item

Drawer System

Notes on use and installation

Contents

Safety instructions

Sharp edges may be present – wear safety gloves during assembly and installation work.

The details and information in this guide are provided for the purposes of describing the product and its installation only. This information does not discharge users from the obligation to conduct their own assessments and checks.

It is also important to bear in mind that components exposed to mechanical loads are subject to a natural process of wear and ageing. Check all components for obvious defects prior to assembly/installation.

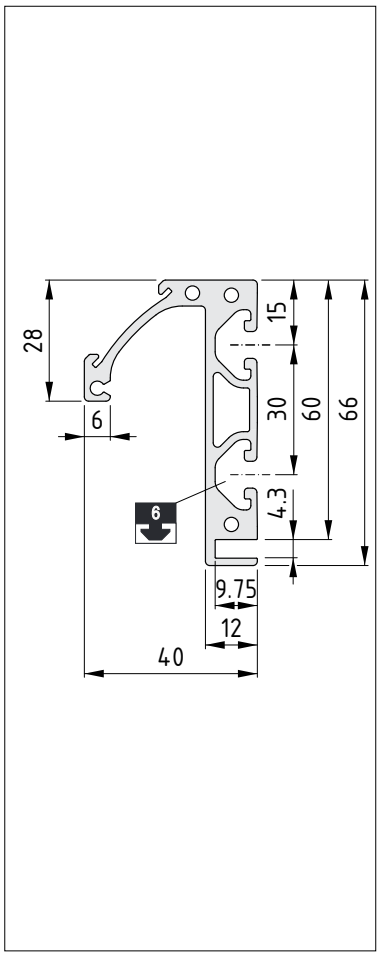
Product description

The Drawer System is used to build custom drawers with an internal height of 60 mm, 120 mm or 180 mm. A drawer is assembled using three Frame Profiles and one Front Profile. Alternatively, four Frame Profiles and a custom grip can be used.

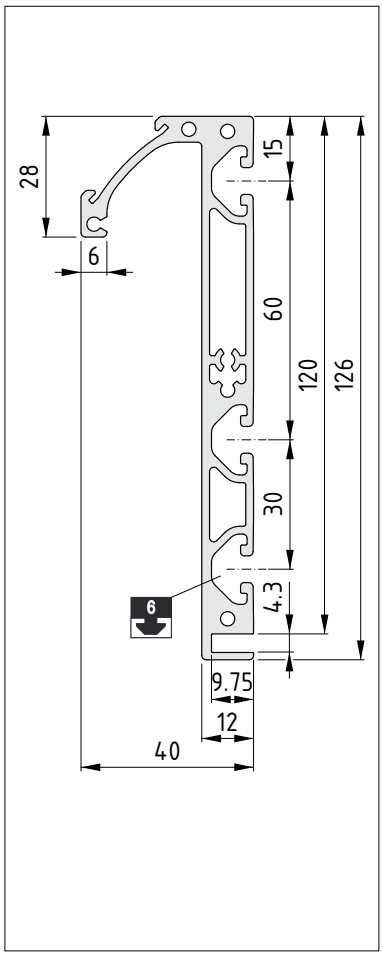
The external Line 5 groove provides a fastening point for item Telescopic Rails.

Products in the Drawer System

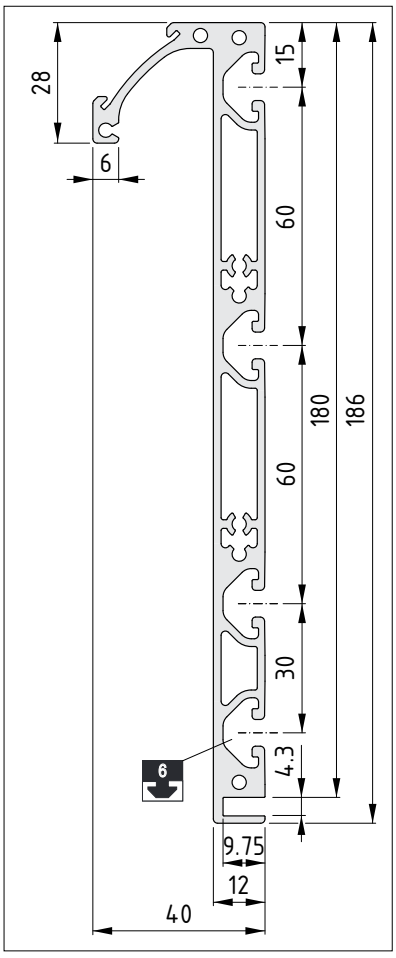
Drawer System, Front Profile with Grip



0.0.721.57

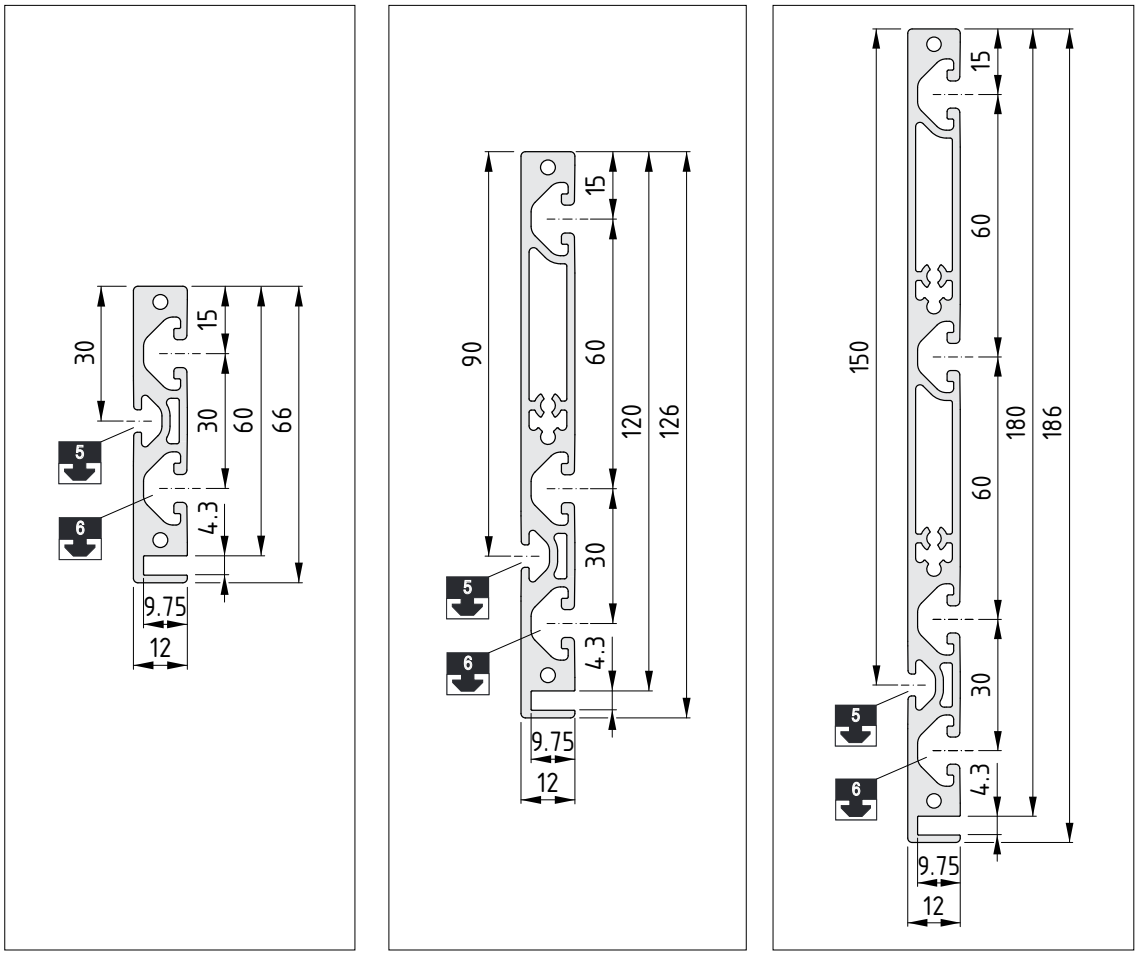


0.0.721.59



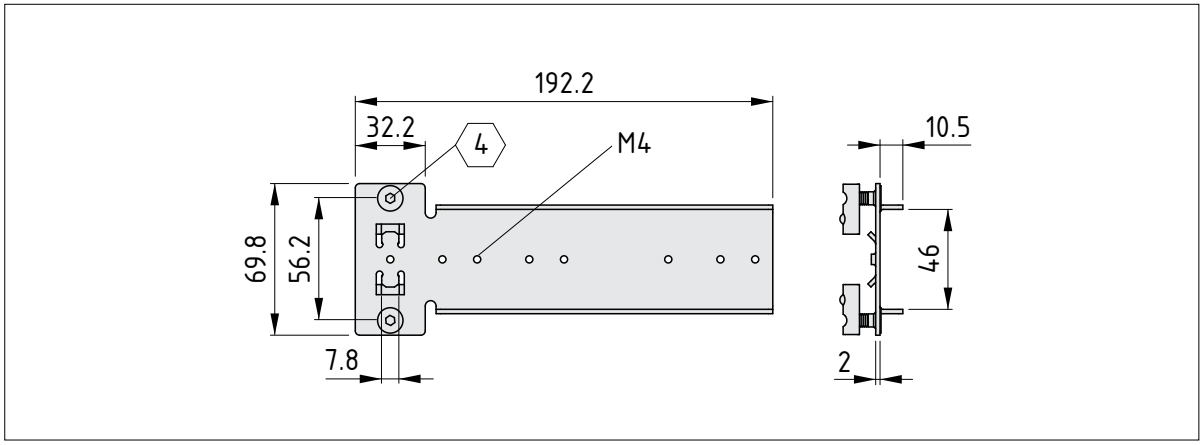
0.0.721.61

Drawer System, Frame Profile

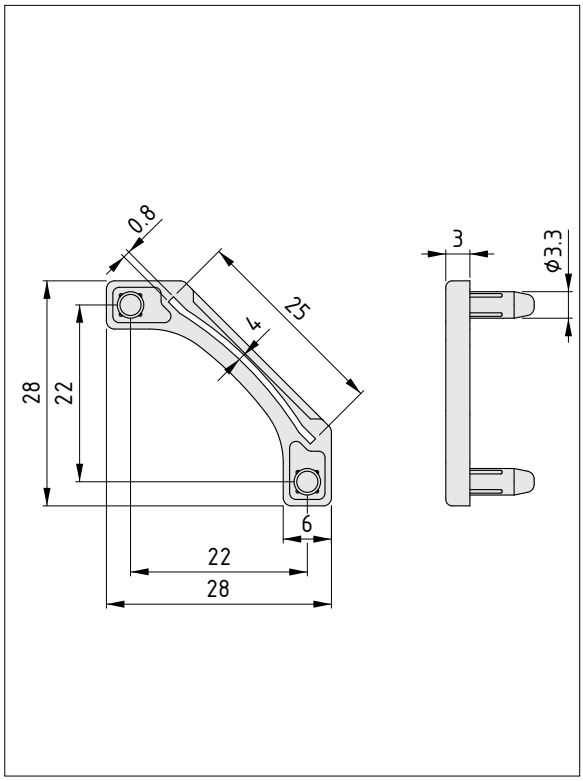


0.0.721.51 0.0.721.53 0.0.721.55

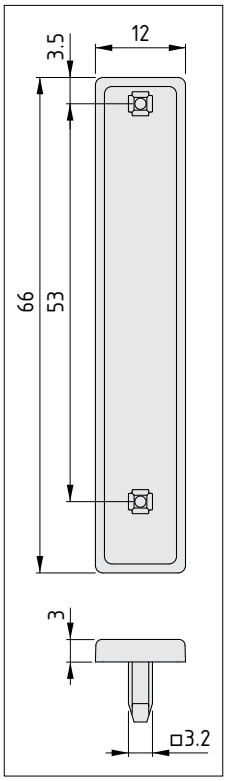
Assembly Set 8, Telescopic Rail 12.7x45.7 (0.0.722.36)



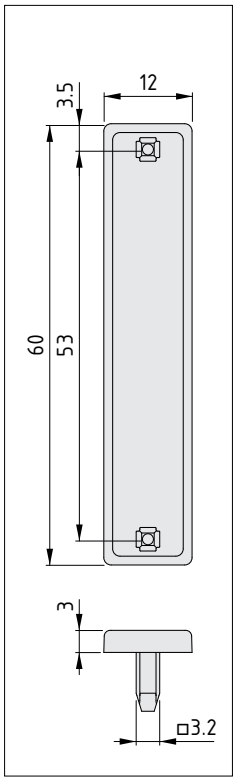
Drawer System, Caps



Drawer System, Grip Cap, grey similar to RAL 7042 (0.0.722.84)

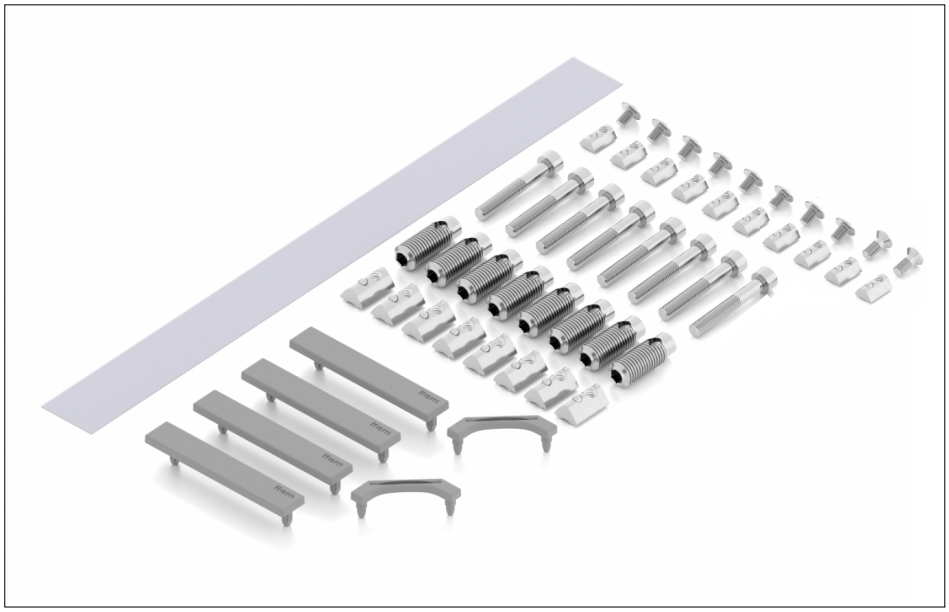


Drawer System, Cap 66x12 grey similar to RAL 7042 (0.0.722.83)



Cap X 6 60x12, grey similar to RAL 7042 (0.0.609.29)

