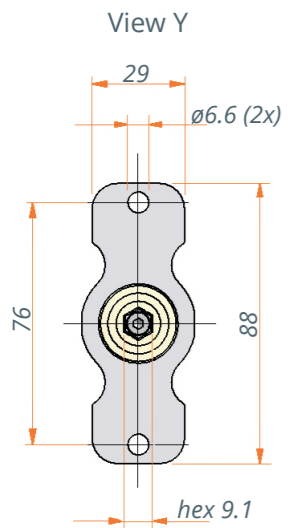
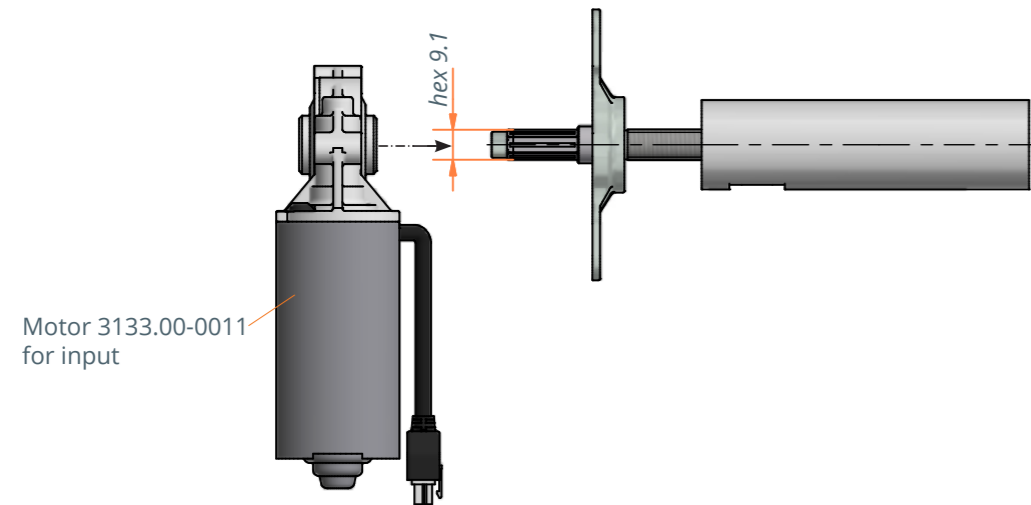
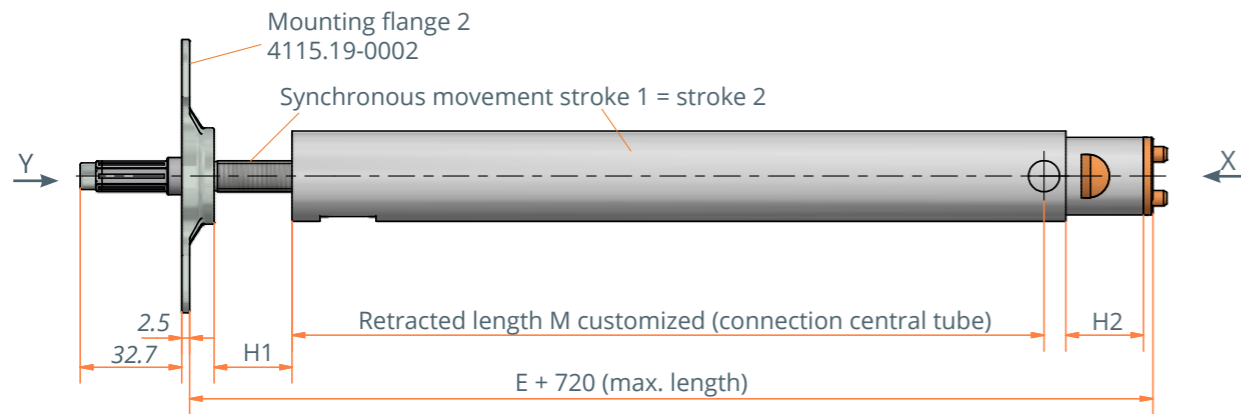
\* In combination with motor 3133 and the LogicData controll box Compact-3

\*\* Stroke length of 720 mm is constant at installation dimension between 476 mm and 560 mm

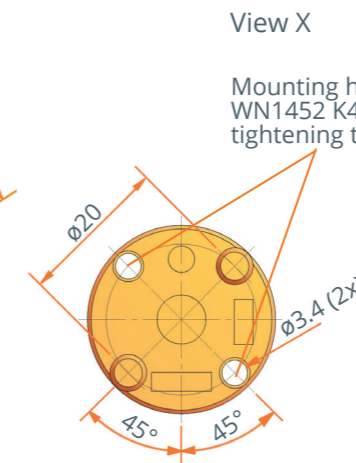
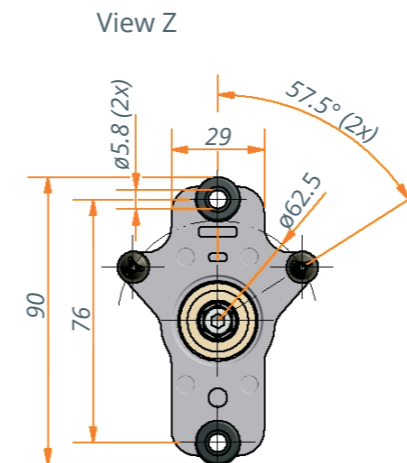
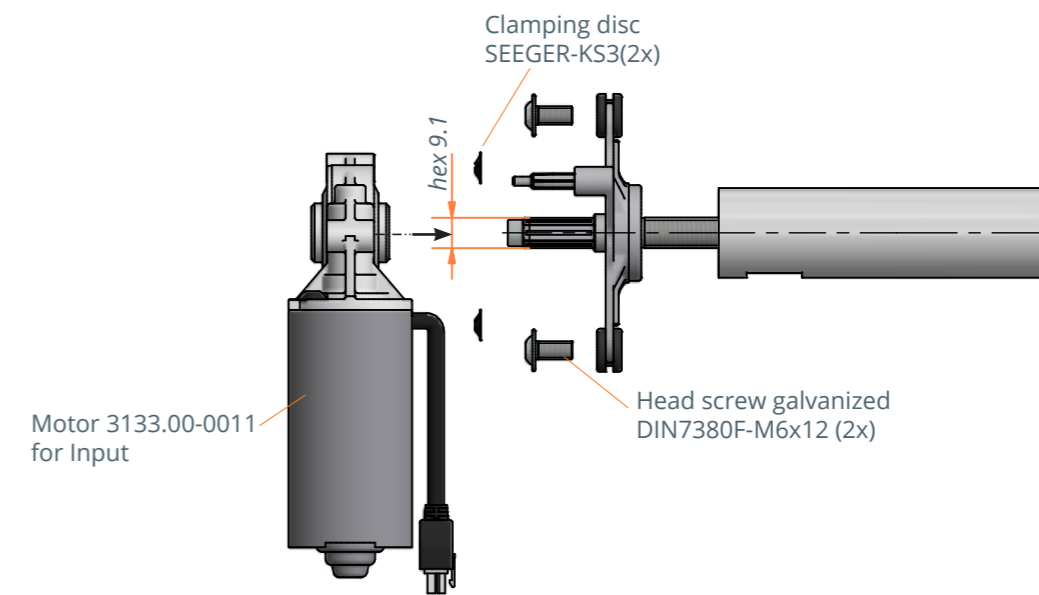
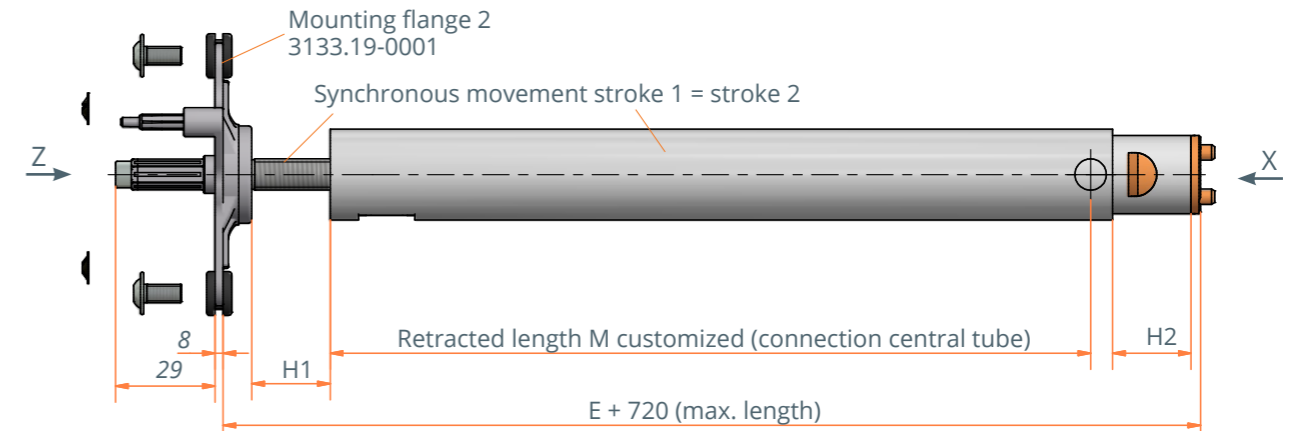
## Technical notes

