alfer®
aluminium

combitech® system
coaxis®

Overview

Dear customers,

"Order is half of life" - this saying is heard time and again. The one who wants to keep tyres, bicycles, shovels, rakes, mowers, etc., in the garage besides the car, and boxes with clothes or discarded toys or other crockery, crates or garden furniture, tools, etc., in the basement will immediately note that there is something true about the saying.

In order to maintain order here, **alfer**® has developed a comprehensive assortment of products. Workshop fitters, booth builders, shop fitters and mechanical engineers can design individual solutions with the **coaxis**® profile system.

The **coaxis**® profile complements the **combitech**® system. It consists of four hollow chambers arranged coaxially around the core. The special construction of the aluminium profiles ensures maximum longitudinal and lateral stability with the lowest weight. Equipped with alignment groove for drilling, the profiles can be easily processed and the assembly of the connecting bracket and hooks is possible even without a hole just with square nut and screw. The profiles are also ideal for damp areas and can also be used in the garden thanks to their weather resistance.
The **coaxis**® and **combitech**®-**coaxis**® can also be combined with the rest of the **combitech**® system, and in this way, for example, threaded rods fit into the core hole. Furthermore, the **coaxis**® range includes fixing brackets, hinges, cover strips, end caps, connection caps and hooks.

coaxis® – the coaxial system profile
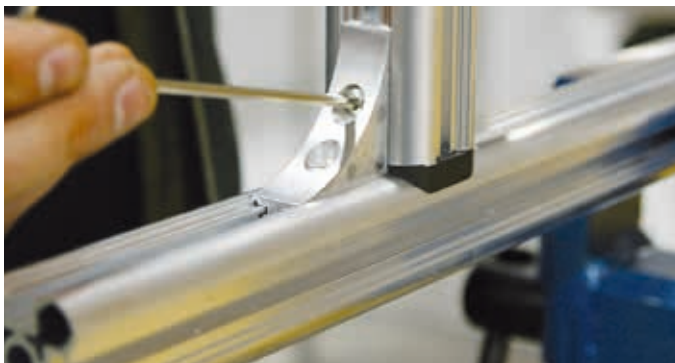
Good reasons to choose coaxis®

- Made of aluminium – light and rustproof
- Flat profiles for wall mounting hook or shelf
- Column profiles for free-standing solutions
- Continuously adjustable and infinitely variable
- Easy to assemble
- Individual designs – with and without drill holes
- Simple assembly and disassembly with few tools
- Broad functionality due to extensive accessories
- Can be used indoors and outdoors.

One profile – thousand solutions

Workbenches, shelving systems, windscreens, walk-in wardrobes, folding walls, sun protection, pergola, canopies, carport, substructure for solar collectors, exhibition stands, market stalls, information boards, lighting and acoustic constructions, showcases, tool cabinets, machine sound insulation, office equipment, work desks, greenhouses, plant tables, party tents, and so on.

System profiles
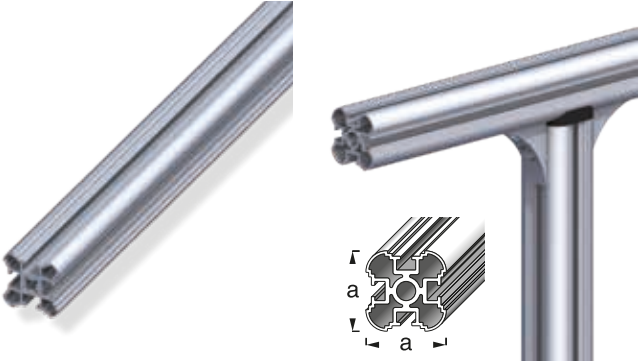
coaxis® column profile

The profile made of aluminium acts as the basis of the design.
It is available in two different sizes, dimension a 27.5 mm and
dimension a 35.5 mm. The four coaxial slots undertake the spatial
profile connection continuously and non-positively. The alignment
grooves in all four coaxial slots help you to drill a precise position.
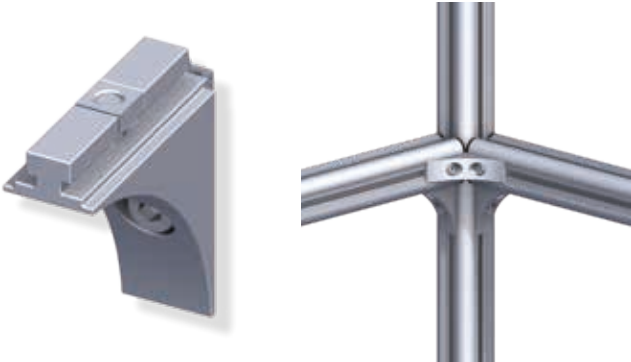
coaxis® connecting bracket

The connecting bracket made of aluminium serves as a con-
nection of **coaxis®** profiles. The connecting brackets give you a
continuous adjustable and spatial profile connection through the
sliding block profile and assembly without drilling.

