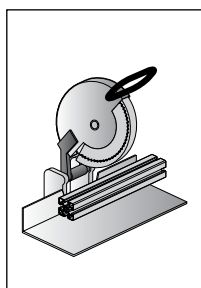


Section 15: Tools

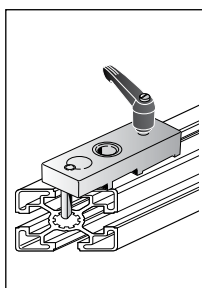
Overview

With Bosch Rexroth aluminum structural framing, you can either specify profiles square cut to length, with the ends machined to meet your needs . . . or you can cut and finish the ends yourself using Bosch Rexroth tools described on the following pages. In this section, you can select the correct special drills, drilling templates, thread taps, and wrench sets needed to complete the job quickly and with precise fits.

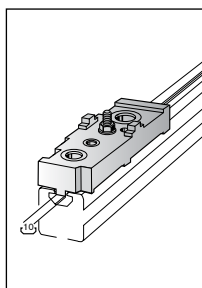
Wrenches



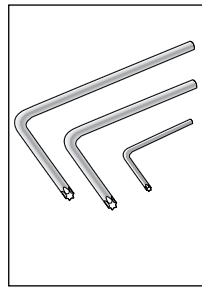
Working with Aluminum Profiles
15-1



Miter Drilling Jigs
15-2

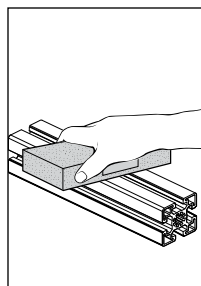


6mm, 8mm, & 10mm Drill & Boring Jigs
15-3 & 15-5

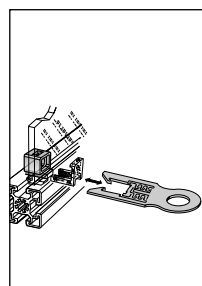


Torx Wrenches
15-6

Other Tools



Cleaning Block
15-7



VarioFix Puller
15-7

Section 15: Tools

Working with Aluminum Profiles

To cut profiles to the desired length virtually burr-free:

Cutting blade selection:

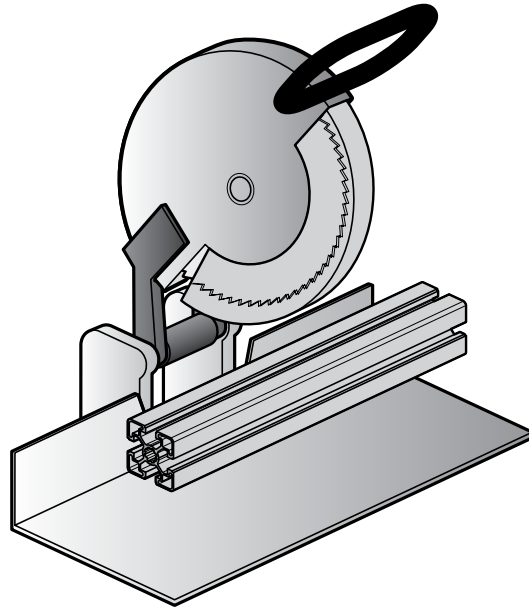
Use a metal 14-inch diameter circular saw blade that is 3.3mm or 2.8mm wide, and that has 92 carbide-tipped teeth.

Cutting speed:

- 1 For production cutting, the saw cutting rate should be approximately 28m per minute (maximum).
- 2 The saw blade rotation speed should be approximately 2500 RPM.

Removing Burrs and Sharp Edges from Profiles:

When cutting or drilling aluminum profiles, some burrs may still remain, regardless of the technique and cutter used. These can easily be removed using a fine metal file in a smooth, continuous motion along the edge to be deburred. This method is also useful for eliminating sharp edges along cut profile surfaces.



