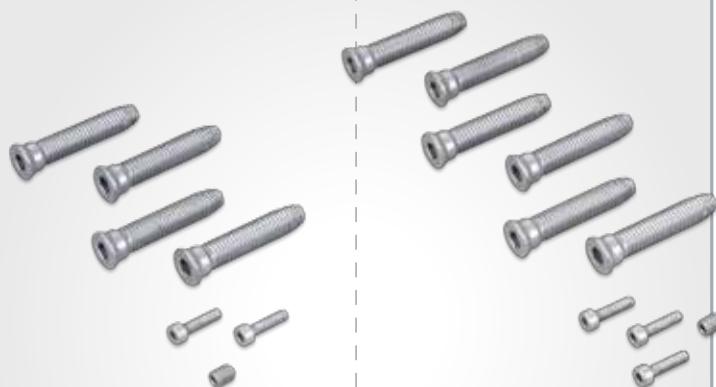


## FIXIA

### Range of fixing kits for Mechanica 2/3-wing hinges

#### MAIN CHARACTERISTICS:

- Fixing system for thermal cut profiles;
- Suited for all Mechanica models with front application;
- White zinc-plated version and stainless steel version;
- Weight capacity of 160 kg according to standard EN 1935:2002, and 230 kg according to standard EN 1191:2000;
- Innovative fixing system that doubles the original thickness of the profile;
- Zero play between screw and hole inside the hinge;
- Does not require the use of counterplates and spacers for T T profiles;
- High tightening torque without using special equipment.



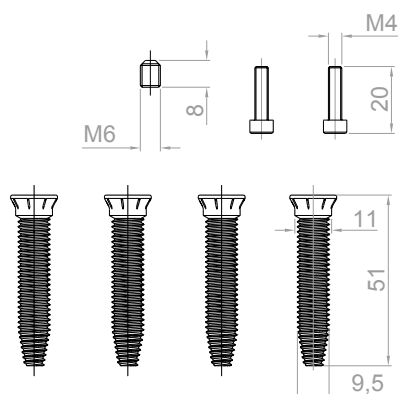
**1145.741**  
**1145.745**  
**1145.741X**  
**1145.745X**

**1145.743**  
**1145.747**  
**1145.743X**  
**1145.747X**

## TECHNICAL DRAWINGS

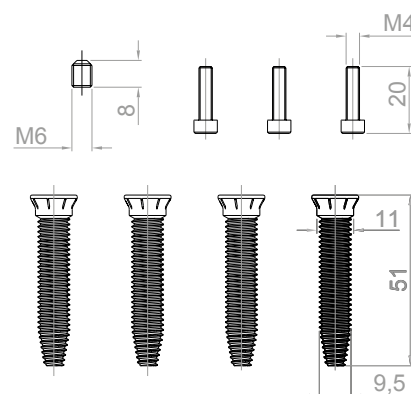
### 2 WINGS

**1145.741**  
**1145.741X**

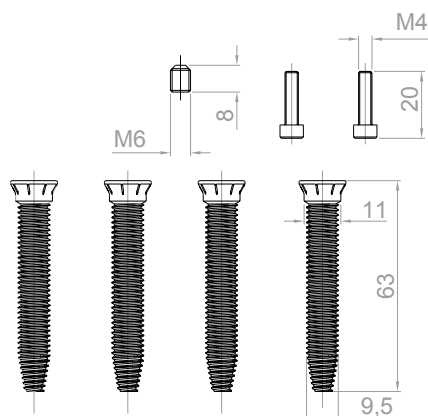


### 3 WINGS

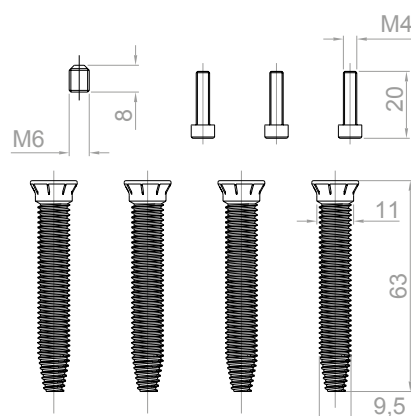
**1145.743**  
**1145.743X**



**1145.745**  
**1145.745X**



**1145.747**  
**1145.747X**



## FIXIA

Range of fixing kits for  
Mechanica 2/3-wing hinges

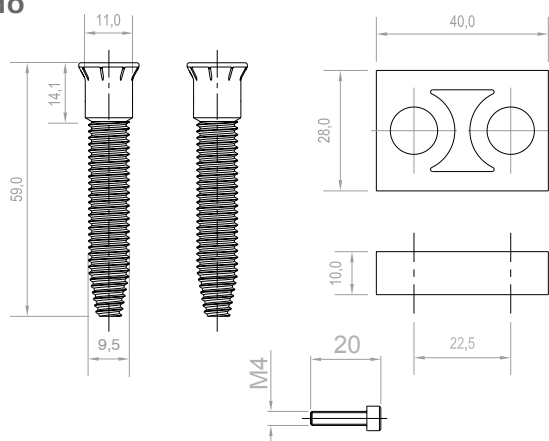
1145.741  
1145.745  
1145.741X  
1145.745X

