



## Tipps and Tricks for XMS

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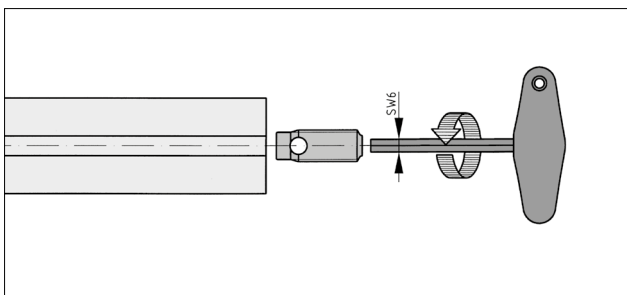
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## Design tips for fasteners

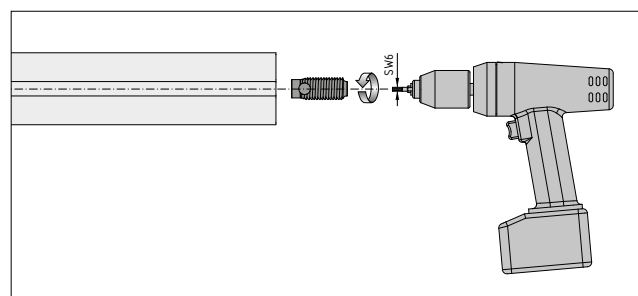
Automatic Fasteners are the perfect solution, as they require minimal machining work and ensure a flawless overall look.

Automatic Fasteners ensure your construction exhibits a high load-carrying capacity. They can be inserted directly into the groove – preferably with a cordless driver – with no additional processing and thus no additional preparation time. This saves times by making complex constructions quick to create.

On top of that, Automatic Fasteners are virtually invisible from outside. Automatic-Fastening Set 8 Cap covers the Automatic-Fastening Set in the groove, adding a nice finishing touch to the design's overall look.



Fitting Automatic Fasteners



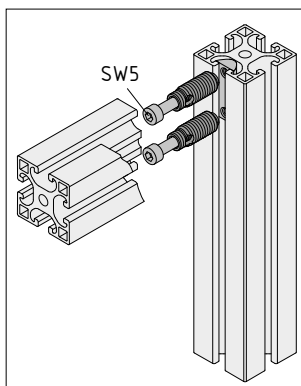
Using Automatic Fasteners, cordless driver



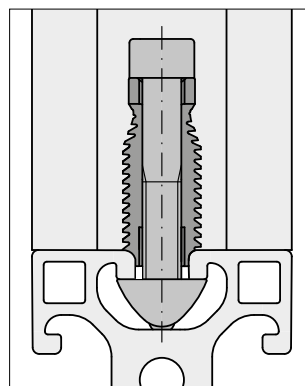
Installed Automatic Fastener



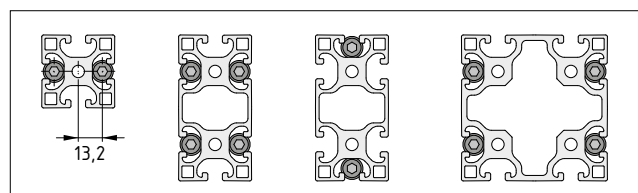
Covered Automatic Fastener



Using Automatic  
Fastening Set 8 40  
0.0.672.84



Using Automatic  
Fastening Set 8  
0.0.440.58

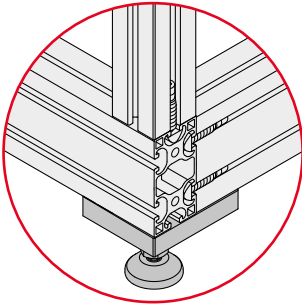


Automatic Fastener XMS mounting arrangement

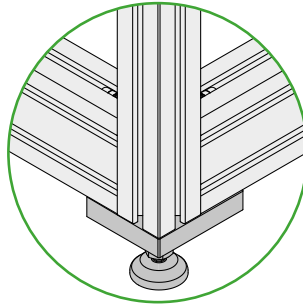
## Design tips for frames

Vertical profiles are continuous, unbroken elements.

