

**HIGHEST LOADS, MOST RUGGED,  
FASTEST SPEED AND ACCELERATION**

## RoundWay\* Linear Roller Guides Offer:

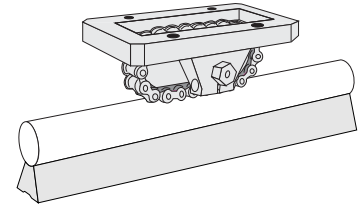
- Up to twenty times the load capacity of conventional linear ball bearings. This dramatic increase allows for more compact machine designs with a reduction in hardware costs
- Industry's highest load capacity. RoundWay Linear Roller bearings handle up to 35 tons/bearing and speeds up to 100 ft/second
- Virtual insensitivity to contamination without concerns of stroke length reduction from way covers
- A self-aligning capability that reduces installation time and cost by compensating for rail misalignment errors
- Interchangeable components for quick, cost-effective machine maintenance.
- Curved rollers running on a curved inner race which make this Linear Guide resistant to severe shock loads
- Corrosion resistant versions for maximum performance in harsh environments.

For more information, or to place an order, please contact your local authorized Thomson distributor or Thomson Industries, at 1-800-55-4-THOMSON, Fax: 1-800-445-0329, or E-mail at [linearguides@thomsonmail.com](mailto:linearguides@thomsonmail.com).

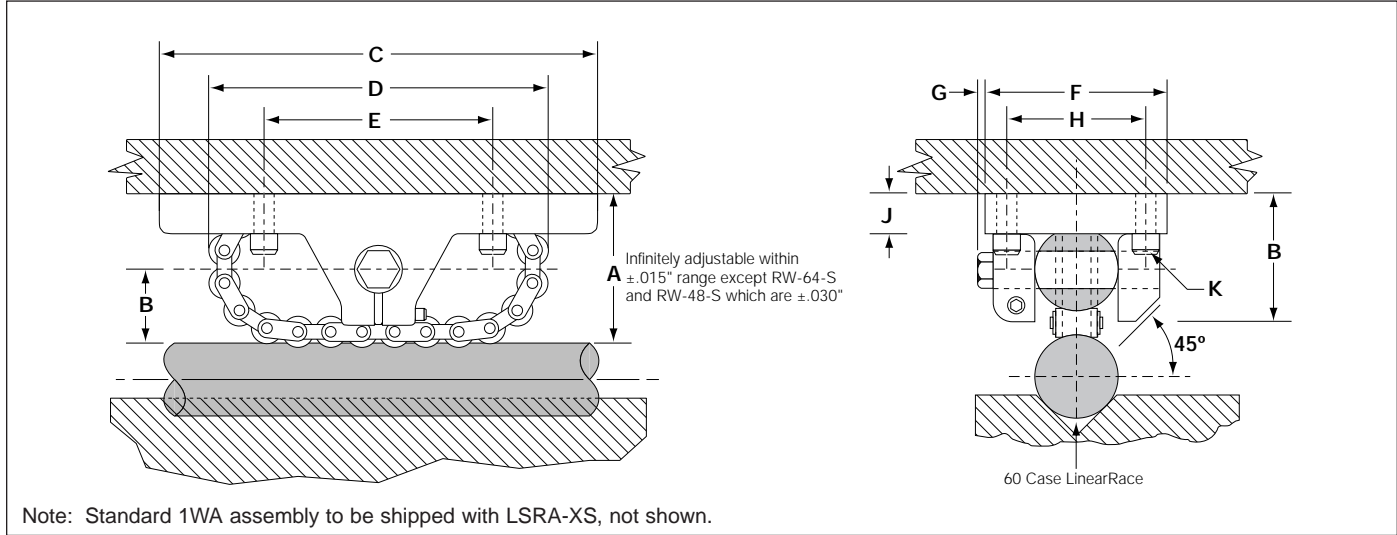
# RoundWay 1WA

## Linear Guide #11 Single Type

Contaminated Environments,  
High Shock Loads



**INCH**



**RoundWay Linear Guide 1WA (Single Type) and 60 Case\* LinearRace\* Shaft** (Dimensions in inches)

| Part Number | Type of Support†         | Nom. Dia. | A    | B    | C    | D     | E    | F    | G   | H    | J    | K    |      | L    | 60 Case LinearRace Diameter d | 60 Case LinearRace Maximum Length | 60 Case Solid LinearRace lb/in | Bearing Mass lb | Dynamic <sup>(1)</sup> Load Capacity lbf |
|-------------|--------------------------|-----------|------|------|------|-------|------|------|-----|------|------|------|------|------|-------------------------------|-----------------------------------|--------------------------------|-----------------|--|
|             |                          |           |      |      |      |       |      |      |     |      |      | Bolt | Hole |      |                               |                                   |                                |                 |  |
| 1WA-08-WAO  | LSRA08-XS                | .500      | 1.00 | .45  | 3.0  | 2.38  | 1.50 | 1.25 | .19 | .94  | .31  | #6   | .16  | .88  | .4995/.4990                   | 168                               | .06                            | .50             | 970                                      |
| 1WA-16-WAO  | LSRA16-XS                | 1.000     | 1.75 | .80  | 5.0  | 3.75  | 2.50 | 2.13 | .25 | 1.63 | .50  | #10  | .25  | 1.50 | .9995/.9990                   | 180                               | .22                            | 2.20            | 3020                                     |
| 1WA-24-WAO  | LSRA24-XS                | 1.500     | 2.50 | 1.15 | 6.5  | 5.38  | 3.50 | 2.88 | .31 | 2.13 | .63  | .31  | .38  | 2.13 | 1.4994/1.4989                 | 204                               | .50                            | 5.60            | 6020                                     |
| 1WA-32-WAO  | LSRA32-XS                | 2.000     | 3.25 | 1.50 | 8.5  | 7.38  | 4.50 | 3.63 | .38 | 2.75 | .75  | .38  | .44  | 2.88 | 1.9994/1.9987                 | 204                               | .89                            | 12.40           | 12360                                    |
| 1WA-48-WAO  | LSRA48-XS <sup>(2)</sup> | 3.000     | 5.00 | 2.30 | 13.0 | 11.00 | 7.00 | 6.00 | .50 | 4.25 | 1.25 | .63  | .69  | 4.25 | 2.9992/2.9983                 | 204                               | 2.00                           | 48.00           | 24000                                    |
| 1WA-64-WAO  | LSRA64-XS <sup>(2)</sup> | 4.000     | 6.50 | 3.00 | 17.0 | 14.88 | 9.00 | 7.75 | .50 | 5.50 | 1.50 | .75  | .81  | 5.88 | 3.9988/3.9976                 | 204                               | 3.56                           | 105.00          | 48000                                    |