- The lifting units must be protected against lateral forces by a separate guide system.
- Attention: The spindle systems with a spindle pitch  $\geq 3$ mm may not be self-locking. Check the self-locking effect in the application.
- The lifting unit is only pressure loadable.
- Customer specific stroke and installation lengths available upon request.
- Incorrect dimensioning of the guide system can damage the lifting unit: Please note the design and safety instructions for spindle drives. You will find them at: [https:// www.ketterer.de/en/downloads/instructions](https://www.ketterer.de/en/downloads/instructions)

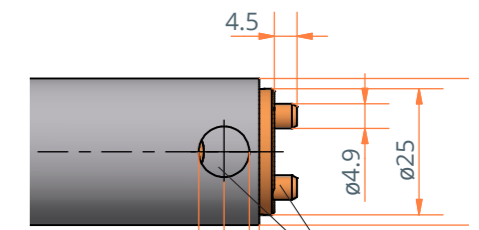
Variants 3130.14-V01EXXXHXXX



Variants 4115.14-V02EXXXMXXX

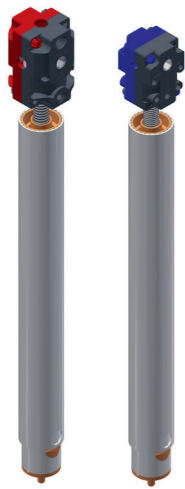


Mounting holes for screws  
WN1452 K40x16  
tightening torque 1.8 Nm



**Attention!**  
Pin-position to borne  
 $\phi 10$  must be considered

# Bevel gear with synchronous telescopic-spindle 4115.00



## Description

Twofold telescopic lifting unit with bevel gear head for various linear drive solutions. Ideal for electromotive sit-stand workplace applications or wherever an infinite linear adjustment is required at a high speed, maximum stroke with a minimum installation dimension. The lifting unit is available in customized spindle lengths.

## Special features

- Double speed through synchronous telescope design
- Maximum stroke with minimum installation dimension
- With gear head 3039 or 3045
- Ratio 1:1
- Drive torque on gear head : max. 4 Nm or 5.5 Nm
- Hardened steel bevel wheels with robust, reinforced toothing
- Ideal for electromotive drives
- Available in different spindle lengths

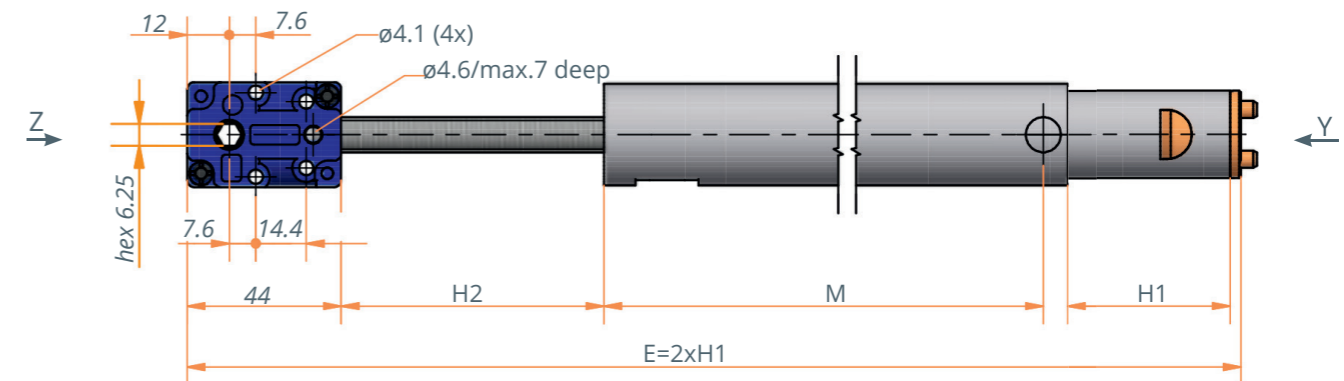


## Technical data

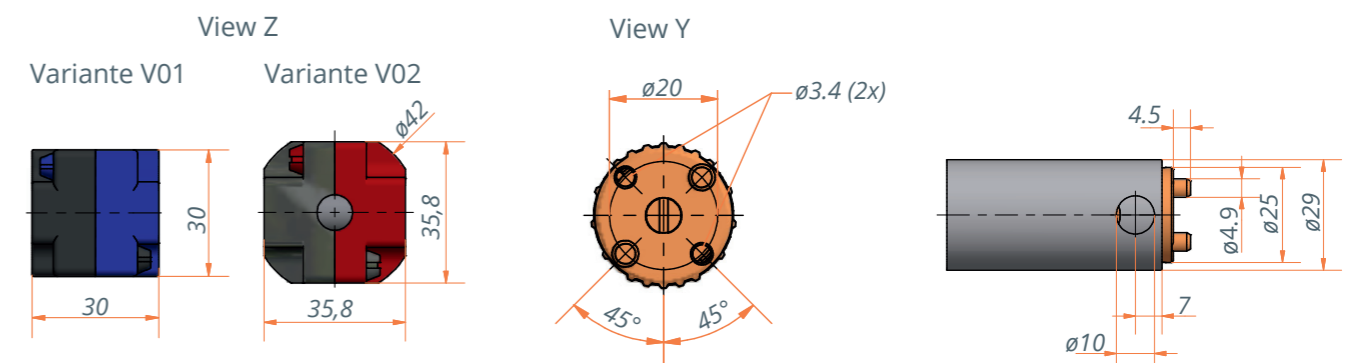
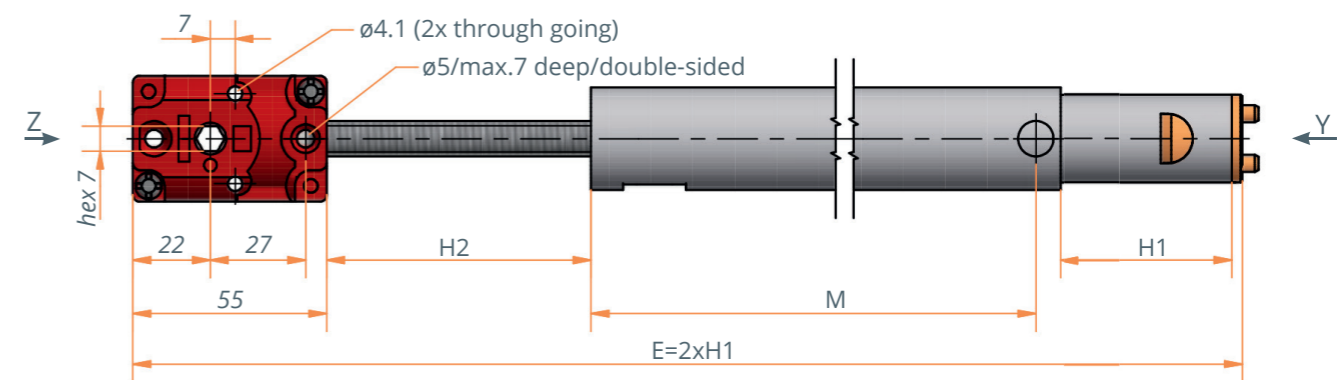
Model	4115.00-V01EXXXMXXX	4115.00-V02EXXXMXXX
<b>Gear head</b>	3039	3045
<b>Ratio</b>	i= 1:1	i= 1:1
<b>Input</b>	hex 6 mm	hex 7 mm
<b>Type of spindle</b>	SG20x10P2 RH SG10x10P2 RH	SG20x10P2 RH SG10x10P2 RH
<b>Travel path</b>	20 mm/rotation synchronous spindle movement	20 mm/rotation synchronous spindle movement
<b>Traverse speed*</b>	40 mm/s	40 mm/s
<b>Retracted length E</b>	customized min. 485 mm, max. 560 mm	customized min. 485 mm, max. 560 mm
<b>Stroke*</b>	656 mm	656 mm
<b>Max. lifting force</b>	dynamic 800 N static 900 N	dynamic 900 N static 900 N
<b>Required drive torque</b>	3.5 Nm	3.5 Nm

