

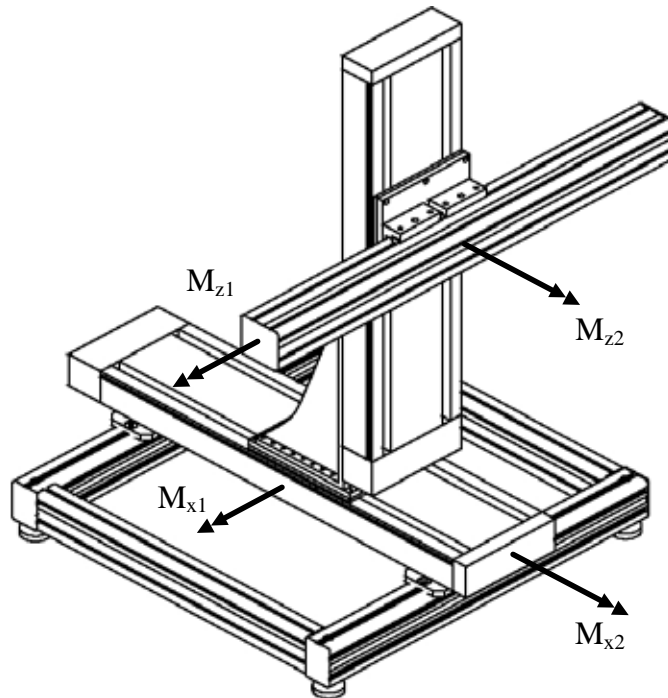
Standard Traverse Systems for LDV, PDPA and PIV



Standard Traverse Systems for LDV, PDPA and PIV

Specifications

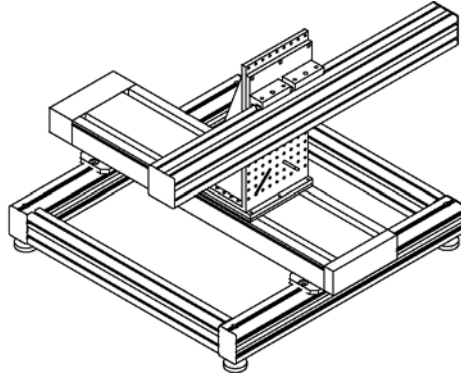
| Model | T1D T1DE | T2D T2DE | T3D T3DE | T3DL T3DLE | T3DH T3DHE |
|--|-------------|-------------|-------------|---------------|---------------|
| Max Vertical Load on Z-Axis (kg) | 72 | 72 | 72 | 72 | 72 |
| Max Static Moment M_{z1} (kgm) | 45 | 45 | 45 | 45 | 45 |
| Max Static Moment M_{z2} (kgm) | 40 | 40 | 40 | 40 | 45 |
| Max Vertical Load on X- or Y-Axis (kg) | 1320 | 1320 | 1320 | 1320 | 1320 |
| Max Static Moment M_{x1} (kgm) | 86 | 86 | 86 | 86 | 86 |
| Max Static Moment M_{x2} (kgm) | 113 | 113 | 113 | 113 | 113 |
| Max No-load Translational Speed (mm/s) | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 |
| Vertical Axis Translational Speed at Max Load (mm/s) | 25 | 25 | 25 | 25 | 25 |
| Horizontal Axis Trans. Speed at Max Load (mm/s) | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 |
| Unidirectional Repeatability (μm) | ± 10 | ± 10 | ± 10 | ± 10 | ± 10 |
| Accuracy (μm) | ± 300 | ± 300 | ± 300 | ± 430 | ± 300 |
| Resolution (μm) | 6.25 | 6.25 | 6.25 | 6.25 | 6.25 |



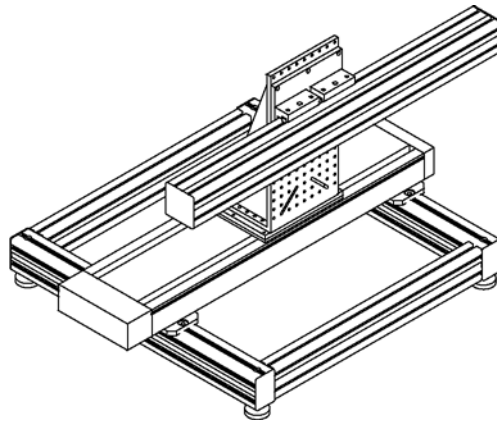
Definition of Moment Axes

Standard Traverse Systems for LDV, PDPA and PIV

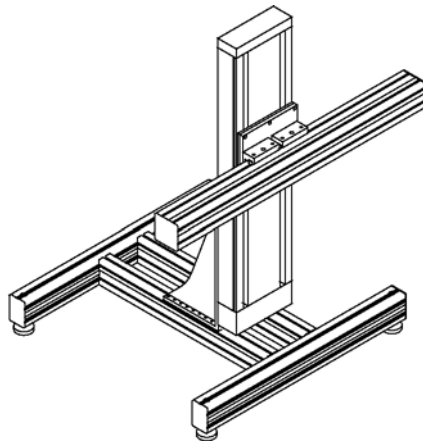
1D Traverse System (Model T1D, Model T1DE)