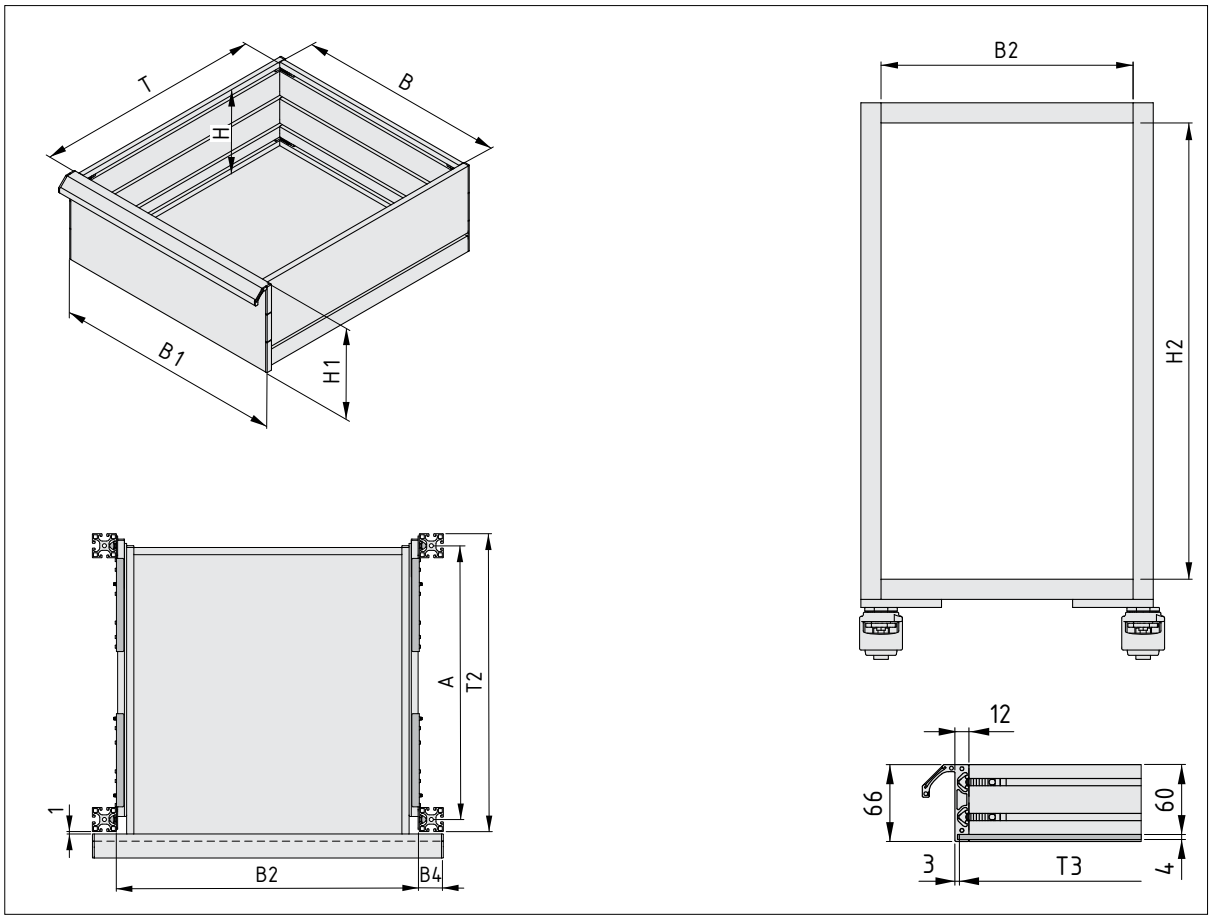
Drawer System, Accessory Set (0.0.725.80)



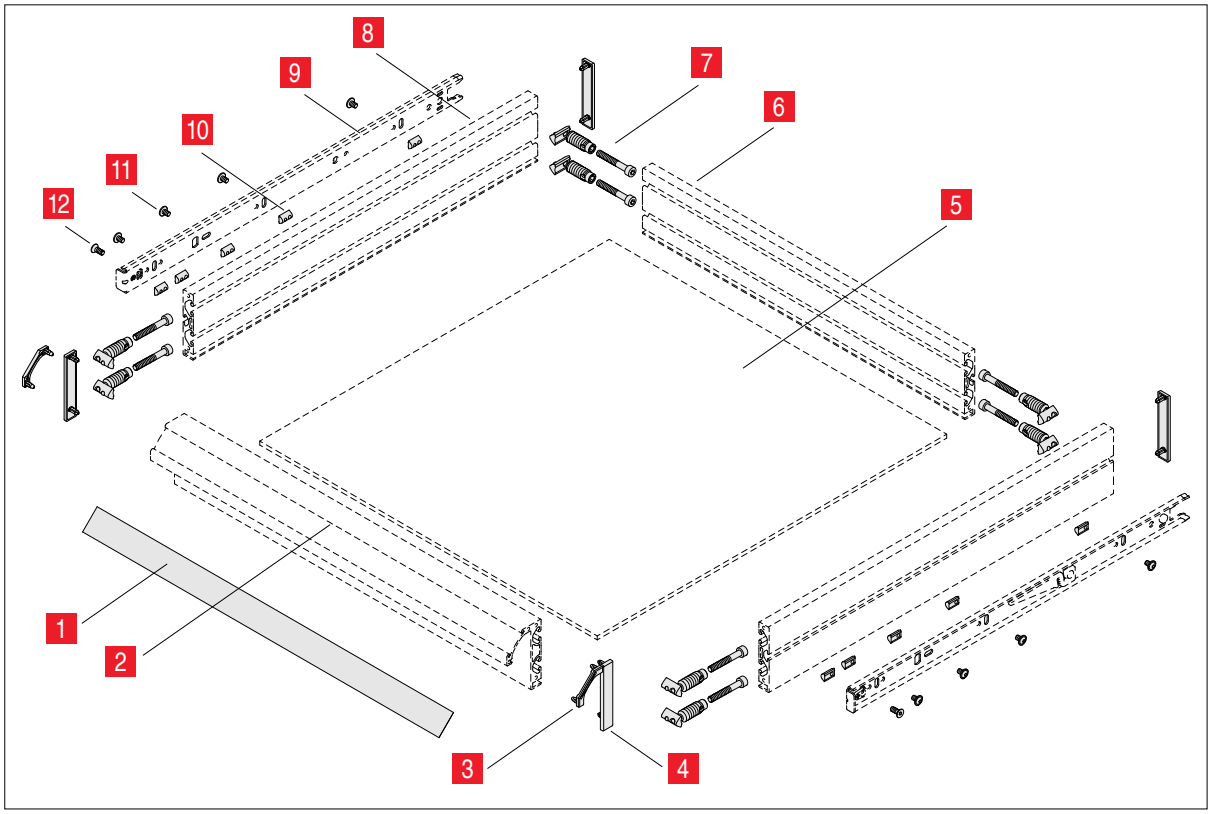
Terms and definitions

Dimension	Description	Comments
H	Usable height inside the drawer	Options: 60 mm or 120 mm or 180 mm
B	Usable width inside the drawer	NOTE! The width of the drawer cannot exceed the length of the Telescopic Rails (T)
T	Usable depth inside the drawer	In full-extension configurations, this corresponds to the length of the Telescopic Rails
H1	Front height of the drawer front	Usable height H is dependent on front height H1: H1 = 186 mm, suitable for the following usable heights: H = 60 mm or 120 mm or 180 mm H1 = 126 mm, suitable for the following usable heights: H = 60 mm or 120 mm H1 = 66 mm, suitable for the following usable height: H = 60 mm
B1	Outside width of the drawer front	The outside width of the drawer front, including the Caps, is dependent on the usable width of the drawer (B) and the position of the drawer front: Drawer front flush with surrounding structure: B1 = B + 46 mm Drawer front proud of surrounding structure: B1 ≥ B + 54 mm
H2	Clear height of the surrounding structure (internal dimension)	H2 = n1 x 186 + n2 x 126 + n3 x 66 + n x 4 mm + 5 mm where: n1 = Number of tall drawers, H1 = 186 mm n2 = Number of medium-height drawers, H1 = 126 mm n3 = Number of low drawers, H1 = 66 mm n = Total number of drawers
B2	Clear width of the surrounding structure (internal dimension)	The internal width of the surrounding structure depends on the usable width of the drawer (B): B2 = B + 54 mm
T2	Depth of surrounding structure (external dimension)	
B3	Width of the panel for the drawer base	The width of the panel (drawer base) depends on the usable width of the drawer: B3 = B +18 mm
T3	Depth of the panel for the drawer base	The depth of the panel (drawer base) depends on the usable depth of the drawer: T3= T +18 mm
A	Distance between the drawer fixing points on the surrounding structure	

Dimen-sion	Description	Comments
B4	Oversize on a drawer front that sits proud of the surrounding structure	Freely selectable



Construction of a drawer

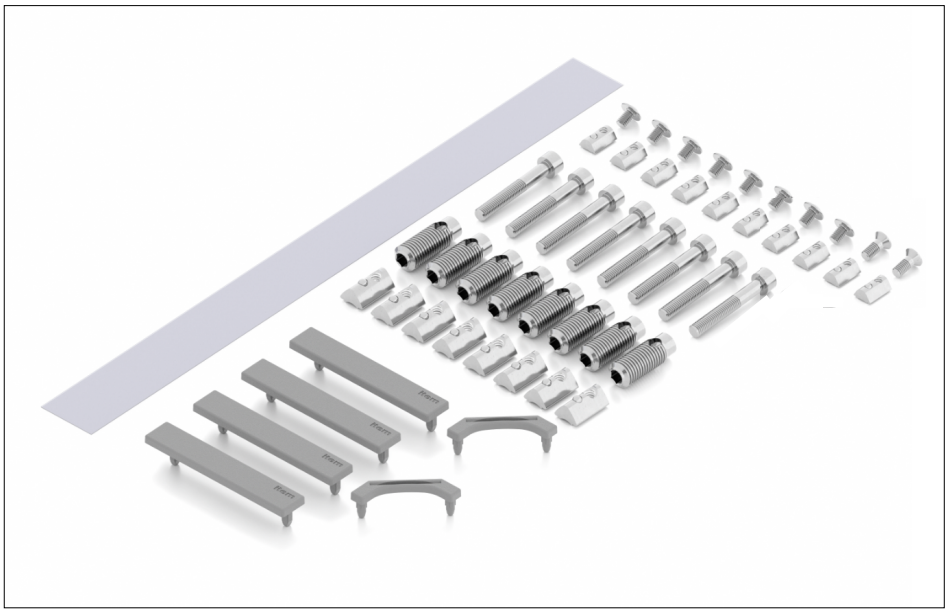


Basic construction of a drawer				
No.	Article	Quan-tity	Description	Comments
1	0.0.667.59	1	Label Protection Strip 8 24	* Part of Drawer System, Accessory Set (0.0.725.80)
2	0.0.721.57	1	Drawer System, Front Profile H66 with Grip	Available In three heights: ▪ Drawer System, Front Profile H66 with Grip (0.0.721.57) ▪ Drawer System, Front Profile H126 with Grip (0.0.721.59) ▪ Drawer System, Front Profile H186 with Grip (0.0.721.61)
3	0.0.722.84	2	Drawer System, Grip Cap	* Part of Drawer System, Accessory Set (0.0.725.80)
4	0.0.722.83	4	Drawer System, Cap 66x12	* Part of Drawer System, Accessory Set (0.0.725.80)

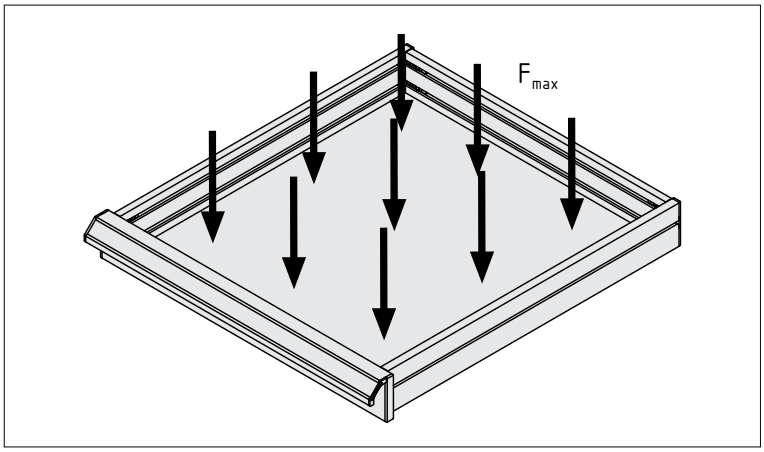
Basic construction of a drawer				
No.	Article	Quan-tity	Description	Comments
5		1	Plastic 4mm	Available in the following variants: ▪ Plastic 4mm, ESD RAL 7035 (0.0.614.85) ▪ Plastic 4mm, RAL 7035 (0.0.428.46) ▪ Plastic 4mm, RAL 5014 (0.0.688.29) ▪ Plastic 4mm, RAL 3000 (0.0.428.43) ▪ Plastic 4mm, RAL 9017 (0.0.474.37) ▪ Plastic 4mm, RAL 9016 (0.0.473.04) ▪ Plastic 4mm, anthracite (0.0.720.10)
6	0.0.721.51	1	Rear: Drawer System, Frame Profile H66	Available in three heights: ▪ Drawer System, Frame Profile H66 (0.0.721.51) ▪ Drawer System, Frame Profile H126 (0.0.721.53) ▪ Drawer System, Frame Profile H186 (0.0.721.55)
7	0.0.419.71	8	Automatic-Fastening Set 6	* Part of Drawer System, Accessory Set (0.0.725.80)
8	0.0.721.51	2	Side: Drawer System, Frame Profile H66	Available in three heights: ▪ Drawer System, Frame Profile H66 (0.0.721.51) ▪ Drawer System, Frame Profile H126 (0.0.721.53) ▪ Drawer System, Frame Profile H186 (0.0.721.55)
9	0.0.718.71	1	Telescopic Rail 12.7x45.7 L400 soft close, full extension	Product always contains two telescopic rails. Available in the following variants: Telescopic Rail 12.7x45.7 L400 soft close, full extension (0.0.718.71) Telescopic Rail 12.7x45.7 L500 soft close, full extension (0.0.719.70) Telescopic Rail 12.7x45.7 L600 soft close, full extension (0.0.719.71) Telescopic Rail 12.7x45.7 L700 soft close, full extension (0.0.719.72)
10	0.0.370.06	10	T-Slot Nut 5 St M4	* Part of Drawer System, Accessory Set (0.0.725.80)
11	8.0.002.74	8	Flat Mushroom Head Screw ISO 7380 M4x6 (ULF)	* Part of Drawer System, Accessory Set (0.0.725.80)
12	0.0.639.56	2	DIN 7991 M4x10 Countersunk Screw	* Part of Drawer System, Accessory Set (0.0.725.80)

* 0.0.725.80 - Drawer System, Accessory Set

The Accessory Set, which is the same for all drawer lengths and widths, must be ordered for each drawer and contains the basic products needed to assemble a drawer using Front Profile H66 with Grip (0.0.721.57) and Frame Profile H66 (0.0.721.51). When assembling a drawer with higher sides and a custom front, you may need to use additional Caps (e.g. Cap X 6 60x12 - 0.0.609.29) and a separate grip or handle.



Technical data



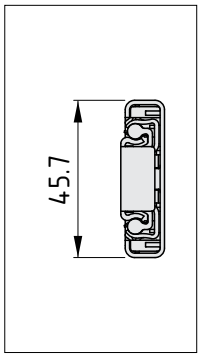
The maximum recommended evenly distributed load of 80 kg should not be exceeded.

F_{max} = 800 N

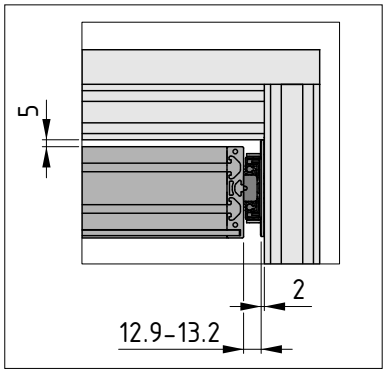
NOTE! The maximum load capacity of the Telescopic Rails that are used must be factored in with regard to the load the drawer can carry.

Technical data – Telescopic Rail 12.7x45.7 soft close

Article	Length [mm]	Max. extension length [mm]	Max. load [kg] in pairs	Dead weight [kg]
0.0.718.71	400	406	44	1.16
0.0.719.70	500	508	45	1.46
0.0.719.71	600	610	45	1.79
0.0.719.72	700	711	43	2.12



- The soft close feature ensures drawers close gently and securely
- The integrated latching mechanism prevents unintentional opening
- The service life is designed for 50,000 cycles
- The operating temperature range is from +10°C to +40°C
- The Telescopic Rails are made of bright zinc-plated steel and are suitable for use in electro-static protected areas (the necessary overall resistance must be ensured)
- The drawer width must not exceed the length of the Telescopic Rails
- Telescopic Rails are only suitable for installation in a vertical orientation.



The 5 mm gap between the top edge of the drawer front on the top drawer and the cross profile of the surrounding structure is predetermined by the height of the fastening brackets in Assembly Set 8, Telescopic Rail 12.7x45.7 (0.0.722.36).
When installed, the top fastening brackets sit against the top cross profile of the surrounding structure.

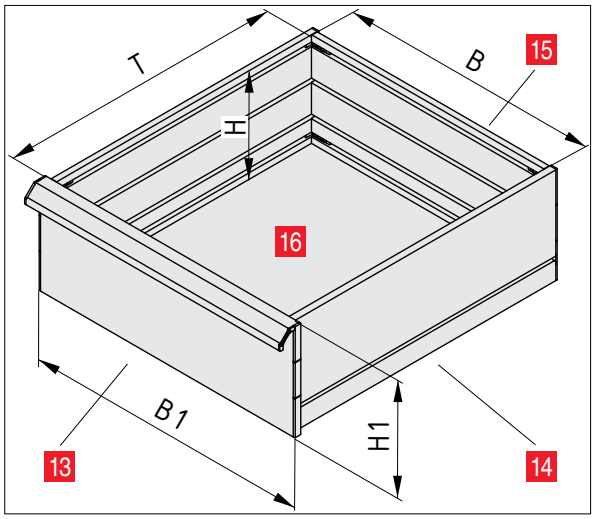
The 2 mm thickness of the fastening brackets in Assembly Set 8, Telescopic Rail 12.7x45.7 (0.0.722.36) must also be taken into account.

