



Aluminum T-Slotted Rail

45 Series Metric T-Slotted Aluminum Rail

SureFrame™ T-slotted aluminum rails are extruded exclusively for AutomationDirect, with features, quality, and performance you expect. SureFrame T-slotted rails are compatible with other popular brands.

- Cut to length in 0.01 cm increments
- Minimum cut length: 15.24 cm
- Maximum cut length: 228.0 cm
- Cut accuracy: +/- 0.015 cm [0.15mm]
- Corrosion and UV resistant



| Properties | |
|---------------------|-----------------------------|
| Material | Aluminum 6063-T6 |
| Finish | Clear Anodize |
| Hardness | Webster Model B 11-12 |
| Straightness | 0.0125 inch/ft [1.042 mm/m] |
| Twist | 0.25°/ft [0.25°/305mm] |



| 45 Series (metric) | | | | | | | | |
|---------------------------|------------|---------------------|--------------|--------------|----------------------|----------------------------------|----------------------------------|---------------------|
| Slot Size 10 | | Core Hole Ø 10.0 mm | | | | | | |
| Part Number | Part Image | Price per cm | Profile Size | Weight Class | Weight lbs/ft [kg/m] | Moment of Inertia Lx | Moment of Inertia Ly | Drawing Link |
| 45-4545C | | \$0.24 | 45 x 45mm | Standard | 1.480 [2.202] | 0.389 [16.824 cm ⁴] | 0.389 [16.824 cm ⁴] | PDF |
| 45-4545CL | | \$0.19 | | Light | 1.100 [1.637] | 0.290 [12.064m ⁴] | 0.290 [12.064m ⁴] | PDF |
| 45-4590C | | \$0.51 | 45 x 90mm | Standard | 3.081 [4.585] | 0.866 [36.026 cm ⁴] | 3.295 [137.072 cm ⁴] | PDF |
| 45-4590CL | | \$0.38 | | Light | 2.159 [3.213] | 0.708 [29.453 cm ⁴] | 2.584 [107.494 cm ⁴] | PDF |
| 45-9090C | | \$0.85 | 90 x 90mm | Standard | 5.518 [8.212] | 5.941 [247.146 cm ⁴] | 5.941 [247.146 cm ⁴] | PDF |

Extruded T-slotted rails have a thru Core Hole feature that can be used to attach various components to the end of the profile using:

- Self-tapping / thread-forming screws (no tapping needed)
- A tap to thread the core hole for a threaded fastener



Please Note: Prices on aluminum are closely tied to the market price. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.



Aluminum T-Slotted Rail

Deflection Calculations

Using the calculations below, find your approximate deflection* for a specific extrusion.
See table below for variations.

As always when calculating, use diligence and work only in either imperial or metric units at one time.

"E" = Modulus of Elasticity

"F" = Force

"I" = Moment of Inertia

"L" = Length

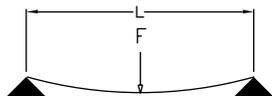
"W" = Weight

| Aluminum 6063-T6 Properties | |
|-----------------------------|---------------------------|
| Yield Strength | 29,007 psi [200 MPa] |
| Tensile Strength | 33,359 psi [230 MPa] |
| Modulus of Elasticity | 10,000,000 psi [68.9 GPa] |

**for reference only*

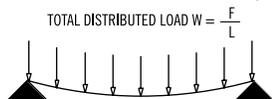
Supported Loads

CONCENTRATED LOAD AT CENTER (simply supported)



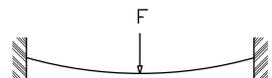
$$\text{MAX DEFLECTION} = \frac{FL^3}{48 EI}$$

UNIFORMLY DISTRIBUTED LOAD (simply supported)



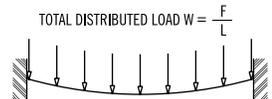
$$\text{MAX DEFLECTION} = \frac{5}{84} \frac{WL^4}{EI}$$

CONCENTRATED LOAD AT CENTER (between fixed supports)



$$\text{MAX DEFLECTION} = \frac{FL^3}{192 EI}$$

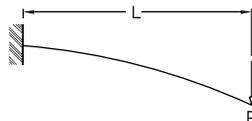
UNIFORMLY DISTRIBUTED LOAD (between fixed supports)



$$\text{MAX DEFLECTION} = \frac{WL^4}{384 EI}$$

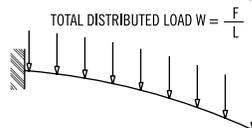
Cantilever Loads

CONCENTRATED LOAD AT CENTER (simply supported)



$$\text{MAX DEFLECTION} = \frac{FL^3}{3 EI}$$

UNIFORMLY DISTRIBUTED LOAD (simply supported)



$$\text{MAX DEFLECTION} = \frac{WL^4}{8 EI}$$

FATH® T-Slotted Rail Accessories

T-Slot Nuts

- Designed to fit into the T-slot cavity of extruded aluminum rails.
- Hammer nuts provide safe electrostatic discharging (ESD) connection.
- No machining required.
- Material: zinc plated steel



| T-Slot Nuts Selection | | | | |
|-----------------------|-------------------------------------|--------------|------------------------------|----------------|
| Part Image | Nut Type | Installation | Holds Position Without Screw | ESD Connection |
| | Double Economy T-Nut | | | No |
| | Economy T-Nut | | | |
| | Hammer Nut | | No | Yes |
| | Slide-In Nut | | | |
| | Roll-In Nut with Leaf Spring | | Yes | No |
| | Roll-In Nut with Spring Loaded Ball | | | |

45 Series T-Slot Nuts

Fits Slot Size 10

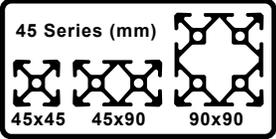
45 Series (mm)

45x45 45x90 90x90

| Part Number | Part Image | Price | Nut Type | Thread Size | Pack Quantity | Drawing Link |
|------------------------|------------|---------|--------------|-------------|---------------|---------------------|
| 161131 | | \$8.00 | Hammer Nut | M4-0.7 | 10 | PDF |
| 161121 | | \$21.00 | Roll-In Nut | | | PDF |
| 161132 | | \$8.00 | Hammer Nut | M5-0.8 | | PDF |
| 161122 | | \$21.00 | Roll-In Nut | | | PDF |
| 161133 | | \$8.00 | Hammer Nut | M6-1.0 | | PDF |
| 162886 | | \$12.50 | Slide-In Nut | | | PDF |
| 151239 | | \$24.00 | Roll-In Nut | | | PDF |

FATH® T-Slotted Rail Accessories

T-Slot Nuts - Continued

| 45 Series T-Slot Nuts - Continued | | | | | | |
|-----------------------------------|---|---|----------------------|---|----------------------------|----------------------------|
| | | Fits  Slot Size 10 | |  | | |
| Part Number | Part Image | Price | Nut Type | Thread Size | Pack Quantity | Drawing Link |
| <u>151237</u> |  | \$7.25 | Economy T-Nut | M8-1.25 | 10 | <u>PDF</u> |
| <u>148803</u> |  | \$5.75 | Double Economy T-Nut | | 4 | <u>PDF</u> |
| <u>151238</u> |  | \$9.00 | Hammer Nut | | 10 | <u>PDF</u> |
| <u>162887</u> |  | \$12.50 | Slide-In Nut | | | <u>PDF</u> |
| <u>151240</u> |  | \$24.00 | Roll-In Nut | | | <u>PDF</u> |
| <u>162888</u> |  | \$17.00 | Slide-In Nut | M10-1.5 | <u>PDF</u> | |