1145.743  
1145.747  
1145.743X  
1145.747X

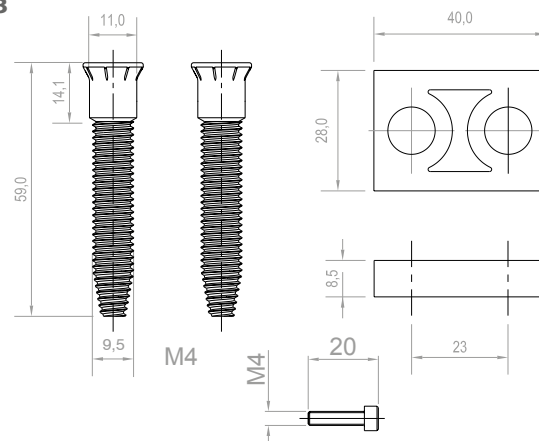
## TECHNICAL DRAWINGS

### SCREWS FOR STEPPED PROFILES

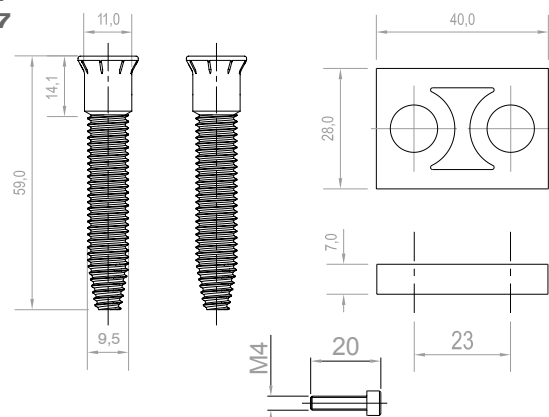
1145.752/10  
1145.753/10



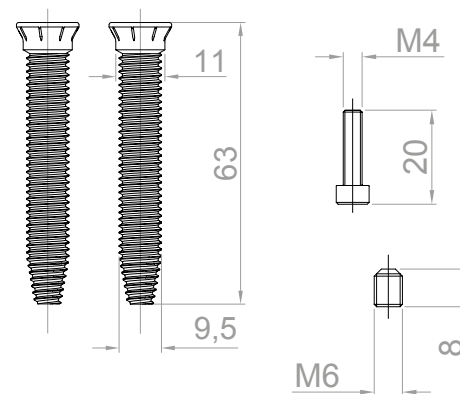
1145.752/8  
1145.753/8



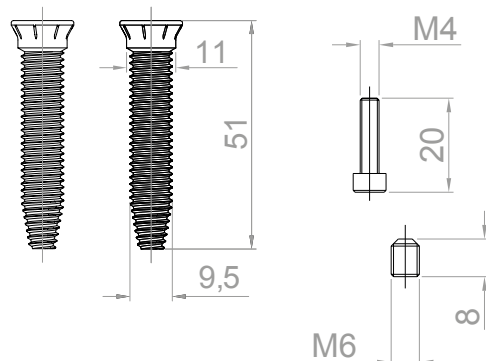
1145.752/7  
1145.753/7



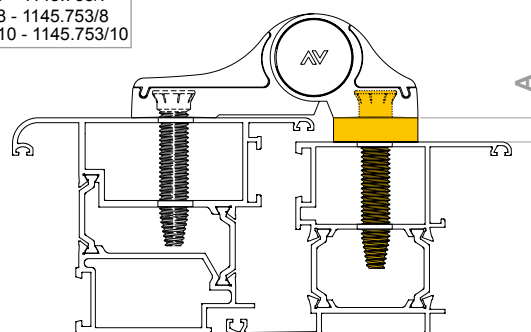
1145.757  
1145.757X



1145.755  
1145.755X



A mm	Codes
7	1145.752/7 - 1145.753/7
8.5	1145.752/8 - 1145.753/8
10	1145.752/10 - 1145.753/10