X-Configuration



Y-Configuration



Z-Configuration

| <u>Model</u> | <u>Description</u> |
|---------------------|---------------------------|
|---------------------|---------------------------|

| | |
|-----|--|
| T1D | 1-Axis Traverse System, 600 mm, 115 VAC Controller |
|-----|--|

| | |
|------|--|
| T1DE | 1-Axis Traverse System, 600 mm, 220 VAC Controller |
|------|--|

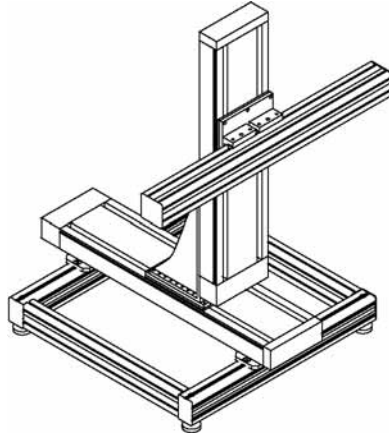
Use: LDV Single Rail or L Rail, 1 or 2 Probes (including beam expanders)
PIV Systems (see moment and load limit chart for exact limits)

Includes: 1D Traverse, Mounting Base, 1-Axis Controller, Hand-Control Unit

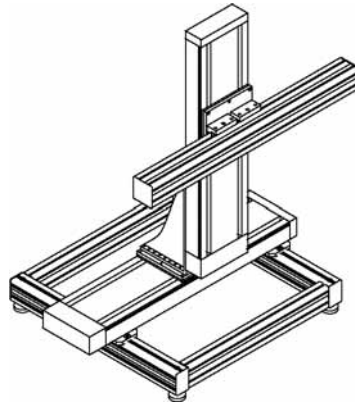
Note: *90 x 90 Bosch Rail shown is not included.*

Standard Traverse Systems for LDV, PDPA and PIV

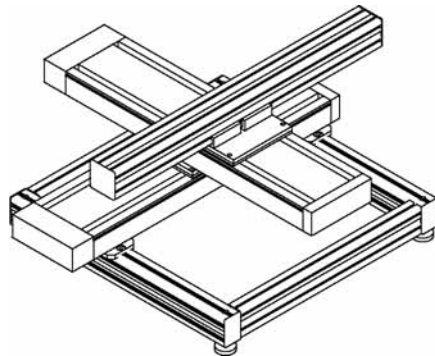
2D Traverse System (Model T2D, Model T2DE)



XZ-Configuration



YZ-Configuration



XY-Configuration

| <u>Model</u> | <u>Description</u> |
|---------------------|--|
| T2D | 2-Axis Traverse System, 600 x 600 mm, 115 VAC Controller |
| T2DE | 2-Axis Traverse System, 600 x 600 mm, 220 VAC Controller |

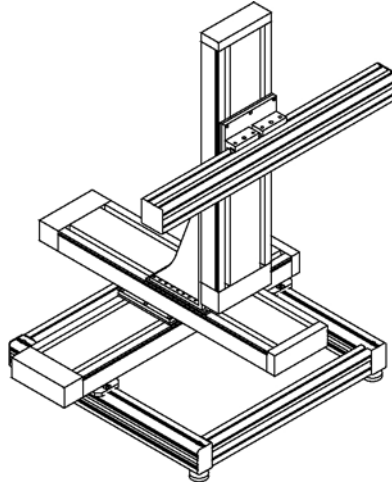
Use: LDV Single Rail or L Rail, 1 or 2 Probes (including beam expanders)
PIV Systems, (see moment and load limit chart for exact limits)

Includes: 2D Traverse, Mounting Base, 2-Axis Controller, Hand Control Unit

Note: *90 x 90 Bosch Rail shown is not included.*

Standard Traverse Systems for LDV, PDPA and PIV

3D Standard Traverse System (Model T3D, Model T3DE)