Selecting the Appropriate Drill and Tap Sizes

Metric Tap/Drill Specifications

Tap	Tap Size	Drill
M4	M4 x 0.7	3.3mm
M5	M5 x 0.8	4.2mm
M6	M6 x 1	5.0mm
M8	M8 x 1.25	6.8mm
M12	M12 x 1.75	10.2mm
M16	M16 x 2	14.0mm

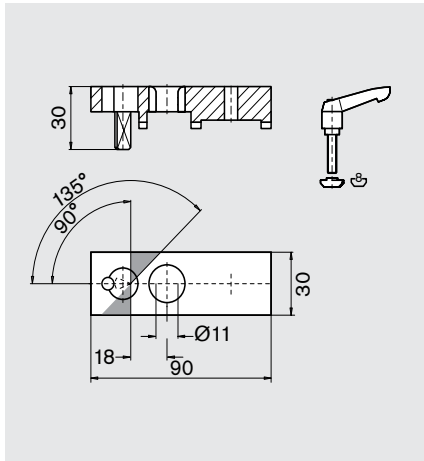
NOTE: For best results, pre-tap 40x40, 45x45, 45x60, 50x50, and 60x60-series profiles.

DO NOT predrill or tap when using self-tapping screws.

Section 15: Tools

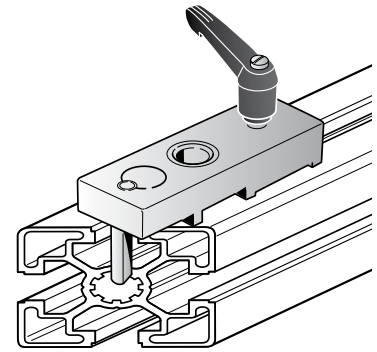
Jigs

8mm Miter Drilling Jig



Features:

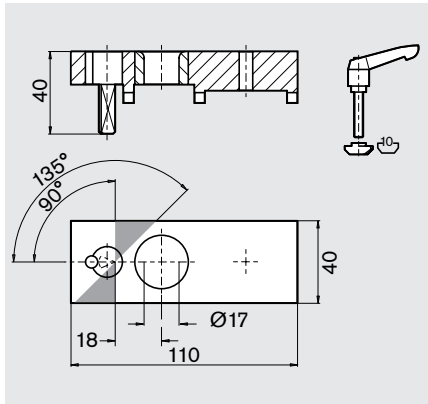
- Provides proper end spacing when drilling 11 mm holes in 8mm T-slotted profiles with a 45° end miter
- Typically used when preparing profiles for use with end-to-end and end-to-side variable angle connectors
- Built-in lock/release lever simplifies use



Description	Lot Size	Part Number
8mm miter drilling jig	1	3 842 516 729

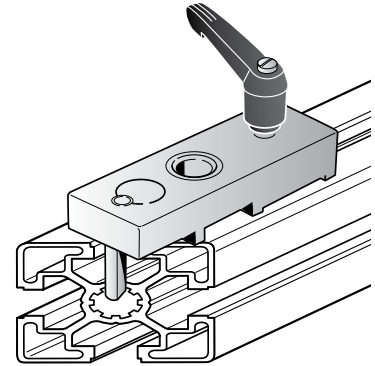
Section 15: Tools

10mm Miter Drilling Jig 



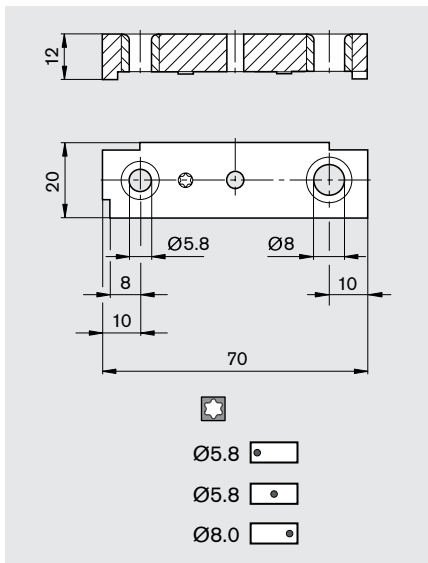
Features:

