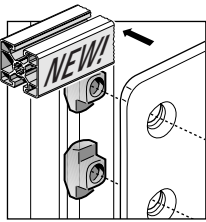
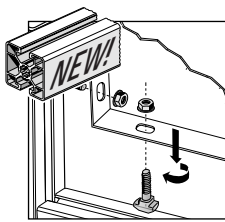


# Section 4 – Fasteners

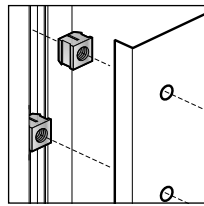
Bosch's wide selection of fasteners connects various equipment and accessories to profiles using the T-slot. All fasteners are designed for quick, easy installation and have a large surface area to provide strong, secure fastening. Also, many have grooved surfaces to resist loosening and provide ESD protection.



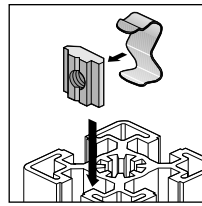
T-Nuts  
4-2 & 4-3



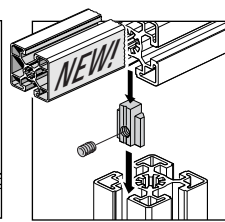
T-Bolt Fastening  
Kits  
4-4 & 4-5



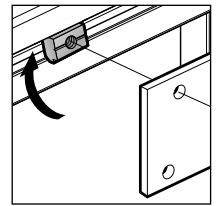
Plastic T-Nuts  
4-6



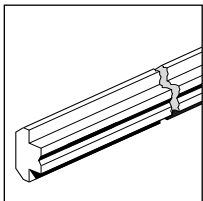
T-Block and  
Spring  
4-7



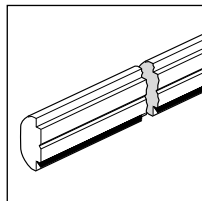
Anti-Rotation  
T-Block  
4-8



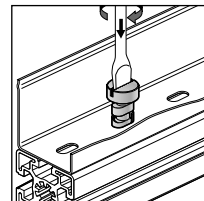
Swivel-In T-Block  
4-9



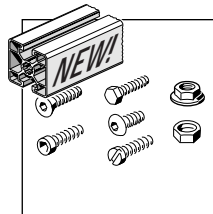
T-Bar  
4-10



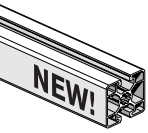
Swivel-In T-Bar  
4-11



Quick-Lock Sheet  
Material Fasteners  
4-12



Common  
Fasteners  
4-13



**T-Nut**



6, 8, 10

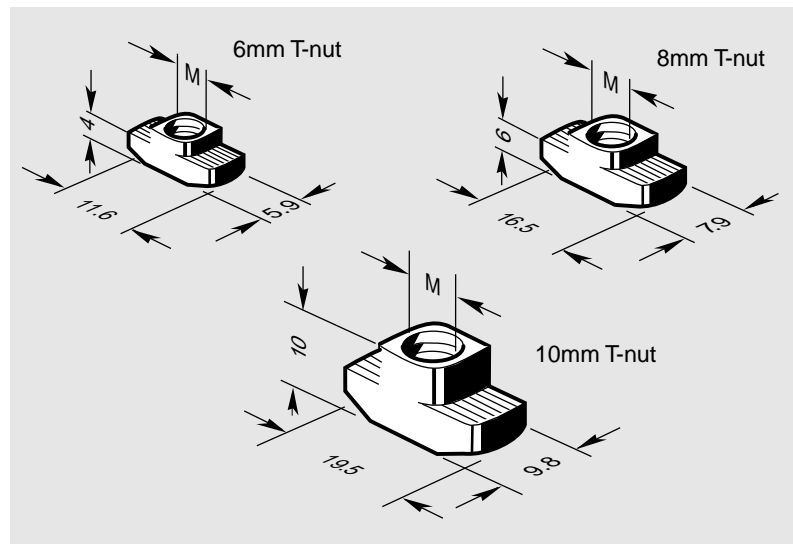
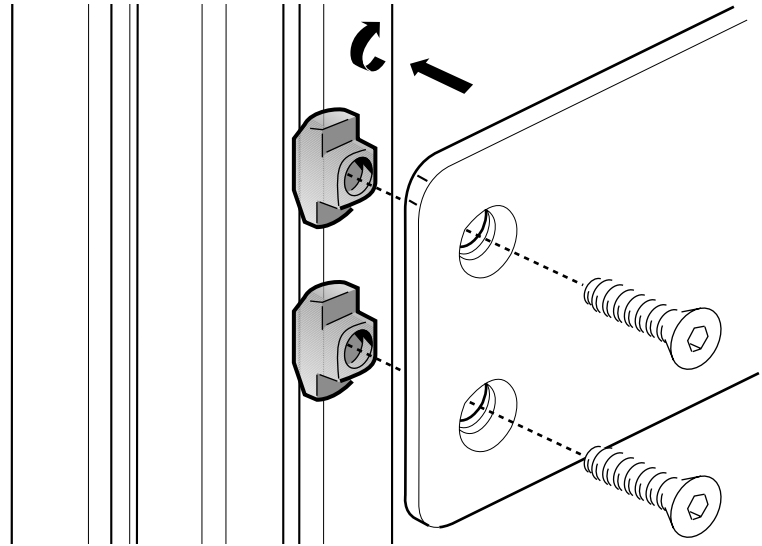
The T-nut fastens loads to profiles when using screws such as button-head, pan-head, socket-head and cap screw. When tightened, the cam neck on the T-nut turns to the locked position. Thread sizes are color coded for easy identification.