## FIXIA

### Range of fixing kits for Mechanica 2/3-wing hinges

**1145.741**  
**1145.745**  
**1145.741X**  
**1145.745X**

**1145.743**  
**1145.747**  
**1145.743X**  
**1145.747X**

ARTICLE	NAME	DESCRIPTION	STANDARD FINISH	PCS/ PACK.
1145.741	FIXIA	Fixing kit for 2-wing MECHANICA with special 51-mm ZINC-PLATED screws		20
1145.741X	FIXIA	Fixing kit for 2-wing MECHANICA with special 51-mm STAINLESS STEEL screws		20
1145.743	FIXIA	Fixing kit for 3-wing MECHANICA with special 51-mm ZINC-PLATED screws		20
1145.743X	FIXIA	As for 1145.741X but for 3-wing MECHANICA		10
1145.745	FIXIA	Fixing kit for 2-wing MECHANICA with special 63-mm ZINC-PLATED screws		20
1145.745X	FIXIA	As for 1145.745 but with special 63-mm STAINLESS STEEL screws		20
1145.747	FIXIA	Fixing kit for 3-wing MECHANICA with special 63-mm ZINC-PLATED screws		10
1145.747X	FIXIA	As for 1145.747 but with special STAINLESS STEEL screws		10
1145.752/7		(patented) 7-mm step with ZINC-PLATED screws MECHANICA int. 60,67,79,93-62.5,78,84,92 mm (PVD X, XSD = 10 pcs.). To be combined with FIXIA fixing kits FIXIA art. 1145.755/.757	1013, 8019, 9005, 9010, 9016, BL10, BR5, C, F, GR217, HL, NE, PVD X, SILV, XSD, ZE	50
1145.752/8		As for 1145.752/7 but with 8.5-mm step		50
1145.752/10		As for 1145.752/7 but with 10-mm step		50
1145.753/7		(patented) As per 1145.702/7 but with STAINLESS STEEL screws (PVD H, PVD X, XSD = 10 pcs.). To be combined with FIXIA fixing kits art. 1145.755X/.757X		50
1145.753/8		As for 1145.753/7 but with 8.5-mm step		50
1145.753/10		As for 1145.753/7 but with 10-mm step		50
1145.755	FIXIA	Fixing kit to the leaf wing with special long 51-mm special ZINC-PLATED screws. For application with steps art. 1145.752		20
1145.755X	FIXIA	Fixing kit to the leaf wing with special long 51-mm special STAINLESS STEEL screws. For application with steps art. art. 1145.753		20
1145.757	FIXIA	Fixing kit to the leaf wing with special long 63-mm special ZINC-PLATED screws. For application with steps art.1145.752		20
1145.757X	FIXIA	Fixing kit to the leaf wing with special long 63-mm special STAINLESS STEEL screws. For application with steps art. 1145.753		20
1145.901/7		Jig for MECHANICA int. /59-62.5-67-74.5-78-84-89-92-97-104.5 mm, with bushings Ø 7 mm		1
1145.904/7		Kit with 6 bits Ø 7 mm for drilling machine art. 18306.26 with quick coupling		1
1145.908/7		Jig for MECHANICA int. /60-67-79-86-93-93SM mm, with bushing Ø 7 mm		1
1145.909/7		Kit with 6 drilling bushings Ø 7 mm		1

## FIXIA

Range of fixing kits for  
Mechanica 2/3-wing hinges

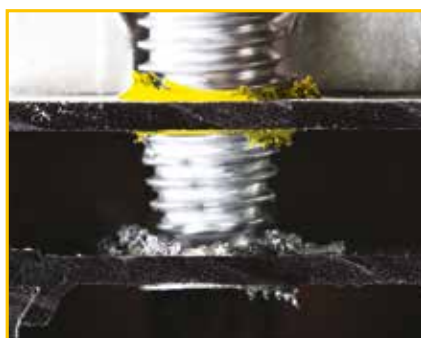
1145.741  
1145.745  
1145.741X  
1145.745X

1145.743  
1145.747  
1145.743X  
1145.747X

## FIXING

The Fixia screw allows a very solid fixing to the profile. Thanks to its special shape with tapered tip, it increases the gripping thickness of the thread created on the aluminium profile.

While it is inserted, the screw gradually widens the hole and creates an increase in thickness (doubles) of the thread. This phenomenon, called heading effect guarantees very high tightening torques and consequently a very solid fixing.



Gradual, strain-free insertion.