The vertical profiles of a frame construction should always be as long as possible. This also applies when designing doors.



False



True

Even if you are inclined to view vertical profiles as “columns” that carry the horizontal profiles, we advise you to design vertical profiles as continuous, unbroken elements and to fit the horizontal profiles between them. This has numerous advantages:



1. The outer surface of the XMS frame is completely closed, even without mitre cuts.



2. Not only do these profiles give the structure a uniform look, they also ensure the Automatic Fasteners are only installed into horizontal grooves. This keeps the vertical grooves free at first, meaning they can be used for Hinge Leaf Profiles, for example.





3. Thanks to the integrated cable conduit, the vertical profiles that are acting as columns or posts offer a straightforward way of laying cables and supply lines even after the construction is complete.



4. This design approach is also used for the doors, ensuring a cohesive appearance.



5. In addition, certain functional elements such as Double Door Stop Set 8 can only function perfectly if the vertical profiles on the door are continuous, unbroken elements running the full height of the door. In this case, the Caps for Door Profile X 8, for example, contact the actuation lever of the Double Door Stop Set. If, however, the horizontal profiles are continuous and run the full width of the door, there would be a profile groove at the position of the actuation lever, meaning the lever would be “grasping at nothing”.

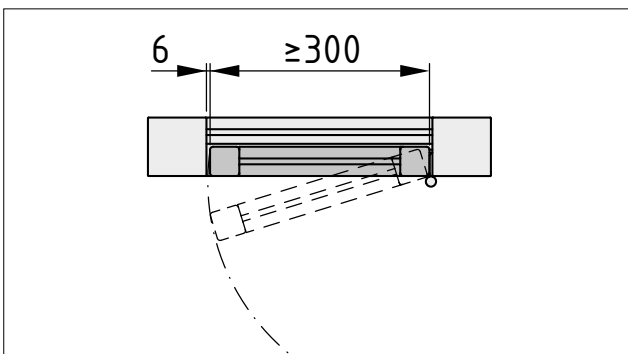
## Frames can be extended with profiles “X”.

In terms of design, the profiles in Line X perfectly match XMS profiles. In addition to the load-bearing outer frame structure, a large selection of Line X profiles can be used inside the cabin without changing the overall look.



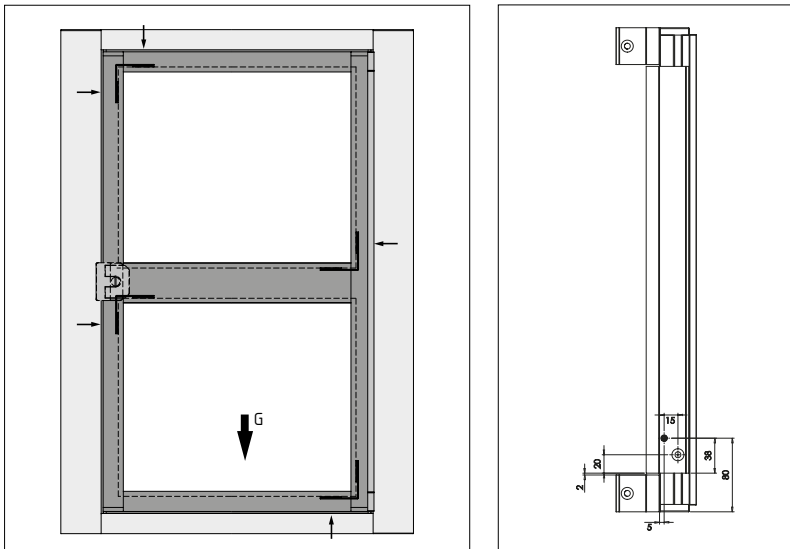
## Do not build swing doors too small (leaf width of at least 300 mm).

The pivot point for swing doors is located outside the XMS frame. An opening angle of 180° can be achieved in this way. However, this design also results in the inner edge of the door swinging out when it is opened. This means that a minimum door width of 300 mm must be provided for a door gap of 6 mm.



Clamping Sets are positioned so they are facing diagonally down toward the hinge.

Clamping Sets are installed at diagonally opposite sides of the panel element. At the top edge on the outside of the door, at the bottom edge on the hinge side.