FATH® T-Slotted Rail Accessories

Fasteners

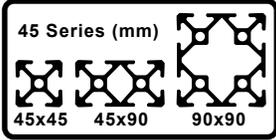
- Choose from 4 Head types in numerous lengths
- Hex socket head
- Select desired T-Slot nut style with corresponding thread size.
- Material: Black zinc plated or bright zinc plated steel, prevents corrosion better than typical black oxide coatings



| 45 Series Fasteners | | | | | | | |
|------------------------|------------|------------------------|-------------------|------------------------------|-------------|---------------|---------------------|
| Fits | | Slot Size 10 | | | | | |
| Part Number | Part Image | Price | Thread X Length | Head Type | Color | Pack Quantity | Drawing Link |
| 162994 | | \$8.00 | 8-32 UNF x 3/8in | Button head socket cap screw | Flat black | 10 | PDF |
| 161073 | | \$7.75 | 8-32 UNF x 1/2in | Flat head socket cap screw | | | PDF |
| 162993 | | \$7.50 | 10-32 UNF x 3/8in | Button head socket cap screw | | | PDF |
| 162995 | | \$7.75 | 10-32 UNF x 1/2in | Socket head cap screw | | | PDF |
| 161088 | | \$2.25 | M4-0.7 x 8mm | Socket head cap screw | Bright zinc | | PDF |
| 161089 | | \$2.50 | M4-0.7 x 10mm | | | | PDF |
| 161056 | | \$1.00 | M4-0.7 x 12mm | Button head socket cap screw | | | PDF |
| 161076 | | \$1.50 | | Flat head socket cap screw | | | PDF |
| 161057 | | \$1.25 | M5-0.8 x 10mm | Button head socket cap screw | | | PDF |
| 161090 | | \$2.50 | | Socket head cap screw | | | PDF |
| 161077 | | \$1.75 | | Flat head socket cap screw | | | PDF |
| 161091 | | \$2.50 | M5-0.8 x 12mm | Socket head cap screw | | | PDF |
| 161058 | | \$1.75 | | Button head socket cap screw | | | PDF |
| 161092 | | \$2.50 | M6-1.0 x 10mm | Socket head cap screw | | | PDF |

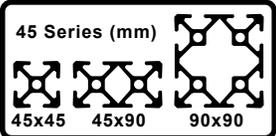
FATH® T-Slotted Rail Accessories

Fasteners - Continued

| 45 Series Fasteners - Continued | | | | | | | |
|---------------------------------|---|--|---|------------------------------|-------------|---------------|----------------------------|
| | | Fits  |  | | | | |
| Part Number | Part Image | Price | Thread X Length | Head Type | Color | Pack Quantity | Drawing Link |
| <u>161078</u> |  | \$2.25 | M6-1.0 x 12mm | Flat head socket cap screw | Bright zinc | 10 | <u>PDF</u> |
| <u>161059</u> |  | \$2.00 | | Button head socket cap screw | | | <u>PDF</u> |
| <u>161093</u> |  | \$2.75 | | Socket head cap screw | | | <u>PDF</u> |
| <u>161079</u> |  | \$2.50 | M6-1.0 x 14mm | Flat head socket cap screw | | | <u>PDF</u> |
| <u>161060</u> |  | \$2.25 | M6-1.0 x 14mm | Button head socket cap screw | | | <u>PDF</u> |
| <u>161094</u> |  | \$2.75 | | Socket head cap screw | | | <u>PDF</u> |
| <u>161080</u> |  | \$2.50 | M6-1.0 x 16mm | Flat head socket cap screw | | | <u>PDF</u> |
| <u>161061</u> |  | \$2.50 | | Button head socket cap screw | | | <u>PDF</u> |
| <u>161095</u> |  | \$2.75 | | Socket head cap screw | | | <u>PDF</u> |
| <u>161062</u> |  | \$2.75 | M6-1.0 x 18mm | Button head socket cap screw | | | <u>PDF</u> |
| <u>161096</u> |  | \$3.00 | | Socket head cap screw | | | <u>PDF</u> |
| <u>161081</u> |  | \$2.50 | M6-1.0 x 20mm | Flat head socket cap screw | | | <u>PDF</u> |
| <u>161063</u> |  | \$2.75 | | Button head socket cap screw | | | <u>PDF</u> |
| <u>161097</u> |  | \$3.25 | | Socket head cap screw | | | <u>PDF</u> |
| <u>161064</u> |  | \$3.25 | M6-1.0 x 25mm | Button head socket cap screw | | | <u>PDF</u> |

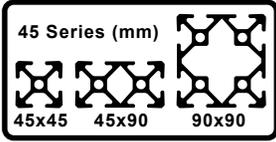
FATH® T-Slotted Rail Accessories

Fasteners - Continued

| 45 Series Fasteners - Continued | | | | | | | | | | | |
|---------------------------------|---|--|---|--------------------------------------|-------------|---------------|---------------------|----|---------------------|----|---------------------|
| | | Fits  |  | | | | | | | | |
| Part Number | Part Image | Price | Thread X Length | Head Type | Color | Pack Quantity | Drawing Link | | | | |
| 161082 |  | \$4.75 | M8-1.25 x 12mm | Flat head socket cap screw | Bright zinc | 10 | PDF | | | | |
| 161065 |  | \$4.25 | | Button head socket cap screw | | | PDF | | | | |
| 161098 |  | \$4.75 | | Socket head cap screw | | | PDF | | | | |
| 161066 |  | \$4.50 | M8-1.25 x 14mm | Button head socket cap screw | | | Bright zinc | 10 | PDF | | |
| 161083 |  | \$5.00 | M8-1.25 x 14mm | Flat head socket cap screw | | | | | PDF | | |
| 161099 |  | \$5.00 | | Socket head cap screw | | | | | PDF | | |
| 161084 |  | \$5.50 | M8-1.25 x 16mm | Flat head socket cap screw | | | | | Gloss black | 10 | PDF |
| 161100 |  | \$5.50 | | Socket head cap screw | | | | | | | PDF |
| 161067 |  | \$4.50 | | Button head socket cap screw | | | | | | | PDF |
| 151183 |  | \$4.75 | M8-1.25 x 16mm | Flanged button head socket cap screw | Gloss black | 10 | | | | | PDF |
| 151184 |  | \$5.50 | | Flanged button head socket cap screw | | | | | | | PDF |
| 161085 |  | \$5.50 | M8-1.25 x 18mm | Flat head socket cap screw | | | | | | | Bright zinc |
| 161068 |  | \$5.00 | | Button head socket cap screw | | | PDF | | | | |
| 161101 |  | \$5.50 | | Socket head cap screw | | | PDF | | | | |
| 151241 |  | \$4.50 | M8-1.25 x 20mm | Button head socket cap screw | | | Bright zinc | 10 | | | |

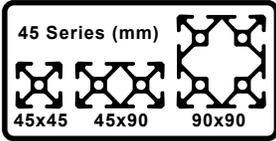
FATH® T-Slotted Rail Accessories

Fasteners - Continued

| 45 Series Fasteners - Continued | | | | | | | |
|---------------------------------|---|--|-----------------|---|-------------|---------------|------------------------------|
| | | Fits  | |  | | | |
| Part Number | Part Image | Price | Thread X Length | Head Type | Color | Pack Quantity | Drawing Link |
| <u>161102</u> |  | \$5.75 | M8-1.25 x 20mm | Socket head cap screw | Bright zinc | 10 | <u>PDF</u> |
| <u>161086</u> |  | \$7.00 | M8-1.25 x 25mm | Flat head socket cap screw | | | <u>PDF</u> |
| <u>161069</u> |  | \$5.25 | | Button head socket cap screw | | | <u>PDF</u> |
| <u>161070</u> |  | \$8.00 | | M8-1.25 x 40mm | | | Button head socket cap screw |
| <u>161071</u> |  | \$15.00 | M12-1.75 x 25mm | <u>PDF</u> | | | |
| <u>161072</u> |  | \$23.00 | M12-1.75 x 40mm | <u>PDF</u> | | | |
| <u>118590</u> |  | \$2.25 | M8-1.25 x 25mm | Hammer head screw and flange nut | | | |