Assembly instructions coaxis® connecting bracket

1. Insert connecting bracket with sliding block profile into the slot of the **coaxis**® profile.

2. Fix the connecting bracket at the desired position with a 4-size ball head Allen key.

3. Slide on the second **coaxis**® profile (the connection cap serves as a decorative connection).

4. Tighten screw.

Required tool: 4-size ball head Allen key

System profiles

Useful tips from the professionals

Attention: If you happen to have forgotten a bracket, then there is the emergency solution of grinding away the short shank of the sliding block chamber on the **coaxis**° column profile to a length of approx. 45 mm or cutting it off with an angle grinder. This should be done in a place where it does not bother visually. Then you can insert the bracket there.

To obtain a higher stability, there is the option of fastening the **coaxis**° column profile with two connection brackets.

For your **coaxis**° constructions you should make a hand sketch before assembly. This will enable you to see the number and position of connecting brackets, hinges, etc. As a result, you are faster and can work without errors. Here you have to be careful about the order sequence of the connecting bracket to be inserted. Forgotten connecting brackets, stop profiles and support profiles lead to a partial disassembly of your construction.
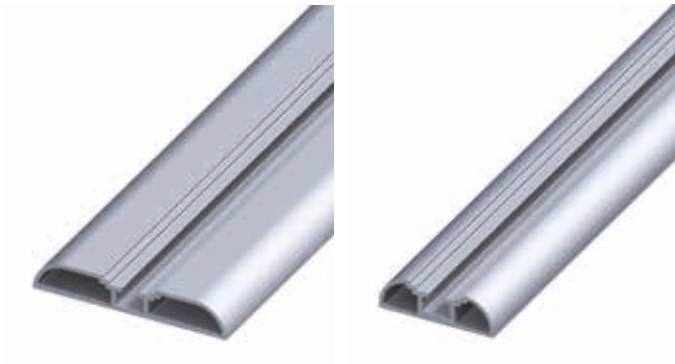
coaxis® profile, wide and narrow

- Serves as a base rail for the **coaxis**® hooks
- Horizontal, vertical and diagonal fastening on the wall, ceiling and floor
- Rust-proof and weather-resistant aluminium, can therefore be used in wet rooms and outdoors.
- Infinite fastening of the **coaxis**® hooks in the double hollow profile in the continuous profile slot
- High stability due to a double hollow profile
- Easy to assemble with provided drill holes for 0.50 m, 1.00 m, 1.50 m and 2.00 m
- 2.50 m profile is available without holes

Assembly instructions coaxis® profile, wide

1 Place the rail against the wall, ceiling or floor, mark, drill, dowel and tighten the rail, then cover the drill hole with the cap.

2 Horizontal: Insert the set screw with square nut into the slot of the rail and tighten at the desired positions. Attach the hook, push the 90° fixation over the hook (to obtain a wobble-free fastening of the hooks) and tighten with the aluminium knurled nut. The device holder and universal holder are inserted into the slot of the rail.
Vertical: The 90° fixation is not needed here.
A wobble-free attachment of the hooks is created by the guide channels in the **coaxis**® profile.

3 Insert the end cap and clip on the cover strip. The cover strip is cut to the appropriate clear gap between the mounted hooks with a household scissors, a utility knife or a small handsaw and then clipped onto the slot, so that the slot does not become the dirt chamber and that an aesthetically very appealing overall design arises.

System accessories

coaxis® suspension plate

- You can use the **coaxis®** suspension plate to hang the **coaxis®** profile, wide or narrow, from the horizontal **coaxis®** profile, wide, quickly and securely.
- This also allows horizontally adjustable shelf racks to be effortlessly constructed, for example.

Assembly instructions coaxis® suspension plate

1 Place the rail against the wall and mark the drill holes. After drilling and dowelling, the rail is fastened and the visible screw heads are covered with the borehole caps.

2 Before inserting, mount the square nuts with cylindrical screws in the holes provided on the **coaxis®** suspension plate.

3 Insert the suspension plate into the slot of the horizontal wide **coaxis®** profile. Insert the vertical narrow **coaxis** profile via the square nuts of the suspension plate and tighten the cylindrical screws with a 4-size Allen key.