- Provides proper end spacing when drilling 17mm holes in 10mm T-slotted profiles with a 45° end miter
- Typically used when preparing profiles for use with end-to-end and end-to-side variable angle connectors
- Built-in lock/release lever simplifies use



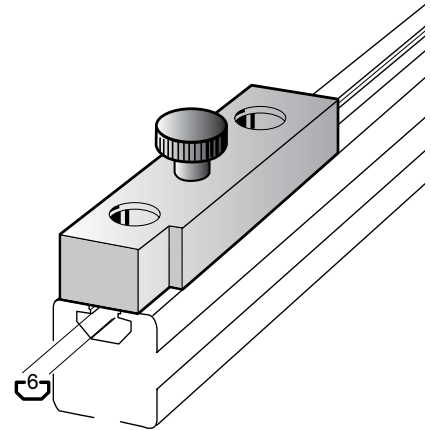
Description	Lot Size	Part Number
10mm miter drilling jig	1	3 842 516 731

6mm Drill and Boring Jig 



Features:

- Built-in lock/release knob simplifies use
- For use with profiles with 6mm T-slots, including 20x20, 20x40, etc.
- Two versions are available:
- Positions 5.8mm access holes for Torx head connection screws and 8mm holes for 20 series quick connectors.

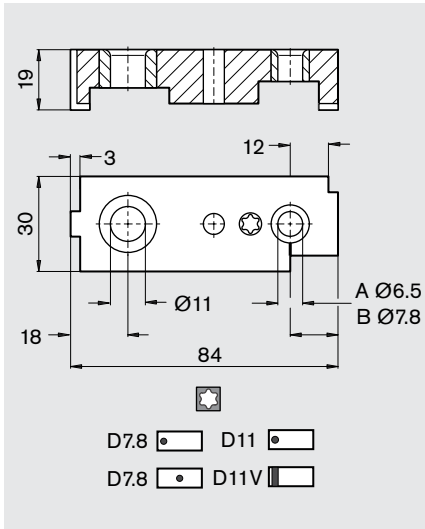


Description	Lot Size	Part Number
Drill and boring jig for 5.8mm holes 	1	3 842 537 556

Section 15: Tools

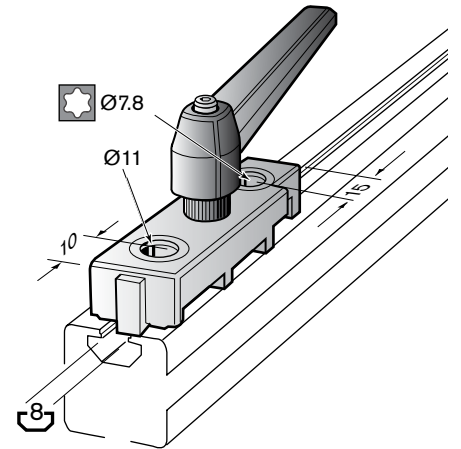
Drill Bits and Jigs

8mm Drill and Boring Jig



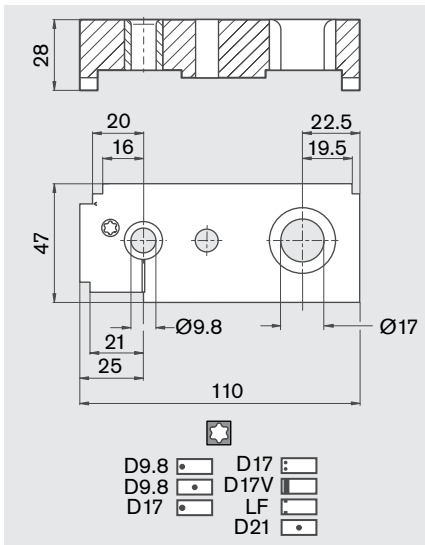
Features:

- Built-in lock/release handle simplifies use
- For use with profiles with 8mm T-slots, including 30x30, 30x60, etc.
- Two versions are available:
- Positions 7.8mm access holes for Torx head connection screws and 11mm holes for bolt connectors