XYZ-Configuration

| <u>Model</u> | <u>Description</u> |
|--------------|--|
| T3D | 3-Axis Traverse System, 600 x 600 x 600 mm, 115 VAC Controller |
| T3DE | 3-Axis Traverse System, 600 x 600 x 600 mm, 220 VAC Controller |

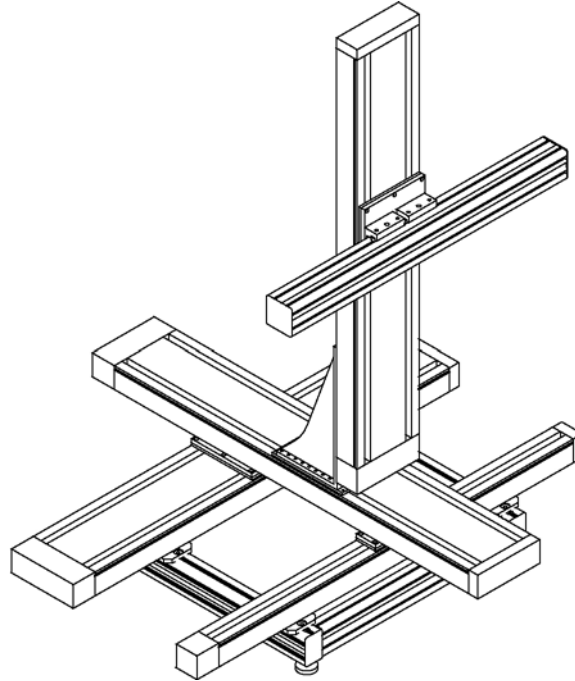
Use: LDV Single Rail or L Rail, 1 or 2 Probes (including beam expanders)
PIV Systems, (see moment and load limit chart for exact limits)

Includes: 3D Traverse, Mounting Base, 3-Axis Controller, Hand Control Unit

Note: *90 x 90 Bosch Rail shown is not included.*

Standard Traverse Systems for LDV, PDPA and PIV

3D Long Traverse System (Model T3DL, Model T3DLE)



XYZ-Configuration

| <u>Model</u> | <u>Description</u> |
|---------------------|--|
| T3DL | 3-Axis Long Traverse System, 1000 x 1000 x 1000 mm, 115 VAC Controller |
| T3DLE | 3-Axis Long Traverse System, 1000 x 1000 x 1000 mm, 220 VAC Controller |

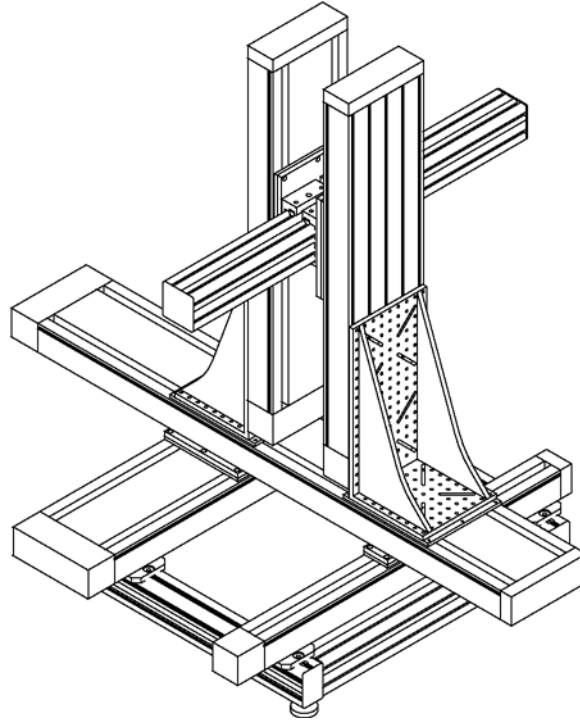
Use: LDV Single Rail or L Rail, 1 or 2 Probes (including beam expanders)
PIV Systems, (see moment and load limit chart for exact limits)

Includes: 3D Traverse, Mounting Base, 3-Axis Controller, Hand Control Unit

Note: *90 x 90 Bosch Rail shown is not included.*

Standard Traverse Systems for LDV, PDPA and PIV

3D Heavy-Duty Traverse System (Model T3DH, Model T3DHE)