**Features:**

- Inserts anywhere along profile's T-slot
- Grooves on head "bite" into metal to securely lock T-nut in position and to resist vibration
- Grooves also provide ESD protection
- Has more surface to provide greater contact with profile surface and greater grip strength
- Tapered neck design provides self-aligning and locking in T-slot
- Color coded thread sizes for easy identification

**Material:**

- Zinc-plated 8.8 steel 8, 10
- Nickel-plated 8.8 steel 6



**Helpful Hint**

Die cast part gives maximum material thickness for more thread engagement.



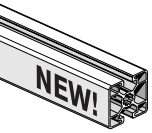
Tapered design for self-aligning and locking in T-slot.



Grooves break up anodized surface, for best possible ESD connection.

Thread size (M)	Color	T-nut
M4 threads	Silver	6mm, 8mm, 10mm
M5 threads	Black	8mm, 10mm
M6 threads	Gold	8mm, 10mm
M8 threads	Silver	10mm
1/4"x20 S.A.E.	Green	8mm, 10mm

Description	Color Code	Part Number
<b>6mm T-nut</b> 		
M4, one	Nickel Plated	<b>3 842 523 135</b>
<b>8mm T-nut</b> 		
M4, one	Silver	<b>3 842 501 751</b>
M5, one	Black	<b>3 842 501 752</b>
M6, one	Gold	<b>3 842 501 753</b>
M6, one	Stainless Steel	<b>3 842 509 390</b>
1/4"x20 S.A.E.	Green	<b>8 981 016 124</b>
8-32 S.A.E.	Green	<b>8 981 016 122</b>
10-32 S.A.E.	Green	<b>8 981 016 123</b>
<b>10mm T-nut</b> 		
M4, one	Silver	<b>3 842 509 613</b>
M5, one	Black	<b>3 842 242 491</b>
M6, one	Gold	<b>3 842 242 492</b>
M8, one	Silver	<b>3 842 242 493</b>
M8, one	Nickel Plated	<b>8 981 019 580</b>
1/4"x20 S.A.E.	Green	<b>8 981 016 127</b>
8-32 S.A.E.	Green	<b>8 981 016 129</b>
10-32 S.A.E.	Green	<b>8 981 016 126</b>
5/16"x18 S.A.E.	Green	<b>8 981 016 128</b>



## T-Bolt Fastening Kit, 8mm T-Slot

8

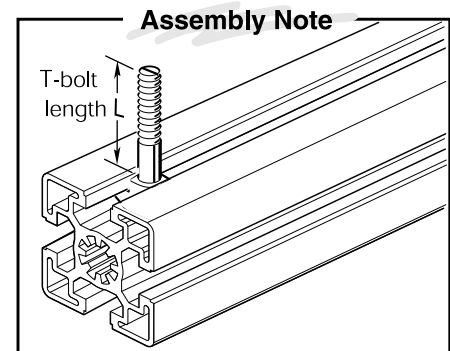
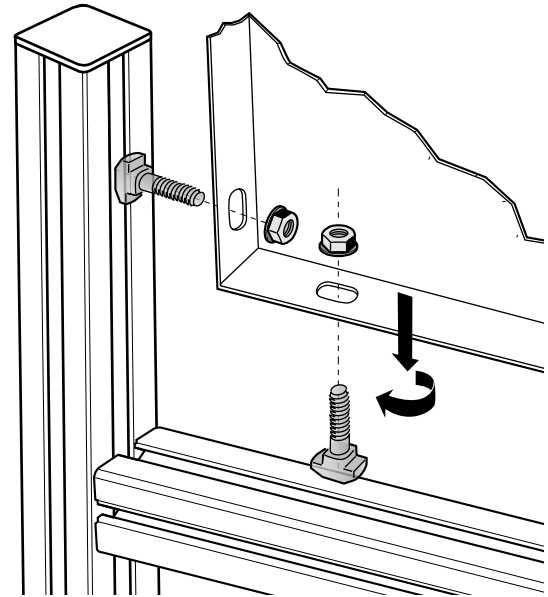
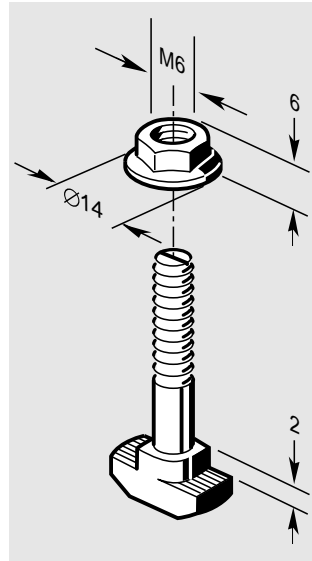
The T-bolt fastening kit, which consists of M6 T-bolt and flange nut, fastens equipment and accessories to 8mm T-slotted profiles. The T-bolt is designed so that when tightened, the cam on its neck locks the bolt head in the proper orientation for secure connection. T-bolts are available in three lengths, from 14mm to 23mm. (This length is the portion of the T-bolt which extends beyond the surface of the profile.)