A through hole must be drilled near the door hinge to provide access to the lower Clamping Set.

**A partial drilling groove is provided for earthing parts that are live in the event of a fault**

The frame must be set up in a way that makes it possible to earth parts that could carry a voltage in the event of a fault. The drilling grooves described on page 8 can be used for this. In addition, Earthing Terminal 8 (0.3.001.81) is available, along with Earthing Connection 8 (0.0.486.95) for connecting doors.

## Assembly tips for frames

### Angular construction with the aid of a small panel, a T-Slot Nut and a Wing Hand Knob

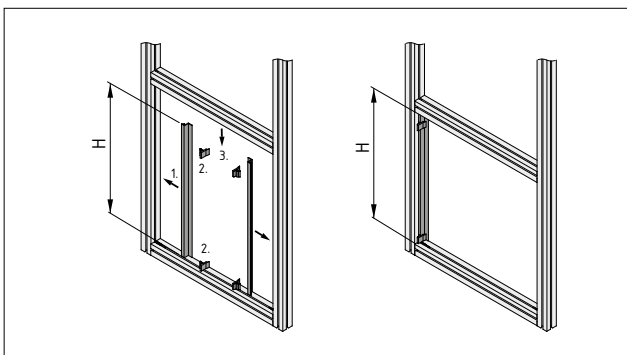
Profiles that meet flush at right angles, such as door frames, can be fixed in place for precise assembly using a small plastic panel, a hammer head screw and a wing nut for further assembly work:



### Aluminium Panel-Clamping Strips 8 Al can be used as an aid (spacer during assembly)

Panel-Clamping Strips 8 Al that have been cut to the appropriate size can be "placed" vertically in the frame and thus temporarily support the cross profiles until they are finally screwed together. To create a temporary fixing, Panel-Clamping Strips 8 Al can be secured

by clamping them with short sections of Panel-Clamping Strip 8 4-6mm. This ensures the frame can be assembled both easily and accurately.

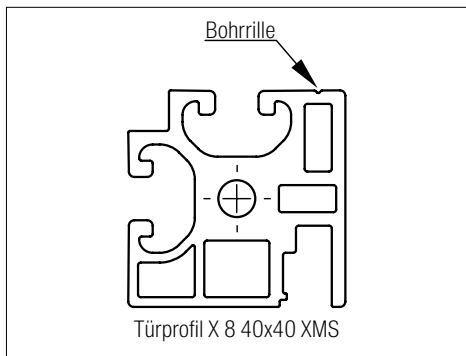


Panel-Clamping Strip as an assembly aid

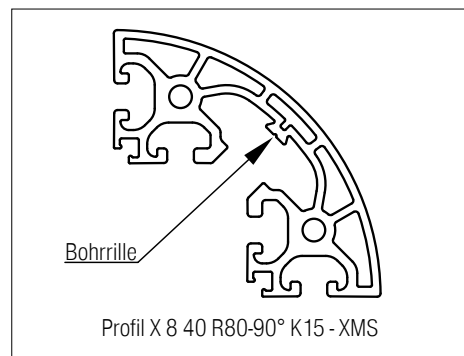


## Using drilling grooves

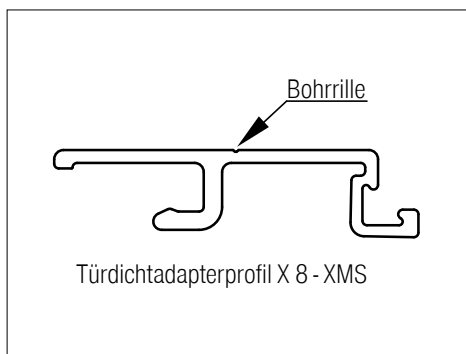
Various profiles feature drilling grooves. These grooves can be used to drill holes at an exact distance from the outer edge of the profile, as the drill is guided transversely by the drilling groove.



Makes it possible to precisely drill the thread for the Clamping Set, Door Profile X 8 – XMS (0.0.650.61)



Makes it possible to attach elements to the cable conduit, e.g. earthing connections



Makes it possible to subsequently secure short Door Seal Adapter Profiles X 8 – XMS, if the clamping force is not sufficient.