\* In connection with motor 3143.00 - 200X and LogicData control box Compact-3

4115.00-V01EXXXHXXX



4115.00-V02EXXXHXXX



## Technical notes

- The lifting units must be protected against lateral forces by a separate guide system.
- Attention: The spindle systems with a spindle pitch  $\geq 3$ mm may not be self-locking. Check the self-locking effect in the application.
- The lifting unit is only pressure loadable.
- Incorrect dimensioning of the guide system can

damage the lifting unit: Please note the design and safety instructions for spindle drives. You will find them at: <https://www.ketterer.de/en/downloads/instructions>

# Brake unit 3052.09

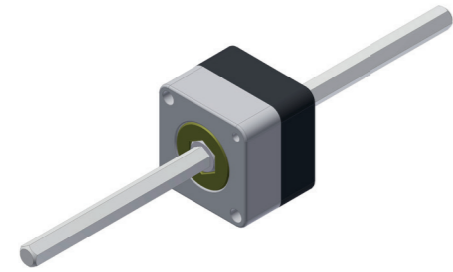
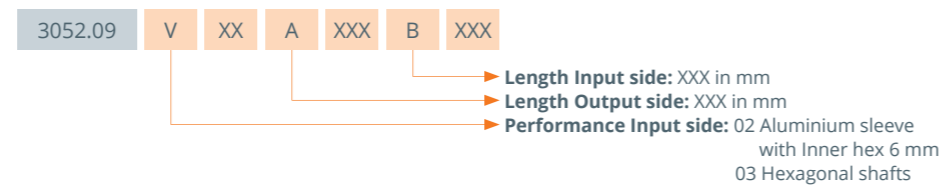
## Description

Very slim, compact brake unit for manually adjustable applications. Can be used flexibly, in combination with lifting gears.

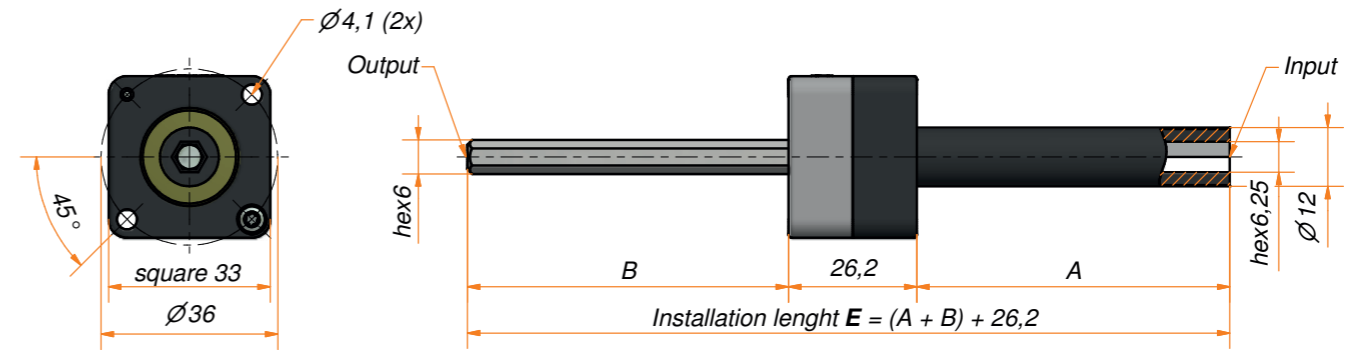
## Special features

- Synthetic gear housing
- Simple mounting
- Input and output can be supplied in various lengths, based on customer requirements

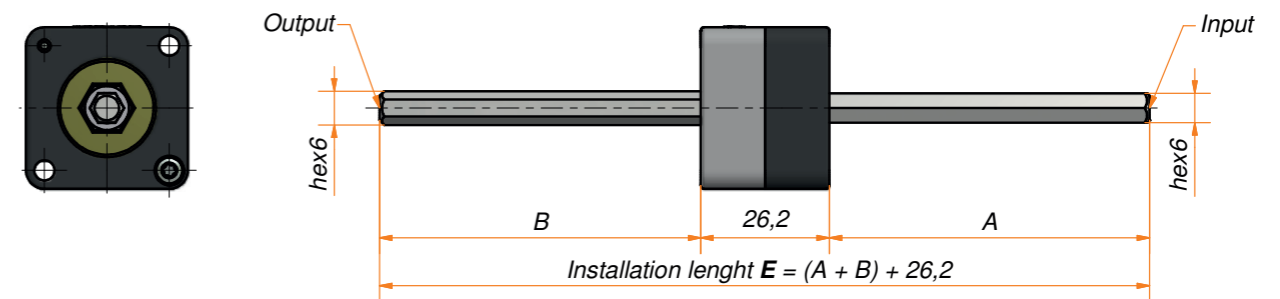
## Variant key



3052.09-V02AXXXBXXX



3052.09-V03AXXXBXXX



## Technical data

Model	3052.09-V02AXXXBXXX	3052.09-V03AXXXBXXX
<b>Input</b>	Inner hex 6 mm Length A customer specific	Hex 6 mm Length A customer specific
<b>Output</b>	Hex 6 mm Length B customer specific	Hex 6 mm Length B customer specific
<b>Max. holding torque</b>	10 Nm	10 Nm
<b>Max. output torque</b>	4 Nm	4 Nm
<b>Application</b>	Manual drives	Manual drives

# Crank handles 5102/5159

## Description

Wire-flexured cranks in several measurements with crank grips made of synthetic material.