The 12.9 mm - 13.2 mm dimension stands for the thickness of the Telescopic Rails, including tolerances.

NOTE! If the height of the top drawer front (H1) is greater than 66 mm (H1 = 126 mm or H1 = 186 mm) and the height of the Frame Profiles is 66 mm, the gap can be 4 mm, as recommended.

Designing a drawer without a surrounding structure

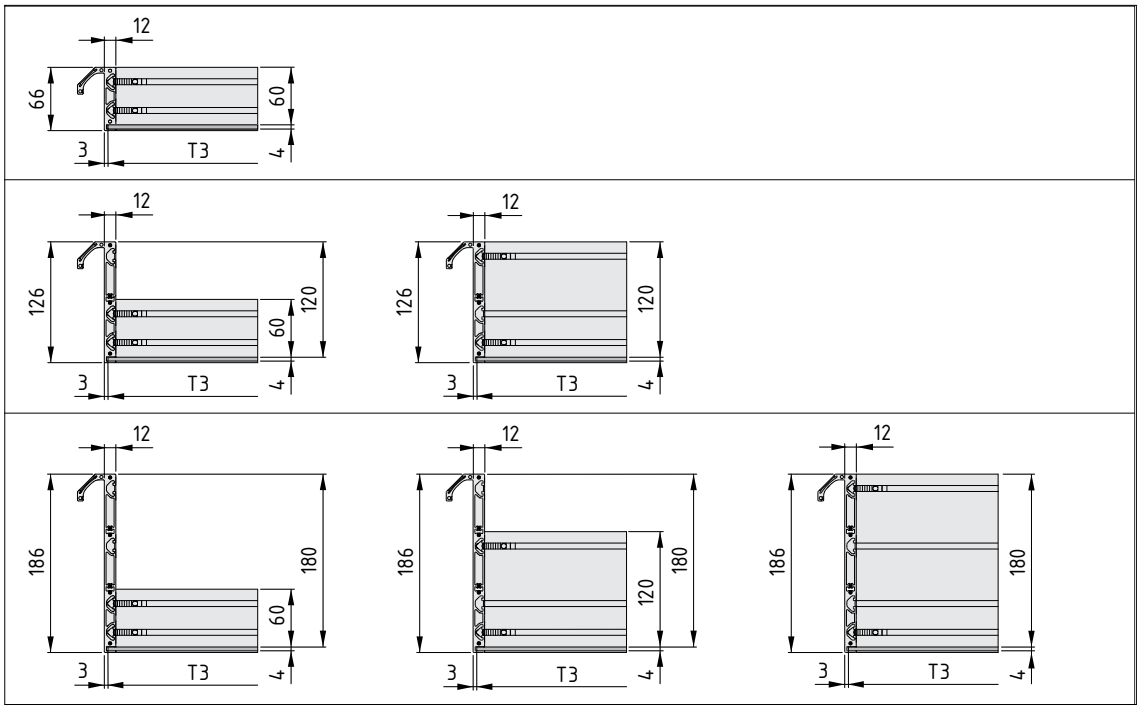
NOTE! Please note that the usable width B of the drawer cannot exceed the usable depth T.



H: Usable height
B: Usable width
H1: Front height of drawer front
B1: Drawer width
T: Usable depth

The usable height H of a drawer is determined by the Drawer System, Frame Profiles used, while the front height H1 can be the same or greater.

H1 = 186 mm, suitable for the following usable heights:	H = 60 mm or H = 120 mm or H = 180 mm
H1 = 126 mm, suitable for the following usable heights:	H = 60 mm or H = 120 mm
H1 = 66 mm, suitable for the following usable height:	H = 60 mm

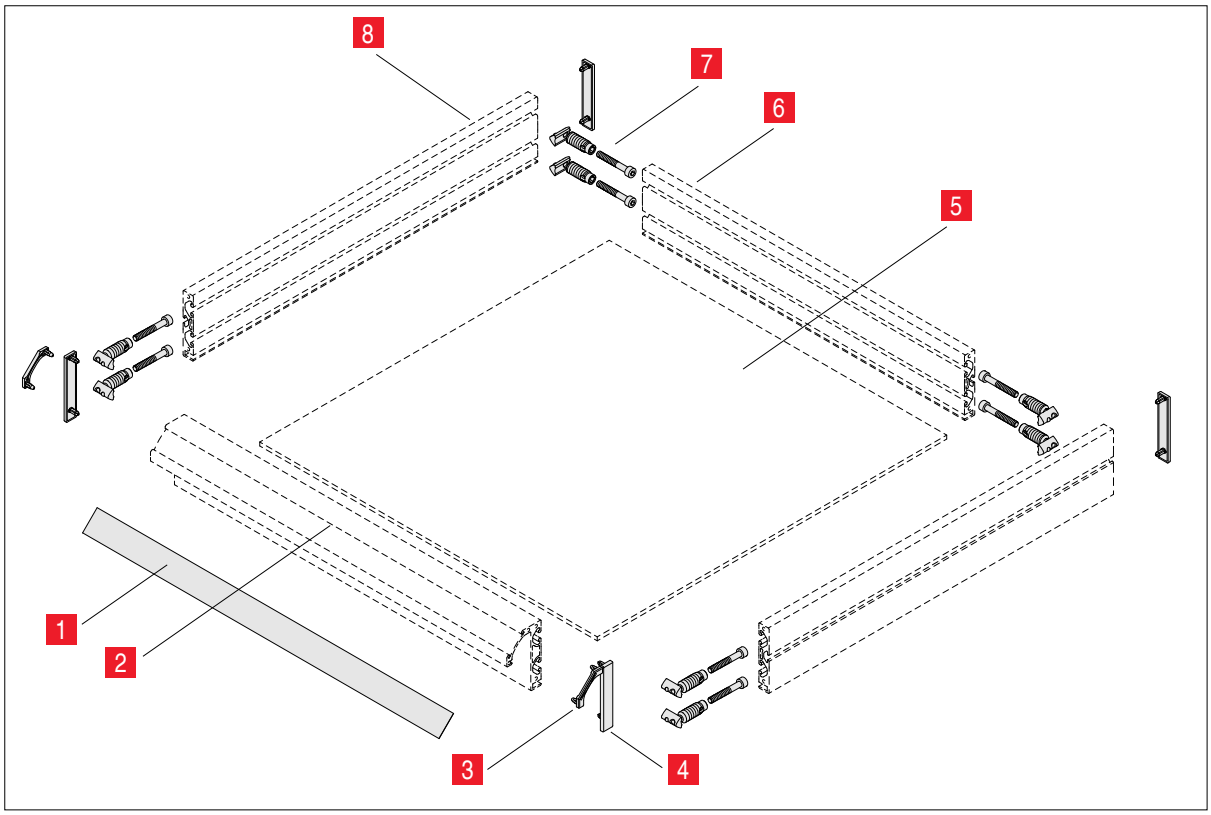


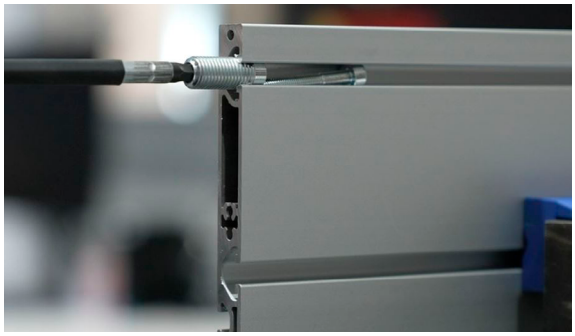
T3: Depth of the drawer base panel

Basic construction of a drawer				
No.	Quan-tity	Description	Comments	Calculation
13	1	Drawer System, Front Profile with Grip	Available In three heights: ▪ Drawer System, Front Profile H66 with Grip (0.0.721.57) ▪ Drawer System, Front Profile H126 with Grip (0.0.721.59) ▪ Drawer System, Front Profile H186 with Grip (0.0.721.61)	Minimum width of drawer front: B1 = B + 46 mm Saw cut: Front Profile length = B + 40 mm
14	2	Side: Drawer System, Frame Profile	Available in three heights: ▪ Drawer System, Frame Profile H66 (0.0.721.51) ▪ Drawer System, Frame Profile H126 (0.0.721.53) ▪ Drawer System, Frame Profile H186 (0.0.721.55)	Saw cut: Frame Profile length = T + 12 mm
15	1	Rear: Drawer System, Frame Profile	Available in three heights: ▪ Drawer System, Frame Profile H66 (0.0.721.51) ▪ Drawer System, Frame Profile H126 (0.0.721.53) ▪ Drawer System, Frame Profile H186 (0.0.721.55)	Saw cut: Frame Profile length = B

Basic construction of a drawer				
No.	Quan-tity	Description	Comments	Calculation
16	1	Plastic 4mm	Available in the following variants: ▪ Plastic 4mm, ESD RAL 7035 (0.0.614.85) ▪ Plastic 4mm, RAL 7035 (0.0.428.46) ▪ Plastic 4mm, RAL 5014 (0.0.688.29) ▪ Plastic 4mm, RAL 3000 (0.0.428.43) ▪ Plastic 4mm, RAL 9017 (0.0.474.37) ▪ Plastic 4mm, RAL 9016 (0.0.473.04) ▪ Plastic 4mm, anthracite (0.0.720.10)	Panel size: Depth: T3 = T + 18 Width: B3 = B +18

Assembling a drawer





First screw the Automatic Fasteners (part of Automatic-Fastening Set 6 7) flush into the intended positions in the grooves of Drawer System, Frame Profiles 6 and 8.

Screw together the sides and rear to create a U-shaped structure.

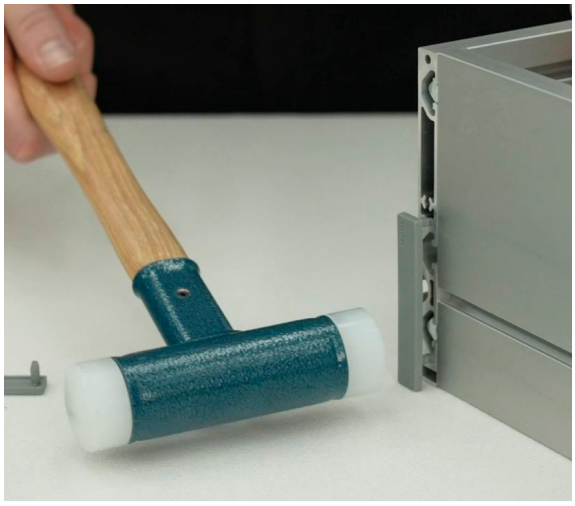
Tightening torque: M_T = 8 Nm

NOTE! The Automatic Fasteners have a left-hand thread.

Insert the cut-to-size panel 5 into this U-shaped structure, slotting it into the relevant groove in the Frame Profiles.

Close the drawer with Drawer System, Front Profile with Grip 2. When doing so, the panel 5 will protrude into the relevant groove on the Front Profile. Next, firmly tighten all the fasteners.

Tightening torque: M_T = 8 Nm



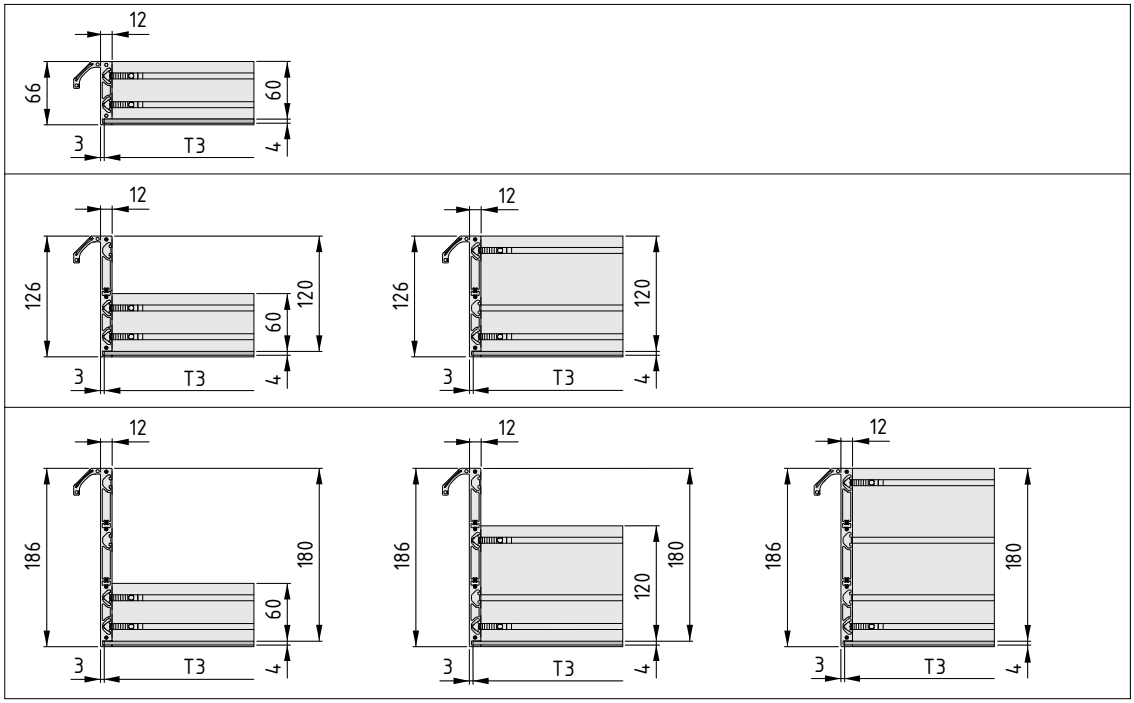
Using a mallet, carefully tap the caps 3 and 4 into the end faces of the profiles.

NOTE! Drawer System, Accessory Set (0.0.725.80) must be ordered for each drawer and contains the basic products needed to assemble a drawer using Front Profile H66 with Grip (0.0.721.57) and Frame Profile H66 (0.0.721.51). Aluminium profiles and panels are not included in the set. When assembling a drawer with higher sides and a custom front, you may need to use additional Caps (e.g. Cap X 6 60x12 - 0.0.609.29) and a separate grip or handle.

Drawer System, Front Profile with Grip 2 can also be fitted with a strip of paper and Label Protection Strip 1, which slot into the grip so drawers can be clearly labelled.

The Label Protection Strip (0.0.667.61) is included in the Drawer System, Accessory Set (0.0.725.80)

Drawers can be built in a range of configurations.



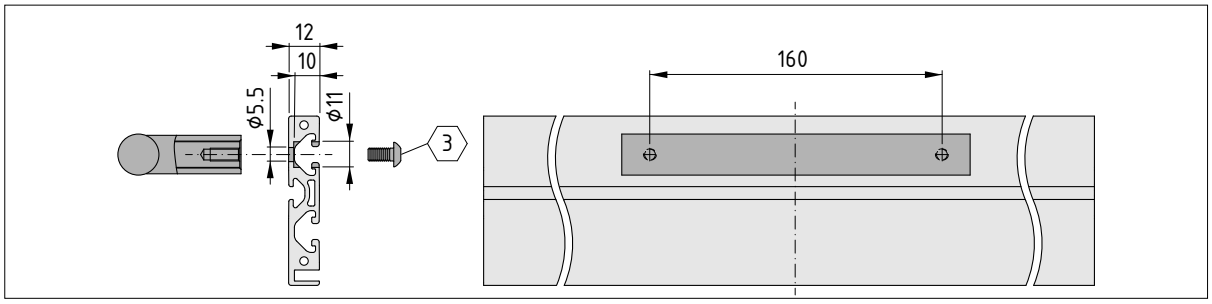
T3: Depth of the drawer base panel

NOTE! To ensure maximum stability, the Automatic-Fastening Sets of the Drawer System, Accessory Set (0.0.725.80) are always installed in the outside grooves of the Frame Profiles.