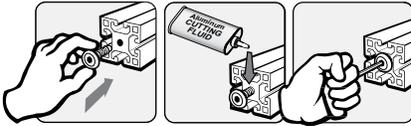
FATH® T-Slotted Rail Accessories

Fasteners - Continued

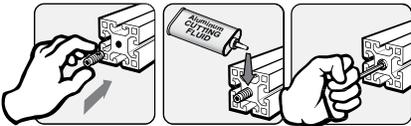
| 45 Series Self Forming / Tapping Screws | | | | | | | |
|---|---|---|----------------------------|---|--|---------------|---------------------|
|  | |  | | | Works with Aluminum with hole diameter 0.394" - 0.413" [10.0 - 10.5 mm] | | |
| Part Number | Part Image | Price | Thread X Length | Description | Color | Pack Quantity | Drawing Link |
| 161110 |  | \$10.50 | 12 x 30mm | Self-Tapping Screw Button head socket cap T-50 Torx | Bright zinc | 10 | PDF |
| 161111 |  | \$28.00 | 12 x 40mm | Self-Tapping Screw Button head socket cap | | | PDF |
| 161042 |  | \$27.00 | M8-1.25 Internal thread | Reducer Bushing | | | PDF |

Self Forming / Tapping Screw Installation

Self Forming / Tapping Screw



Reducer Bushing



FATH® T-Slotted Rail Accessories

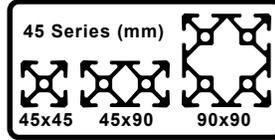
Connecting Components

- Connects two or three T-slot rails together
- Recommended ADC Fastener based on part feature, slot Depth and core hole
- Material: varies by part



45 Series Connecting Components

Fits  Slot Size 10



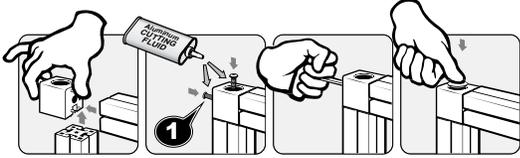
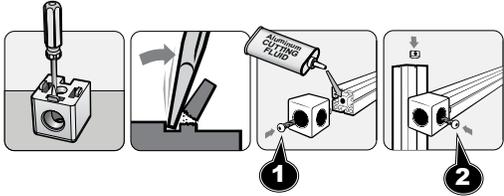
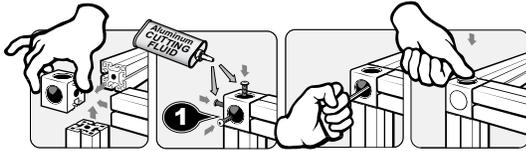
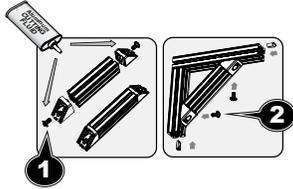
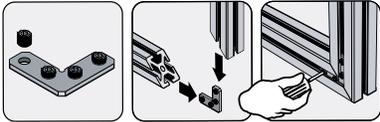
| Part Number | Part Image | Price | Description | Fits Profile | Material | Recommended Screw Fastener (ADC Part Number) | | Pack Quantity | Drawing Link |
|----------------------------------|---|---------|--------------------------|---------------------------------|---------------------|--|---------------------------------------|---------------------|---------------------|
| | | | | | | Core Hole Attachment 1 | *T-Slot Attachment 2 | | |
| 148960 |  | \$11.00 | 2d Cube Connector | 45 x 45mm | Die-cast aluminum | 161110 | 161068 | 1 | PDF |
| 148961 |  | \$11.00 | 3d Cube Connector | | | | n/a | | PDF |
| 151246 |  | \$10.00 | Angle Connector | | | | 151241 | | PDF |
| 151247 |  | \$16.50 | | 45 x 90mm | PDF | | | | |
| ** 151242 |  | \$96.00 | T-Matic Connector | All 45 Light Series (45-xxxxCL) | Zinc plated steel | n/a | 10 | PDF | |
| ** 151243 |  | \$59.00 | Automatic Connector | | Steel | | | PDF | |
| ** 151244 |  | \$11.00 | Automatic Butt Connector | | PDF | | | | |
| 151245 |  | \$11.50 | Milling Connector | All 45 Series | Zinc plated steel | n/a | 1 | PDF | |
| 151248 |  | \$18.00 | Connecting Strip | | | | | PDF | |
| 162892 |  | \$13.00 | Direct Connector | | Steel | | Fasteners included | PDF | |
| 162962 |  | \$12.50 | Miter Connector | | | | M10-1.25 x 8mm set screw (4) included | PDF | |

*T-Slot Nut also required.

** Does not fit 45 standard series (45-xxxxC)

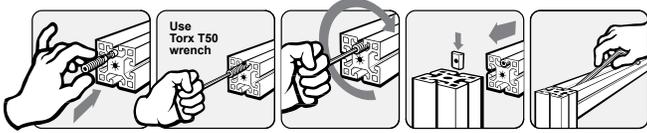
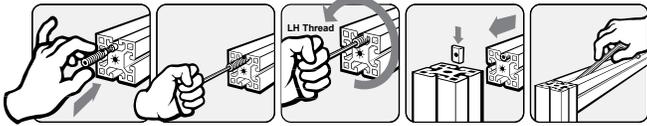
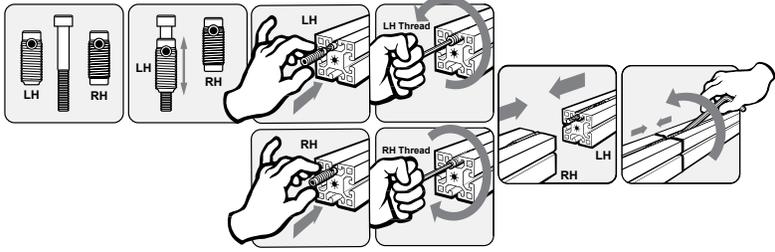
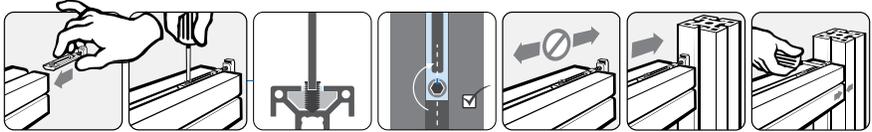
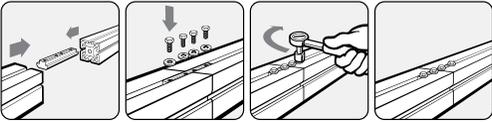
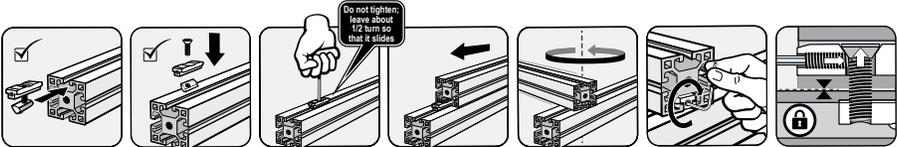
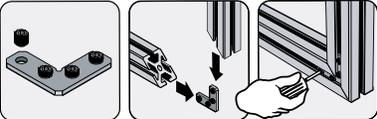
FATH® T-Slotted Rail Accessories