Overlapping of the profile thickness  
(in proximity to the thread)



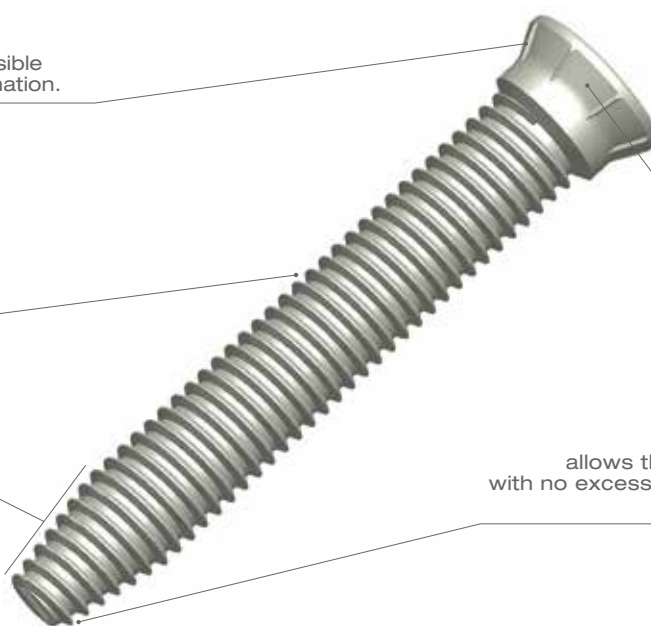
The profile is compressed against  
the hole of the hinge, forming a  
collar that eliminates any  
screw/hinge/profile plays.

### Keying:

It allows high tightening torques and guarantees a permanent and irreversible locking, preventing any hinge deformation.

The **lubricating lining**  
makes for smoother insertion.

**Special shape**  
for gradual heading.



**Tapering:**  
It perfectly lines up the holes  
of the profiles to the hinge,  
eliminating any play between  
the screw and the hinge.

The **three-lobed tip**  
allows the screw to enter gradually  
with no excess pressure, and encourages  
the thread to form.

## FIXIA

### Range of fixing kits for Mechanica 2/3-wing hinges

1145.741  
1145.745  
1145.741X  
1145.745X

1145.743  
1145.747  
1145.743X  
1145.747X

## WEIGHT CAPACITIES

FIXIA SINGLE-PIECE SCREW USED TO FIX MECHANICA HINGES			
Leaf weigh	Standard	N° of cycles	Certifying body
160 Kg	EN 1935-2002	200.000	Afnor
230 Kg	EN 1191-2002	200.000	IFT-Rosenheim

The weight capacity of the Mechanica hinges can be expressed in different values, depending on the standard used to test it:

- With the initial tests, conducted in compliance with standard EN1935, the weight capacity of the two-wing Mechanica hinges is equal to **160 Kg**, regardless of the type of fixing used. These tests were certified by **AFNOR (Body Notified at the European level)** at the CETIM laboratory (France).
- The latest tests conducted in compliance with standard EN1191 on the Mechanica+Fixia pair, on the other hand, have already allowed us, thanks to exceptional seal characteristics, to exceed 200,000 work cycles with a weight capacity of **230 Kg**.

The test was carried out on an aluminium door with profile thickness of 1.7 mm and leaf dimensions of L =1100 x H=2200, and with two Mechanica hinges 1146/62.5.

### Standard EN 1935-2002:

The test used to calculate the weight capacities according to this standard does not take into account the system used to fix the hinge to the profile. The standard establishes that, during the test, only the top hinge has to sustain the load, while the bottom hinge serves for alignment purposes but it is slightly raised, thus in this case the weight capacity of 160 kg refers to one hinge only (of course this does not mean that 2 hinges carry double the weight, as in this case the test is carried out based on the subsequent standard).

This test, together with a periodical repetition of the checks, allows the EC mark to be affixed to the hinge, and consequently for it to be used in cases where product marking is required (doors on escape routes).

### Standard EN 1191-2002:

The standard concerning durability of doors EN1191-2002, on the other hand, makes it possible to conduct tests that consider the door-hinge assembly. In this case, the door is tested under its actual conditions of use. The test carried out at the IFT in Rosenheim has already exceeded 200,000 cycles using a 230-kg leaf with two Mechanica 2-wing hinges (1146/62.5) fixed using the Fixia system

In this case, the weight capacity of 230 kg thus refers to two hinges working at the same time.