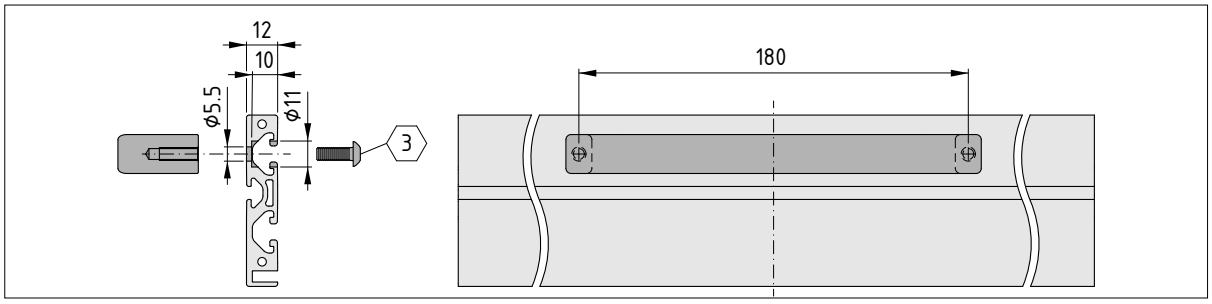
A Drawer System, Frame Profile H66, H126 or H186 can also be used for the front of a drawer, instead of a Drawer System, Front Profile with Grip. To do this, a suitable Frame Profile (H66, H126 or H186) must be cut to the required length.
To be used as a Front Profile, this Frame Profile will also need to be fitted with a handle that will require two fastening screws.

Examples:

Handle X 160 Al (0.0.708.84) and two Button-Head Screws M5x10, bright zinc-plated (8.0.000.06)



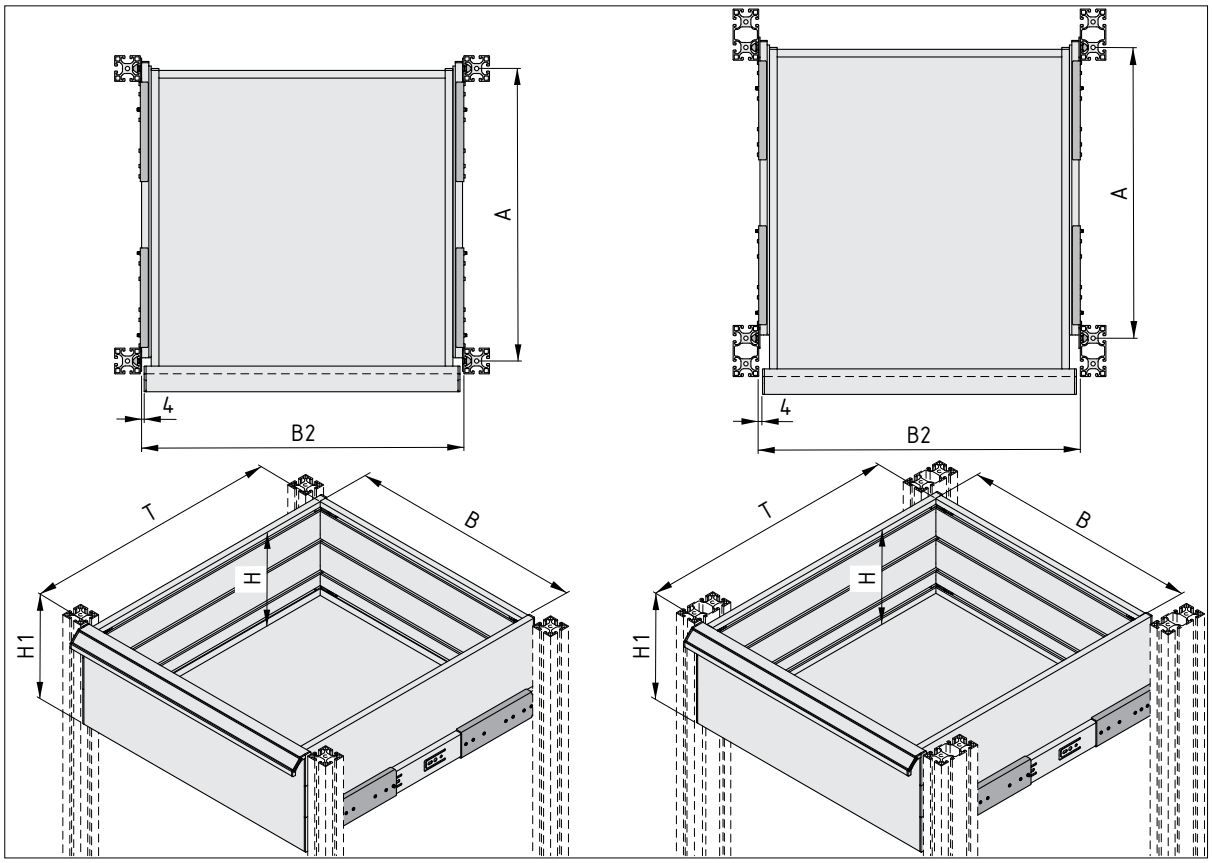
Handle, light duty (0.0.26.44) and two Button-Head Screws M5x14, bright zinc-plated (0.0.417.30)



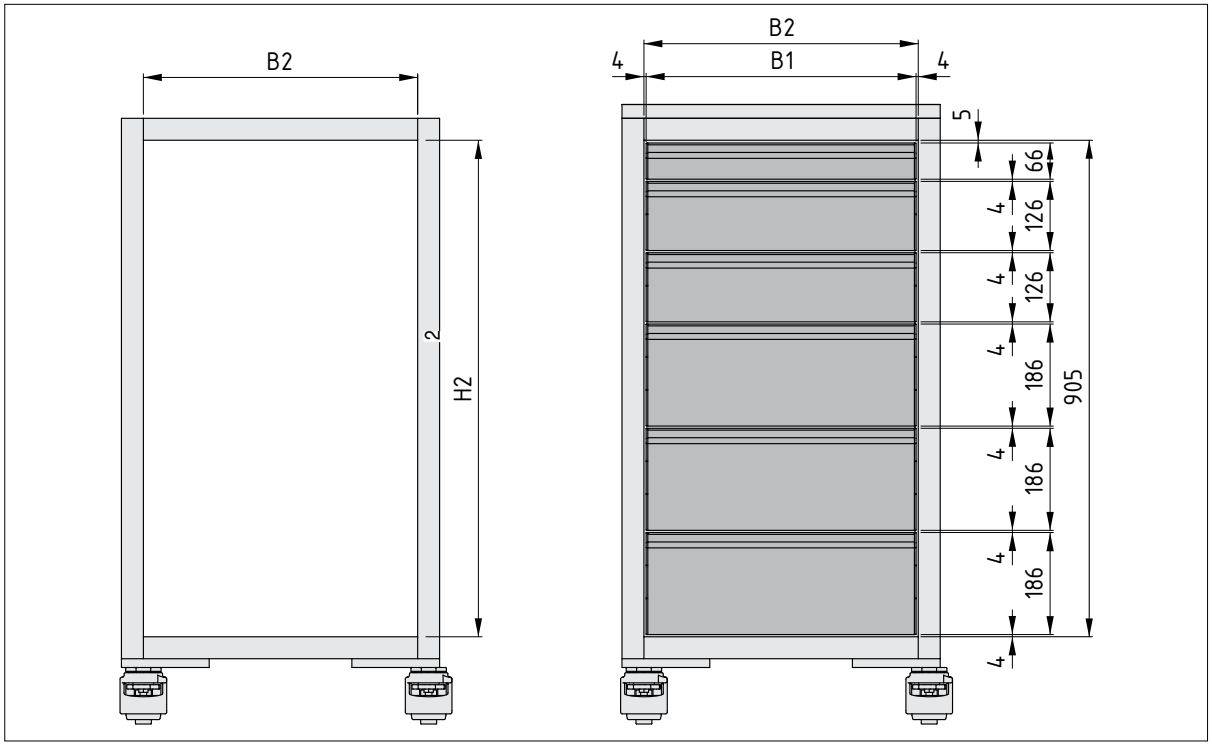
Designing a full-extension drawer that fits flush to its surrounding structure

The most common approach to designing a drawer unit is to work out what size of drawer space is needed, then how big the drawer needs to be and then how big the surrounding structure (the drawer unit itself) needs to be.

It is usually preferable to have the front of the drawers close flush to the surrounding structure of the drawer unit.



Basic dimensions of the drawer in its surrounding structure – closing flush to the front of the surrounding structure		
Dimen-sion	Description	Comments
H	Usable height inside the drawer	Options: 60 mm or 120 mm or 180 mm
H1	Front height of the drawer front	Usable height H is dependent on front height H1: H1 = 186 mm, suitable for the following usable heights: H = 60 mm or 120 mm or 180 mm H1 = 126 mm, suitable for the following usable heights: H = 60 mm or 120 mm H1 = 66 mm, suitable for the following usable height: H = 60 mm
B	Usable width inside the drawer	
B1	Outside width of the drawer front	Drawer front flush with surrounding structure: The external width of the drawer front depends on the usable width of the drawer (B): B1 = B + 46 mm
B2	Clear width of the surrounding structure (internal dimension)	The internal width of the surrounding structure depends on the usable width of the drawer (B). B2 = B + 54 mm
T	Usable depth inside the drawer	The usable depth of the drawer depends on the length of the Telescopic Rails when they are fully extended: ▪ Telescopic Rail: 400 mm => T = 400 mm ▪ Telescopic Rail: 500 mm => T = 500 mm ▪ Telescopic Rail: 600 mm => T = 600 mm ▪ Telescopic Rail: 700 mm => T = 700 mm
B3	Width of the panel for the drawer base	The width of the panel (drawer base) depends on the usable width of the drawer: B3 = B +18 mm
T3	Depth of the panel for the drawer base	The depth of the panel (drawer base) depends on the usable depth of the drawer: T3= T +18 mm



NOTE! The gaps are 4 mm all round, and it is only when fitting a drawer with a front height of H1 = 66 mm at the very top that a gap of no less than 5 mm must be maintained. If a drawer with a front height of H1 = 126 mm or H1 = 186 mm is used as the top drawer, a gap of 4 mm can be maintained there, too.

Based on the example and the formula below, the clear height (H2) of the surrounding structure (drawer unit) is:

$H2 = n_1 \times 186 + n_2 \times 126 + n_3 \times 66 + n \times 4\ mm + 5\ mm = \underline{905\ mm}$

Where: $n_1 = 3$ (number of tall drawers, H1 = 186 mm)

$n_2 = 2$ (number of medium-height drawers, H1 = 126 mm)

$n_3 = 1$ (number of low drawers, H1 = 186 mm)

$n = 6$ (total number of drawers)

Basic dimensions of the surrounding structure		
Dimen-sion	Description	Comments
A	Distance between the drawer fixing points on the surrounding structure	The usable surrounding structure depth depends on the length of the Telescopic Rail when fully extended in conjunction with Assembly Set 8, Telescopic Rail 12.7x45.7 (0.0.722.36). ▪ Telescopic Rail: 400 mm => A = 396 mm or A = 420 mm or A = 436 mm or A = 460 mm or A = 476 mm ▪ Telescopic Rail: 500 mm => A = 496 mm or A = 520 mm or A = 536 mm or A = 560 mm or A = 576 mm ▪ Telescopic Rail: 600 mm => A = 596 mm or A = 620 mm or A = 636 mm or A = 660 mm or A = 676 mm ▪ Telescopic Rail: 700 mm => A = 696 mm or A = 720 mm or A = 736 mm or A = 760 mm or A = 776 mm
B2	Necessary clear surrounding structure width	The internal width of the surrounding structure depends on the usable width of the drawer (B): B2 = B + 54 mm
H2	Necessary clear surrounding structure height	$H2 = n_1 \times 186 + n_2 \times 126 + n_3 \times 66 + n \times 4$ mm + 5 mm* where: n_1 = 3 (number of tall drawers, H1 = 186 mm) n_2 = 2 (number of medium-height drawers, H1 = 126 mm) n_3 = 1 (number of low drawers, H3 = 186 mm) n = 6 (total number of drawers)

NOTE! Please note that the usable width of the drawer (B) cannot exceed the length of the Telescopic Rail.

*NOTE! The gaps are 4 mm all round, and it is only when fitting a drawer with a front height of H1 = 66 mm at the very top that a gap of no less than 5 mm must be maintained. If a drawer with a front height of H1 = 126 mm or H1 = 186 mm is used as the top drawer, a gap of 4 mm can be maintained there, too.

Installing Telescopic Rails

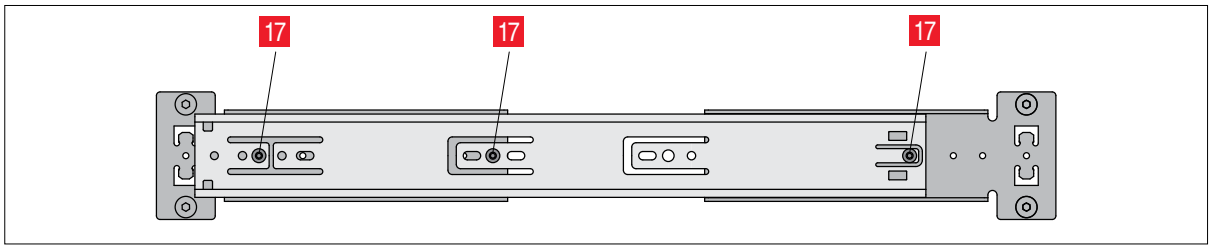
The Telescopic Rails need to be disassembled before they are installed. The internal rail is fastened to the drawer, while the large external rail is fastened to the inside of the surrounding structure (drawer unit).

To fix the Telescopic Rails in place, first remove the internal rail from the external rail. To do so, first move the plastic lever (1.) then pull out the internal rail (2.).

Note re. Step 1: The Telescopic Rails for the right and left sides are identical, which means the lever needs to be pressed down at one side and pushed up at the other in order to release the mechanism.

Fastening the large external rail to the inside of the surrounding structure

Fasten the external rail to the inside of the surrounding structure with Assembly Set 8, Telescopic Rail 12.7x45.7 (0.0.722.36). Use the following screw holes for this purpose:



Use Countersunk Screws DIN 7991 M6x12 to fasten the Assembly Set to the grooves of 40x40 or 8 80x40 profiles from Line 8.

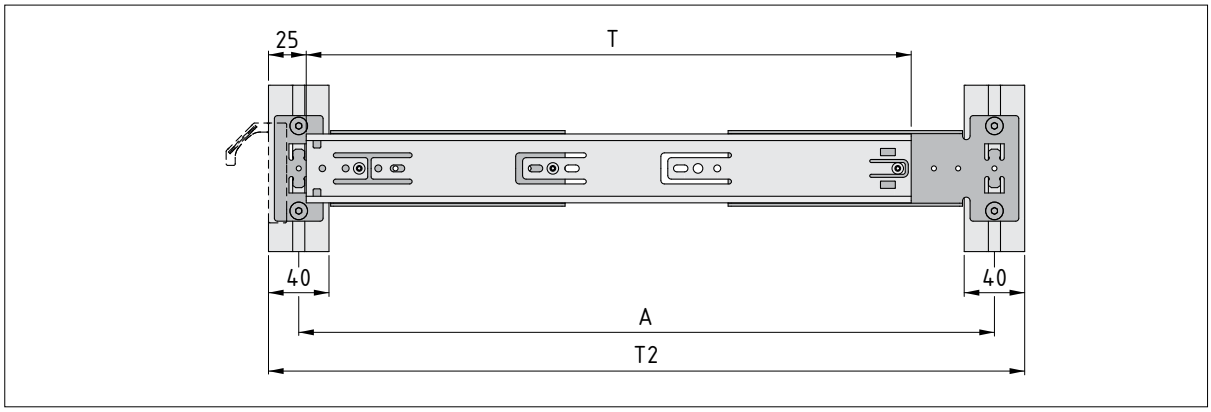
Tightening torque M_T = 10 Nm

Telescopic Rail 12.7x45.7 soft close – internal rail		
Fixing	17	Recommended tightening torque (bolt grade 10.9)
Assembly Set 8, Telescopic Rail 12.7x45.7 (0.0.722.36)	Countersunk Screw DIN 7991 M4x10, bright zinc-plated (0.0.639.56)	4.0 Nm

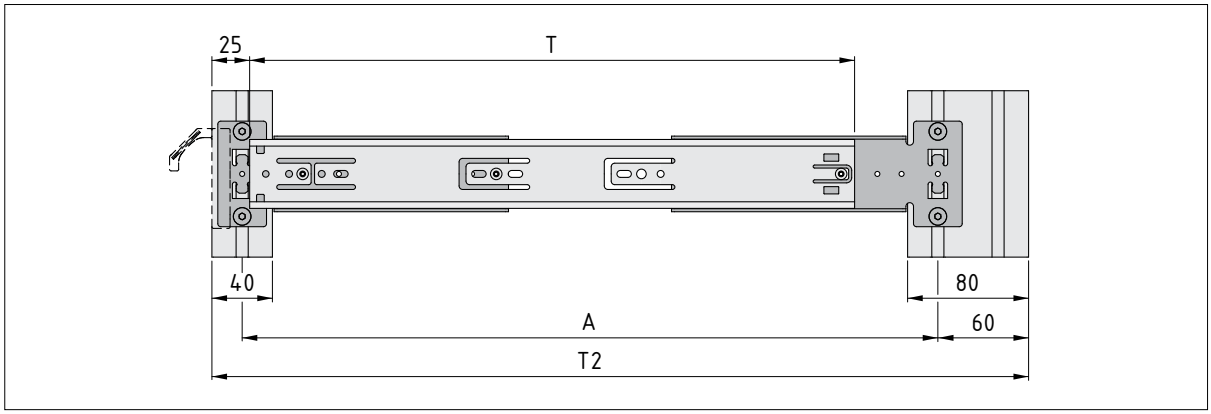
The Telescopic Rails can be fitted in a wide variety of positions. When used with Line 8 profiles, there is a huge range of ways the rails can be fastened in place in frames of various sizes.