Connecting Components - Continued

| Connecting Components Installation | |
|--|--|
| Core Hole Installation | T-Slot Installation |
| <p>2D Cube Connector</p>  |  |
| <p>3D Cube Connector</p>  | <p>n/a</p> |
| <p>Angle Connector</p>  | |
| <p>Miter Connector</p>  | |

FATH® T-Slotted Rail Accessories

Connecting Components - Continued

| Connecting Components Installation | |
|------------------------------------|--|
| T-Slot Installation | |
| T-matic Connector |  |
| Automatic Connector |  |
| Automatic Butt Connector |  |
| Milling Connector |  |
| Connecting Strip |  |
| Direct Connector |  |
| Miter Connector |  |

FATH® T-Slotted Rail Accessories

Joining Plates

- Connects two or more T-slot rails together.
- Recommended ADC Fastener based on part feature and slot depth.
- Material: Anodized aluminum



| 45 Series Joining Plates | | | | | | |
|--------------------------|------------|-----------------|------------------------|---|---------------|---------------------|
| Fits | | Slot Size 10 | 45 Series (mm) | | | |
| Part Number | Part Image | Price | Description | Recommended Screw Fastener - T-Slot Hole Attachment (ADC Part Number) | Pack Quantity | Drawing Link |
| 148851 | | \$8.25 | Straight Flat Plate | 151183 or 151184 | 1 | PDF |
| 162987 | | \$10.50 | | | | PDF |
| 148857 | | \$12.00 | | | | PDF |
| 148854 | | \$10.00 | Square Flat Plate | | | PDF |
| 148859 | | \$18.00 | Rectangular Flat Plate | | | PDF |
| 151249 | | \$19.00 | Flat Plate | | | PDF |
| 151250 | | \$20.50 | T-Shaped Flat Plate | | | PDF |
| 148863 | | \$29.50 | | | | PDF |

FATH® T-Slotted Rail Accessories

Brackets

- Connects two T-slot rails together at a 90° angle
- Recommended ADC Fastener based on part feature and slot depth
- Material: varies by part

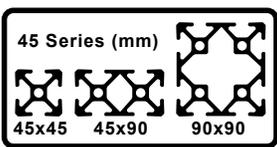


| 45 Series Brackets | | | | | | | | |
|------------------------|------------|---------|--|--|-------------------------|---------------|---------------------|---------------------|
| | | | | | | | | |
| Part Number | Part Image | Price | Description | Recommended Screw Fastener (ADC Part Number) | | Pack Quantity | Material | Drawing Link |
| | | | | Core Hole Attachment ① | *T-Slot Attachment ② | | | |
| 151251 | | \$4.00 | Angle Bracket | n/a | 151241 | 1 | Die-cast aluminum | PDF |
| 151252 | | \$7.75 | | | | | | PDF |
| 148899 | | \$5.25 | PDF | | | | | |
| 148902 | | \$7.50 | PDF | | | | | |
| 148904 | | \$7.50 | PDF | | | | | |
| 148907 | | \$11.50 | PDF | | | | | |
| 148912 | | \$5.25 | 151183 or 151184 | | Anodized aluminum | | PDF | |
| 148914 | | \$12.00 | PDF | | | | | |
| 148913 | | \$11.00 | PDF | | | | | |
| 148979 | | \$21.50 | PDF | | | | | |

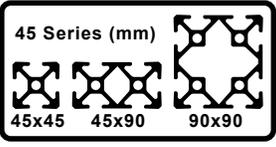
*T-Slot Nut also required.

FATH® T-Slotted Rail Accessories

Brackets - Continued

| 45 Series Brackets - Continued | | | | | | | | |
|--------------------------------|---|---|---------------------------------|---|--------------------------------|---------------|---------------------------------------|---------------------|
| | | Slot Size Fits  | |  | | | | |
| Part Number | Part Image | Price | Description | Recommended Screw Fastener (ADC Part Number) | | Pack Quantity | Material | Drawing Link |
| | | | | Core Hole Attachment 1 | *T-Slot Attachment 2 | | | |
| 151253 |  | \$29.50 | Pivot Joint | 161042 and 161067 Install 161042 first then 161067 | 161067 | 1 | Die-cast zinc | PDF |
| 151254 |  | \$39.50 | Pivot Joint With Locking Handle | | | | | PDF |
| 163016 |  | \$35.00 | 1-Slot Pivot Joint | 161069 and 161042 install 161042 first then 161069 | 161068 | | Die-cast zinc/die-cast aluminum/nylon | PDF |
| 163019 |  | \$53.00 | 2-Slot Pivot Joint | | | | | PDF |

*T-Slot Nut also required.

| 45 Series Reducer Bushing | | | | | | | |
|---------------------------|---|---|----------------------------|---|-------------|---------------|---------------------|
| | | 45 Series Fits  Core Hole | |  | | | |
| Part Number | Part Image | Price | Thread X Length | Description | Color | Pack Quantity | Drawing Link |
| 161042 |  | \$27.00 | M8-1.25 Internal thread | Reducer Bushing | Bright zinc | 10 | PDF |

FATH® T-Slotted Rail Accessories

Brackets - Continued

| Brackets Installation | |
|------------------------|---------------------|
| Core Hole Installation | T-Slot Installation |
| Pivot Joint* | |
| | |
| Pivot Joint | |
| | |
| Reducer Bushing | |
| | |

*For 45 series installation, the 10mm embossed key should face toward the aluminum extrusion upon assembly.

FATH® T-Slotted Rail Accessories

Bases

- Recommended ADC Fastener based on part features and extrusion core hole
- Material: varies by part



45 Series Bases

Fits Slot Size 10

45 Series (mm)

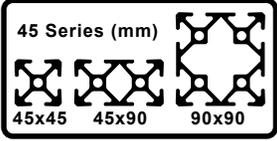
45x45 45x90 90x90

| Part Number | Part Image | Price | Diameter | Description | Fits | Load Rating kg [lb] | Recommended Screw Fastener (ADC Part Number) | | Pack Quantity | Material | Drawing Link | | | | | | | | | | |
|------------------------|------------|---------|-------------------------------|-----------------------------------|-------------------------------------|------------------------|---|-----------------------------------|------------------|------------------|---------------------|---|----------------------|---------------------|---|-------|---------------------|-----|---|------------------|---------------------|
| | | | | | | | Core Hole Attachment 1 | *T-Slot Attachment 2 | | | | | | | | | | | | | |
| 151259 | | \$20.50 | n/a | M12-1.75 Transport/ Base Plate | 45 x 90mm | n/a | 161111 (2) included with kit | n/a | 1 | Die-cast zinc | PDF | | | | | | | | | | |
| 151260 | | \$25.00 | | | 90 x 90mm | | 161111 (4) included with kit | | | | PDF | | | | | | | | | | |
| 162951 | | \$20.00 | | M16-2.0 Transport/ Base Plate | 45 x 90mm | | 161111 (2) included with kit | | | | n/a | 1 | Zinc plated steel | PDF | | | | | | | |
| 162952 | | \$20.00 | | | M20-2.5 Transport/ Base Plate | | 161111 (4) included with kit | | | | | | | PDF | | | | | | | |
| 162953 | | \$25.00 | | M16-2.0 Transport/ Base Plate | 90 x 90mm | | 161111 (4) included with kit | | | | | | | n/a | 1 | Nylon | PDF | | | | |
| 162954 | | \$25.00 | | | M20-2.5 Transport/ Base Plate | | 161111 (4) included with kit | | | | | | | | | | PDF | | | | |
| 151231 | | \$4.50 | | 1.57 in [39.0 mm] | Swivel Base With Anti-Slip Plate | | Transport/Base Plate 151259 or 151260 | | | | | | | | | | 770 [1698]** | n/a | 1 | Die-cast zinc | PDF |
| 162938 | | \$6.50 | | | | | Transport/Base Plate 162951 or 162953 | | | | | | | | | | 1450 [3197]** | | | | PDF |
| 162939 | | \$11.00 | | | | | Transport/Base Plate 162952 or 162954 | | | | | | | | | | 2430 [5357]** | | | | PDF |
| 151068 | | \$4.00 | | 1.57 in [39.0 mm] | Swivel Base With Anti-Slip Plate | | Any 15mm ball Threaded Rod | | | | | | | | | | 900 [1984] | | | | n/a |
| 151071 | | \$9.50 | Any 15mm ball Threaded Rod | | | 3000 [6614] | PDF | | | | | | | | | | | | | | |