## Special features

- Made of steel or stainless steel
- Customized production possible
- Customer specific solutions can be realized rapidly at a competitive price, by use of a production method which does not depend on specific tools or designs

### Crank-handles with grip 5101.11-01

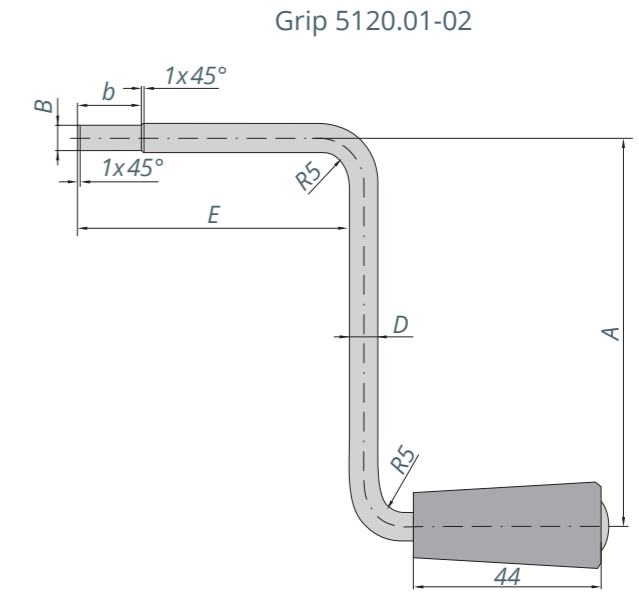
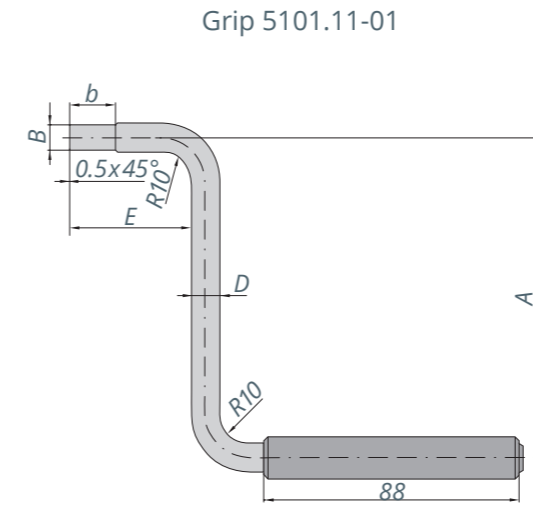
Item-Number	A	B	D	E	b	Material
5108.00-00	100	Hex 9 mm	Ø10	62	15	Stainless steel
5104.00-00	110	Hex 9 mm	Ø10	60	15	Stainless steel
5109.00-00	110	Inner hex 6 mm	Ø10	60	12	Stainless steel
5102.00-00	110	Hex 9 mm	Ø10	42	16	Stainless steel

### Crank-handles with grip 5120.01-02

Item-Number	A	B	D	E	b	Material
5147.00-00	65	Hex 5 mm	Ø7	53	15	Stainless steel
5132.00-00	90	Hex 5 mm	Ø7	110	15	Stainless steel
5153.00-00	90	Hex 5 mm	Ø7	63	15	Stainless steel
5156.00-13	90	Hex 6 mm	Ø7	33	20	Steel
5187.00-0003	110	Inner hex 6 mm	Ø7	325	300	
5183.00-0000	90	Hex 6 mm	Ø7	200	20	Stainless steel
5156.00-0011	115	Inner hex 6 mm	Ø7/ Ø12	503	480	
5156.00-10	90	Hex 6 mm	Ø7	33	20	Steel
5156.00-00	90	Hex 6 mm	Ø7	33	20	Stainless steel
5159.00-00	90	Hex 6 mm	Ø7	60	20	Stainless steel
5157.00-00	90	Hex 6 mm	Ø7	85	20	Stainless steel
5163.00-00	90	Hex 6 mm	Ø7	116.5	20	Stainless steel
5165.00-00	105	Hex 6 mm	Ø7	85.5	12	Stainless steel
5158.00-00	150	Hex 6 mm	Ø7	33	20	Stainless steel
5133.00-00	90	Hex 7 mm	Ø8	62	15	Stainless steel

### Crank-handles oblique

Item-Number	A	B	D	E	b	Material
5121.00-00 (Angle = 10°)	134	Hex 6 mm	Hex 6 mm	64	64	Steel



# Crank-handle 5180

## Description

Crank-handle grip and the crank extension are made of glass-fibre reinforced synthetic material.

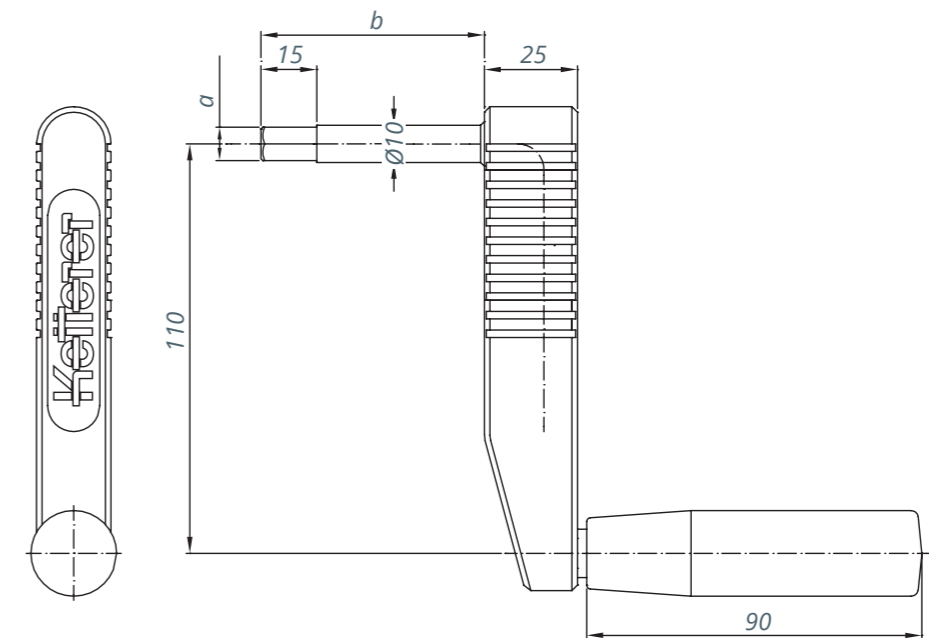


## Special features

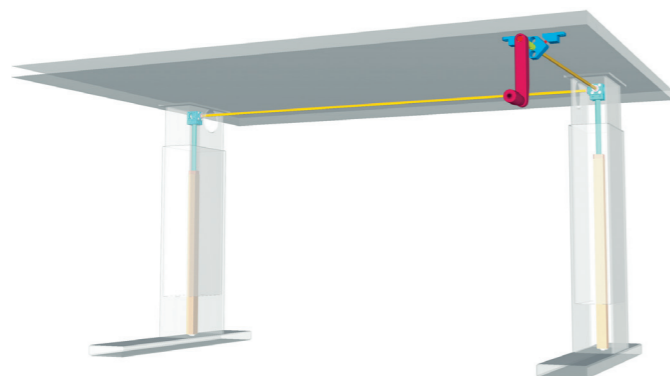
- Modern design
- On request, the type and length of the hexagonal bolt as well as the colour of the crank body can be produced to customer specification
- On request, an own logotype is possible

## Technical data

Model	5180 Standard	5180 Customer specific
Measure a	Hex 9 mm	On request
Measure b	60 mm	On request
Type of hexagonal bolt	Hardened/Blank	On request
Colour (crank body and grip)	Black	On request
Logotype	Without	Your logotype