**Features:**

- Alignment slot on bolt assures correct fastening
- Inserts anywhere along profile's T-slot
- Grooves on head "bite" into metal to securely lock T-bolt in position and to resist vibration
- Grooves also provide ESD protection
- Has more surface to provide greater contact with profile surface and greater grip strength

**Material:**

- Industrial grade 8.8 steel, zinc-plated

**Description****Part Number**

14mm T-bolt fastening kit, one

8 981 019 577

18mm T-bolt fastening kit, one

8 981 019 578

23mm T-bolt fastening kit, one

8 981 019 579

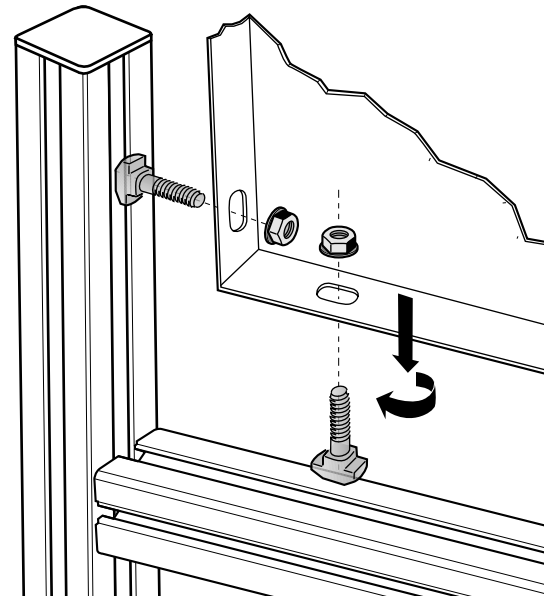
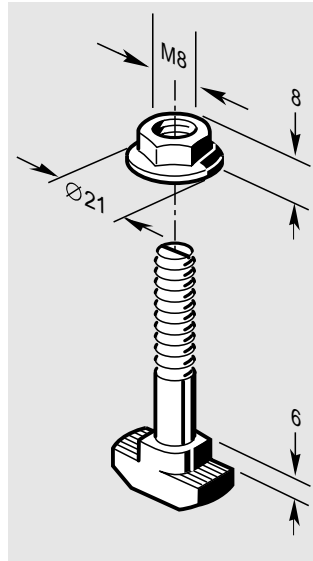
M6 flange nut only, one

3 842 523 925

## T-Bolt Fastening Kit, 10mm T-Slot

10

The T-bolt fastening kit, which consists of M8 T-bolt and flange nut, fastens equipment and accessories to 10mm T-slotted profiles. The T-bolt is designed so that when tightened, the cam on its neck locks the bolt head in the proper orientation for secure connection. T-bolts are available in eight lengths, from 14mm to 94mm. (This length is the portion of the T-bolt which extends beyond the surface of the profile.)

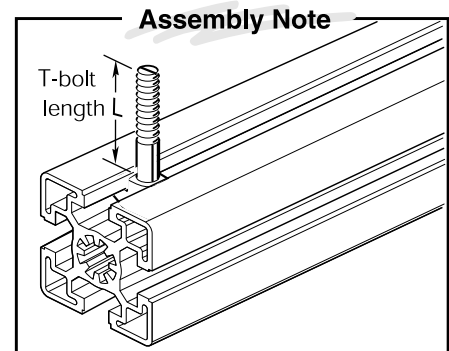


**Features:**

- Alignment slot on bolt assures correct fastening
- Inserts anywhere along profile's T-slot
- Grooves on head "bite" into metal to securely lock T-bolt in position and to resist vibration
- Grooves also provide ESD protection
- Has more surface to provide greater contact with profile surface and greater grip strength

**Material:**

- Industrial grade 8.8 steel, zinc-plated



**Description**

**Part Number**

14mm T-bolt fastening kit, one	3 842 146 821
19mm T-bolt fastening kit, one (this kit is used with most gussets)	3 842 146 822
24mm T-bolt fastening kit, one	3 842 146 823
34mm T-bolt fastening kit, one	3 842 146 824
44mm T-bolt fastening kit, one	3 842 146 825
54mm T-bolt fastening kit, one	3 842 146 826
74mm T-bolt fastening kit, one	3 842 146 827
94mm T-bolt fastening kit, one	3 842 146 828
M8 flange nut only, one	3 842 345 081