*T-Slot Nut also required.
 **Based on installation with Transport / Base Plate
 Load rating of a swivel foot assembly is based on the part with the lowest load rating, typically the threaded rod.
 Example:
 Threaded rod load rating = 210kg [463lb]
 Swivel base load rating = 3000kg [6614lb]
 Swivel foot assembly load rating = 210kg [463lb]

FATH® T-Slotted Rail Accessories

Bases - Continued

| 45 Series Bases - continued | | | | | | | | | | | |
|-----------------------------|---|--|----------------------|---|----------------------------|------------------------|---|--------------------------------|---------------|-------------------|---------------------|
| | | Fits  | |  | | | | | | | |
| Part Number | Part Image | Price | Diameter | Description | Fits | Load Rating kg [lb] | Recommended Screw Fastener (ADC Part Number) | | Pack Quantity | Material | Drawing Link |
| | | | | | | | Core Hole Attachment 1 | *T-Slot Attachment 2 | | | |
| 151072 |  | \$17.00 | 3.11 in [79.0 mm] | Swivel Base With Anti-Slip Plate | Any 15mm ball Threaded Rod | 3000 [6614] | n/a | n/a | 1 | Die-cast zinc | PDF |
| 151073 |  | \$17.00 | | | | | | | | | PDF |
| 151069 |  | \$6.00 | | | | 900 [1984] | PDF | | | | |
| 151070 |  | \$6.00 | | | | | PDF | | | | |
| 151255 |  | \$10.00 | 3.90 in [99.0 mm] | | | 900 [1984] | n/a | | | Nylon | PDF |
| 151256 |  | \$10.00 | | | | | | | | | PDF |
| 151257 |  | \$24.00 | 3.90 in [99.0 mm] | | | 3500 [7716] | n/a | | | Die-cast zinc | PDF |
| 151258 |  | \$24.00 | | | | | | | | | PDF |
| 162933 |  | \$12.50 | See 2D drawing | Extended Swivel Base | Any 15mm ball Threaded Rod | 1000 [2204] | | | | Nylon | PDF |
| 162934 |  | \$27.00 | | | | 3000 [6613] | | | | | PDF |
| 162959 |  | \$12.50 | n/a | Floor Bracket | All 45 Series | n/a | | 161068 | | Anodized aluminum | PDF |

*T-Slot Nut also required.

**Based on installation with Transport / Base Plate

Load rating of a swivel foot assembly is based on the part with the lowest load rating, typically the threaded rod.

Example:

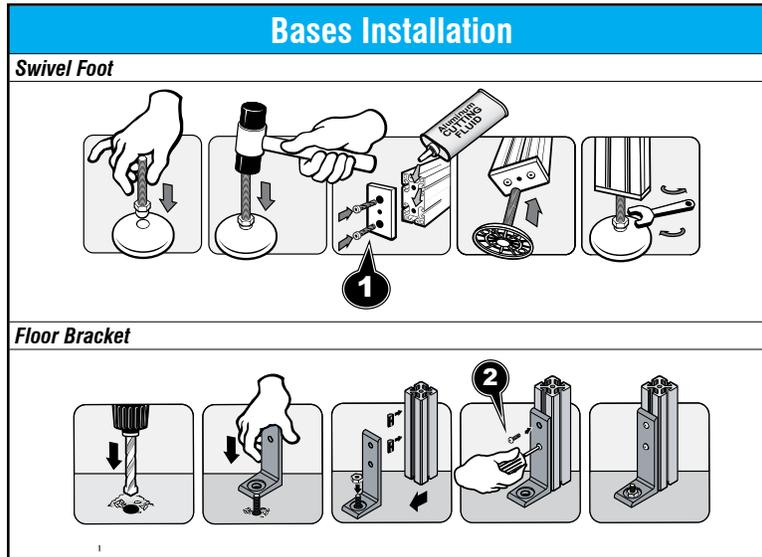
Threaded rod load rating = 210kg [463lb]

Swivel base load rating = 3000kg [6614lb]

Swivel foot assembly load rating = 210kg [463lb]

FATH[®] T-Slotted Rail Accessories

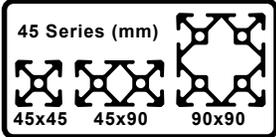
Bases - Continued



FATH® T-Slotted Rail Accessories

Casters

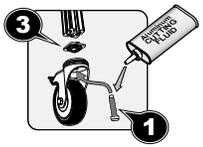
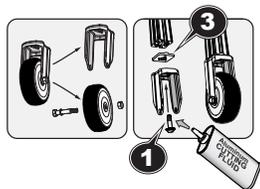
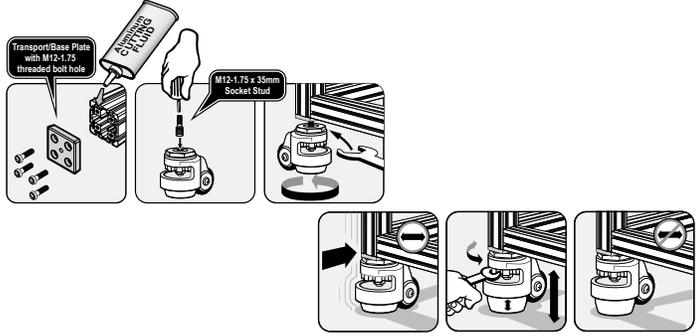
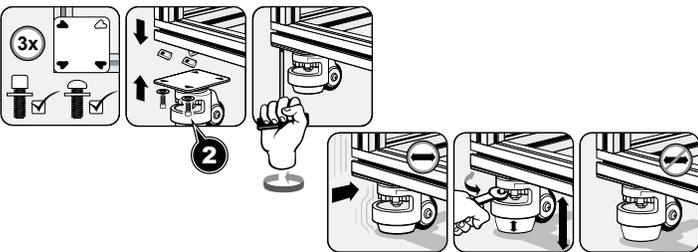
- Recommended ADC Fastener based on part feature and core hole
- Material: varies by part