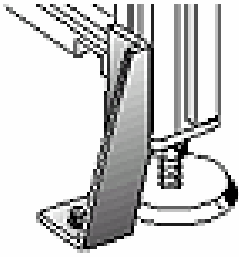
XYZ-Configuration

| <u>Model</u> | <u>Description</u> |
|---------------------|--|
| T3DH | 3-Axis Heavy-Duty Traverse System, 600 x 600 x 600 mm, 115 VAC Controller |
| T3DHE | 3-Axis Heavy-Duty Traverse System, 600 x 600 x 600 mm, 220 VAC Controller |
| Use: | LDV Single Rail or L Rail or U Rail, 1, 2 or 3 probes (including beam expanders), (see moment and load limit chart for exact limits) |
| Includes: | 3D Traverse, Mounting Base, 3-Axis Controller, Hand Control Unit |
| Note: | <i>90 x 90 Bosch Rail shown is not included.</i> |

Standard Traverse Systems for LDV, PDPA and PIV

Traverse-Base Accessories

Traverse Foundation Bracket Kit (Model 1090169)



Foundation Bracket

Includes: Four Brackets with mounting hardware and Four Anchor Bolts

Traverse Heavy-duty Locking Caster Kit (Model 1090170)



Caster

Includes: Four Casters

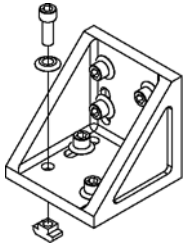
Standard Traverse Systems for LDV, PDPA and PIV

Hardware and Mount Kits

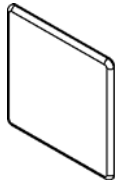
Rails and Rail Hardware Kits

| | |
|----------|---|
| BRL050 | 0.50 meter 90 x 90 mm Bosch Rail |
| BRL075 | 0.75 meter 90 x 90 mm Bosch Rail |
| BRL100 | 1.00 meter 90 x 90 mm Bosch Rail |
| BRL150 | 1.50 meter 90 x 90 mm Bosch Rail |
| BRL200 | 2.00 meter 90 x 90 mm Bosch Rail |
| BRH-1 | Single Rail Hardware Kit |
| BRH-2 | L Rail Hardware Kit |
| BRH-3 | U Rail Hardware Kit |
| M-2DPIVS | 2D PIV Mount Kit |
| M-STPIVS | Stereo PIV (sidescatter) Mount Kit |
| M-STPIVB | Stereo PIV (backscatter) Mount Kit |
| M-3DL | 3D LDV (2 Probe) Mount Kit (not for TR 10 series or TR 20 series probes) |
| M-3DP | 3D PDPA (2 Transmitter) Mount Kit (not for TR 10 series or TR 20 series probes) |
| M-L1 | Single Probe LDV Mount Kit (not for TR 10 series or TR 20 series probes) |
| M-P2 | 1D or 2D PDPA Mount Kit (not for TR 10 series or TR 20 series probes) |

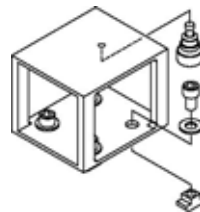
2D PIV Mount Kit (Model M-2DPIVS)



Gusset (2)



End Cap (3)



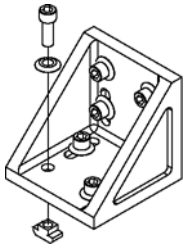
Camera Mount (1)

| <u>Model</u> | <u>Description</u> |
|---------------------|----------------------------|
| M-2DPIVS | 2D PIV L-Rail Mounting Kit |

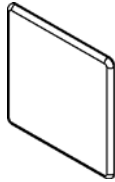
Includes: Two Gussets with mounting hardware, Three Bosch Rail End Caps, and One Camera Mount with mounting hardware

Standard Traverse Systems for LDV, PDPA and PIV

Stereo PIV (sidescatter) Mount Kit (Model M-STPIVS)



Gusset (4)

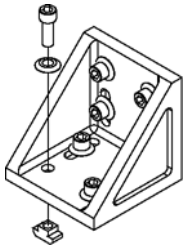


End Cap (3)

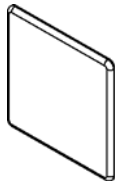
| <u>Model</u> | <u>Description</u> |
|--------------|--------------------------------|
| M-STPIVS | Stereo PIV L-Rain Mounting Kit |

Includes: Four Gussets with mounting hardware and Three Bosch Rail End Caps

Stereo PIV Mount Kit (Model M-STPIVB)



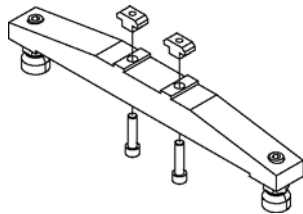
Gusset (2)



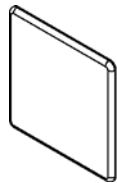
End Cap (2)

Includes: Two Gussets with mounting hardware and Two Rail End Caps

Single Rail Hardware Kit (Model BRH-1)