4 Slide the vertical narrow **coaxis®** profile into the desired position, clip on the cover strip and insert the end cap.

# Assembly instructions **coaxis**® suspension plate

System accessories
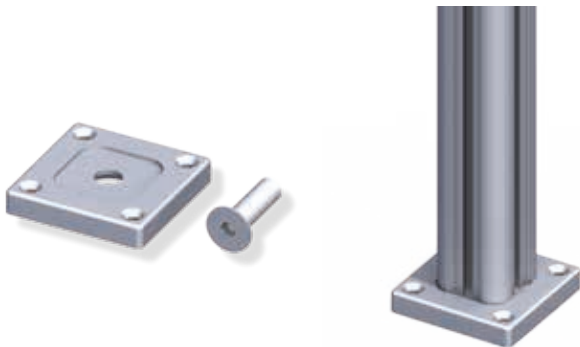
coaxis® fixing bracket

The fixing bracket is used to fasten the **coaxis**® column profile to the floor, wall and ceiling. The large hole in the centre is intended for the supplied M 10 screw. The recess in the fixing bracket serves as torsion protection for the **coaxis**® column profile.

Assembly instructions coaxis® fixing bracket
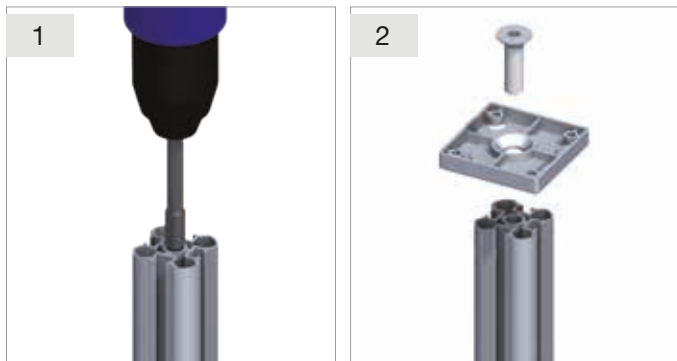
1   Cut thread, the thread turn should be at least 30 mm long. Tip: Always use oil.

2   Bring up fixing bracket with visible side to the **coaxis**® column profile and then screw tight.

3   In this way, for example, a furniture foot is created in your desired length very quickly.

4   Optionally with furniture castors; there are soft furniture castors for hard floors like parquet and laminate and hard furniture castors for soft floors like carpet.

Required tools: Thread cutter for M10 thread, 6-size ball head Allen key

Useful tip from professionals

If you need to screw in one or more outer hollow chambers on the **coaxis**® profile, you can simply screw an M 10 screw in there without cutting a thread. If you need to screw in the centre thread channel of the **coaxis**® profile, but do not have an M 10 thread cutter to hand, you can drill out the thread channel with a 9.5 mm drill and screw in an M 10 screw, without cutting a thread.

System accessories

coaxis® connection cap

It acts as a decorative connection when joining two **coaxis**®
column profiles, improves the sliding properties and at the same
time protects the counter profile from scratches. It can be installed
with one or two fixing brackets.

coaxis® connection cap, one-sided

It acts as a decorative connection when joining two to three
coaxis® column profiles and can be mounted with one to three
connecting brackets.

coaxis® cover strip

It serves as a decorative protection against dirt. It is cut to the appropriate clear gap with a pair of household scissors and then clipped onto the slot, so that the sliding block chamber does not become a dirty chamber and that an aesthetically appealing overall design is created.

coaxis® end and connection cap

It acts as a decorative connection for the end and connection of the **coaxis®** profile, narrow with **coaxis®** profile, narrow or **coaxis®** column profile. It improves the sliding properties and at the same time protects the counter profile from scratches.
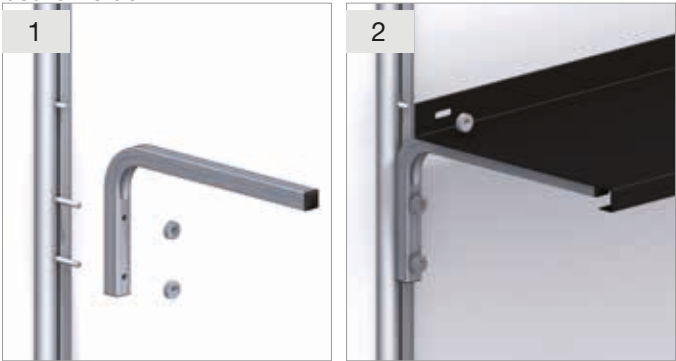
System accessories
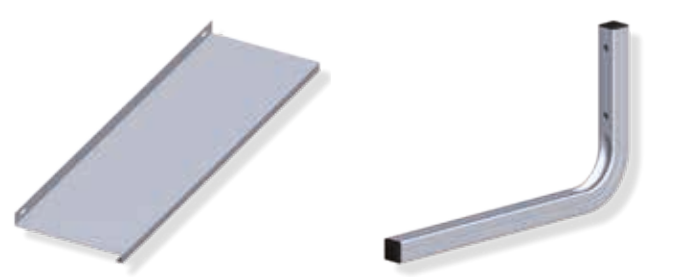
coaxis® shelf and coaxis® shelf board holder