| 45 Series Casters | | | | | | | | | | |
|------------------------|---|--|--------------------------------------|---|------------------------|---|-----------------------------------|------------------|--|------------------------|
| | | Fits  | |  <p>45 Series (mm) 45x45 45x90 90x90</p> | | | | | | |
| Part Number | Part Image | Price | Description | Requires | Load Rating kg [lb] | Recommended Screw Fastener (ADC Part Number) | | Pack Quantity | Material | Drawing Link |
| | | | | | | Core Hole Attachment 1 | *T-Slot Attachment 2 | | | |
| 151134 |  | \$47.00 | Swivel Caster | Requires Swivel Caster Adapter Plate 151261 | 122 [269] | 161111 | | 1 | Thermoplastic polyurethane/nylon/steel | PDF |
| 151135 |  | \$40.50 | Fixed Caster | Requires Fixed Caster Adapter Plate 161041 | | | | | | 161110 |
| 151261 |  | \$4.50 | 3 Swivel Caster Adapter Plate | Requires Swivel Caster 151134 | n/a | | | 1 | Steel | PDF |
| 161041 |  | \$3.25 | 3 Fixed Caster Adapter Plate | Requires Fixed Caster 151135 | | | | | Die-cast zinc | PDF |
| 151137 |  | \$62.00 | Swivel Caster | n/a | 122 [269] | | 161066 | 1 | Thermoplastic polyurethane/nylon/steel | PDF |
| 151138 |  | \$49.00 | Fixed Caster | | | | | | | PDF |
| 163010 |  | \$40.00 | Leveling Caster | Transport / Base Plate with M12-1.75 threaded hole | 250 [551] | | n/a | 1 | Die-cast aluminum/steel/nylon/rubber | PDF |
| 163011 |  | \$52.00 | | | 500 [1102] | | | | | PDF |
| 163012 |  | \$41.00 | | n/a | 250 [551] | 161061 | PDF | | | |
| 163013 |  | \$56.00 | | | 500 [1102] | | PDF | | | |

*T-Slot Nut also required

FATH® T-Slotted Rail Accessories

Casters - Continued

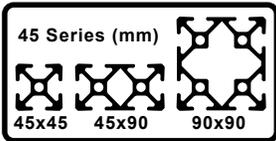
| Caster Installation | |
|--|--|
| Swivel Caster |  |
| Fixed Caster |  |
| Leveling Caster with bolt hole thread |  |
| Leveling Caster with mounting plate |  |

FATH® T-Slotted Rail Accessories

Hinges

- Recommended ADC Fastener based on part feature and slot depth
- Material: varies by part



| 45 Series Hinges | | | | | | | |
|------------------------|---|--|---|---|---------------|-------------------------------|---------------------|
| Fits | | Slot Size  |  | | | | |
| Part Number | Part Image | Price | Description | Recommended Screw Fastener *T-Slot Attachment (ADC Part Number) | Pack Quantity | Material | Drawing Link |
| 151262 |  | \$7.75 | Left-Hand Detachable Combination Hinge | 161080 | 1 | Fiberglass reinforced plastic | PDF |
| 151263 |  | \$7.75 | Right-Hand Detachable Combination Hinge | | | | PDF |
| 151264 |  | \$7.75 | Non-Detachable Combination Hinge | | | | PDF |
| 151265 |  | \$12.00 | Non-Detachable Combination Hinge With Locking Lever | | | | PDF |
| 151266 |  | \$18.00 | Left-Hand Detachable Combination Hinge | | | Die-cast aluminum | PDF |
| 151267 |  | \$18.00 | Right-Hand Detachable Combination Hinge | | | | PDF |
| 151268 |  | \$18.00 | Non-Detachable Combination Hinge | | | | PDF |

*T-Slot Nut also required

FATH® T-Slotted Rail Accessories

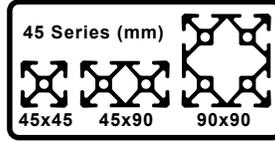
Panel and Door Elements

- Recommended ADC Fastener based on part feature and slot depth
- Material: varies by part



45 Series Panel and Door Elements

Fits Slot Size 10

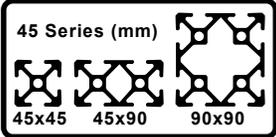


| Part Number | Part Image | Price | Description | Recommended Screw Fastener (ADC Part Number) | | Pack Quantity | Material | Drawing Link | |
|------------------------|------------|---------|----------------------------|--|-----------------------------|-------------------------------|-------------------------------|---------------------|---------------------|
| | | | | Core Hole Attachment 1 | *T-Slot Attachment 2 | | | | |
| 151146 | | \$6.00 | Bridge Handle | n/a | 161063 | 1 | Fiberglass reinforced plastic | PDF | |
| 151147 | | \$6.00 | | | 161067 | | | PDF | |
| 151148 | | \$6.25 | Cover Cap 3 | | n/a | | | PDF | |
| 151149 | | \$6.50 | Comfort Handle | | 151241 | | | PDF | |
| 151150 | | \$2.25 | Cover Cap 3 | | n/a | | | PDF | |
| 151151 | | \$12.50 | Comfort Handle | | 151241 | | | PDF | |
| 151152 | | \$3.00 | Cover Cap 3 | | n/a | | | PDF | |
| 151153 | | \$33.50 | Machine Handle | | 161100 | | | PDF | |
| 151154 | | \$47.00 | Compact Slam Latch | | 161061 | | | Die-cast aluminum | PDF |
| 151155 | | \$58.00 | Compact Sliding Door Latch | | | | | | PDF |
| 162972 | | \$34.00 | Sliding Door Guide | Fasteners included | n/a | Die-cast aluminum/nylon | PDF | | |
| 151156 | | \$37.00 | Emergency Opener | n/a | 161094 | Fiberglass reinforced plastic | PDF | | |
| 162963 | | \$8.50 | Magnetic Catch | | 161063 | Nylon/steel | PDF | | |

*T-Slot Nut also required

FATH® T-Slotted Rail Accessories

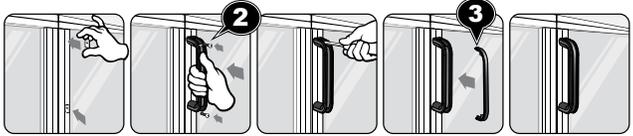
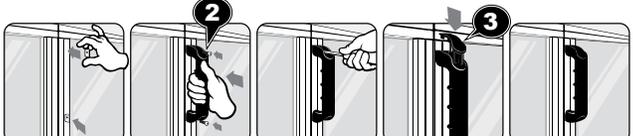
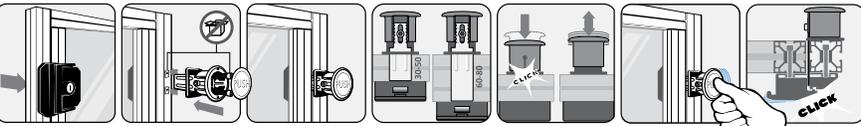
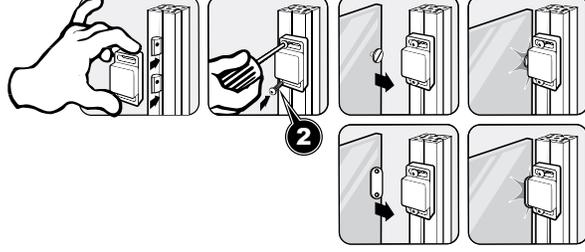
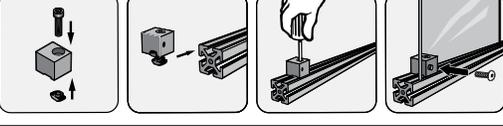
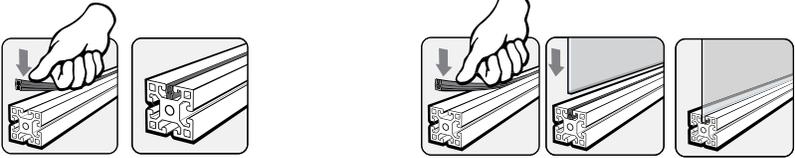
Panel and Door Elements - Continued