## Plastic T-Nut

10

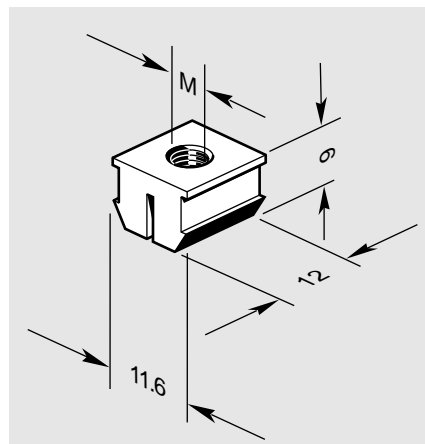
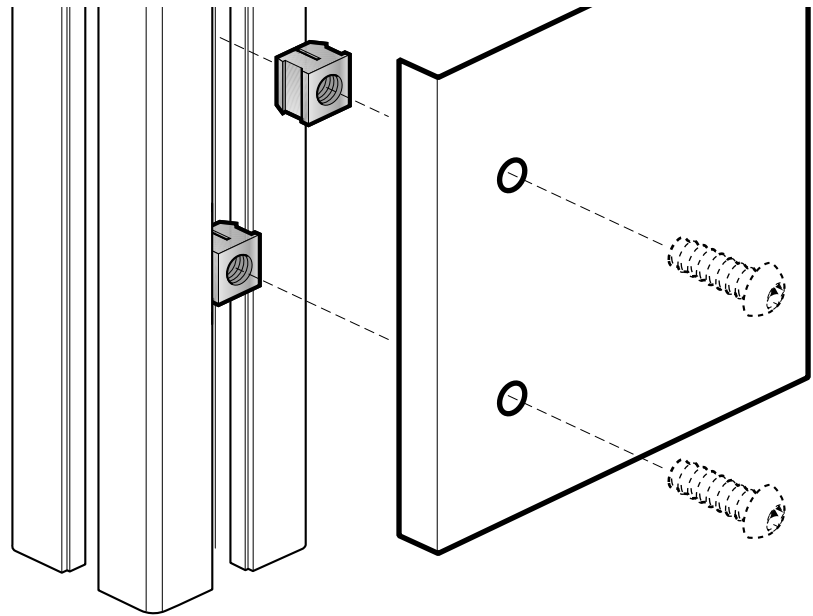
The plastic T-nut fastens light loads, such as proximity sensors or identification tags, to any 10mm T-slotted profile. Available in 4mm, 5mm, and 6mm threads.

### Features:

- Snaps in T-slot
- Easy installation
- Easy positioning
- Stay in place in vertical T-slot

### Material:

- Black polyamide 6



### Description

### Part Number

M4, package of 10

3 842 146 870

M5, package of 10

3 842 146 872

M6, package of 10

3 842 146 874

## T-Block and Spring

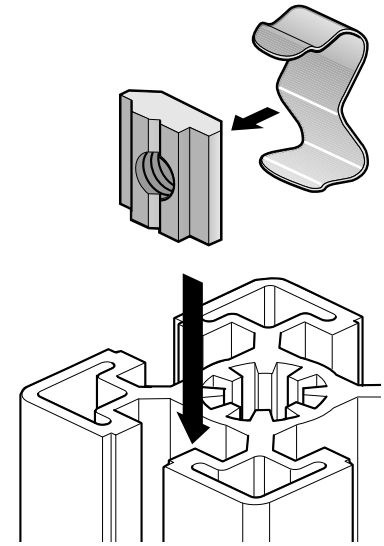
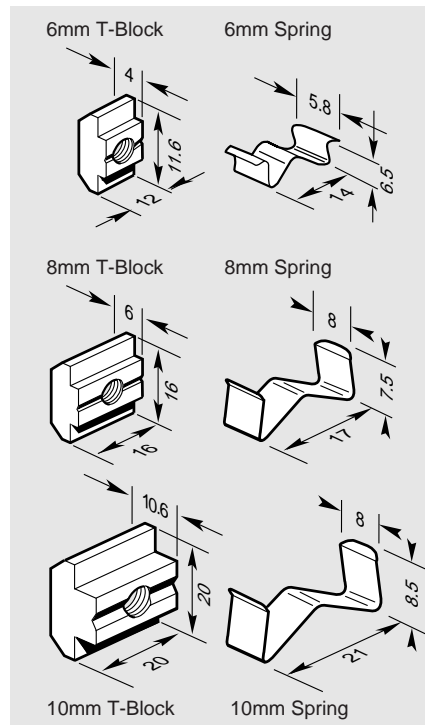
The T-block fastens heavy loads to any 6mm, 8mm or 10mm T-slotted profile. Its ample surface-contact area with the profile's inside T-slot provides secure fastening, and it can be easily positioned, moved and repositioned in the T-slot. The T-block spring can be used on any 6mm, 8mm, or heavy (H series) 10mm T-slots to hold the T-block in position in the T-slot while making a vertical connection.