The three typical variants illustrated below with dimensions provide an overview. The attachment points of the front fastening bracket always stay the same. Only the different attachment positions of the rear fastening bracket are used.

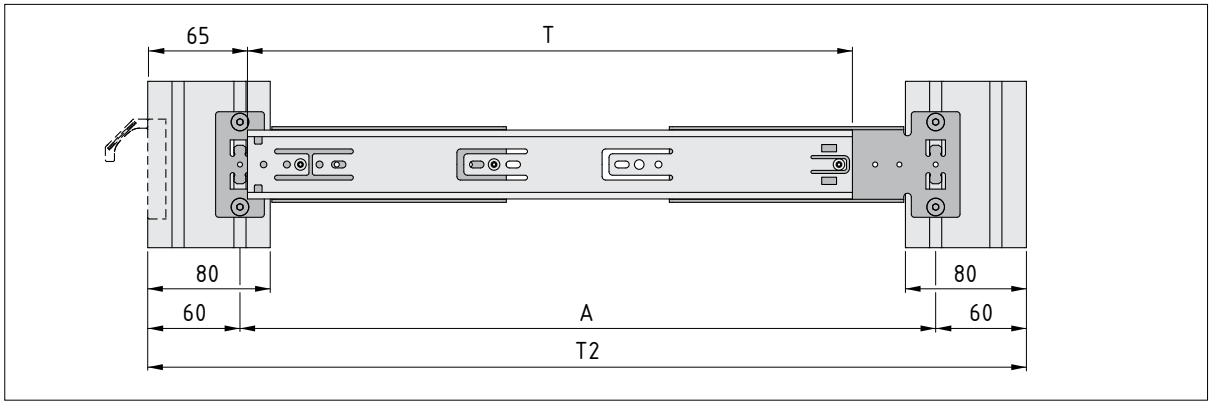
Surrounding structure made of 40x40 profiles from Line 8



Surrounding structure made of 40x40 and 80x40 profiles from Line 8

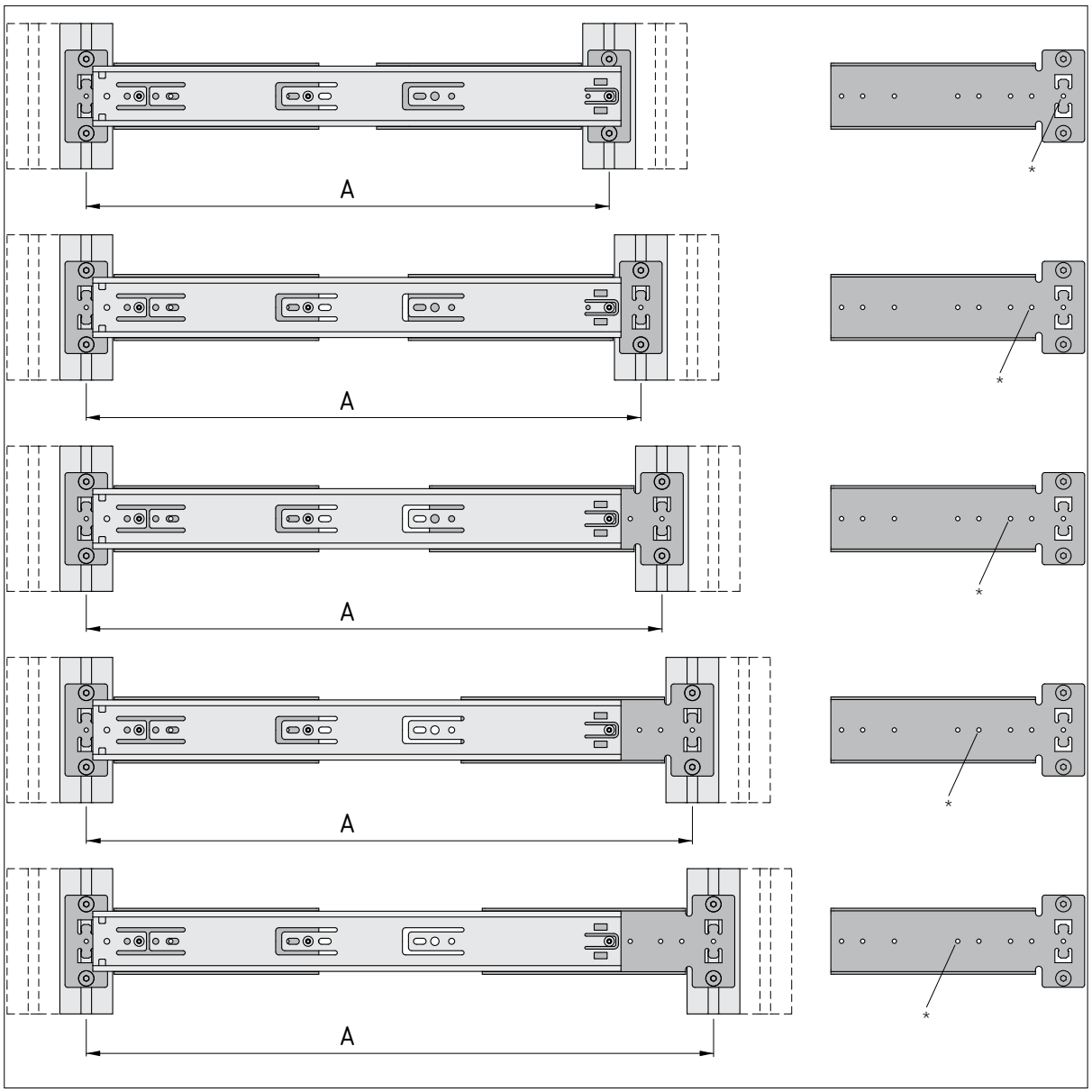


Surrounding structure made of 80x40 profiles from Line 8



The front end of the Assembly Set and external rail are always attached to the surrounding structure in the same way. If the

depth of the surrounding structure increases, the attachment point for the external rail on the rear fastening bracket moves forward, but the same screw hole on the external rail is always used.

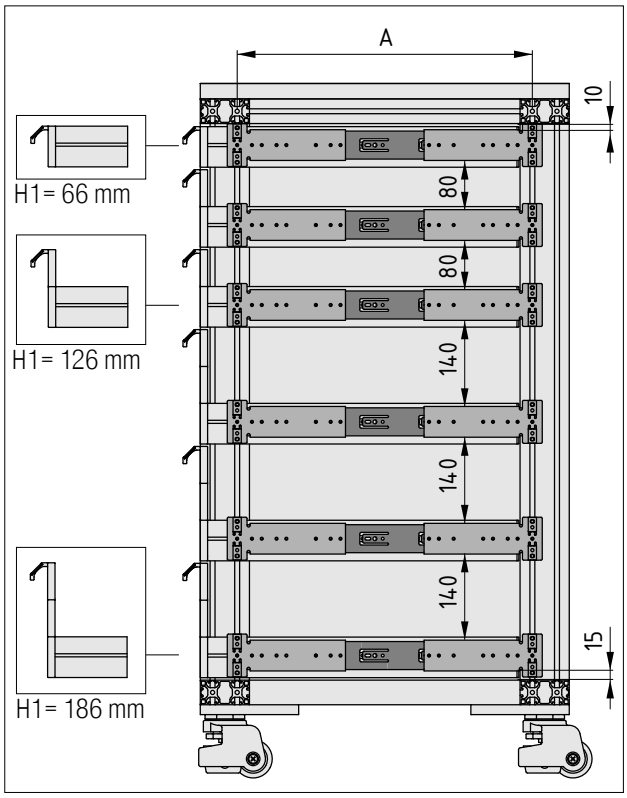


* Attachment point on the rear fastening bracket

NOTE! The three screw holes at the front of the rear fastening bracket must not be used, as they will not provide adequate support for the Telescopic Rail.

When working with a surrounding structure made of 40x40 profiles from Line 8 (front and back), the following depths can be achieved:

Surrounding structure depths when using 40x40 profiles from Line 8				
Telescopic Rail T	Spacing of attachment points for the Assembly Set and Telescopic Rail (A)	Surrounding structure depth T2 40x40 profiles from Line 8	Surrounding structure depth T2 40x40 profiles from Line 8 and 80x40 profiles from Line 8	Surrounding structure depth T2 80x40 profiles from Line 8
T = 400 mm	A = 396 mm A = 420 mm A = 436 mm A = 460 mm A = 476 mm	T2 = 436 mm T2 = 460 mm T2 = 476 mm T2 = 500 mm T2 = 516 mm	T2 = 496 mm T2 = 520 mm T2 = 536 mm T2 = 560 mm T2 = 576 mm	T2 = 516 mm T2 = 540 mm T2 = 556 mm T2 = 580 mm T2 = 596 mm
T = 500 mm	A = 496 mm A = 520 mm A = 536 mm A = 560 mm A = 576 mm	T2 = 536 mm T2 = 560 mm T2 = 576 mm T2 = 600 mm T2 = 616 mm	T2 = 596 mm T2 = 620 mm T2 = 636 mm T2 = 660 mm T2 = 676 mm	T2 = 616 mm T2 = 640 mm T2 = 656 mm T2 = 680 mm T2 = 696 mm
T = 600 mm	A = 596 mm A = 620 mm A = 636 mm A = 660 mm A = 676 mm	T2 = 636 mm T2 = 660 mm T2 = 676 mm T2 = 700 mm T2 = 716 mm	T2 = 696 mm T2 = 720 mm T2 = 736 mm T2 = 760 mm T2 = 776 mm	T2 = 716 mm T2 = 740 mm T2 = 756 mm T2 = 780 mm T2 = 796 mm
T = 700 mm	A = 696 mm A = 720 mm A = 736 mm A = 760 mm A = 776 mm	T2 = 736 mm T2 = 760 mm T2 = 776 mm T2 = 800 mm T2 = 816 mm	T2 = 796 mm T2 = 820 mm T2 = 836 mm T2 = 860 mm T2 = 876 mm	T2 = 816 mm T2 = 840 mm T2 = 856 mm T2 = 880 mm T2 = 896 mm



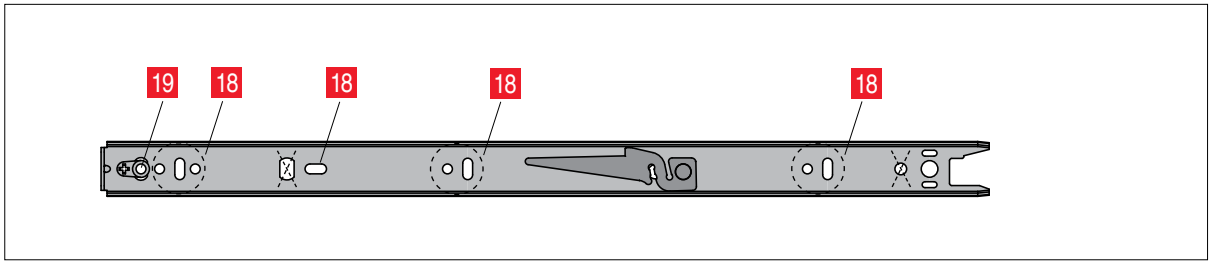
The location of the external rail on the inside of the surrounding structure is determined by the height of the drawer front (H1)

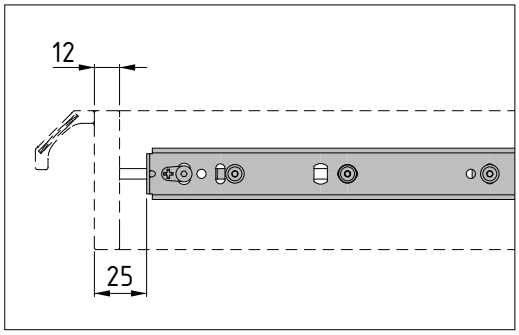
- A spacing of 15 mm must be maintained between the lower-most profile and the edge of the fastening bracket, regardless of the height of the drawer front (H1)
- A drawer front height (H1) of 186 mm requires a spacing of 140 mm from the edge of the fastening bracket above
- A drawer front height (H1) of 126 mm requires a spacing of 80 mm from the edge of the fastening bracket above
- A drawer front height (H1) of 66 mm requires a spacing of 20 mm from the edge of the fastening bracket above
- The spacing between the top edge of the top fastening bracket and the top-most cross profile of the surrounding structure is determined by the drawer front height (H1):

  When H1 = 66 mm, a spacing of 10 mm
  When H1 = 126 mm, a spacing of 70 mm
  When H1 = 186 mm, a spacing of 130 mm

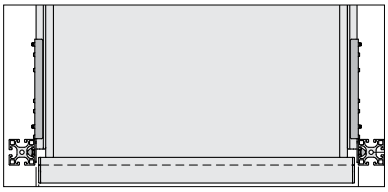
Fastening the internal telescopic rail to the drawer

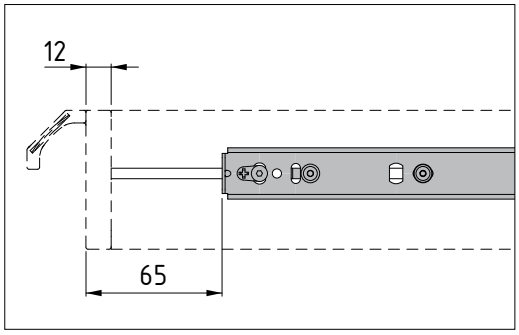
Use the fixings included in the Drawer System, Accessory Set (0.0.725.80) to fasten the internal rail to the drawer at the following points. The spacing from the front of the drawer is determined by the size of the profiles used in the surrounding structure.



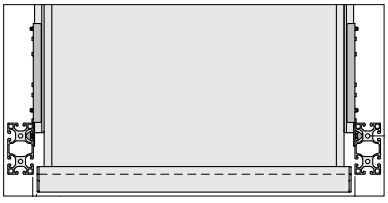


When working with a surrounding structure that has a 40x40 profile from Line 8 at the front, fasten the rail in place with the following spacing from the front profile.





When working with a surrounding structure that has an 80x40 profile from Line 8 at the front, fasten the rail in place with the following spacing from the front profile.