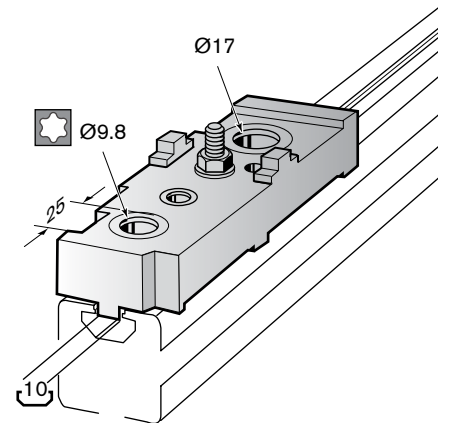
Description	Lot Size	Part Number
Drill and boring jig for 7.8mm and 11mm holes 	1	3 842 528 577

10mm Drill and Boring Jig for 40-/50-series Profiles



Features:

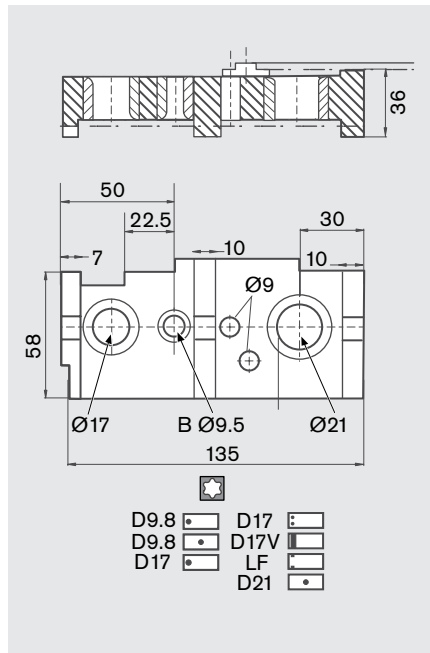
- For use with 40-series and 50-series profiles ONLY
- Fastens securely in place with a T-bolt and 13mm flange nut
- Allows positioning of 9.8mm access holes for Torx head connection screws
- Positions 17mm holes for bolt connectors and other fasteners



Description	Lot Size	Part Number
Drill and boring jig for 9.8mm and 17mm holes 	1	3 842 530 400

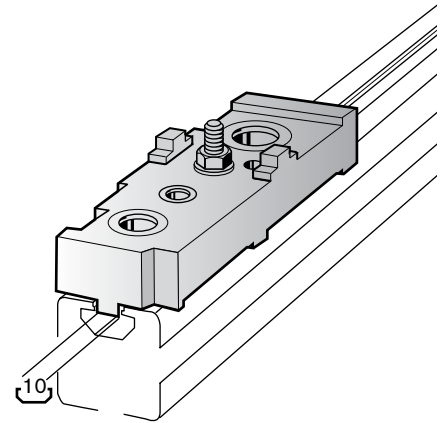
Section 15: Tools

10mm Drill and Boring Jig for 45-/60-series Profiles 



Features:

- Fastens securely in place with a T-bolt and 13mm flange nut
- For use with profiles with 45-series and 60-series profiles, including 45x45, 45x60, 60x60, 60x90, etc.
- Two versions are available:
- Positions 9.8mm access holes for Torx head connection screws, 17mm for bolt connectors, and 21mm holes for pneumatic port kits