The **coaxis®** shelf combined with the **coaxis®** shelf board holder can be used to build infinitely adjustable wall-mounted shelf units quite easily.

Assembly instructions coaxis® shelf and coaxis® shelf board holder

1. To assemble the **coaxis®** shelf board holder, two M5 × 30 mm threaded pins per holder are required, which are mounted on the square nuts. These are then inserted into the previously attached **coaxis®** rail. For mounting the **coaxis®** shelf, two coaxial threaded pins M5 × 23 mm are required for each

coaxis® shelf, which are mounted on the square nuts. These are also inserted into the previously attached **coaxis®** rail.

2 The **coaxis®** shelves and the **coaxis®** shelf board holders are fastened to the desired position using the aluminium knurled nuts.
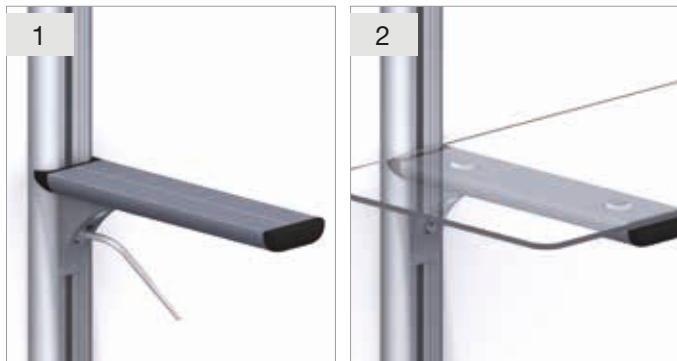
Assembly example

System accessories

coaxis® shelf support

It is intended, for example, for the production of a continuously adjustable wall-mounted shelving unit.

Assembly instructions coaxis® shelf support

1 The **coaxis®** shelf support is inserted into the profile groove of the previously attached **coaxis®** rail and secured in the desired position with a ball head Allen key.

2 The desired shelf can now be attached. For glass shelves, we recommend the elastic buffer as underlay, in order to achieve a better hold. Wooden shelves can also be screwed tight from the underside of the **coaxis®** shelf support, the screws are then concealed later by the **coaxis®** cover strip.

Useful tip from professionals

Assembly without screws is possible with the aid of a second **coaxis**° shelf support, which is attached on the opposite side (multiple clamp). This enables a wide variety of shelves made of wood, glass, stone or plastic, for example, to be continuously braced.
If the required length for the shelf boards is not available, a shelf support can quite easily be made in the required length by yourself using a **coaxis**° connection bracket combined with a **coaxis**° profile, narrow.
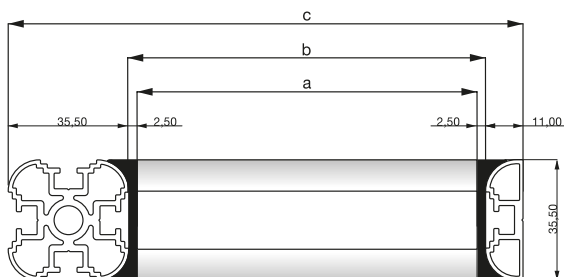
Assembly example

Dimension table for **coaxis**® constructions
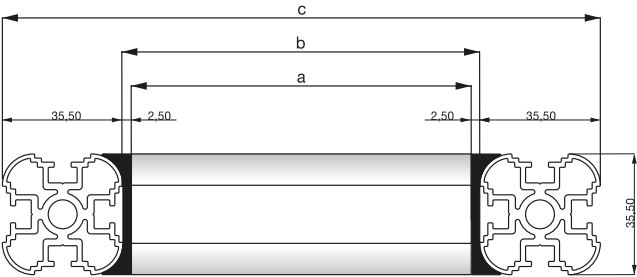
Determination of dimensions for **coaxis**® frames made of **coaxis**® column and **coaxis**® column

a) Profile length
   Outer frame dimension – 76.0 mm*) = Profile length
   Example: 400.0 mm – 76.0 mm = 324.0 mm
b) Inner frame dimension
   Outer frame dimension – 71.0 mm**) = Inner frame dimension
   Example: 400.0 mm – 71.0 mm = 329.0 mm
c) Outer frame dimension
   Profile length + 76.0 mm*) = Outer frame dimension
   Example: 324.0 mm + 76.0 mm = 400.0 mm