Application example



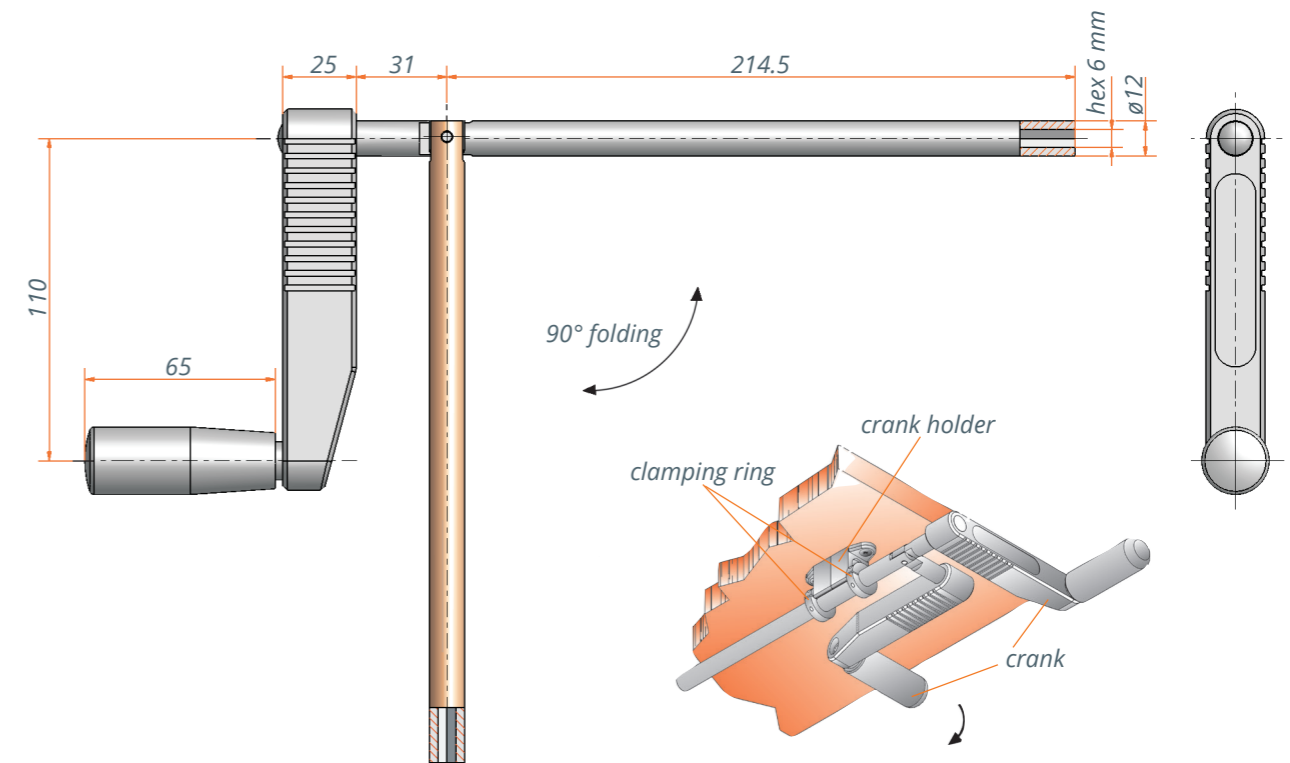
# Crank-handle 5186

## Description

Crank-handle grip and crank extension are made of glass-fibre reinforced synthetic material.

## Special features

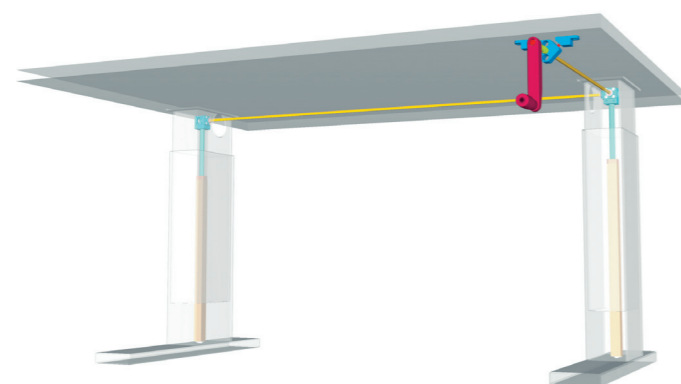
- Modern design
- Can be folded by 90°.
- On request, the type and the length of the hexagonal bolt as well as the colour of the crank body can be produced to customer specifications
- On request, an own logotype is possible



## Technical data

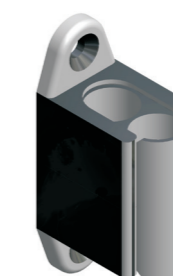
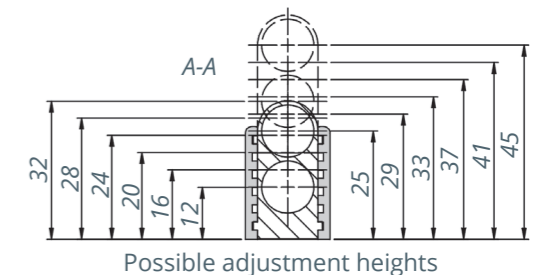
Model	5186
Crank extension	110 mm
Type of hexagonal bolt	Inner hex 6 mm
Dynamic torque	2 Nm

Application example

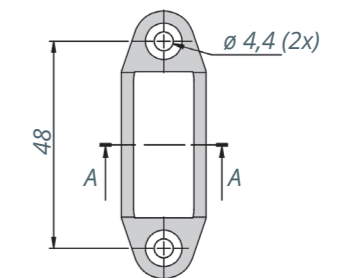


## Technical notes

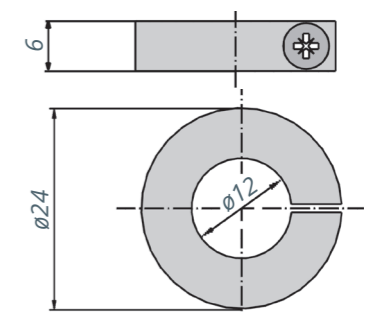
- Crank holder, made of black synthetic material, for a 12 mm diameter crank shaft. The holder can be adjusted from a height of 12 mm up to 45 mm.
- Clamping ring, made of black synthetic material, for shaft with diameter 12 mm. You need 2 clamping rings to secure the crank shaft on the crank holder. The fixing nut is enclosed.



Crank holder  
Order number 5186.19-0000



Clamping ring  
Order number 5186.10-0001



# Crank-handle 5187



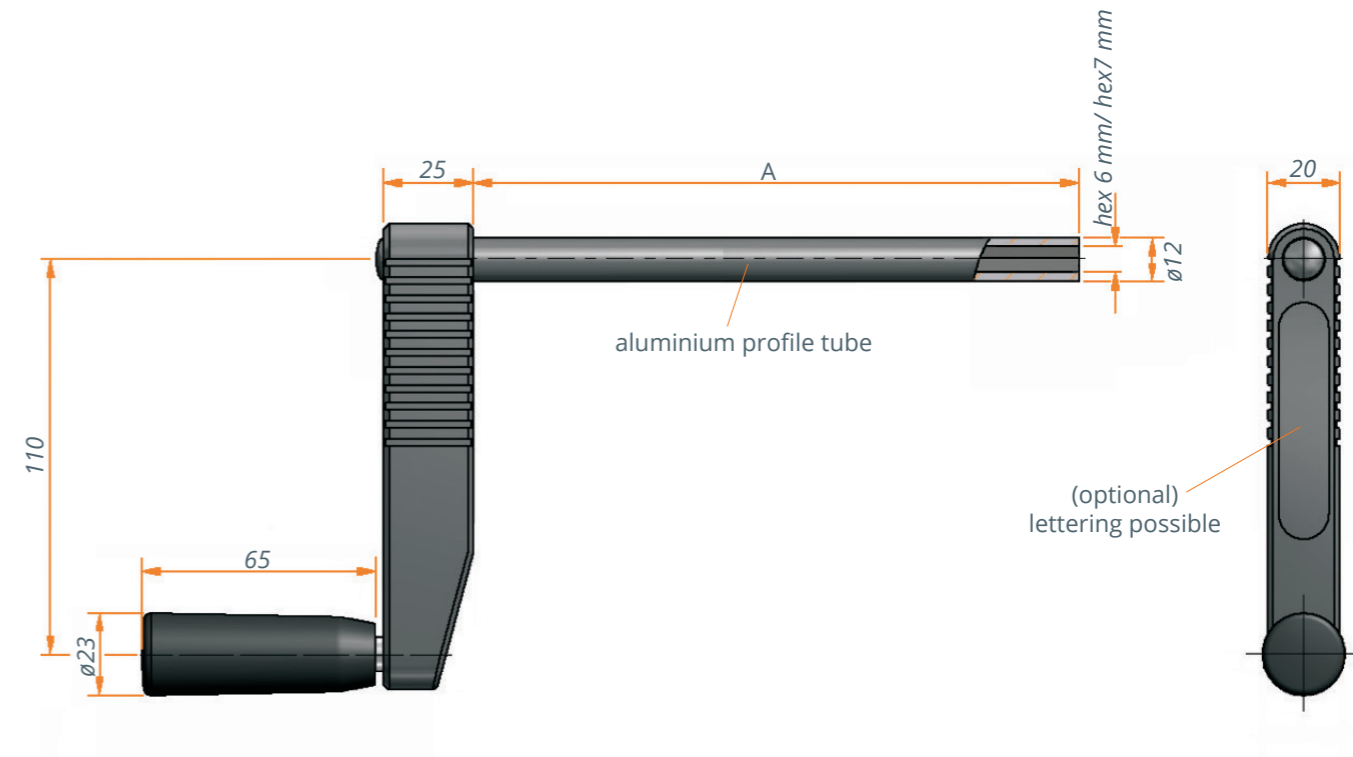
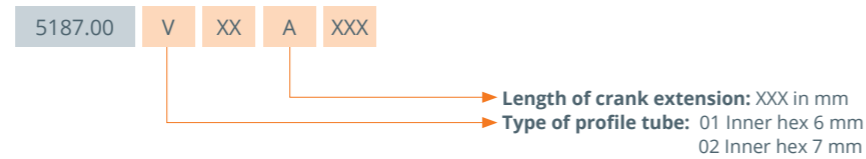
## Description