### Features:

- Large surface area contact with profile's T-slot provides maximum holding strength
- Seven thread engagement for strong, secure mounting

### Material:

- T-block:
  - 6mm: stainless steel
  - 8mm & 10mm: galvanized steel
- Spring: spring steel






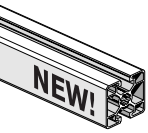
### Helpful Hint

For easier installation, use a spring for holding the T-block in position in the T-slot while making a vertical connection

## Description

## Part Number

6mm T-block 	
M4, one	<b>3 842 523 140</b>
M5, one	<b>3 842 523 142</b>
Spring for 6mm T-block, package of 1	<b>3 842 523 145</b>
8mm T-block 	
M4, one	<b>3 842 514 928</b>
M5, one	<b>3 842 514 929</b>
M6, one	<b>3 842 514 930</b>
M8, one	<b>3 842 514 931</b>
Spring for 8mm T-block, package of 1	<b>3 842 516 685</b>
10mm T-block 	
M5, one	<b>3 842 218 991</b>
M6, one	<b>3 842 218 992</b>
M8, one	<b>3 842 218 993</b>
Spring for 10mm T-block, package of 1	<b>3 842 516 669</b>



## Anti-Rotation T-Block

8-10

The Anti-Rotation T-block is used to prevent rotation where twist moments are applied to profile T-joints. It is available for profiles with 8mm or 10mm T-slots.

It swivels into the T-slot and when locked into place with a set screw, it will prevent rotation of the adjacent profile.

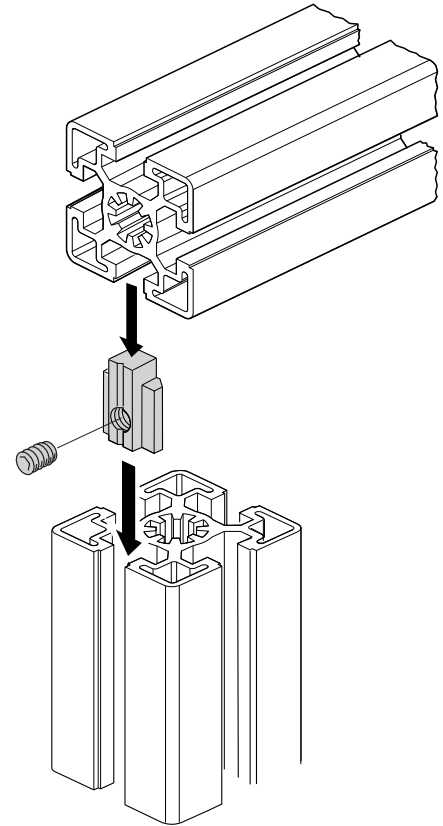
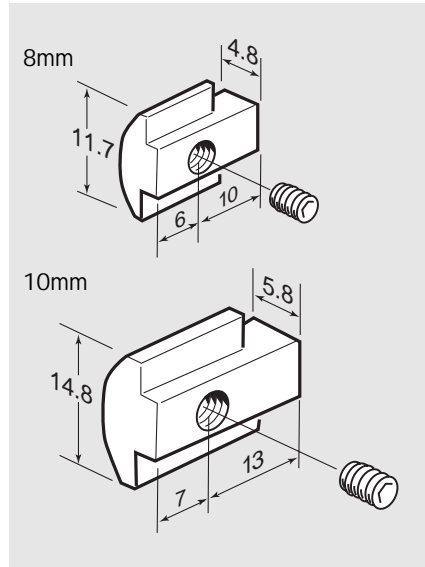
Includes set screw.

### Features:

- Swivel-in mounting
- Prevents rotation at connection point
- Large surface area contact with profile's T-slot