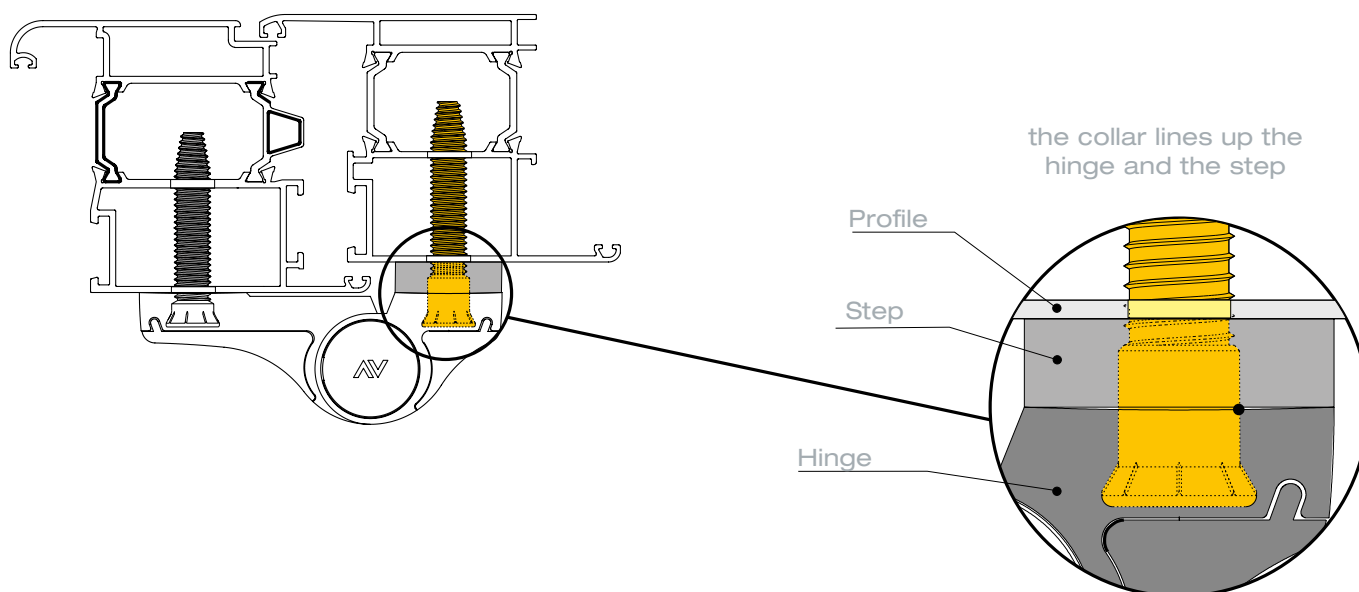
## FIXIA

Range of fixing kits for  
Mechanica 2/3-wing hinges

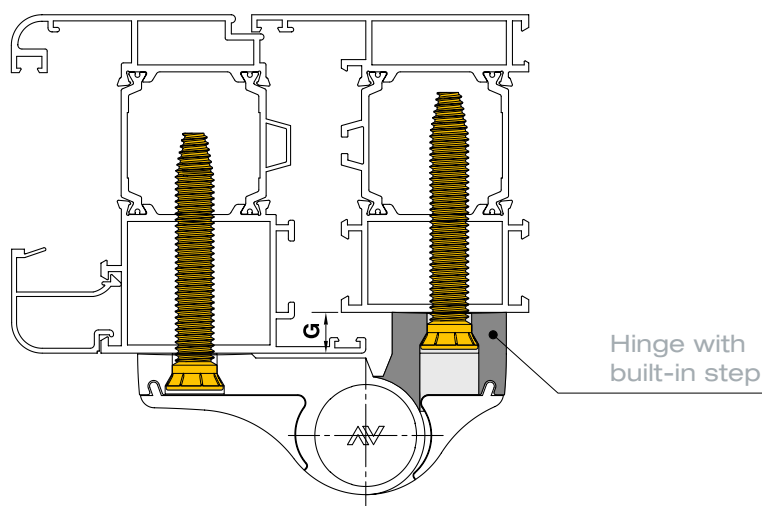
1145.741  
1145.745  
1145.741X  
1145.745X

1145.743  
1145.747  
1145.743X  
1145.747X

### FIXING TO OVERLAPPED STEPPED PROFILES



### FIXING TO OVERLAPPED PROFILES WITH SINGLE-PIECE HINGES



Art.	G	WINGS
1145.2/60	10	2
1145.23/60	10	3
1145.82/60	8	2
1145.83/60	8	3
1146.2/62	10	2
1146.23/62	10	3