## Assembly tips for fasteners

During assembly, it is very important that the axis of the Automatic Fastener is exactly aligned with the groove. Drilling Jig 5 0.0.370.19 can be used as an aid for this purpose.

To do this, the Drilling Jig is positioned against the end face of the profile. By screwing the Automatic Fastener into the groove via one of the outer drill bushes of the Jig, you can then ensure the Automatic Fastener is screwed into the groove on a precise axis.



## Installation tips for panels

Only remove protective film from the edges of panels and leave the rest until after completion

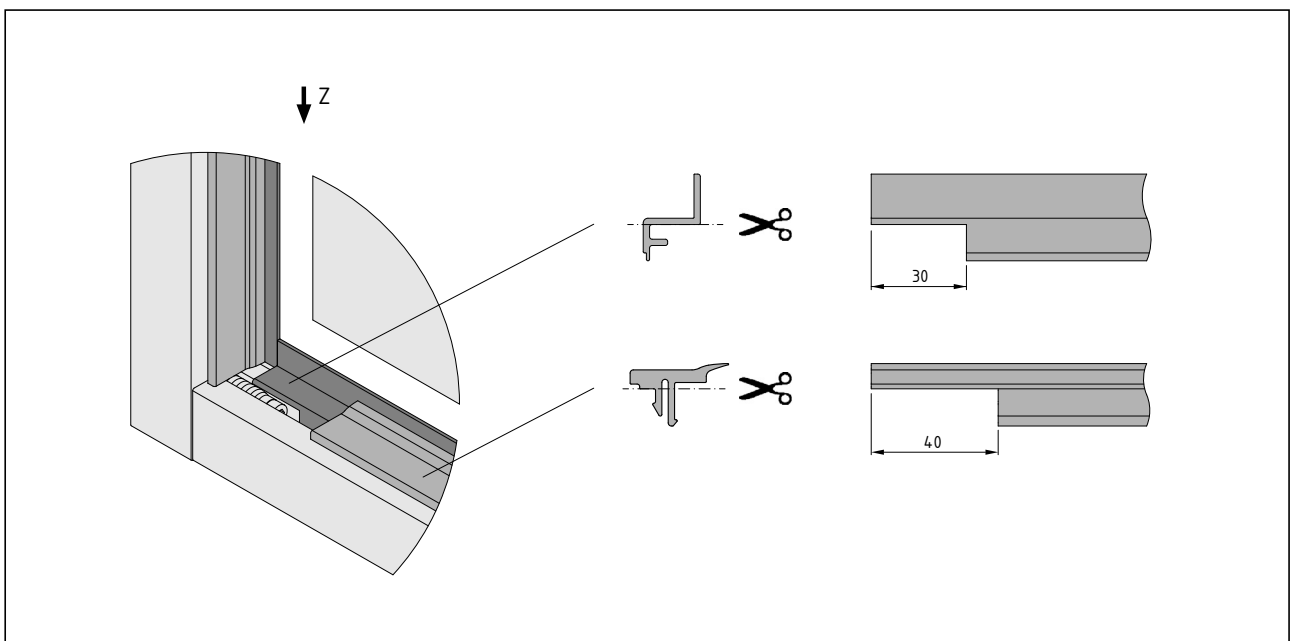
To prevent damage to panel elements during assembly (especially acrylic panel elements), the protective film should only be removed at the edges during assembly. This also prevents the protective film from getting

jammed in the Lip Seals 4-5 XMS. Only remove the rest of the protective film once the cabin has been completed.



### Notch Panel-Clamping Strips 8 Al

Horizontal Panel-Clamping Strips 8 Al must be notched on the ends over a length of 30 mm prior to assembly using a suitable band or hand saw. This makes it possible to insert them into a groove in which an Automatic Fastener has been installed at the end.