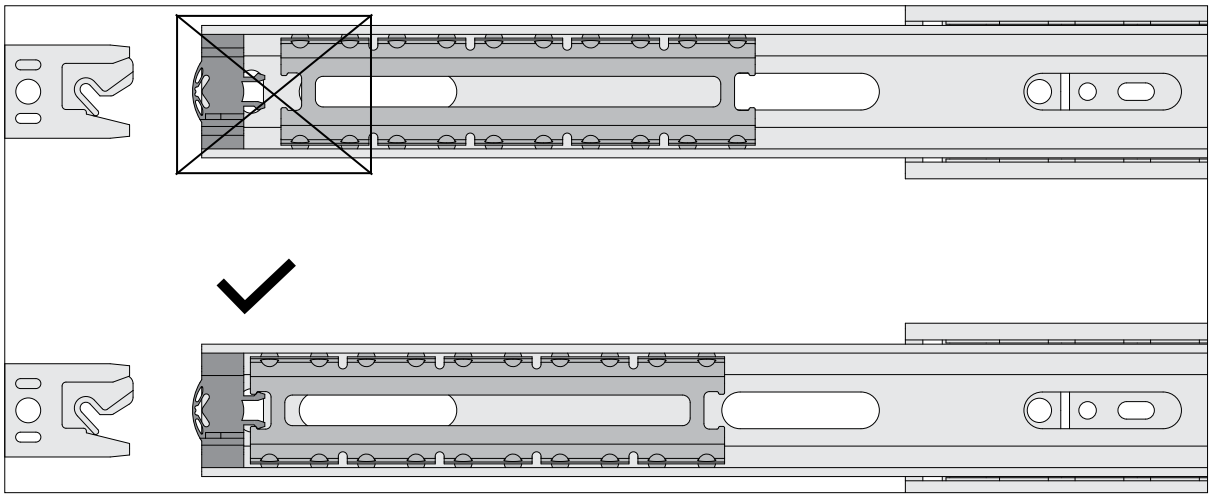


Telescopic Rail 12.7x45.7 Soft Close
Where possible, use all screw fixings to ensure maximum load-carrying capacity.

Groove	18	19	Recommended tightening torque (bolt grade 10.9)
5	Flat Mushroom Head Screw ISO 7380 (ULF) M4x6, bright zinc-plated (8.0.002.74)*	Countersunk Screw DIN 7991 M4x10, bright zinc-plated (0.0.639.56)*	4.0 Nm

* Part of Drawer System, Accessory Set (0.0.752.80)

Re-assembling the Telescopic Rail



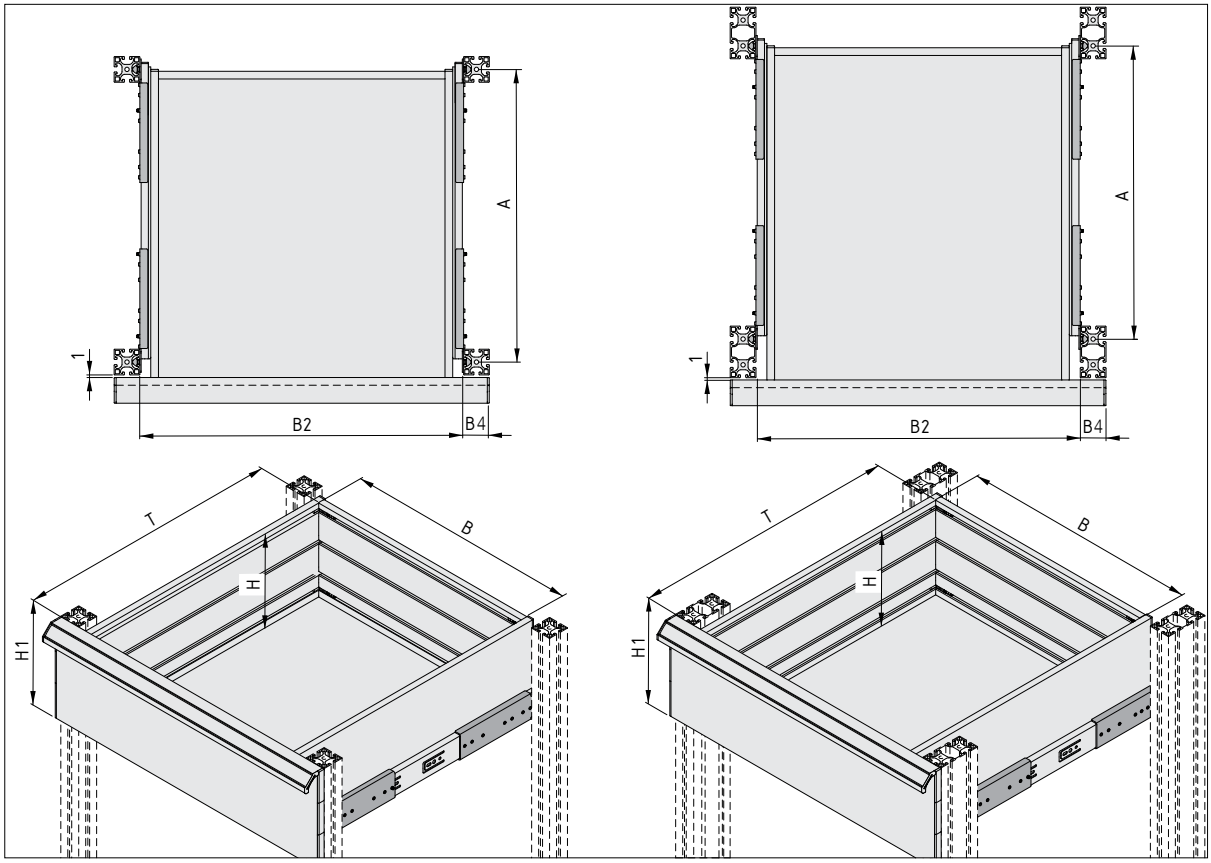
NOTE! Before re-inserting the internal rail, ensure that the ball-bearing rail (located inside the installed external rail) is clipped into the plastic holder.

Designing a full-extension drawer with a front that sits proud of its surrounding structure

The most common approach to designing a drawer unit is to work out what size of drawer space is needed, then how big the drawer needs to be and then how big the surrounding structure (the drawer unit itself) needs to be.

The drawer front can sit proud of its surrounding structure and does not necessarily need to be made from the Front Profile with Grip. It is also possible to use a Frame Profile as a drawer front.

NOTE! The following drawings use Drawer System, Front Profile with Grip as the drawer front.

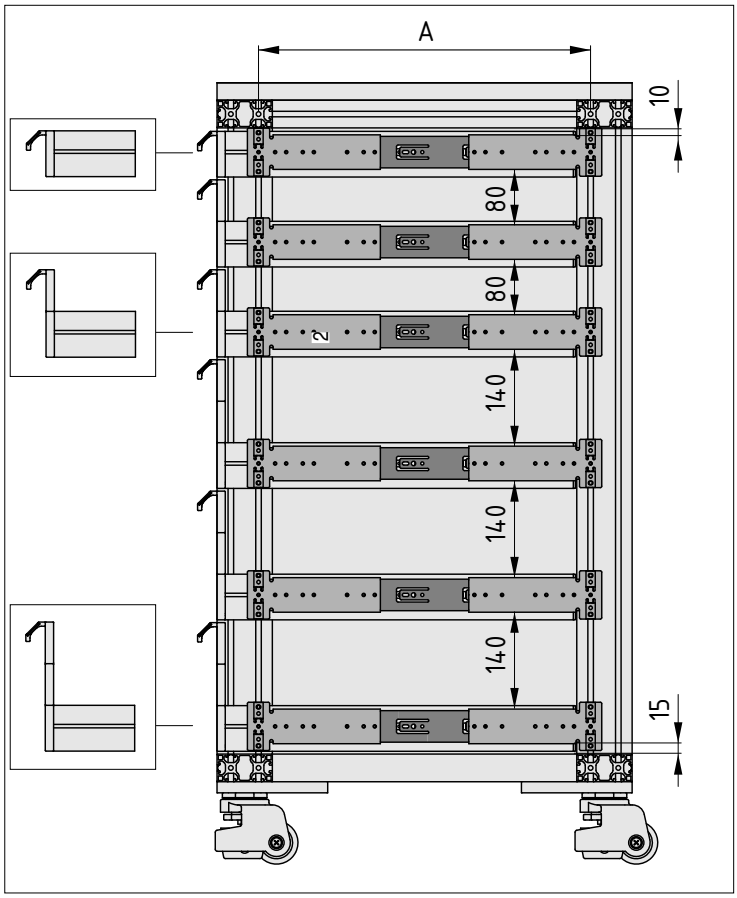


Basic dimensions of the drawer in its surrounding structure – drawer front sitting proud of the surrounding structure		
Dimen-sion	Description	Comments
H	Usable height inside the drawer	Options: 60 mm or 120 mm or 180 mm
H1	Front height of the drawer front	Usable height H is dependent on front height H1: H1 = 186 mm, suitable for the following usable heights: H = 60 mm or 120 mm or 180 mm H1 = 126 mm, suitable for the following usable heights: H = 60 mm or 120 mm H1 = 66 mm, suitable for the following usable height: H = 60mm
B	Usable width inside the drawer	
B1	Outside width of the drawer front B1 = B2 + B4	Drawer front proud of surrounding structure: The external width of the drawer front depends on the usable width of the drawer (B): B1 > B + 54 mm
B2	Clear width of the surrounding structure (internal dimension)	The internal width of the surrounding structure depends on the usable width of the drawer (B): B2 = B + 54 mm

Basic dimensions of the drawer in its surrounding structure – drawer front sitting proud of the surrounding structure		
Dimen-sion	Description	Comments
T	Usable depth inside the drawer	The usable depth of the drawer depends on the length of the Telescopic Rails when they are fully extended: ▪ Telescopic Rail: 400 mm => T = 400 mm ▪ Telescopic Rail: 500 mm => T = 500 mm ▪ Telescopic Rail: 600 mm => T = 600 mm ▪ Telescopic Rail: 700 mm => T = 700 mm
B4	Oversize of the drawer front in relation to the surrounding structure	In principle, this is freely selectable
B3	Width of the panel for the drawer base	The width of the panel (drawer base) depends on the usable width of the drawer: B3 = B + 18 mm
T3	Depth of the panel for the drawer base	The depth of the panel (drawer base) depends on the usable depth of the drawer: T3= T + 18 mm

NOTE! Take careful note of how wide the drawer front can be in order to prevent pinch points and collisions.

NOTE! Please note that the usable width of the drawer (B) cannot exceed the length of the Telescopic Rail.



Example shows a drawer unit with drawers that close flush to their surrounding structure.

NOTE! The gaps are 4 mm all round, and it is only when fitting a drawer with a front height of H1 = 66 mm at the very top that a gap of no less than 5 mm must be maintained. If a drawer with a front height of H1 = 126 mm or H1 = 186 mm is used as the top drawer, a gap of 4 mm can be maintained there, too.

Based on the example and the formula below, the clear height (H2) of the surrounding structure (drawer unit) is:

$H2 = n_1 \times 186 + n_2 \times 126 + n_3 \times 66 + n \times 4\ mm + 5\ mm = \underline{905\ mm}$

Where: $n_1 = 3$ (number of tall drawers, H1 = 186 mm)
$n_2 = 2$ (number of medium-height drawers, H1 = 126 mm)
$n_3 = 1$ (number of low drawers, H1 = 186 mm)
$n = 6$ (total number of drawers)

Basic dimensions of the surrounding structure – drawer front sitting proud of the surrounding structure		
Dimen-sion	Description	Comments
A	Distance between the drawer fixing points on the surrounding structure	The usable depth of the surrounding structure depends on the length of the Telescopic Rails when they are fully extended: ▪ Telescopic Rail: 400 mm => A = 396 mm or A = 420 mm or A = 436 mm or A = 460 mm or A = 476 mm ▪ Telescopic Rail: 500 mm => A = 496 mm or A = 520 mm or A = 536 mm or A = 560 mm or A = 576 mm ▪ Telescopic Rail: 600 mm => A = 596 mm or A = 620 mm or A = 636 mm or A = 660 mm or A = 676 mm ▪ Telescopic Rail: 700 mm => A = 696 mm or A = 720 mm or A = 736 mm or A = 760 mm or A = 776 mm
B2	Necessary clear surrounding structure width for the drawer	The internal width of the surrounding structure depends on the usable width of the drawer (B): B2 = B + 54 mm
H2	Necessary clear surrounding structure height	$H2 = n_1 \times 186 + n_2 \times 126 + n_3 \times 66 + n \times 4\ mm + 5\ mm$* where: $n_1 = 3$ (number of tall drawers, H1 = 186 mm) $n_2 = 2$ (number of medium-height drawers, H1 = 126 mm) $n_3 = 1$ (number of low drawers, H3 = 186 mm) $n = 6$ (total number of drawers)

*NOTE! The gaps are 4 mm all round, and it is only when fitting a drawer with a front height of H1 = 66 mm at the very top that a gap of no less than 5 mm must be maintained. If a drawer with a front height of H1 = 126 mm or H1 = 186 mm is used as the top drawer, a gap of 4 mm can be maintained there, too.

Installing Telescopic Rails

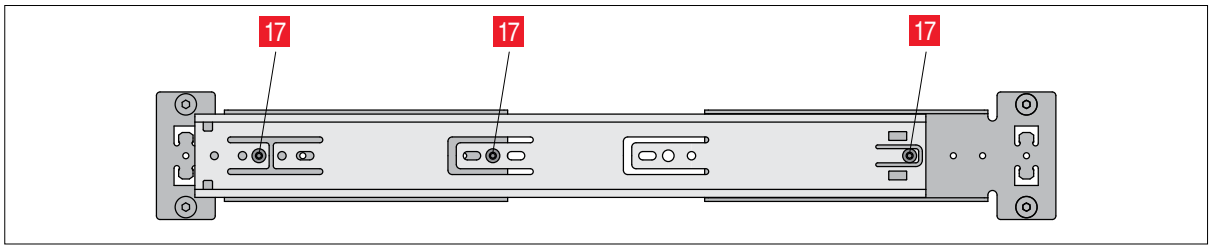
The Telescopic Rails need to be disassembled before they are installed. The internal rail is fastened to the drawer, while the large external rail is fastened to the inside of the surrounding structure (drawer unit).

To fix the Telescopic Rails in place, first remove the internal rail from the external rail. To do so, first move the plastic lever (1.) then pull out the internal rail (2.).

Note re. Step 1: The Telescopic Rails for the right and left sides are identical, which means the lever needs to be pressed down at one side and pushed up at the other in order to release the mechanism.

Fastening the large external rail to the inside of the surrounding structure

Fasten the external rail to the inside of the surrounding structure with Assembly Set 8, Telescopic Rail 12.7x45.7 (0.0.722.36). Use the following screw holes for this purpose:



Use Countersunk Screws DIN 7991 M6x12 to fasten the Assembly Set to the grooves of 40x40 or 8 80x40 profiles from Line 8.

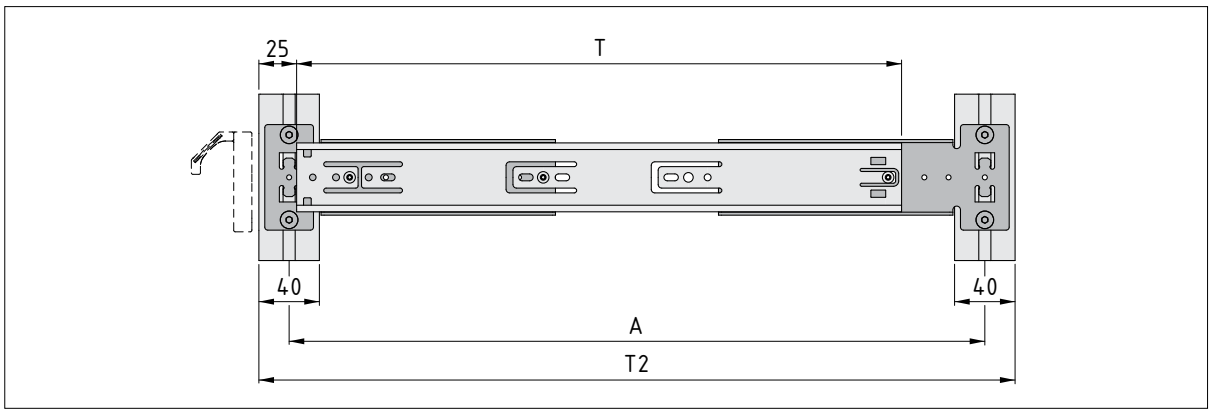
Tightening torque M_T = 10 Nm

Telescopic Rail 12.7x45.7 soft close – internal rail		
Fixing	17	Recommended tightening torque (bolt grade 10.9)
Assembly Set 8, Telescopic Rail 12.7x45.7 (0.0.722.36)	Countersunk Screw DIN 7991 M4x10 bright zinc-plated (0.0.639.56)	4.0 Nm

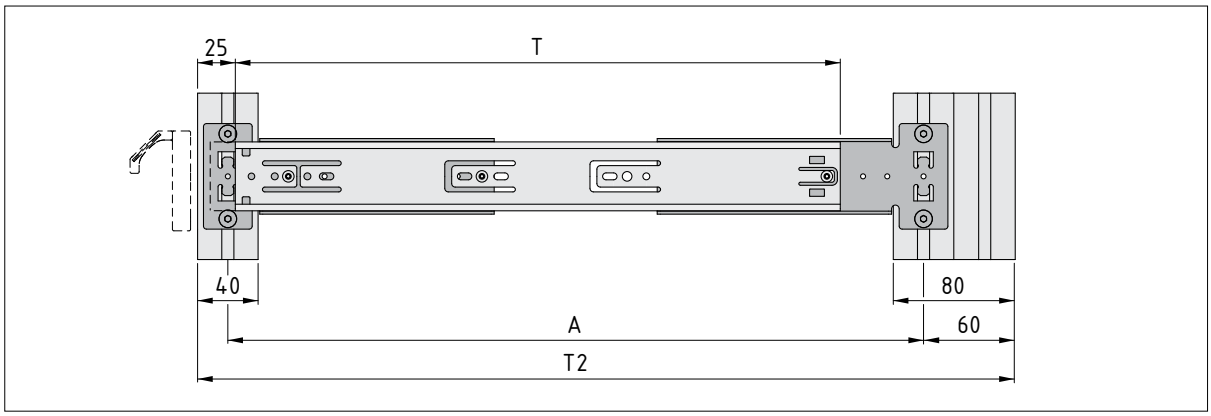
The Telescopic Rails can be fitted in a wide variety of positions. When used with Line 8 profiles, there is a huge range of ways the rails can be fastened in place in frames of various sizes.