*) 76.0 mm result	
2 × column profile	2 × 35.5 mm = 71.0 mm
2 × connection cap	2 × 2.5 mm = 5.0 mm
**) 71.0 mm result	
2 × column profile	2 × 35.5 mm = 71.0 mm

Determination of dimensions for coaxis® frames made of coaxis® column and coaxis® profile, narrow

a) Profile length

Outer frame dimension – 51.5 mm*) = Profile length

Example: 400.0 mm – 51.5 mm = 348.5 mm

b) Inner frame dimension

Outer frame dimension – 46.5 mm**) = Inner frame dimension

Example: 400.0 mm – 46.5 mm = 353.5 mm

c) Outer frame dimension

Profile length + 51.5 mm*) = Outer frame dimension

Example: 348.5 mm + 51.5 mm = 400.0 mm

| *) 51.5 mm result	
1 × column profile	1 × 35.5 mm = 35.5 mm
1 × profile, narrow	1 × 11.0 mm = 11.0 mm
2 × connection cap	2 × 2.5 mm = 5.0 mm
**) 46.5 mm result	
1 × column profile	1 × 35.5 mm = 35.5 mm
1 × profile, narrow	1 × 11.0 mm = 11.0 mm

The installation of **coaxis®** profiles works just as well without the use of the connection caps. In this case you have to consider 2 × 2.5 mm = 5.0 mm in each of the above formulas. Simply put, the inner frame dimension corresponds to the profile length in this case.

System accessories

33,00 mm
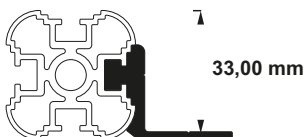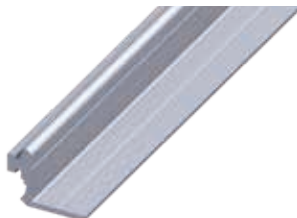
coaxis® **stop profile**

- The profile is compatible with the **coaxis**® column profile and the **coaxis**® profile, narrow.
- Simply insert the profile with the sliding block profile into the slot of the **coaxis**® profile and place it in the desired position.
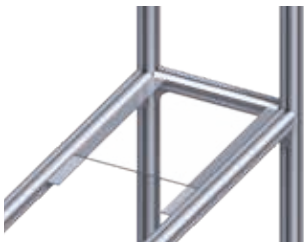
Using **coaxis**® stop and **coaxis**® support profiles, you can quickly and easily build partition walls, changing cubicles or supports for wooden and glass shelves.
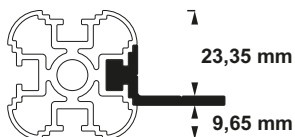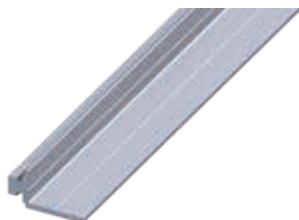
23,35 mm

9,65 mm

coaxis® support profile

- The profile is compatible with the **coaxis®** column profile, the **coaxis®** profile, narrow and the **coaxis®** profile, wide
- Simply insert the profile with the sliding block profile into the slot of the **coaxis®** profile and place it in the desired position
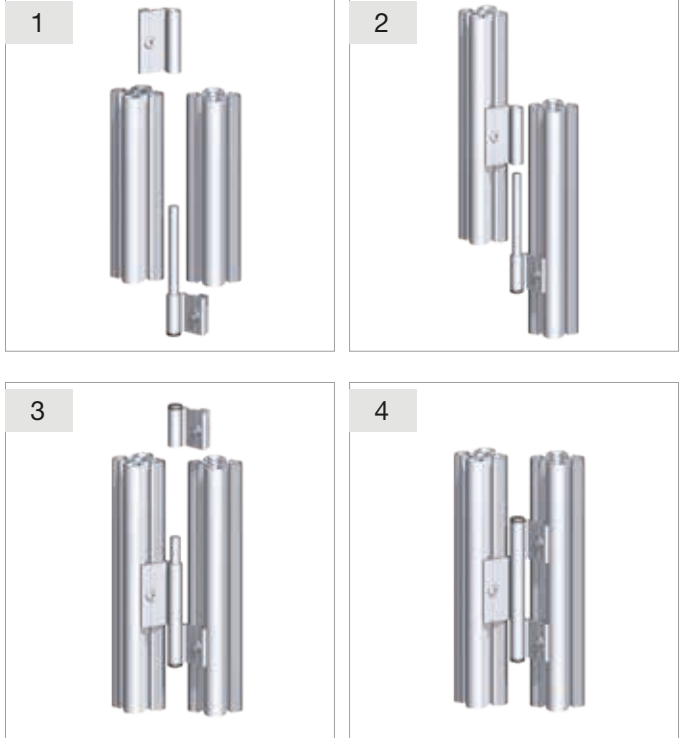