## FIXIA

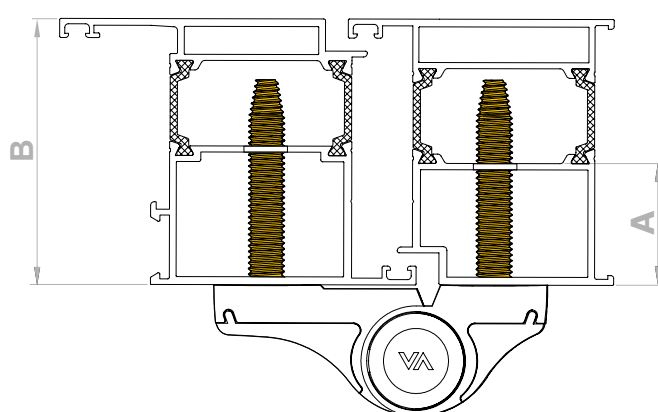
Range of fixing kits for  
Mechanica 2/3-wing hinges

1145.741  
1145.745  
1145.741X  
1145.745X

1145.743  
1145.747  
1145.743X  
1145.747X

### FIELDS OF APPLICATION FOR FLAT PROFILES

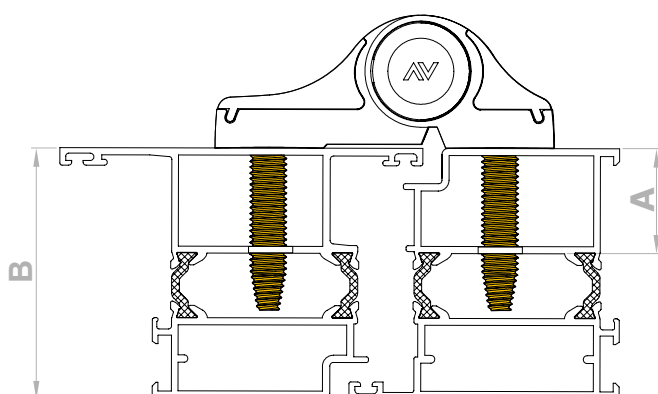
INWARD OPENING.



<b>1145.741/.743</b>	
<b>1145.741X/.743X</b>	
<b>A= 15 ÷ 34</b>	<b>B ≥ 45</b>

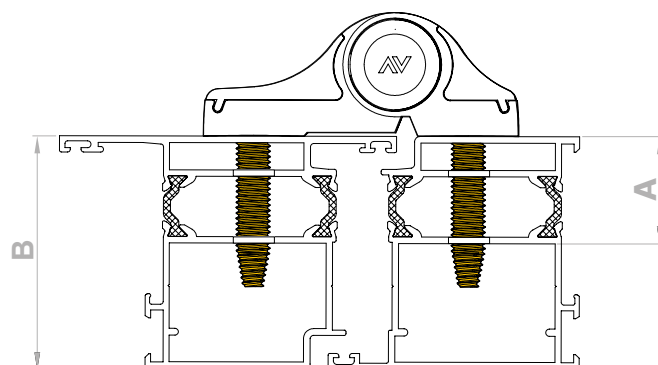
<b>1145.745/.747</b>	
<b>1145.745X/.747X</b>	
<b>A= 15 ÷ 44</b>	<b>B ≥ 60</b>

OUTWARD OPENING.



<b>1145.741/.743</b>	
<b>1145.741X/.743X</b>	
<b>A= 15 ÷ 34</b>	<b>B ≥ 45</b>

<b>1145.745/.747</b>	
<b>1145.745X/.747X</b>	
<b>A= 15 ÷ 44</b>	<b>B ≥ 60</b>



<b>1145.741/.743</b>	
<b>1145.741X/.743X</b>	
<b>A= 15 ÷ 34</b>	<b>B ≥ 45</b>

<b>1145.745/.747</b>	
<b>1145.745X/.747X</b>	
<b>A= 15 ÷ 44</b>	<b>B ≥ 60</b>



## FIXIA

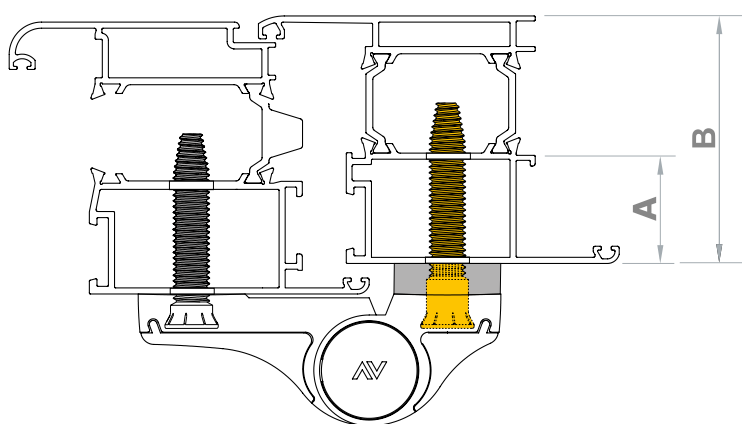
Range of fixing kits for  
Mechanica 2/3-wing hinges