| 45 Series Panel and Door Elements - Continued | | | | | | | |
|---|---|--|-----------------------------|---|------------------------|----------------------------|----------------------------|
| | | Fits  | |  | | | |
| Part Number | Part Image | Price | Description | Recommended Screw Fastener *T-Slot Attachment 2 (ADC Part Number) | Pack Quantity | Material | Drawing Link |
| <u>162914</u> |  | \$5.75 | Panel Holder | <u>161068</u> | 1 | Anodized aluminum | <u>PDF</u> |
| <u>162919</u> |  | \$8.25 | | | | | <u>PDF</u> |
| <u>162926</u> |  | \$7.25 | Panel Mount Block | Fasteners included | | Lacquered aluminum | <u>PDF</u> |
| <u>162927</u> |  | \$7.25 | | | Powder-coated aluminum | <u>PDF</u> | |
| <u>162980</u> |  | \$3.25 | Panel Uni-Block | n/a | 10 | Nylon | <u>PDF</u> |
| <u>151269</u> |  | \$57.00 | Sealing Strip | | 2 | PVC/TPE | <u>PDF</u> |
| <u>151272</u> |  | \$110.00 | Cover Profile | | 25 | Polypropylene | <u>PDF</u> |
| <u>162981</u> |  | \$190.00 | Cover And Reduction Profile | | | | <u>PDF</u> |

*T-Slot Nut also required

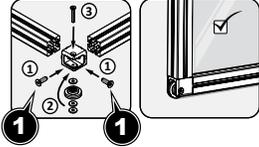
FATH® T-Slotted Rail Accessories

Panel and Door Elements - Continued

| Panel and Door Elements Installation | |
|--------------------------------------|--|
| Bridge Handle and Cover Cap |  |
| Comfort Handle and Cover Cap |  |
| Slam Latch |  |
| Sliding Door Latch |  |
| Emergency Opener |  |
| Magnetic Catch |  |
| Panel Mount Block |  |
| Cover and Reduction Profile |  |

FATH[®] T-Slotted Rail Accessories

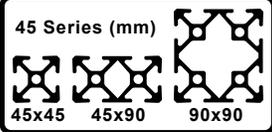
Panel and Door Elements - Continued

| Panel and Door Elements Installation - Continued | |
|--|---|
| <i>Panel Holder</i> |  |
| <i>Sliding Door Guide</i> |  |

FATH® T-Slotted Rail Accessories

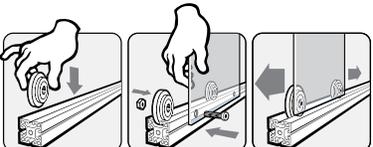
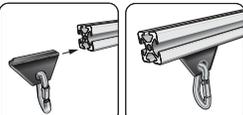
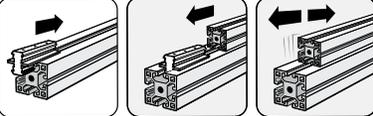
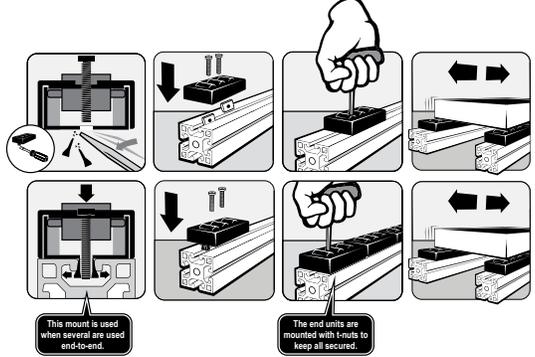
Slides and Rollers



| 45 Series Slides and Rollers | | | | | | | | |
|------------------------------|---|---|------------------------------|---|---------------|--|--|---------------------|
| | | Fits  Slot Size 10 | |  | | | | |
| Part Number | Part Image | Price | Description | Fits | Pack Quantity | Recommended Screw Fastener T-Slot Attachment | Material | Drawing Link |
| 151274 |  | \$9.50 | Roller | All 45 Series | 1 | n/a | Glass-filled nylon/steel | PDF |
| 151273 |  | \$4.50 | Slider | | | | | PDF |
| 151089 |  | \$4.50 | Snap Hook | Slider 151273 | | | Zinc plated steel | PDF |
| 162969 |  | \$7.75 | Profile Slider Center Slot | All 45 Series | | | Polyoxymethylene (POM) | PDF |
| 162970 |  | \$8.00 | Profile Slider Center Ridge | | | | PDF | |
| 163022 |  | \$16.00 | Roller Element With Guide | Fasteners included | | | Thermoplastic polyurethane/nylon/steel | PDF |
| 163023 |  | \$16.50 | Roller Element Without Guide | | | | | PDF |

FATH® T-Slotted Rail Accessories

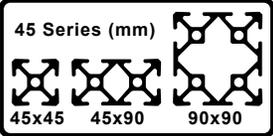
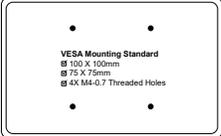
Slides and Rollers - Continued

| Slides and Rollers Installation | |
|---------------------------------|---|
| Roller |  |
| Slider and Snap Hook |  |
| Profile Slider |  |
| Roller Element |  <p>This mount is used when several are used end-to-end.</p> <p>The end units are mounted with T-nuts to keep all secured.</p> |

FATH® T-Slotted Rail Accessories

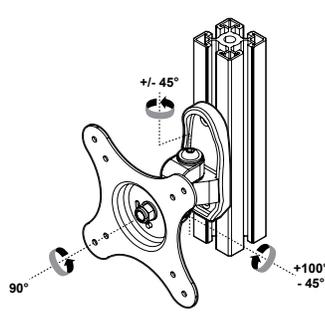
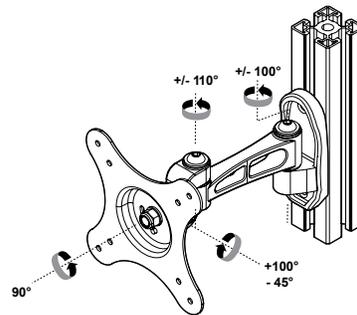
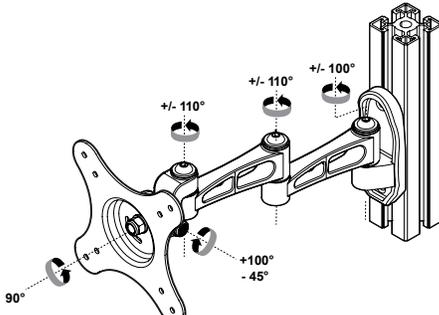
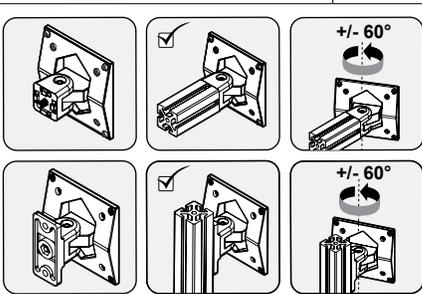
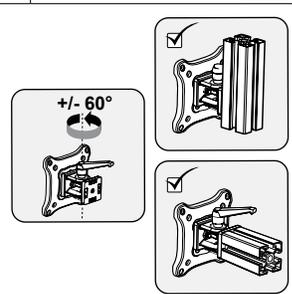
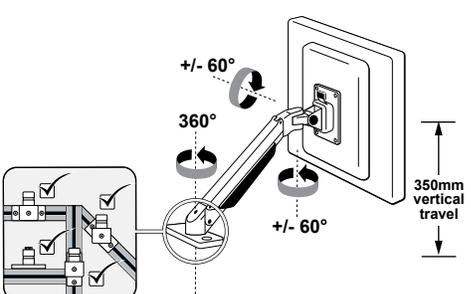
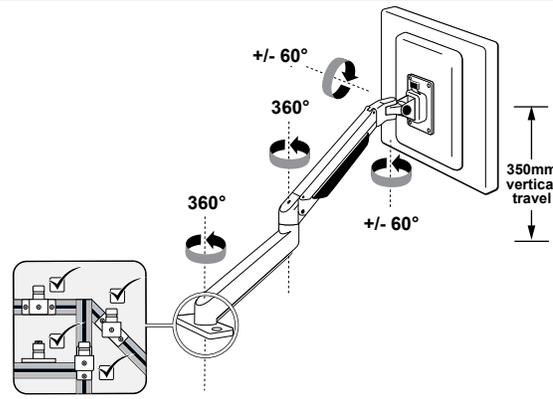
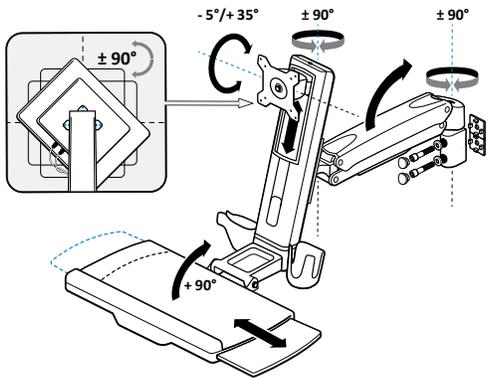
Monitor Mounts