coaxis® fastening flange

- The **coaxis®** stop profile is also available in lengths of 50 mm, serving as attachment for the **coaxis®** column profile on the floor, wall and ceiling.

Assembly instructions coaxis® hinge, version A

1 Provide one of the two shorter hinge parts from the SS pack

with an end cap, insert the hinge pin and insert it into the right-hand **coaxis**® profile. Then insert the longer hinge part (with sliding block profile) into the left **coaxis**® profile.

2 Place the hinge parts in the correct position and fix with the screw. Then attach the left **coaxis**® profile with the hinge part on the hinge pin.

3 Now fit the second short hinge part with an end cap, insert it into the right-hand **coaxis**® profile and push it over the hinge pin.

4 Also fix the second short hinge part with the screw. Of course

you can now loosen the hinge once again and readjust if
necessary.

coaxis® profile connected to a coaxis® profile

Here is an example of a component provided with a hinge.

Assembly instructions coaxis° hinge, version B

1. Provide one of the two shorter hinge parts from the SS pack with an end cap, insert the hinge pin and push it into the right-hand **coaxis°** profile. Then position the longer hinge part (with a flat flange and two holes) on the square tube and screw it on with the self-tapping screws.

2. Put the right hinge part in the correct position and fix it with the screw. Then attach the left **coaxis°** profile with the hinge part on the hinge pin.

3. Now fit the second short hinge part with an end cap, insert it into the right-hand **coaxis°** profile and push it over the hinge pin.

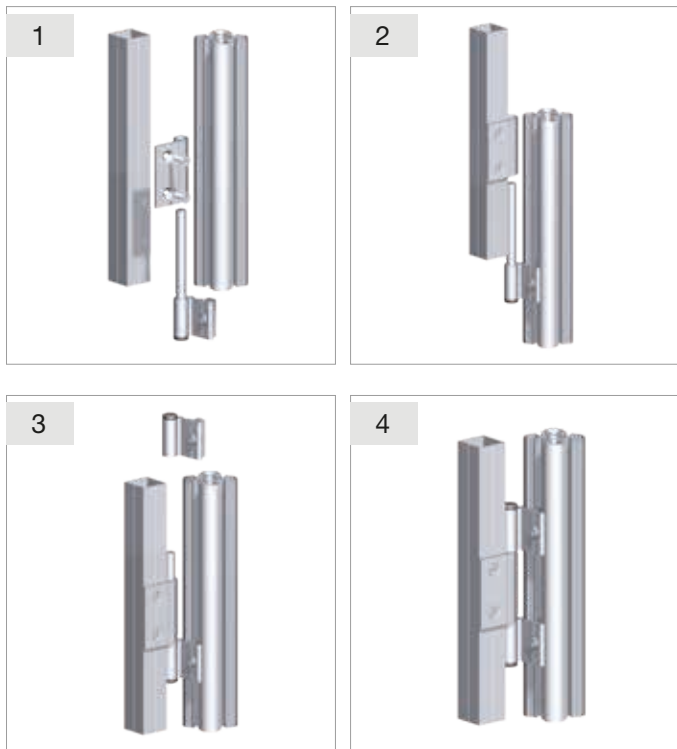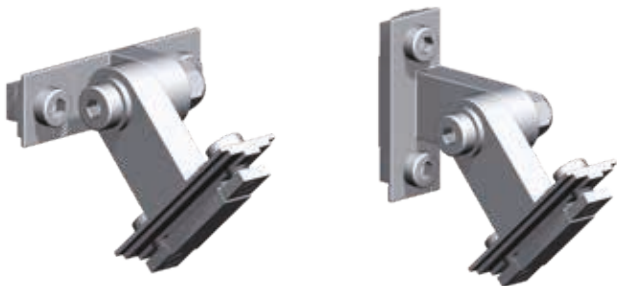4 Also fix the second short hinge part with the screw. Of course you can now loosen the hinge once again and readjust if necessary.

coaxis® profile connected to a 23.5 mm square tube

Here is an example of a component provided with a hinge.