### Material:

- Industrial grade 8 steel, zinc-plated



### Description

8mm swivel-in anti-rotation T-block, one

10mm swivel-in anti-rotation T-block, one

### Part Number

3 842 525 010

3 842 525 012



## Swivel-In T-Block

8-10

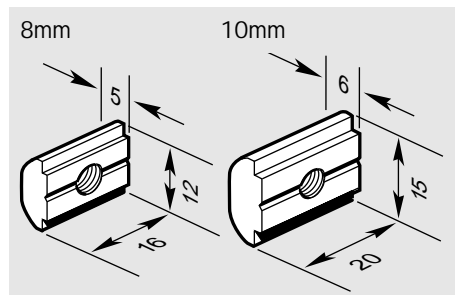
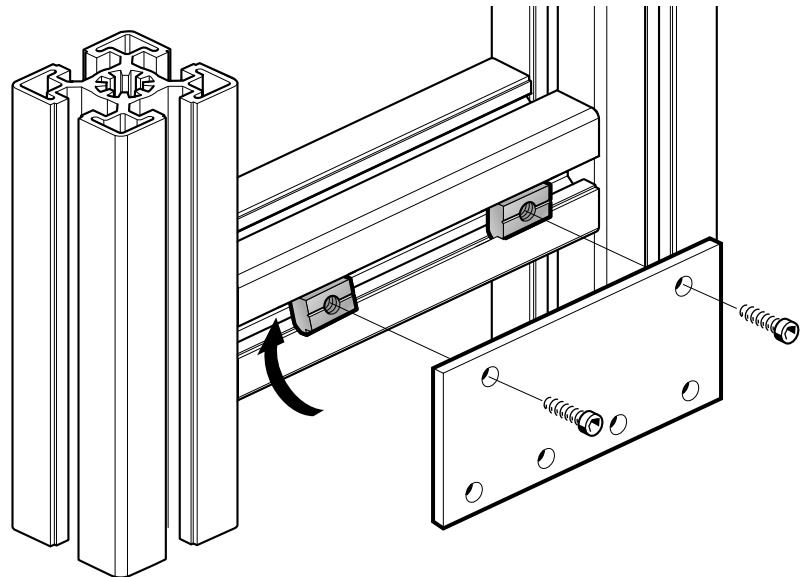
The swivel-in T-block fastens loads to any 8mm and 10mm T-slotted profiles, even after the structure has been built. Its ample surface-contact area with the profile's T-slot provides secure fastening. The swivel-in T-block can be easily positioned, moved, and repositioned in the T-slot. The 8mm swivel-in T-block is available with 5mm, 6mm, and 8mm threads; the 10mm swivel-in T-block is available with 6mm and 8mm threads.

### Features:

- Can be inserted anywhere along the profile's T-slot after the structure is completed
- Provides quick, easy fastening
- Large surface area contact with profile's T-slot provides maximum strength

### Material:

- Industrial grade 8 steel, zinc-plated



Description	Part Number
8mm swivel-in T-block	
M5, one	3 842 516 681
M6, one	3 842 516 678
M8, one	3 842 516 695
10mm swivel-in T-block	
M6, one	3 842 516 674
M8, one	3 842 516 671



## T-Bar

6 8 10

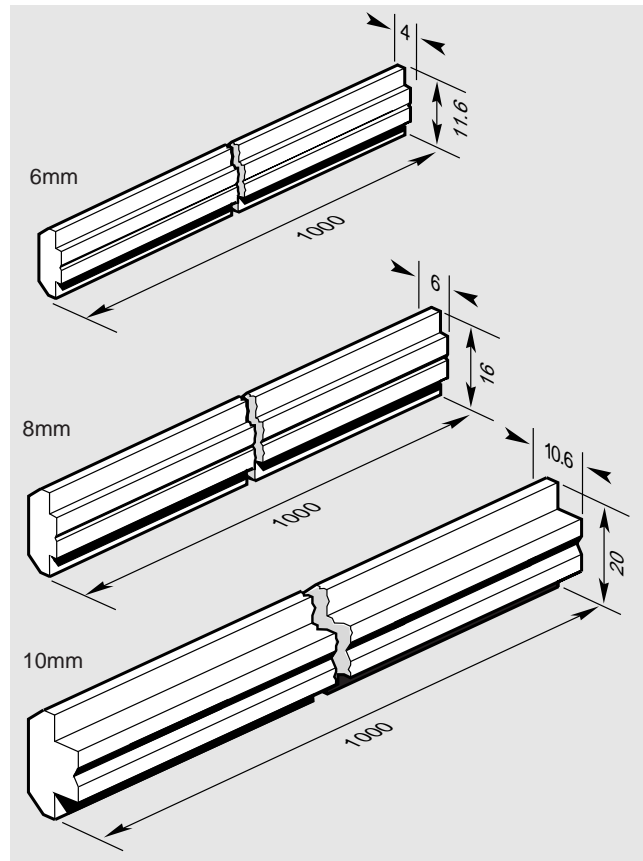
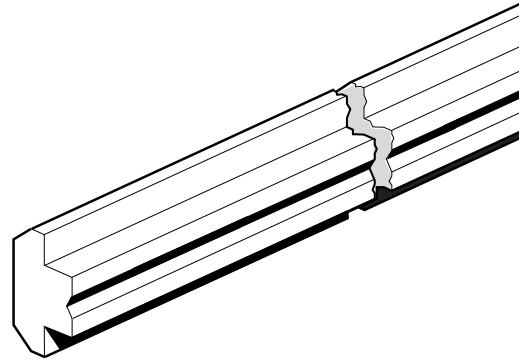
The T-bar allows you to make fasteners to suit your application. Designed for use with 6mm, 8mm and 10mm T-slotted profiles, the T-bar is supplied as raw steel stock which may be cut to length, then bored and tapped in any diameter up to 8mm. The groove in the bar acts as a drill guide. Length: 1000mm.