The three typical variants illustrated below with dimensions provide an overview. The attachment points of the front fastening bracket always stay the same. Only the different attachment positions of the rear fastening bracket are used.

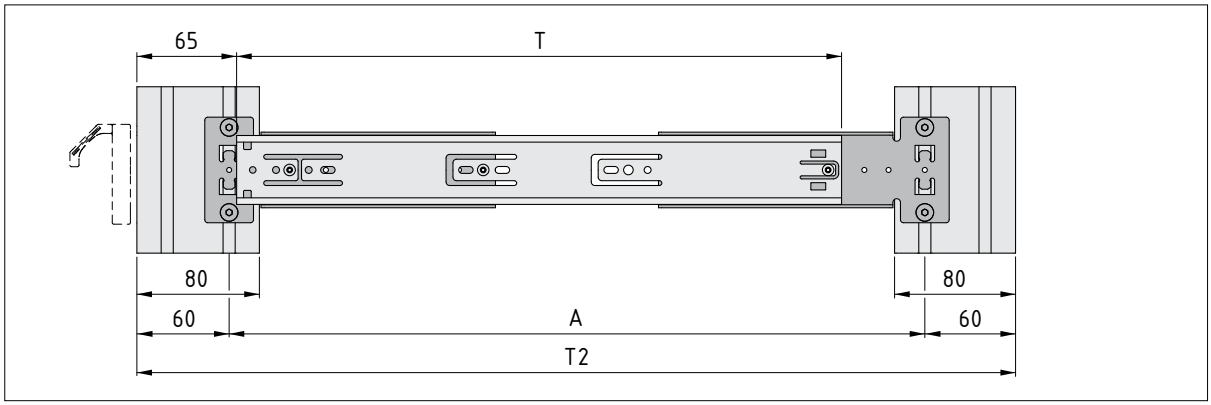
Surrounding structure made of 40x40 profiles from Line 8



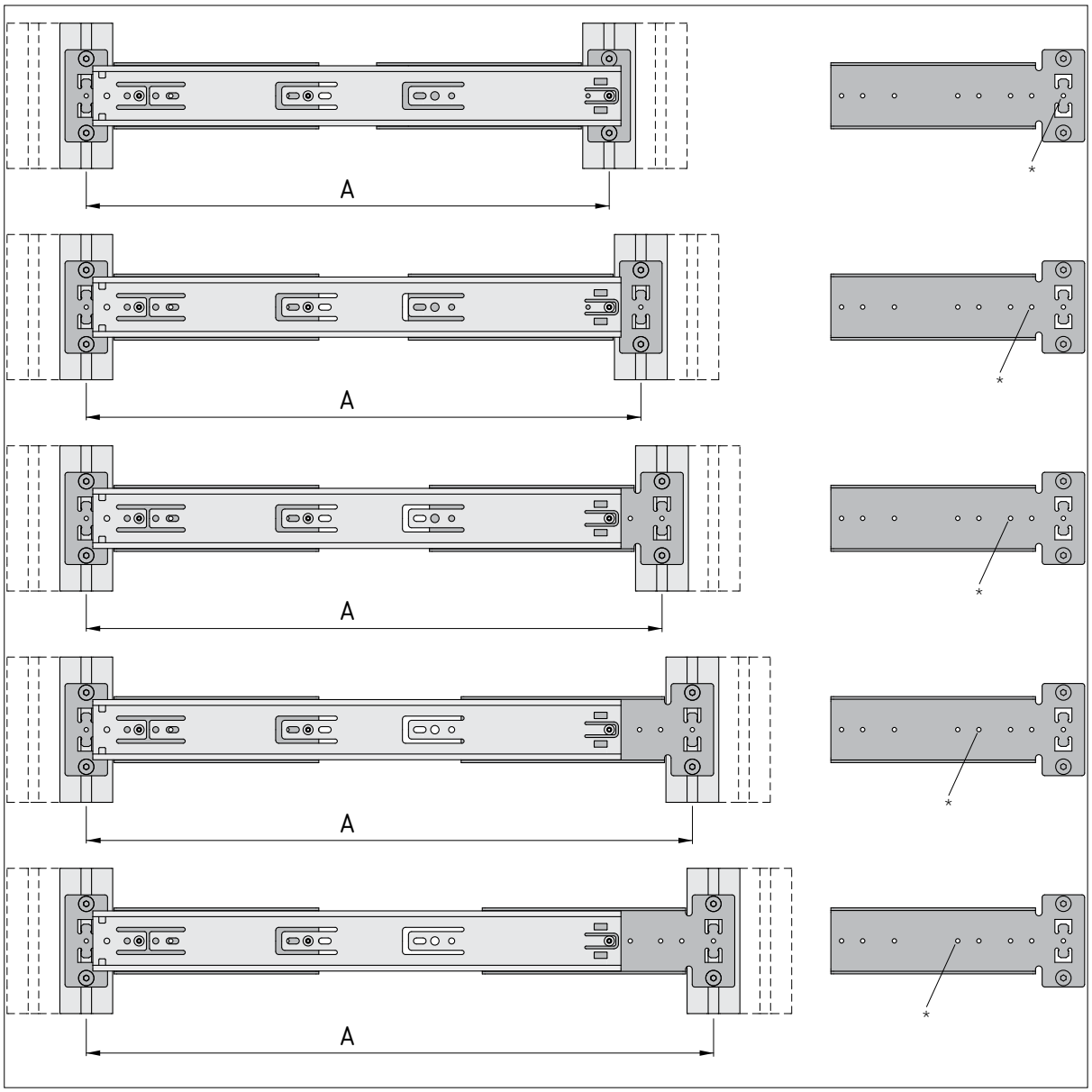
Surrounding structure made of 40x40 and 80x40 profiles from Line 8



Surrounding structure made of 80x40 profiles from Line 8



The front end of the Assembly Set and external rail are always attached to the surrounding structure in the same way. If the depth of the surrounding structure increases, the attachment point for the external rail on the rear fastening bracket moves forward, but the same screw hole on the external rail is always used.

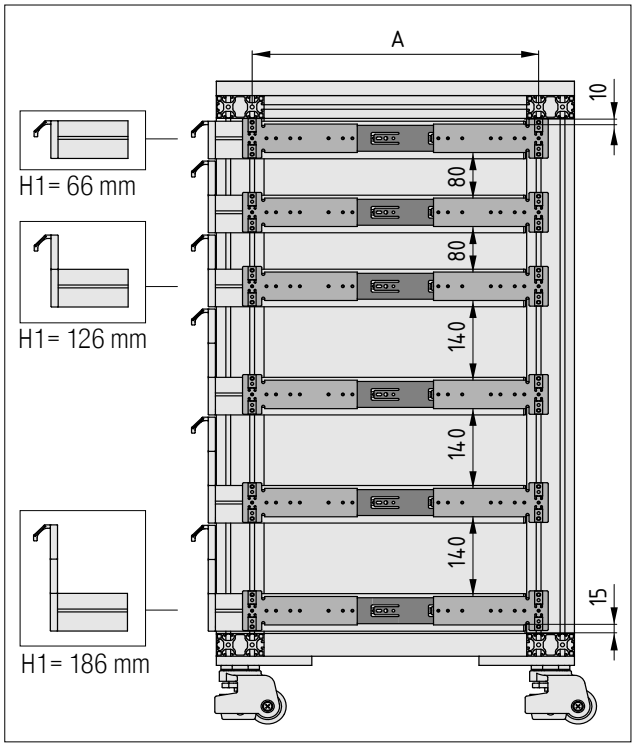


* Attachment point on the fastening bracket

NOTE! The three screw holes at the front of the rear fastening bracket must not be used, as they will not provide adequate support for the Telescopic Rail.

When working with a surrounding structure made of 40x40 profiles from Line 8 (front and back), the following depths can be achieved:

Surrounding structure depths when using 40x40 profiles from Line 8				
Telescopic Rail T	Spacing of attachment points for the Assembly Set and Telescopic Rail (A)	Surrounding structure depth T2 40x40 profiles from Line 8	Surrounding structure depth T2 40x40 profiles from Line 8 and 80x40 profiles from Line 8	Surrounding structure depth T2 80x40 profiles from Line 8
T = 400 mm	A = 396 mm A = 420 mm A = 436 mm A = 460 mm A = 476 mm	T2 = 436 mm T2 = 460 mm T2 = 476 mm T2 = 500 mm T2 = 516 mm	T2 = 496 mm T2 = 520 mm T2 = 536 mm T2 = 560 mm T2 = 576 mm	T2 = 516 mm T2 = 540 mm T2 = 556 mm T2 = 580 mm T2 = 596 mm
T = 500 mm	A = 496 mm A = 520 mm A = 536 mm A = 560 mm A = 576 mm	T2 = 536 mm T2 = 560 mm T2 = 576 mm T2 = 600 mm T2 = 616 mm	T2 = 596 mm T2 = 620 mm T2 = 636 mm T2 = 660 mm T2 = 676 mm	T2 = 616 mm T2 = 640 mm T2 = 656 mm T2 = 680 mm T2 = 696 mm
T = 600 mm	A = 596 mm A = 620 mm A = 636 mm A = 660 mm A = 676 mm	T2 = 636 mm T2 = 660 mm T2 = 676 mm T2 = 700 mm T2 = 716 mm	T2 = 696 mm T2 = 720 mm T2 = 736 mm T2 = 760 mm T2 = 776 mm	T2 = 716 mm T2 = 740 mm T2 = 756 mm T2 = 780 mm T2 = 796 mm
T = 700 mm	A = 696 mm A = 720 mm A = 736 mm A = 760 mm A = 776 mm	T2 = 736 mm T2 = 760 mm T2 = 776 mm T2 = 800 mm T2 = 816 mm	T2 = 796 mm T2 = 820 mm T2 = 836 mm T2 = 860 mm T2 = 876 mm	T2 = 816 mm T2 = 840 mm T2 = 856 mm T2 = 880 mm T2 = 896 mm



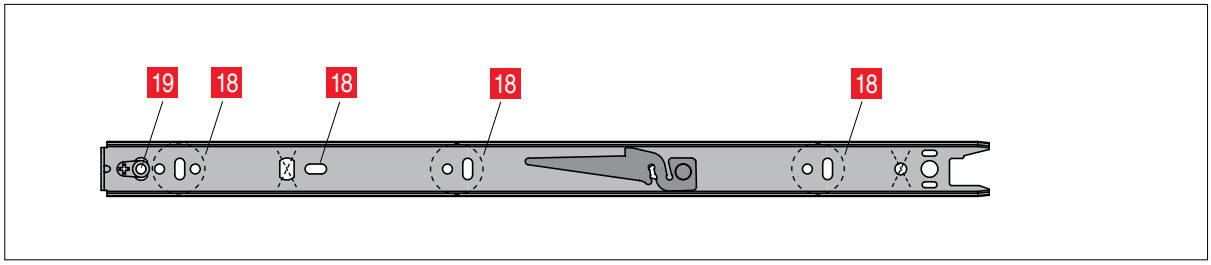
The location of the external rail on the inside of the surrounding structure is determined by the height of the drawer front (H1)

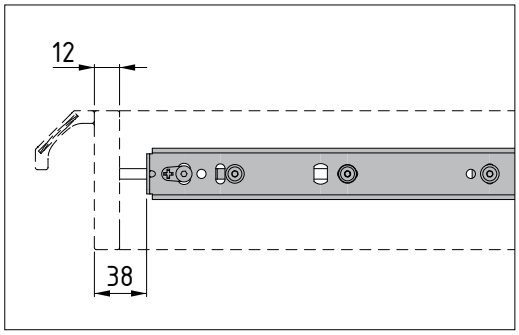
- A spacing of 15 mm must be maintained between the lower-most profile and the edge of the fastening bracket, regardless of the height of the drawer front (H1)
- A drawer front height (H1) of 186 mm requires a spacing of 140 mm from the edge of the fastening bracket above
- A drawer front height (H1) of 126 mm requires a spacing of 80 mm from the edge of the fastening bracket above
- A drawer front height (H1) of 66 mm requires a spacing of 20 mm from the edge of the fastening bracket above
- The spacing between the top edge of the top fastening bracket and the top-most cross profile of the surrounding structure is determined by the drawer front height (H1):

  When H1 = 66 mm, a spacing of 10 mm
  When H1 = 126 mm, a spacing of 70 mm
  When H1 = 186 mm, a spacing of 130 mm

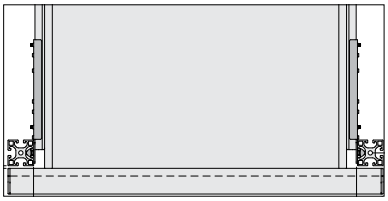
Fastening the internal telescopic rail to the drawer

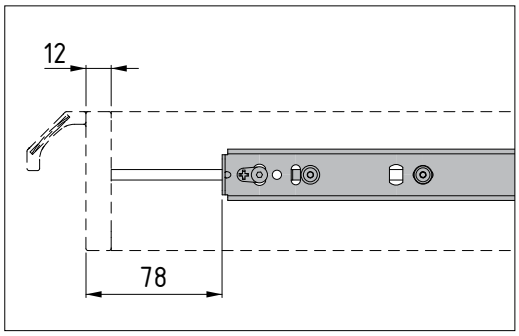
Use the fixings included in the Drawer System, Accessory Set (0.0.725.80) to fasten the internal rail to the drawer at the following points. The spacing from the front of the drawer is determined by the size of the profiles used in the surrounding structure.



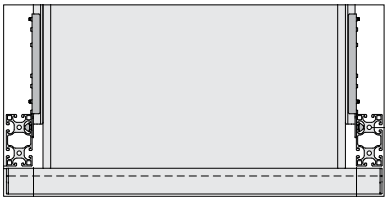


When working with a surrounding structure that has a 40x40 profile from Line 8 at the front, fasten the rail in place with the following spacing from the front profile.





When working with a surrounding structure that has an 80x40 profile from Line 8 at the front, fasten the rail in place with the following spacing from the front profile.