System accessories

coaxis® hinge joint

Depending on the application, the **coaxis®** hinge joint can be installed orthogonally or coaxially. This increases the possibilities to pivot the components in different directions. The **coaxis®** hinge joint, both orthogonal and coaxial, is available in the product range as a set.

Here you can see a wall bracket for a flat screen. Here, the **coaxis®** profile with **coaxis®** column profile and the **coaxis®** hinge joint was installed. In this way, one can swivel the screen upwards. Furthermore, you can also move the screen up and down and left and right. Here, the coaxial hinge joint was used.

System tools

coaxis® drilling jig

It is intended as a help to screw two **coaxis®** column profiles together for an extremely sturdy construction.
Tip: The drilling jig can also be used without a stop for serial drilling.

1 First, insert the drilling jig into the slot of the **coaxis®** column profile to be drilled. Insert the drilling jig so that the 5-size drill bushing is on top.

2 Insert the drilling jig so far until the stop touches the **coaxis®** profile that is to be screwed horizontally. Then fix the drilling jig with the knurled nuts.
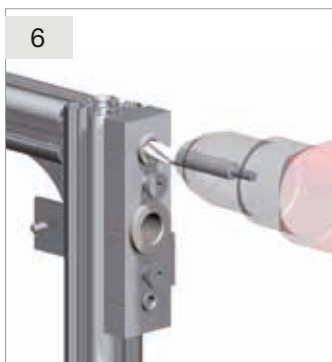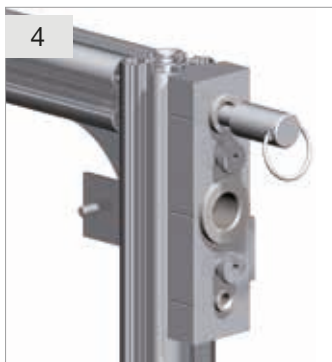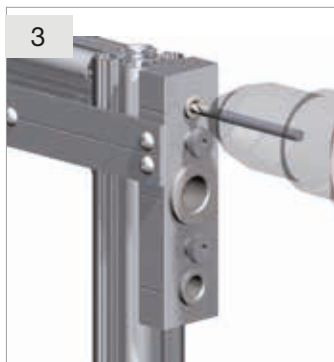
3 Drill through the vertical **coaxis**® profile with a cordless screwdriver and a 5-size drill through the 5-size drill bushing. Please oil the drill.

4 Loosen the drilling jig, push it out, turn it by 180°, push it back in, so this time the 10-size drill bushing is on top.

5 Fix the 10-size drill bushing with the fixing pin over the already drilled 5-size hole and tighten the knurled nuts again.

6 Drill through the vertical **coaxis**® profile with the cordless screwdriver and a 10-size drill through the 10-size drill bushing. Please oil the drill again.

7 Loosen the drilling jig and push it upwards and fix the 16-size
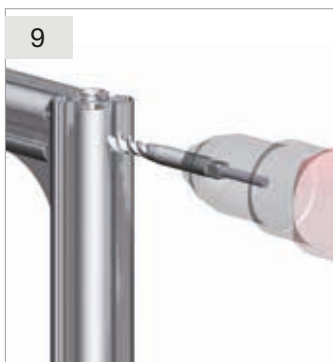
socket over the 10-size hole with the fixing pin. Now fix the drilling jig with the lower knurled nut.

8 Drill with a cordless screwdriver and a 16-size drill through the 16-size drill bushing into the **coaxis**® profile down to the bottom of the slot. Please oil the drill. Then loosen the drilling jig and remove.

9 Using a cordless screwdriver and a 10-size thread cutter, cut a thread through the hole in the vertical **coaxis**® profile into the thread channel of the horizontal **coaxis**® profile. Please oil the thread cutter.

10 Now screw the two **coaxis**® profiles together with the cylindrical screws M10 × 50 mm DIN 6912, which are available in the assortment.