Panel-Clamping Strips

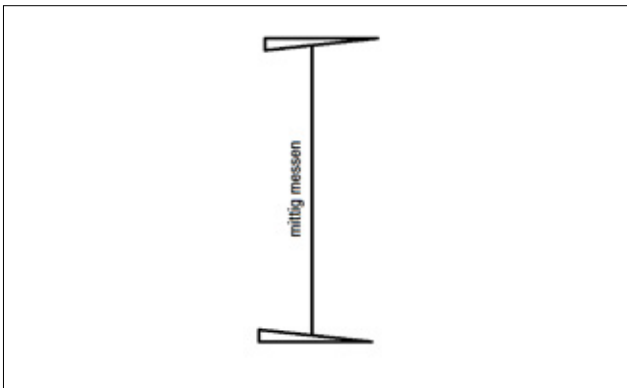
### Cutting and installing Panel-Clamping Strip 8 4-6 mm, grey

Install the horizontal plastic Panel-Clamping Strips 8 4-6 mm first. To do this, measure the clearance of the frame. Cut Panel-Clamping Strips 8 4-6 mm 4 mm

shorter than the clearance, as Panel-Clamping Strip AI requires 2 mm of space on either side.

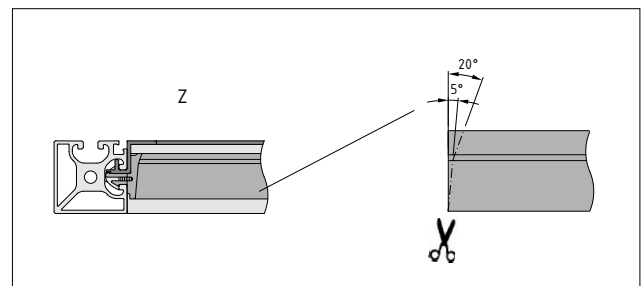


After cutting to size, cut away at each end a 40 mm length of the two protruding lips on the underside, which will later be inserted into the 8 mm groove, as there are automatic connectors in the groove here. Standard pliers are well suited for this purpose; any remaining cut edges must be reworked.



Now determine the cut-off length for the vertical Panel-Clamping Strips 8 4-6 mm. Measure from the centre, as the profiles have a slanted cross-section. Experience has shown that the length is approximately 12 mm shorter than the clearance.

Cut into the rubber lip at an angle of about 20° before installation (see sketches/photo).

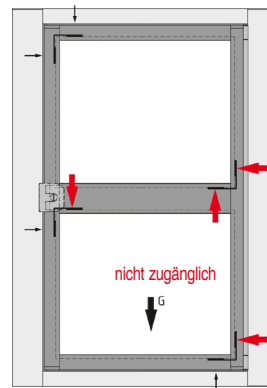


## Assembly tips for doors

For applications that involve intense vibrations, apply threadlocker to grub screw DIN 916 from the Clamping Sets.

The grub screws DIN 916 from the Clamping Sets should be protected against loosening with a suitable threadlocker when used in frames that are exposed to intense vibrations.

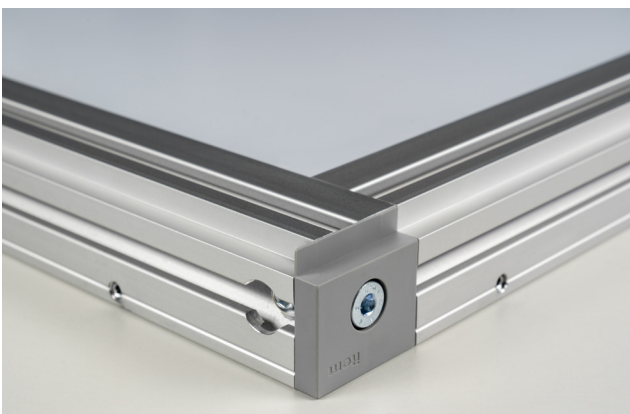
In case of doubt, this can prevent a protruding screw from blocking the door from opening.



Depending on the design, some Clamping Sets can only be accessed from one side. Nevertheless, in this case, insert all Clamping Sets and align the door using the accessible Clamping Sets.