| 45 Series Monitor Mounts | | | | | | | |
|--|---|---|---|---|---------------------|-----------------------------------|---------------------|
| <ul style="list-style-type: none"> Fits monitors with VESA mounting standard Durable steel construction Powder coat finish Mounting hardware included for several mounting locations | | Fits  Slot Size 10 |  |  | | | |
| Part Number | Part Image | Price | Description | Load Rating kg [lb] | Pack Quantity | Installation Instructions Link | Drawing Link |
| 162893 |  | \$42.00 | Swivel Monitor Mount | 15 [33.1] | 1 | PDF | PDF |
| 162894 |  | \$50.00 | | | | PDF | PDF |
| 162895 |  | \$58.00 | | | | PDF | PDF |
| 162896 |  | \$92.00 | Monitor Mounting Joint | | | PDF | PDF |
| 162898 |  | \$93.00 | Monitor Holder | | | PDF | PDF |
| 162899 |  | \$325.00 | 4-Axis Mounting Support | 10 [22.0] | | PDF | PDF |
| 162900 |  | \$375.00 | 5-Axis Mounting Support | | | PDF | PDF |
| 162901 |  | \$600.00 | 4-Axis Workstation | 8 [17.6] | PDF | PDF | |

FATH® T-Slotted Rail Accessories

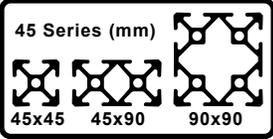
Monitor Mounts - Continued

| Monitor Mounts Adjustments | | |
|--|---|---|
|  <p>162893</p> |  <p>162894</p> |  <p>162895</p> |
|  <p>162896</p> |  <p>162898</p> | |
|  <p>162899</p> |  <p>162900</p> | |
|  <p>162901</p> | | |

FATH® T-Slotted Rail Accessories

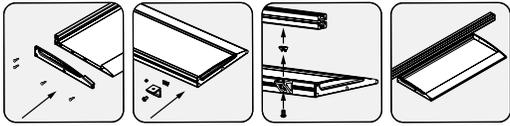
Workstation Components



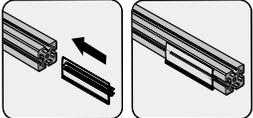
| 45 Series Workstation Components | | | | | | | |
|----------------------------------|---|---|--|---|------------------|----------------|---------------------|
| | | Fits  Slot Size 10 | |  | | | |
| Part Number | Part Image | Price | Description | Load Rating kg [lb] | Pack Quantity | Material | Drawing Link |
| 162902 |  | \$185.00 | Keyboard Holder (requires mounting solution, designer's choice) | n/a | 1 | Aluminum/nylon | PDF |
| 162966 |  | \$2.25 | Label Clip | | 10 | PVC | PDF |

Workstation Components Installation

Keyboard Holder (mounting example)



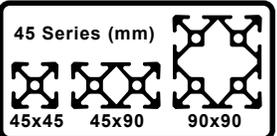
Label Clip



FATH® T-Slotted Rail Accessories

Wire Management



| 45 Series Wire Management | | | | | | | |
|---------------------------|---|---|------------------------------|---|--|--------------------------------------|---------------------|
| | | Fits  Slot Size 10 | |  | | | |
| Part Number | Part Image | Price | Description | Pack Quantity | Recommended Screw Fastener *T-Slot Attachment 2 (ADC Part Number) | Material | Drawing Link |
| 151270 |  | \$89.00 | Conduit Cover 2000 mm long | 2 | | Polypropylene | PDF |
| 151271 |  | \$89.00 | | | | | PDF |
| 151278 |  | \$15.50 | Cross Cable Binding Block | 10 | n/a | Nylon | PDF |
| 151279 |  | \$59.00 | Hook And Loop | | | Glass-filled nylon/ polypropylene | PDF |
| 151280 |  | \$33.50 | Clip Cable Binder | | | Nylon/rubber | PDF |
| 151281 |  | \$28.50 | Ground Connector | 1 | Fasteners included | Nylon/rubber | PDF |
| 151178 |  | \$4.00 | Grounding Terminal | | | Steel/brass | PDF |
| 162982 |  | \$7.50 | Universal Cable Binder Block | 10 | 161058 | Nylon | PDF |
| 162984 |  | \$16.50 | Cable Binder Block | | n/a | | PDF |

*T-Slot Nut also required

Wire Management Installation

Universal Cable Binder Block

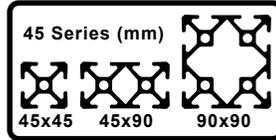
FATH® T-Slotted Rail Accessories

Miscellaneous Accessories



45 Series Miscellaneous Accessories

Fits Slot Size 10



| Part Number | Part Image | Price | Description | Fits | Recommended Screw Fastener *T-Slot Attachment 2 (ADC Part Number) | Pack Quantity | Material | Drawing Link |
|------------------------|------------|---------|--|---------------|--|---------------|--------------------------|---------------------|
| 151275 | | \$16.50 | End Cap | 45 x 45mm | n/a | 10 | Glass-filled nylon | PDF |
| 151276 | | \$24.00 | | 45 x 90mm | | | | PDF |
| 151277 | | \$32.00 | | 90 x 90mm | | | | PDF |
| 151091 | | \$6.00 | Stop Bumper | All 45 Series | BHCS M4-0.7 x 25mm (not sold by ADC) | 1 | Rubber/zinc-plated steel | PDF |
| 151170 | | \$9.00 | | | | | | PDF |
| 162973 | | \$3.25 | Sensor Mounting Block for 8mm diameter sensor | All 45 Series | BHCS M4-0.7 x 25mm (not sold by ADC) | 1 | Nylon | PDF |
| 162974 | | \$3.25 | Sensor Mounting Block for 12mm diameter sensor | | | | | PDF |

*T-Slot Nut also required

Miscellaneous Accessories Installation

Sensor Mounting Block