1145.741  
1145.745  
1145.741X  
1145.745X

1145.743  
1145.747  
1145.743X  
1145.747X

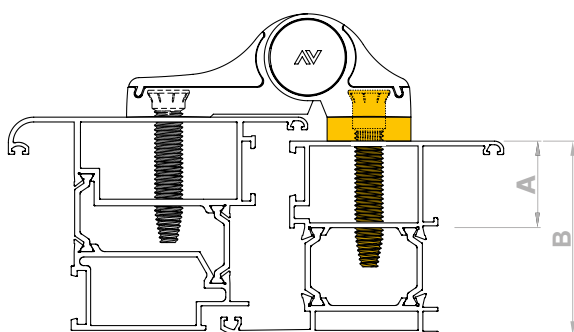
### FIELDS OF APPLICATION OF STEPPED PROFILES, FRAME SIDE

INWARD OPENING, FRAME SIDE.



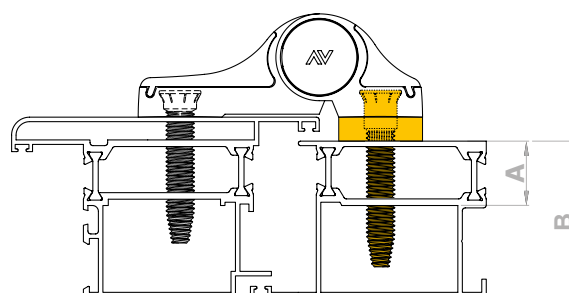
1145.753/7 1145.753/8 1145.753/10	
A = 15 ÷ 34	B ≥ 45

OUTWARD OPENING, FRAME SIDE.



1145.752/7 - 1145.753/7  
1145.752/8 - 1145.753/8  
1145.752/10 - 1145.753/10

A = 15 ÷ 34    B ≥ 45



1145.752/7 - 1145.753/7  
1145.752/8 - 1145.753/8  
1145.752/10 - 1145.753/10

A = 15 ÷ 34    B ≥ 45



## FIXIA

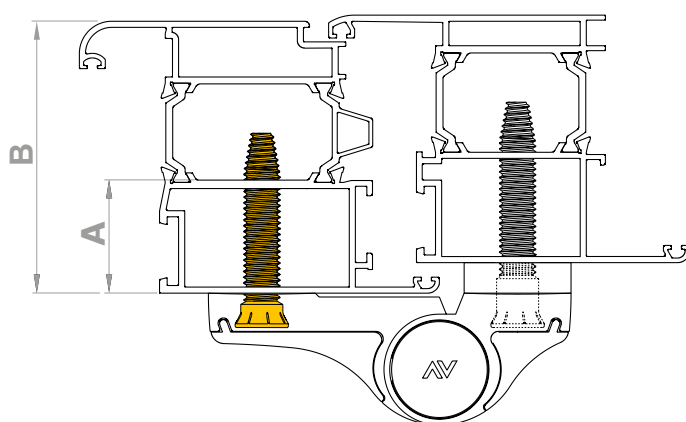
Range of fixing kits for  
Mechanica 2/3-wing hinges

1145.741  
1145.745  
1145.741X  
1145.745X

1145.743  
1145.747  
1145.743X  
1145.747X

### FIELDS OF APPLICATION OF STEPPED PROFILES ON LEAF SIDE

INWARD OPENING, LEAF SIDE.



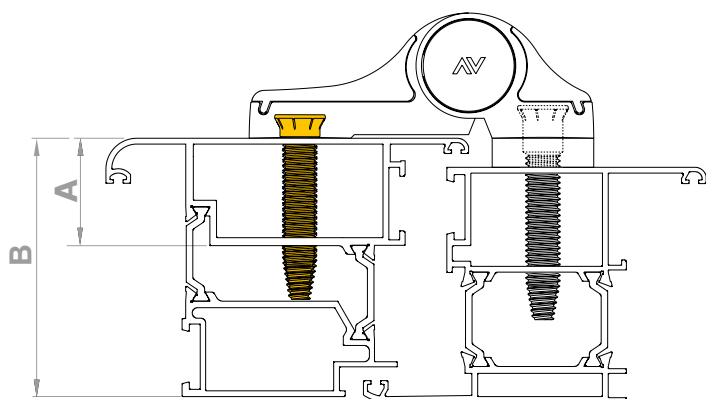
**1145.755 - 1145.755X**

**A = 15 ÷ 34    B ≥ 45**

**1145.757 - 1145.757X**

**A = 15 ÷ 44    B ≥ 55**

OUTWARD OPENING LEAF SIDE.