**Features:**

- Can drill holes anywhere along the bar
- Large surface area contact with profile's T-slot provides maximum strength

**Material:**

- 12L 14 cold drawn steel

**Description****Part Number**

6mm T-bar, 1000mm long, one

**3 842 523 438**



8mm T-bar, 1000mm long, one

**3 842 510 078**

10mm T-bar, 1000mm long, one

**3 842 502 883**

## Swivel-In T-Bar

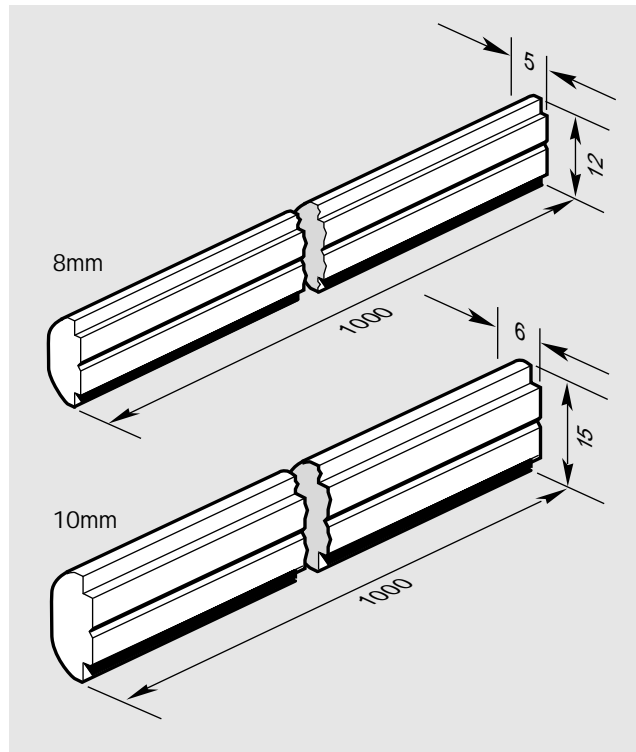
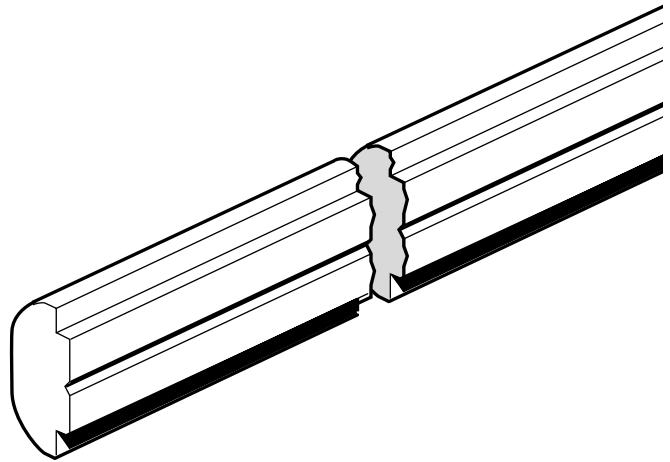
The swivel-in T-bar allows you to make fasteners to suit your application. Designed for use with 8mm and 10mm T-slotted profiles, the T-bar is supplied as raw steel stock which may be cut to length, then bored and tapped in any diameter up to 8mm. The groove in the bar acts as a drill guide. Length: 1000mm.

**Features:**

- Can drill holes anywhere along the bar
- Large surface area contact with profile's T-slot provides maximum strength

**Material:**

- 12L 14 cold drawn steel



Description	Part Number
8mm swivel-in T-bar, 1000mm long, one	<b>3 842 516 684</b>
10mm swivel-in T-bar, 1000mm long, one	<b>3 842 516 677</b>

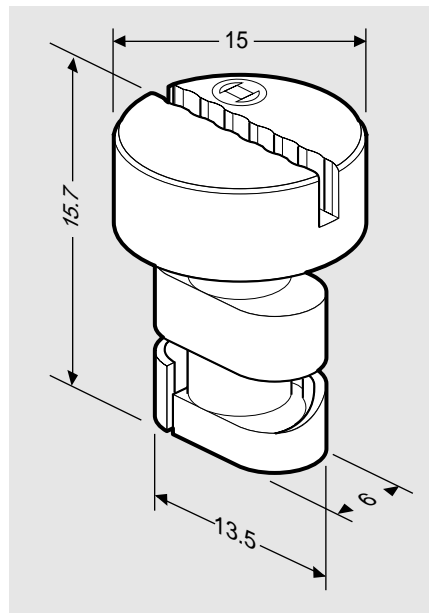
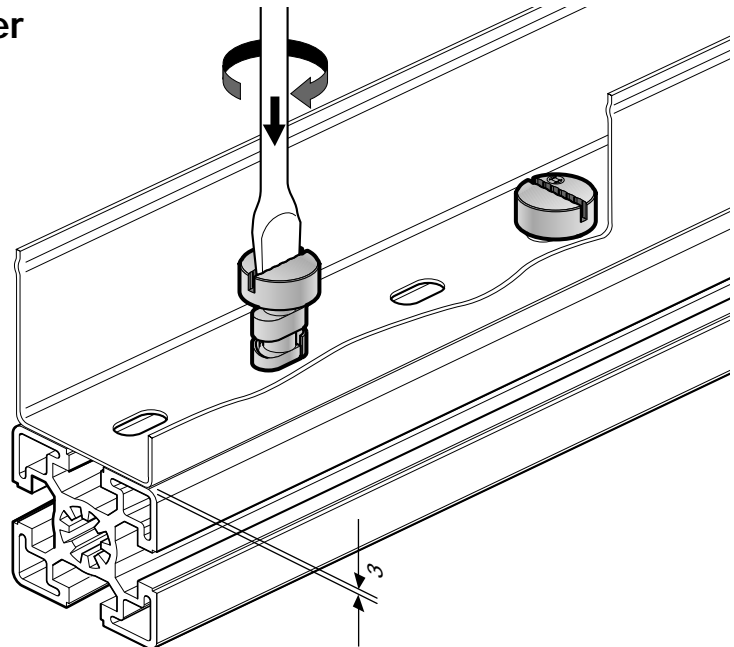
## Quick-Lock Sheet Material Fastener