Wand- und Deckenhaken

Die breite Version des **coaxis**®-Profils lässt sich horizontal, vertikal und diagonal an Wänden und Decken befestigen. So können Sie den vorhandenen Raum perfekt ausnutzen. Mit den passenden Haken findet alles seinen Platz, und das nicht nur innen, sondern auch im Außenbereich. Egal ob im Garten, in der Garage, im Keller oder auf dem Dachboden: Alles ist sicher aufbewahrt. Die Gummikappen auf den Haken sorgen dafür, dass nichts verkratzt.
Die **coaxis**®-Haken gibt es aus Aluminium oder verzinktem Stahl. Ein flexibles Schienen- und Hakensystem organisiert Keller und Garage.

coaxis®-Wandhaken

coaxis®-Wand- und Deckenhaken

coaxis®-Wand- und Deckenhaken

coaxis®-Wandhaken, gummiert

coaxis®-Wand- und Deckenhaken, gummiert

coaxis®-Wand- und- Deckenhaken, gummiert

coaxis®-Felgenhalter

coaxis®-Haken-Verdrehschutz

coaxis®-Haken-Verdrehschutz

Ideas and possibilities

In this way you can arrange as you wish

There are various possible combinations with the **coaxis**® profiles. For example, a number of **coaxis**® column profiles can be used to build a workbench with overlying shelves and various tool holders. In this way you can build a profile bracket, which is infinitely adjustable vertically and sideways, that is, if you have to process longer profiles and the vice alone is not enough, it is a great help to keep the profile straight and process without problems. As a result, you do not have to clamp it strongly and thus prevent damages to the profile. With the **coaxis**® profile, narrow, different shelves can be built on the side of the workbench, for example, to place working tools. Our different types of hooks can also be mounted on the **coaxis**® column profile to attach various items on it. Wall shelf designs are also ideal in the laundry room to keep various utensils.

Ideas and possibilities

Wheelie bin shelter

TV shelf

Walk-in wardrobe

Outdoor kitchen

Useful application videos

Watch videos of our product and processing tips on YouTube.

 Workman's van with vehicle furnishings

 Outdoor kitchen

 Wheelie bin shelter

 TV shelf

 Walk-in wardrobe

Notes – technical diagrams

Dimensions
The dimensions indicated in this brochure are approximate values and may deviate slightly in either direction.

Product versions
We reserve the right to make modifications in the interest of technical progress and product improvement.

Warranty
As this is an abridged brochure, no liability can be accepted for either individual cases or the reproduction of the models shown.

Colours
The colours depicted may vary slightly from the original products.

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alfer°	(EU) (CH) (CAN) (GB)
alferpro°	(EU)
aluvalley°	(EU)
clipstech°	(EU) (MEX)
coaxis°	(EU) (MEX)
combitech°	(EU) (CH) (MEX)
ferroplatan°	(EU)
logika°	(EU)
verando°	(EU) (CH)
x-star°	(EU)

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alfer® hardware range

combitech® system · basis
System profiles · metric threaded rods and threaded tubes · system accessories · tool range

combitech® system · connect 23.5 mm
Connect connectors 23.5 mm · system profiles 23.5 mm · system accessories

combitech® system · model construction
Connect connectors 7.5mm · System profiles 7.5mm · system accessories
logika® profiles · metric threaded rods · expanded metal, smooth, embossed and perforated sheets

combitech® system · sheets, plates and accessories
Plastic panels · smooth, embossed, perforated and expanded sheets · Prismatech · Multitube · checker plate profiles · accessories

Profiles for DIY and professional purposes
Standard profiles made from aluminium, brass, plastic, steel, stainless steel clampline clamping aluminium profiles

Steel profiles

alfer® building material range

Tile edgings
Angle, round, quarter-circle and square tile edgings · tile edgings for steps
LED profiles · joint cover profiles and expansion joint profiles · wet sealing
profiles **clipstech**® system profiles · balcony angle · mats and accessories

Floor and room profiles
Cover and joint cover profiles · edging, level balancing, angle edging and
end profiles · step edging profiles · Edge protecting profiles · Baseboard and
buckling angles

Profiles for parquet, laminate and designer floors
clipstech®, **clipstech**®-vario, **clipstech**®-plus, **clipstech**®-mini, optifloor
and renovation System profiles and accessories · cover, level balancing,
wall edging and edging profiles · Edge profiles, drilled

verando® Decking boards
verando® combines sophisticated design and sustainability.
The weatherproof profiles, mainly made of rice husks, are more durable than
other wood or wood substitute products, they don´t splint, crack or swell.

alfer® **classification system range**

combitech® **system · logika**®
The logically perforated profile range: **logika**® profiles and **logika**® accessories

combitech® **system · coaxis**®
The coaxial system profiles: system profiles, accessories and tools ·
wall and ceiling hooks

Storage range
System rails and accessories · profile hooks, clothes hooks and utensils
supports · bicycle stands · shelving brackets · Furniture construction profiles
and plant trolley

alfer®
aluminium

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