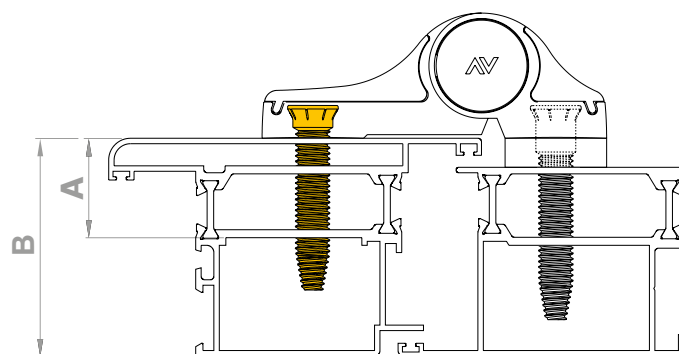


**1145.755 - 1145.755X**

**A = 15 ÷ 34    B ≥ 45**

**1145.757 - 1145.757X**

**A = 15 ÷ 44    B ≥ 55**



**1145.755 - 1145.755X**

**A = 15 ÷ 34    B ≥ 45**

**1145.757 - 1145.757X**

**A = 15 ÷ 44    B ≥ 55**

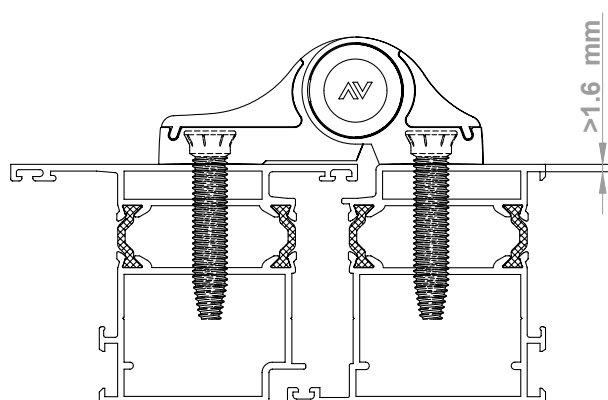
## FIXIA

Range of fixing kits for  
Mechanica 2/3-wing hinges

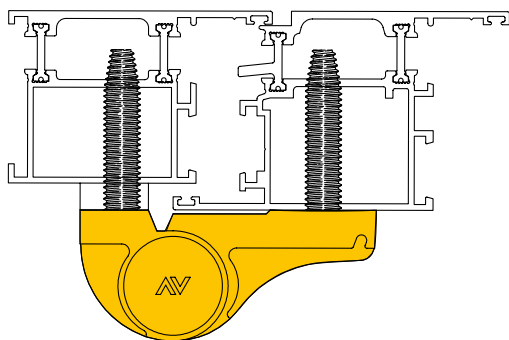
1145.741  
1145.745  
1145.741X  
1145.745X

1145.743  
1145.747  
1145.743X  
1145.747X

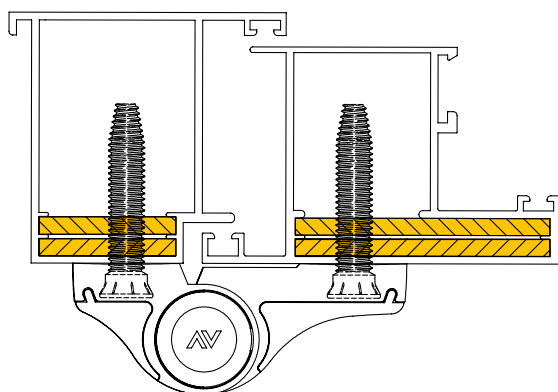
## LIMITATIONS



- Do not use on profiles with thickness of less than 1.6 mm
- Use only on profiles with thermal cut
- The screws have to engage at least two walls



- Do not use in combination with hinges with reduced male: Art. 1145/ 53 - 1145/60MR - 1145/67MR Art. 1145.3/53
- the following articles can be used only in the leaf: Art. 1145.755 - 1145.755X - 1145.757 - 1145.757X



- Do not use on reinforced profiles, not even by threading the reinforcement plates