### Pre-determined breaking points on Cap Set, Door Profile X 8 40x40 XMS

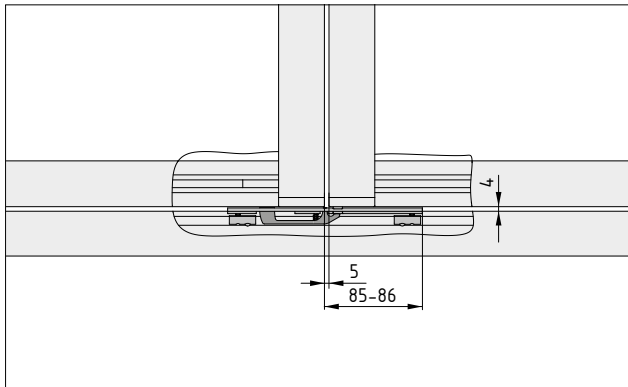
Depending on whether the respective cover cap is used at the top, bottom, left or right, a corner of the Cap must be cut off at the intended pre-determined breaking point to clear the way for the all-round seal of the frame.





### Double Door Stop Set 8: Ensure the axis is central, and you're good to go.

When installing Double Door Stop Set 8, all it takes to ensure correct alignment is to make sure the axis of rotation as viewed from above is located exactly in the middle of the door gap.

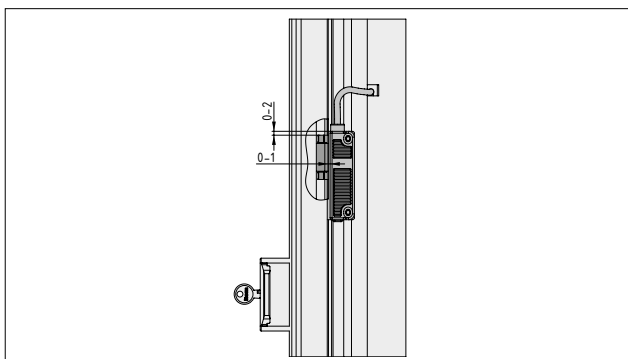


However, if malfunctions still occur, check whether the correct clearance of 5 mm above and below the door has been maintained. If necessary, align the door vertically.

### Safety Switch 8, target on the side of the plug, flush-mounted on the metal plate

To ensure the target of Safety Switch 8 functions properly, it must be aligned precisely to the sensor. The sensor's fastening plate can be used as a guideline here. The target is correctly positioned when the top edge of the target is aligned with the top edge

of the fastening plate on the side to which the sensor's connecting cable is attached. The target is symmetrical, meaning it can be installed in both directions.



To prevent tampering, the sensor and the target are equipped with Security Bolts. Special tools are required for installation, for example 0.0.661.47 Security Bit Set SW2-SW6.

## Installation tips for seals

### General information for installing Lip Seals

When installing sealing profiles from the XMS system, assembly can be made easier by using suitable lubricants (e.g. soapy water).

### Cutting and installing Lip Seals 8 XMS, T1-XMS and T2-XMS

The vertical Door Lip Seals have to be installed first. To do this, cut the Lips Seals to the dimensions of the clearance of the door opening. After installation, measure the remaining horizontal clearance between

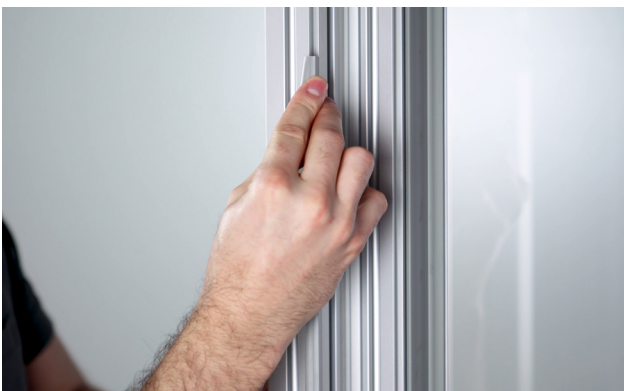
the Lip Seals already installed, cut the profiles to these dimensions and install the two horizontal profiles.



### Installing Lip Seals T1 and T2

Lip Seals T1 and T2 are brought up to the groove at an angle and then swivelled in so they clip into the groove. Applying lubricant should make installation easier.

Stress whitening caused by installation is normal and does not impair functionality.