Crank-handle grip and crank extension are made of glass-fibre reinforced synthetic material.

## Special features

- Modern design
- On request, the type and the length of the hexagonal bolt as well as the colour of the crank body can be produced to customer specifications
- On request, an own logotype is possible

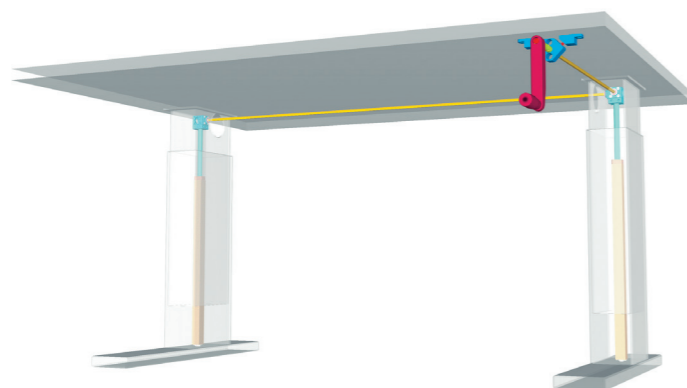
## Variant key



## Technical data

Model	5187.00-V01AXXX	5187.00-V02AXXX
<b>Crank extension</b>	Customer specific	Customer specific
<b>Type of profile tube</b>	Inner hex 6 mm	Inner hex 6 mm
<b>Material</b>	Synthetic crank body and handle	Synthetic crank body and handle
<b>Length A</b>	Customer specific	Customer specific
<b>Colour</b>	Black (more colours available on request)	Black (more colours available on request)

Application example



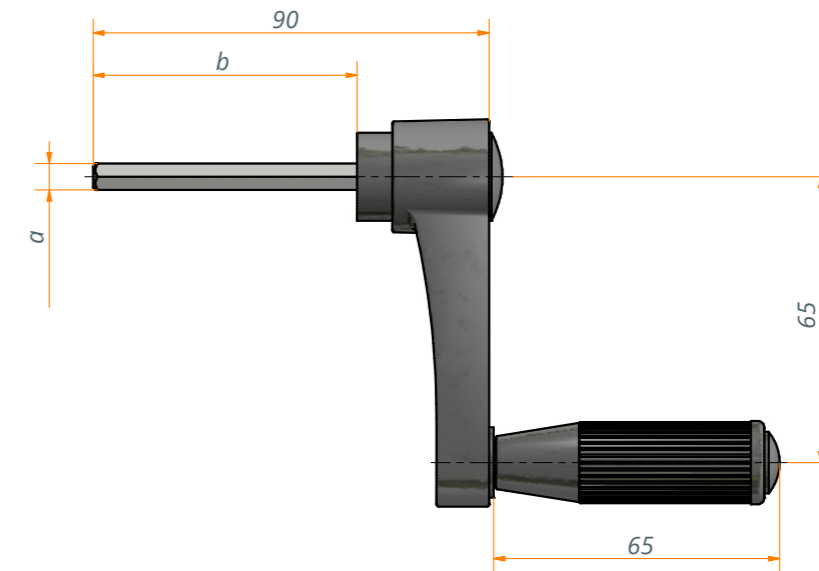
# Crank-handle 5190

## Description

Crank-handle grip and crank extension are made of glass-fibre reinforced synthetic material.

## Special features

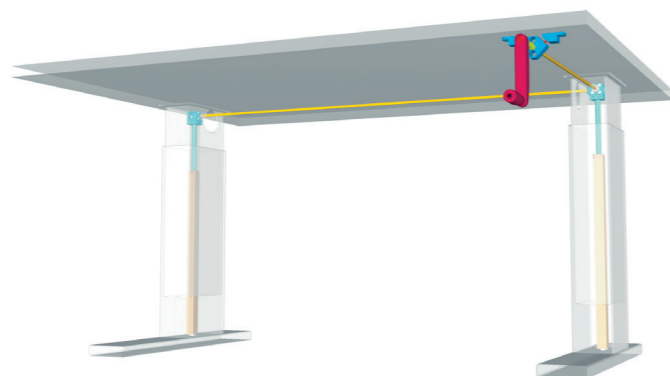
- Modern design
- On request, the type and the length of the hexagonal bolt as well as the colour of the crank body can be produced to customer specifications



## Technical data

Model	5190.00-0000	5190 Customer specific
Measure a	Hex 6 mm	On request
Measure b	60 mm	On request
Type of hexagonal bolt	Alvanized	On request
Colour (Crank body and grip)	Black	On request

## Application example



# Control box Compact



## Description

Compact is the control unit for high adjustable workstations and is matched to all Ketterer drives.

With one control unit can be controlled:

- up to three drives in parallel structure (one or two drives follow the master drive)
- two drives synchronously (drives are individually controlled)

## Special features

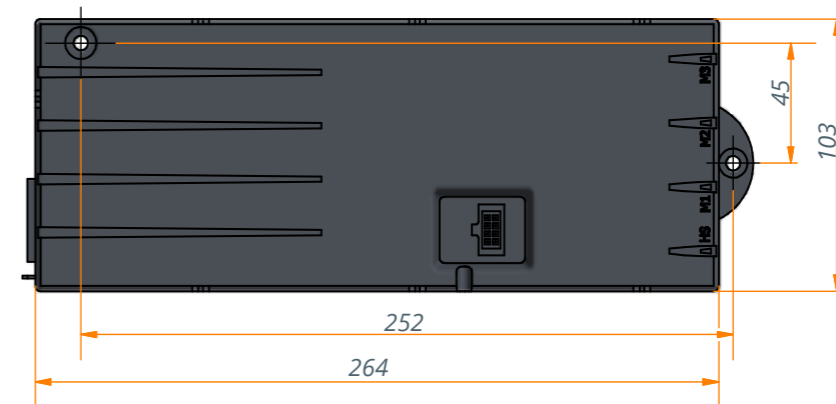
- Control box Compact<sup>eco</sup>, Firmware-Version 1.9
- Voltage supply variants: 230 V and 110 V
- Freely stroke with hand switch with display (HSU-MDF-4M2-LD or TOUCHfx) programmable
- Ketterer can preprogram a desired stroke
- Duty cycle 2 min. ON/ 18 min. OFF