Rail Support (2)

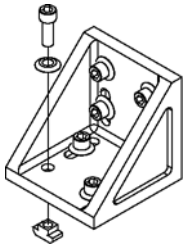


End Cap (2)

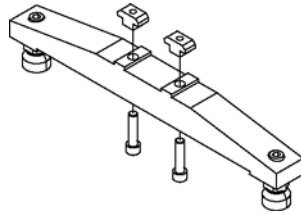
Includes: Two Bosch Rail Supports with mounting hardware and Two Bosch Rail End Caps

Standard Traverse Systems for LDV, PDPA and PIV

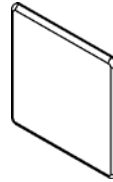
L Rail Hardware Kit (Model BRH-2)



Gusset (2)



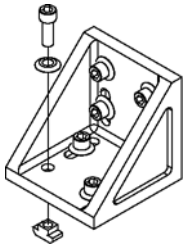
Rail Support (3)



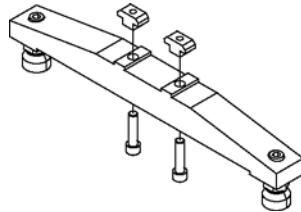
End Cap (3)

Includes: Two Gussets with mounting hardware, Three Bosch Rail Supports with mounting hardware and Three Bosch Rail End Caps

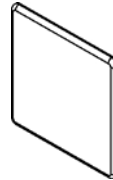
U Rail Hardware Kit (Model BRH-3)



Gusset (4)



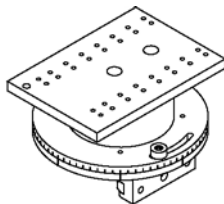
Rail Support (4)



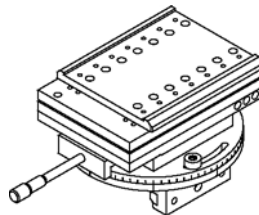
End Cap (4)

Includes: Four Gussets with mounting hardware, Four Bosch Rail Supports with mounting hardware and Four Bosch Rail End Caps

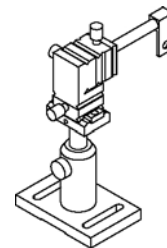
3D LDV (2 Probe) Mount Kit (Model M-3DL)



Fixed Mount (1)



Adjustable Mount (1)

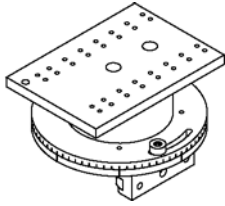


Pinhole Assembly (1)

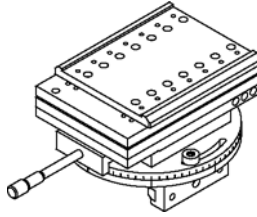
Includes: One Fixed Mount, One Adjustable Mount and One Pinhole Assembly

Standard Traverse Systems for LDV, PDPA and PIV

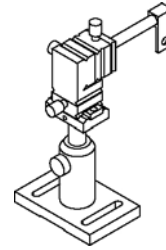
3D PDPA (3 Probe) Mount Kit (Model M-3DP)



Fixed Mount (2)



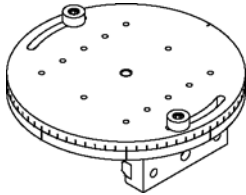
Adjustable Mount (1)



Pinhole Assembly (1)

Includes: Two Fixed Mounts, One Adjustable Mount and One Pinhole Assembly

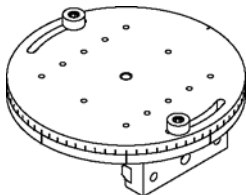
Single Probe LDV Mount Kit (Model M-L1)



Rotation Plate Assembly (1)

Includes: One Rotation Plate Assembly

1D or 2D PDPA Mount Kit (Model M-P2)



Rotation Plate Assembly (2)

Includes: Two Rotation Plate Assemblies



TSI Incorporated

Headquarters—Tel: +1 651 490 2811 Toll Free: 1 800 874 2811 E-mail: fluid@tsi.com

UK Tel: +44 1494 459200 E-mail: tsiuk@tsi.com France Tel: +33 491 95 21 90 E-mail: tsifrance@tsi.com

Germany Tel: +49 241 523030 E-mail: tsigmbh@tsi.com Sweden Tel: +46 8 595 13230 E-mail: tsiab@tsi.com

India Tel: +91 80 41132470 E-mail: tsi-india@tsi.com China Tel: +86 10 8260 1595 E-mail: tsibeijing@tsi.com