10

This fastener connects sheet material up to 3mm thick to any 10mm T-slotted profile. Slotted holes must be drilled into the sheet to accommodate the fastener's cam-shaped locking lug. This fastener is placed through the sheet material and into the profile's T-slot, then twisted into the locking position with a standard screwdriver.

### Material:

- Black polyamide 12

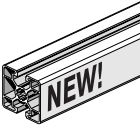


### Description

Quick-lock sheet material fastener, one

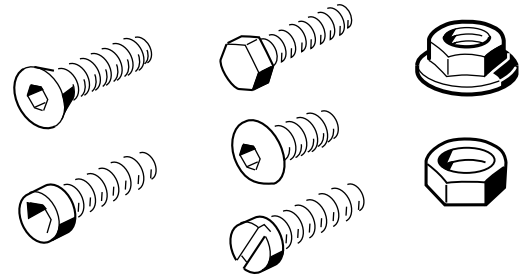
### Part Number

3 842 146 920



## Common Fasteners and Hardware

Listed below are many common fasteners and hardware for use with Bosch structural aluminum framing, including screws, bolts, and nuts.



DIN/ISO	Description—Screws & Bolts	Part Number
	S8 x 25; Flat head screw	3 842 517 543
DIN 913	M8 x 8-45H; Set screw	2 912 041 230
DIN 7984	M8 x 8; SLHCS; GD 8.8; zinc	2 910 131 118
ISO 7380	M8 x 55-10.9; Oval head screw	3 842 508 061
DIN 7984	M8 x 45-8.8; Hex socket screw	2 910 131 252
ISO 7380	M8 x 35-10.8; Oval head screw	3 842 501 639
DIN 7984	M8 x 20-8.8; Hex socket screw	2 910 131 242
DIN 7991	M8 x 20-8.8; Flat head screw	2 910 541 242
DIN 912	M8 x 16-8.8; Hex socket screw	2 910 141 238
DIN 933	M8 x 16-8.8; Hex bolt	2 911 061 238
DIN 7991	M8 x 16-8.8; Flat head screw	2 910 541 238
DIN 916	M8 x 16-45H; Set screw	2 912 061 238
DIN 913	M8 x 12; Set screw	2 912 041 274
DIN 913	M6 x 8; Set screw	2 912 041 189
DIN 912	M6 x 30-8.8; Hex socket screw	2 910 141 205
DIN 913	M6 x 25-45H; Set screw	2 912 041 203
DIN 912	M6 x 20-8.8; Hex socket screw	2 910 141 201
DIN 7991	M6 x 16-8.8; Flat head screw	2 910 541 197
DIN 7516-D	M6 x 16; Self-tapping screw	3 842 517 132
DIN 7984	M6 x 16; LHCS; GD 8.8; zinc	2 910 161 197
DIN 7984	M6 x 14-8.8; Socket head screw	2 910 131 195
DIN 7991	M6 x 12-8.8; Flat head screw	2 910 541 193
DIN 913	M6 x 12; Set screw	2 912 041 193
DIN 7984	M6 x 12; LHCS; GD 8.8; zinc	2 910 131 193
DIN 913	M6 x 10-45H; Set screw	2 912 041 191
DIN 913	M5 x 5; Set screw	2 912 041 147
ISO 7380	M5 x 30-10.9; Oval head screw	3 842 501 638
ISO 7380	M5 x 25-10.9; Oval head screw	3 842 501 637
DIN 7991	M5 x 12-8.8; Flat head screw	2 910 541 154
DIN 7991	M4 x 16-8.8; Flat head screw	2 910 541 126
DIN 7984	M12 x 40-8.8; Hex socket screw	2 910 131 346
	M12 x 30, M4 KT 18 screw	3 842 504 761
DIN 7984	M12 x 20-8.8; Socket head screw	2 910 131 338
DIN 913	M10 x 10-45H; Set screw	2 912 041 279
	HN1624 Anchor bolt	3 842 146 844
	FB 8/25 Anchor bolt; L=65	3 842 515 920
	4.5 x 30 Chip board screw; Phillips head	3 842 508 022
DIN/ISO	Description—Nuts	Part Number
	M8 Flange nut	3 842 234 081
ISO 4032	M6-8-A; Hex nut	2 915 011 007