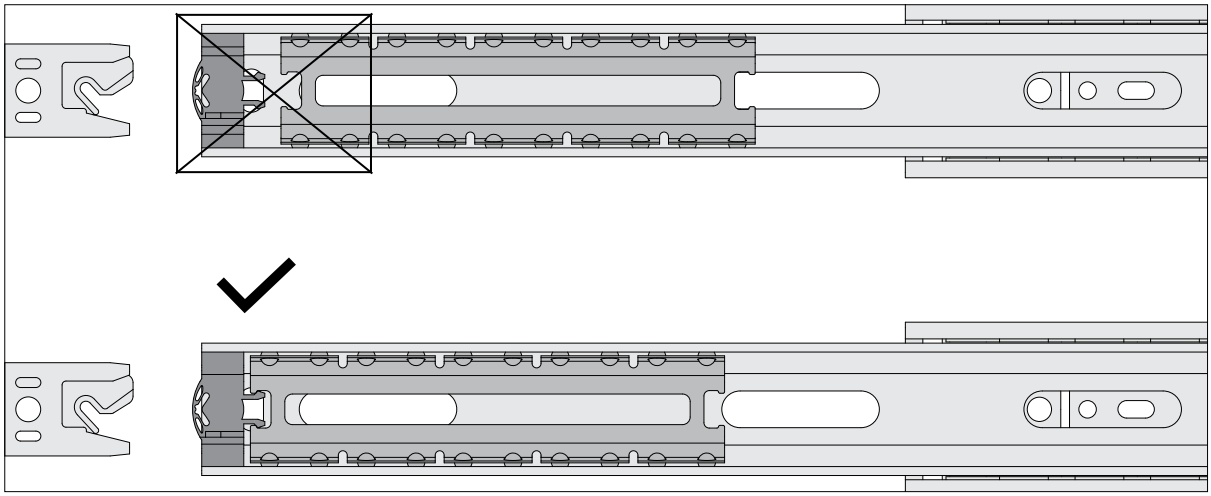


Telescopic Rail 12.7x45.7 Soft Close
Where possible, use all screw fixings to ensure maximum load-carrying capacity.

Groove	18	19	Recommended tightening torque (bolt grade 10.9)
5	Flat Mushroom Head Screw ISO 7380 (ULF) M4x6, bright zinc-plated (8.0.002.74)*	Countersunk Screw DIN 7991 M4x10, bright zinc-plated (0.0.639.56)*	4.0 Nm

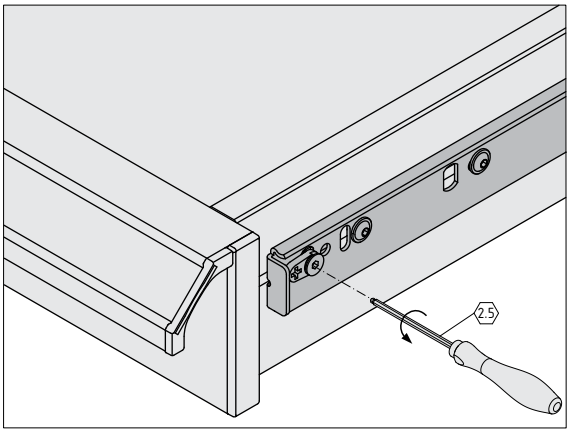
* Part of Drawer System, Accessory Set (0.0.752.80)

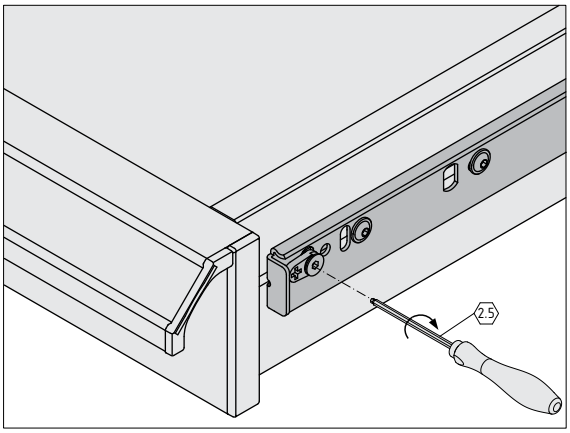
Re-assembling the Telescopic Rail

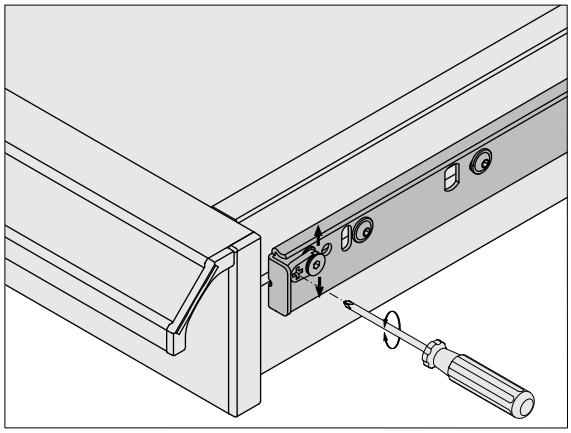


NOTE! Before re-inserting the internal rail, ensure that the ball-bearing rail (located inside the installed external rail) is clipped into the plastic holder.

Adjustment







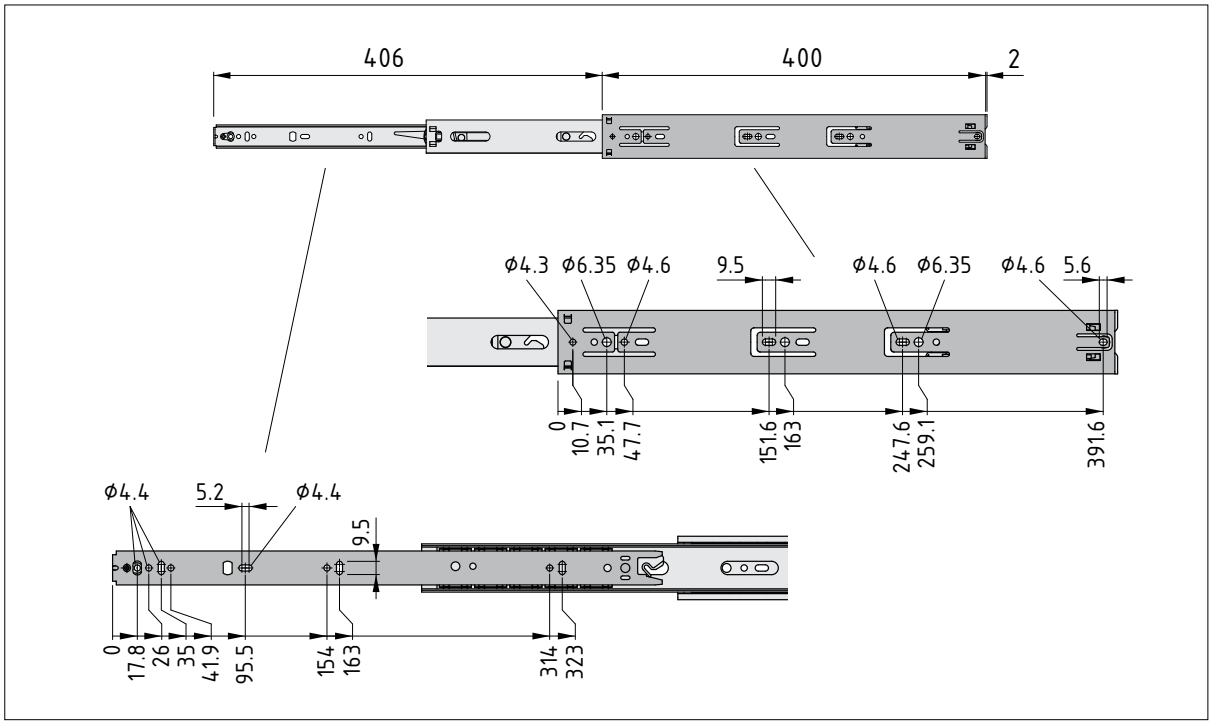
Cam adjustment is only necessary if, during use, the gap between the drawer fronts needs to be fine-tuned.

To make adjustments, first loosen the hexagon socket head cap screw then use a crosshead screwdriver to adjust the rail.

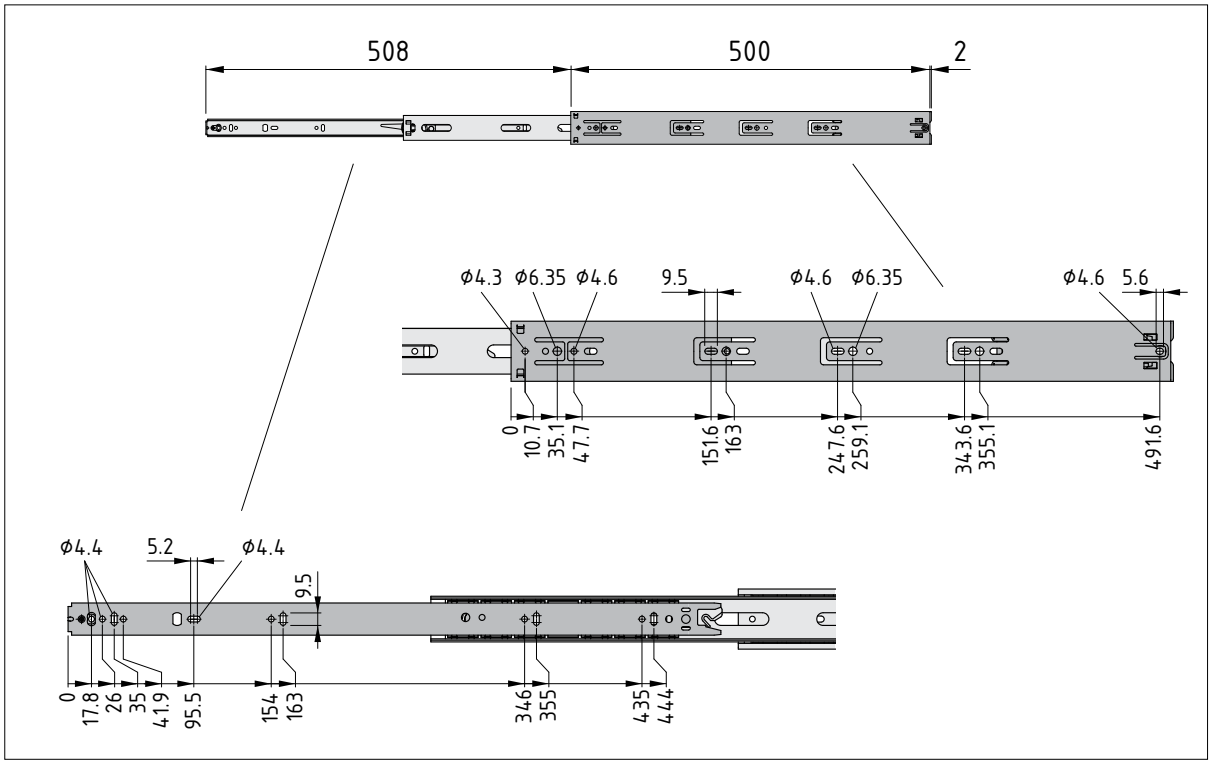
Finally, tighten the hexagon socket head cap screw again to secure the rail in place.

Annex

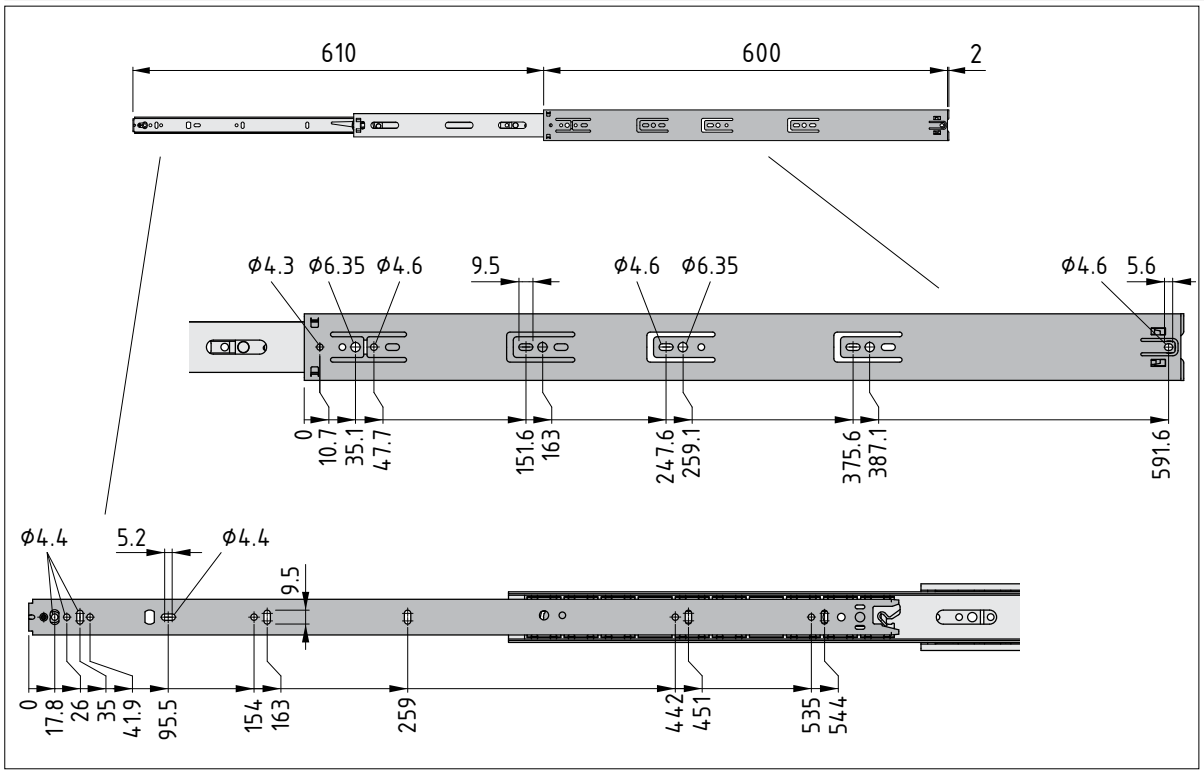
0.0.718.71 - Telescopic Rail 12.7x45.7 L400 soft close, full extension



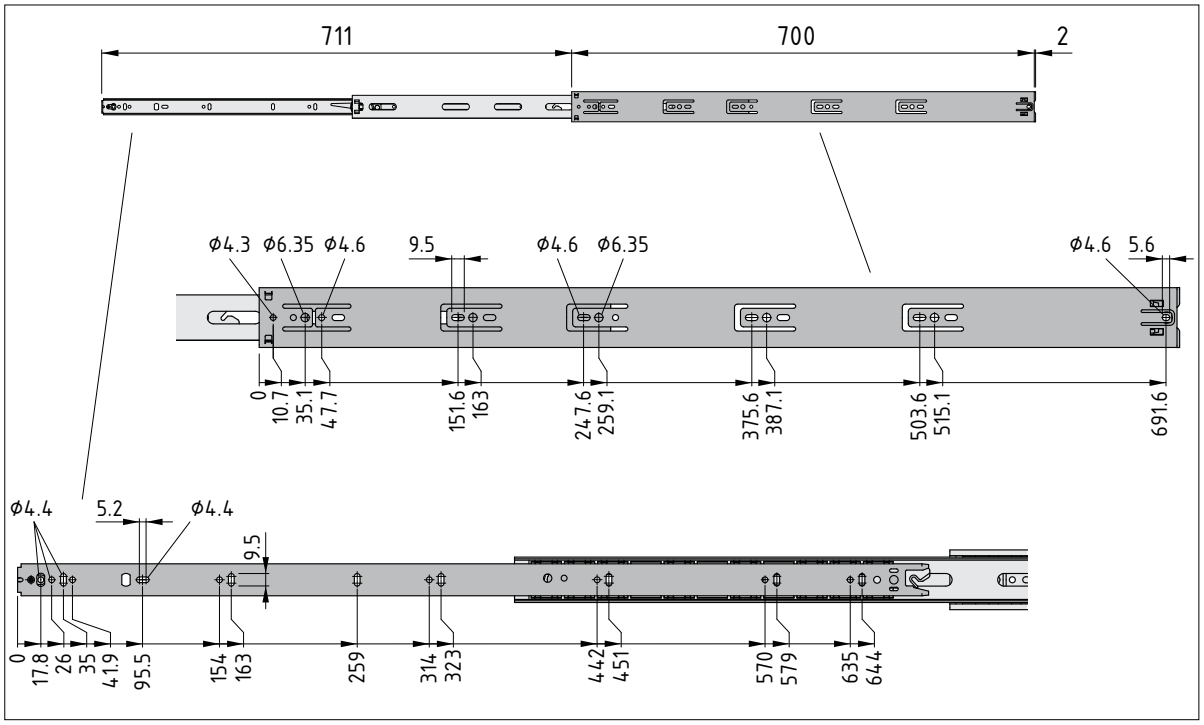
0.0.719.70 - Telescopic Rail 12.7x45.7 L500 soft close, full extension



0.0.719.71 - Telescopic Rail 12.7x45.7 L600 soft close, full extension



0.0.719.72 - Telescopic Rail 12.7x45.7 L700 soft close, full extension



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0.0.725.81 item Industrietechnik GmbH Made in Germany 05/2025