## Technical data






Control box	Description	Drives for use with
1000.49-36 / Compact-e-3-KTS-4778-EU	<b>one to three</b> motors <b>parallel</b>	(4778, 4779)**
1000.49-46 / Compact-e-3-KTS-4778-US	<b>one to three</b> motors <b>parallel</b>	
1000.49-37 / Compact-e-3-KTS-4779-EU	<b>one to three</b> motors <b>parallel</b>	
1000.49-47 / Compact-e-3-KTS-4779-US	<b>one to three</b> motors <b>parallel</b>	(3143, 4114, 4630, 4701, 4773) *
1000.49-01 / Compact-e-3-KTS-4630-EU	<b>one to three</b> motors <b>parallel</b>	
1000.49-02 / Compact-e-3-2-KTT-4630-EU	<b>two</b> motors <b>synchronous</b>	
1000.49-11 / Compact-e-3-KTS-4630-US	<b>one to three</b> motors <b>parallel</b>	4643 **
1000.49-12 / Compact-e-3-2-KTT-4630-US	<b>two</b> motors <b>synchronous</b>	
1000.49-03 / Compact-e-3-KTS-3130-EU	<b>one to three</b> motors <b>parallel</b>	(3120, 3121, 3130, 3131)**
1000.49-04 / Compact-e-3-2-KTT-3130-EU	<b>two</b> motors <b>synchronous</b>	
1000.49-13 / Compact-e-3-KTS-3130-US	<b>one to three</b> motors <b>parallel</b>	
1000.49-14 / Compact-e-3-2-KTT-3130-US	<b>two</b> motors <b>synchronous</b>	3122 **
1000.49-05 / Compact-e-3-KTS-3122-EU	<b>one to three</b> motors <b>parallel</b>	
1000.49-06 / Compact-e-3-2-KTT-3122-EU	<b>two</b> motors <b>synchronous</b>	
1000.49-15 / Compact-e-3-KTS-3122-US	<b>one to three</b> motors <b>parallel</b>	3133.00 **
1000.49-09 / Compact-e-3-KTS-3133.00-EU	<b>one to three</b> motors <b>parallel</b>	
1000.49-10 / Compact-e-3-2-KTT-3133.00-EU	<b>two</b> motors <b>synchronous</b>	
1000.49-19 / Compact-e-3-KTS-3133.00-US	<b>one to three</b> motors <b>parallel</b>	3133.48 **
1000.49-20 / Compact-e-3-2-KTT-3133.00-US	<b>two</b> motors <b>synchronous</b>	
1000.49-07 / Compact-e-3-KTS-3133.48-EU	<b>one to three</b> motors <b>parallel</b>	3133.48 **
1000.49-08 / Compact-e-3-2-KTT-3133.48-EU	<b>two</b> motors <b>synchronous</b>	
1000.49-17 / Compact-e-3-KTS-3133.48-US	<b>one to three</b> motors <b>parallel</b>	
1000.49-18 / Compact-e-3-2-KTT-3133.48-US	<b>two</b> motors <b>synchronous</b>	

\* Motor cable 4138.53-01/ Length 1 m or 4138.53-02/ Length 2 m

\*\* Motor cable 3122.53-02/ Length 1.75 m



further details under [www.logicdata.at](http://www.logicdata.at)

Power cable	Connector
<b>3143.53-22</b> / Power cable <b>LOG-CBL-PWK</b>	plug for control with 3-pin Schuko - Europe 
<b>3143.53-23</b> / Power cable <b>LOG-CBL-PWK-UK</b>	for control with 3-pin plug - UK 
<b>3143.53-24</b> / Power cable <b>LOG-CBL-PWK-DK</b>	for control with 3-pin plug - Denmark 
<b>3143.53-25</b> / Power cable <b>LOG-CBL-PWK-SW</b>	for control with 3-pin plug - Schweiz 
<b>3143.53-28</b> / Power cable <b>LOG-CBL-PWK-USA</b>	for control with 3-pin plug - USA 

## Technical notes

- Power cable has to be ordered separately.
- For stroke programming or changing on site a hand switch with display is always required (see hand control and motor cables).
- Please note the permissible duty cycle of the controller. If the operating times are exceeded the controller switches off automatically.
- Attention: Electric drives usually have a shorter duty cycle than controllers and are thus system-leading.

# Hand control and motor cables



## Description







Ketterer's range of accessories offers a large selection of hand switches in various designs, with or without display, with simple or touch buttons and various motor cables to suit the respective Ketterer drives.

## Special features

- Stepless adjustment
- User-defined and application-oriented control of your stepless adjustment
- Can be used with the Compact controller and all Ketterer motor drives

## Technical data

Motor cable	For use with drives
4138.53-01/ Length 1 m 4138.53-02/ Length 2 m	3143, 4114, 4630, 4701, 4773
3122.53-02/ Length 1,75 m	4643, 3120, 3121, 3131, 3122, 3133.00, 3133.48

Hand switch	Description
3143.47-05/ HSU-MDF-4M2-LD	Switch with display and four memory positions, stroke heights and two up-down buttons, free programmable 
3143.47-43/ TOUCH fx	Switch with display and four memory positions, with touch & click function 
3143.47-30/ HSM-OD-2-LD	Simple hand control, up-down 
3143.47-42/ TOUCH-basic-DN	Simple hand control up-down, with touch function 
3143.47-08/ IRR-DSK-SET-LIGHT	IR remote control consisting of, IR receiver, remote control (including battery) and manual 
3143.47-0001/ Receiver, remote control	RF remote control consisting of RF receiver, remote control (including battery), and manual 

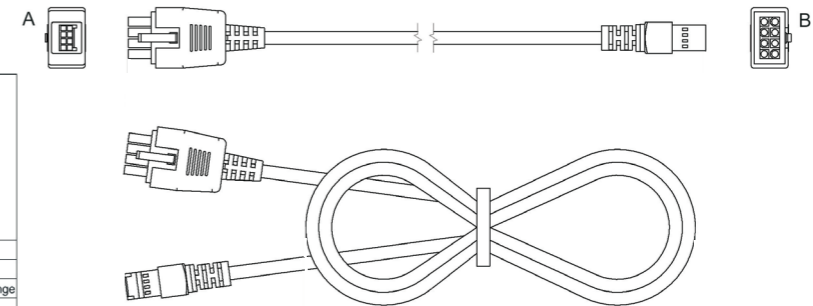
\* Further details under <http://www.logicdata.at>

**Motor cable** 4138.53-01: 1 m long  
4138.53-02: 2 m long

AMP - Serie HE 14 plug allocation

A			B					
1	3	5	7	4	5	6	7	8
2	4	6	8	1	2	3	8	

Pin-No.	signal	colour	Pin-No.	signal	colour
6,8	motor blue	black, blue	4	motor blue	black, blue
5,7	motor red	brown, orange	8	motor red	brown, orange
2	+5VDC, reverb	red	2	+5VDC, reverb	red
4	GND, reverb	grey	3,7	reverb-signal 2	grey
3	reverb-signal 2	green	5	GND, reverb	green
1	reverb-signal 1	violet	1	reverb-signal 1	violet