Description

Drill and boring jig for 9.8mm, 17mm, and 21mm holes

Lot Size

1

Part Number

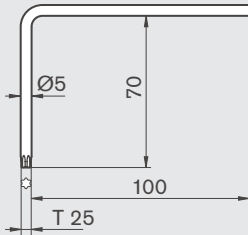
3 842 528 574

Section 15: Tools

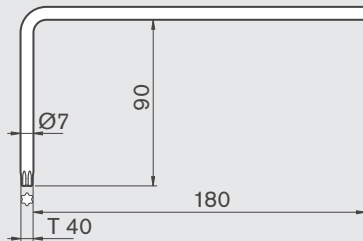
Wrenches

Torx Wrenches

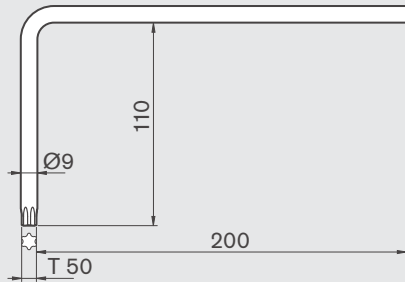
A



B

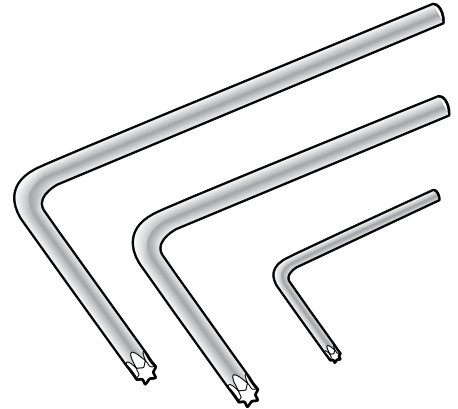





C



Features:

- For use with S6 Torx head self-tapping connection screws
- Standard key wrench **A** features long neck to provide extra clearance
- T40 wrench for use with S8 Torx head self-tapping connection screws
- T50 wrench for use with S12 Torx head self-tapping connection screws
- Standard key wrenches (**A & B**) feature long neck to provide extra clearance



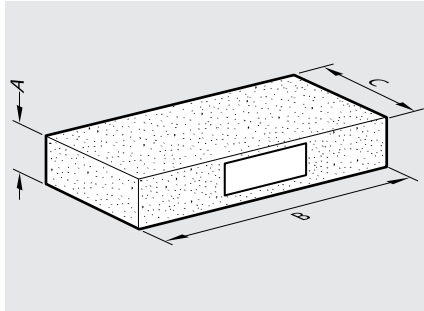
Description		Lot Size	Part Number
A T25 Torx standard key wrench 		1	3 842 528 590
B T40 Torx standard key wrench 		5	3 842 528 588
C T50 Torx standard key wrench 		5	3 842 528 586

* For smaller quantities, please contact your local distributor.

Section 15: Tools

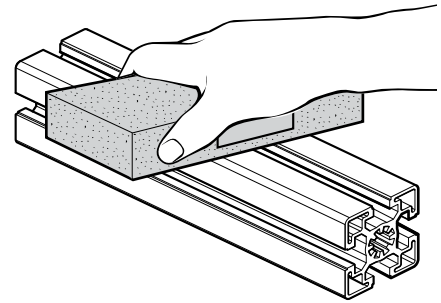
Other Tools

Cleaning Block



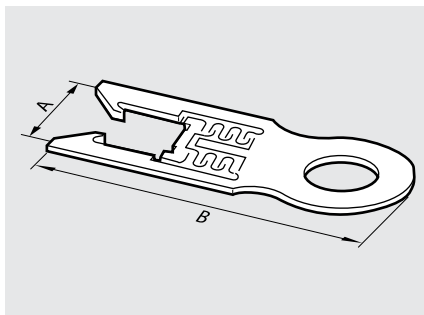
Features:

- Removes dirt, marks, and small scratches from profiles and other anodized surfaces
- Made with very long-lasting elastic-based material impregnated with fine abrasives



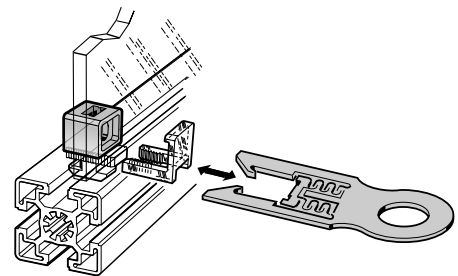
Description	Lot Size	Part Number
Cleaning block	1	3 842 518 650

VarioFix Puller



Features:

- Quickly and easily removes VarioFix clamping pieces, even in hard-to-reach areas
- Hooks over the snap-in clip of the VarioFix block, spreads the teeth on the clip, then is removed with the clip



Description	Lot Size	Part Number
VarioFix puller	1	3 842 526 589