### Installation aid for Lip Seal 8 XMS

A suitable (non-sharp-edged) plastic panel can be used as an aid to insert Lip Seal 8 XMS into the groove provided by tapping it into place with a hammer.



## Cutting and installing Lip Seal 4-5 mm XMS

Install the vertical Lip Seals first. To do this, place the Lip Seal in a corner and press it into place. Then press the Lip Seal into place bit by bit, working towards the other corner (Assembly Tool Lip Seal 5 0.0.484.40 makes it easier to press the Lip Seal into the correct position in the profile groove). If the Lip Seal protrudes

at the end, it can simply be shortened (e.g. with Multi-Purpose Pliers 0.0.265.63). The same procedure is followed for horizontal Lip Seals. The outer ends can be cut diagonally to achieve a clean finish.



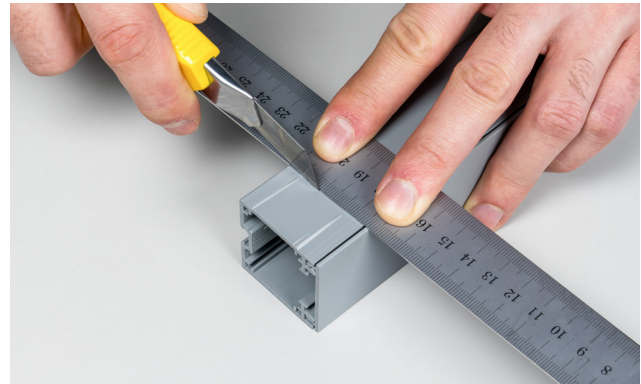
## Assembly tips for cable conduits

### Making cut-outs in cable conduits with pliers, a knife and a ruler

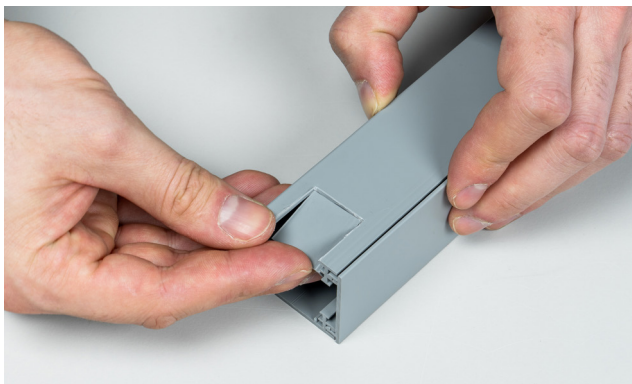
Suitable pliers (e.g. Multi-Purpose Pliers 0.0.265.63), a steel ruler and a box cutter are recommended for making cut-outs in cable conduits.



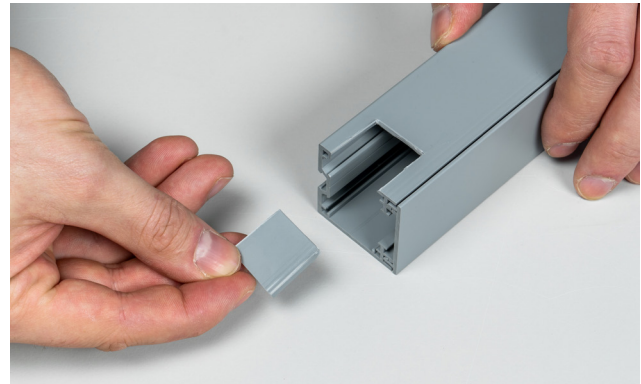
Make the first cuts at an angle to the outer edge.



Then cut the desired cut edge parallel to the outer edge with a box cutter, working along a steel ruler.



The cut-out can now be easily removed at this pre-determined breaking point.





### Installing Clip, Conduit Profile (swivel in)

Cable Conduit Clips 0.0.643.85 can be easily fitted into the groove provided by first inserting them at one side and then swivelling them in to the side. Afterwards, the Clips can still be easily moved along the groove.



### Installing the cable conduit on the profile (e.g. with the handle of a hammer)

Once the cable conduit has been prepared in this way, fit it to the aluminium profile groove by applying force at points along its centre – e.g. using the handle of a hammer.



Ihr Vertriebs- und Servicepartner

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