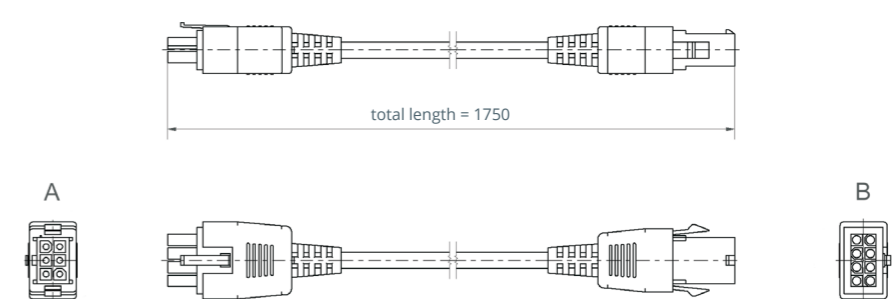


**Motor cable** 3122.53-02: 1.75 m long

AMP - 172160 plug allocation

A			B					
1	4	5	6	4	5	6	7	8
2	3	6	8	1	2	3	8	

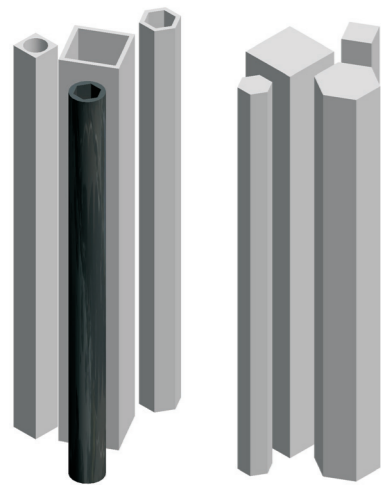
Pin-No.	signal	colour	Pin-No.	signal	colour
1	motor blue	black, blue	4	motor blue	black, blue
2	motor red	brown, orange	8	motor red	brown, orange
3	+5VDC, reverb	red	2	+5VDC, reverb	red
4	reverb-signal 2	green	5	reverb-signal 2	green
5	GND, reverb	gray	3,7	GND, reverb	gray
6	reverb-signal 1	violet	1	reverb-signal 1	violet



## Technical notes

- Hand switches with touch function require the Compact controller with firmware Version 1.9
- For stroke programming or changing the travel on site a hand switch with display is always required

# Profile tubes - Profile rods



## Description

You get profile rods and profile tubes as rods in a length of 3 m.

## Special features

- Profile rods are made of steel and drawn according to DIN 176 (hexagon bars)
- Profile rods are made of steel and drawn according to DIN 178 (square bars)
- Profile tubes are made of steel and drawing to DIN 2391
- Further profile rods, profile tubes, special lengths and machining on request

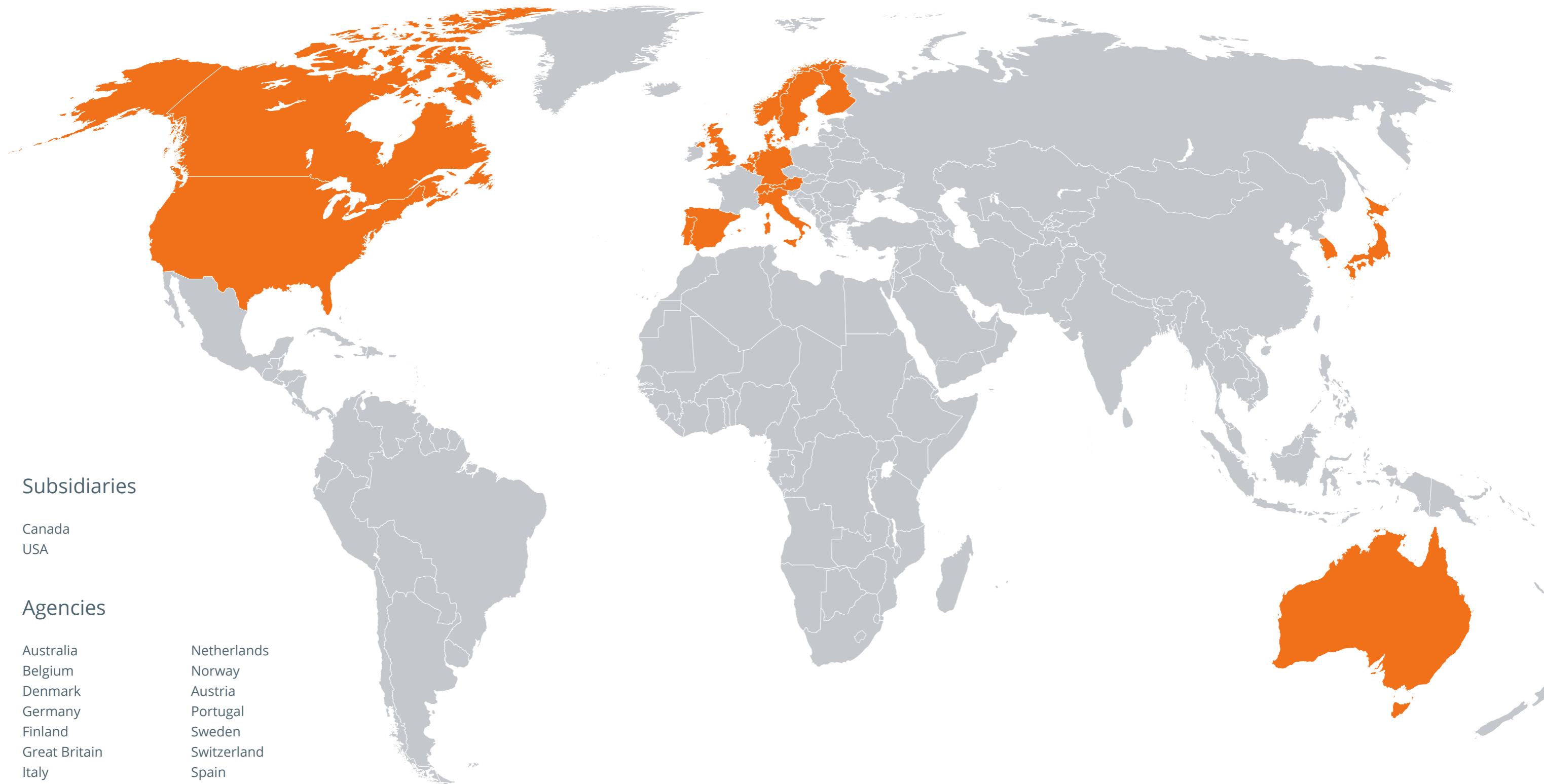
## Profile tubes drawn according to DIN 2391

Item number Steel version	Item number Brass version	Item number Aluminium black (anodised) Aluminium-tube DIN 17611 / quality E6	Outer dimension	Inner dimension
209R0.08.0-6kt5	-	-	Ø8	hex 5 mm
209R0.09.0-6kt6-SL	-	-	Ø9	hex 6 mm
209R0.10.0-6kt6	-	-	Ø10	hex 6 mm
209R0.10.0-6kt7	-	-	Ø10	hex 7 mm
209R0.12.0-4kt7	203R0.12.0-4kt7	-	Ø12	square 7 mm
-	203R0.12.0-4kt8	-	Ø12	square 8 mm
209R0.12.0-6kt6	-	201R0.12.0-6kt6SL	Ø12	hex 6 mm
-	-	201R0.12.0-6kt7	Ø12	hex 7 mm
-	-	201R0.12.0-6kt8	Ø12	hex 8 mm
209R6.09.0-6kt6	-	-	hex 9 mm	hex 6 mm
209R6.12.0-6kt9	-	-	hex 12 mm	hex 9 mm

## Profile rods drawn according to DIN 176 (hexagon bars) and according to DIN 178 (square bars)

Item number Steel version	Item number Brass version	Outer dimension
209S4.06.0	203V4.06.0	square 6mm
209S6.05.0		hex 5 mm
209S6.06.0		hex 6 mm
209S6.07.0		hex 7 mm
209S6.08.0	203V6.08.0	hex 8 mm
209S6.09.0		hex 9 mm
209S6.12.0	203V6.12.0	hex 12 mm

# USED AROUND THE WORLD



## Subsidiaries

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USA

## Agencies

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Denmark	Austria
Germany	Portugal
Finland	Sweden
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Italy	Spain
Japan	South Korea
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