<sup>(1)</sup> Dynamic Load Capacity is based on 10 million inches of travel.

<sup>(2)</sup> Contact factory for availability.

† Other supports available as special options, see next page.

For more information, or to place an order, please contact your local authorized Thomson distributor or Thomson Industries, at 1-800-55-4-THOMSON, Fax: 1-800-445-0329, or E-mail at [linearguides@thomsonmail.com](mailto:linearguides@thomsonmail.com).

# 60 Case\* LinearRace\* Shaft Support Rails and Assemblies for Continuously Supported Applications

**Type LSR and LSR-PD LinearRace Shaft Support Rails**

Material: Steel Alloy  
Longer lengths are available

**Type LSR and LSR-PD LinearRace Shaft Support Rails** (Dimensions in inches)

| LSR-PD Standard w/PreDrilled Holes | Nomina LinearRace Diameter $d$ | H $\pm .002$ | H1   | A    | M    | N2   |       | X | Y | LSR Weight lb/ft |
|------------------------------------|--------------------------------|--------------|------|------|------|------|-------|---|---|------------------|
|                                    |                                |              |      |      |      | Hole | Bolt  |   |   |                  |
| LSR-8-PD                           | .500                           | .562         | .34  | .37  | .25  | .17  | #6-32 | 4 | 2 | .32              |
| LSR-16-PD                          | 1.000                          | 1.000        | .56  | .69  | .50  | .28  | ¼-20  | 6 | 3 | 1.01             |
| LSR-24-PD                          | 1.500                          | 1.375        | .70  | .93  | .69  | .41  | ⅝-16  | 8 | 4 | 1.68             |
| LSR-32-PD                          | 2.000                          | 1.750        | .85  | 1.18 | .88  | .53  | ⅞-13  | 8 | 4 | 2.59             |
| LSR-48-PD                          | 3.000                          | 2.750        | 1.40 | 1.88 | 1.38 | .81  | ¾-10  | 8 | 4 | 6.98             |
| LSR-64-PD                          | 4.000                          | 3.500        | 1.75 | 2.50 | 1.88 | 1.06 | 1-8   | 8 | 4 | 11.80            |

**Type LSRA 60 Case Smart Rail Assemblies**

Material: Steel Alloy  
Longer lengths are available

**Type LSRA-XS Smart Rail\* Linear Guide Assemblies** (Dimensions in inches)

| Part Number                        |                                    | LinearRace Diameter | H $\pm 0.002$ | A    | A1    | Y   | Mounting Holes |      |
|------------------------------------|------------------------------------|---------------------|---------------|------|-------|-----|----------------|------|
| Smart Rail Assembly <sup>(1)</sup> | Smart Rail Assembly <sup>(2)</sup> |                     |               |      |       |     | Std.           | X1   |
| LSRA10-XS                          | LSRA10-XSCR                        | 0.625               | 0.687         | 0.45 | 0.225 | 1.0 | 2              | #5   |
| LSRA12-XS                          | LSRA12-XSCR                        | 0.750               | 0.750         | 0.51 | 0.255 | 1.5 | 3              | #6   |
| LSRA16-XS                          | LSRA16-XSCR                        | 1.000               | 1.000         | 0.69 | 0.345 | 1.5 | 3              | #10  |
| LSRA20-XS                          | LSRA20-XSCR                        | 1.250               | 1.187         | 0.78 | 0.390 | 1.5 | 3              | 5/16 |
| LSRA24-XS                          | LSRA24-XSCR                        | 1.500               | 1.375         | 0.93 | 0.465 | 2.0 | 4              | 3/8  |

(1) = Consists of black oxidized steel rail and high carbon steel LinearRace Shaft (HRC 60-65).

(2) = Consists of zinc plated steel rail and 440C St. 'l. LinearRace Shaft (HRC 50-55).

\* RoundWay Linear Guides used with LSRA Assemblies are recommended for download only.

**Type SR and SR-PD 60 Case LinearRace Shaft Support Rails and Assemblies**

Material: Aluminum Alloy  
Longer lengths are available

**Type SR/SR-PD LinearRace Shaft Support Rails and Assemblies** (Dimensions in inches)

| SR-PD With PreDrilled Holes | Assembly With Solid LinearRace | Nom. LinearRace Dia. $d$ | H $\pm .002$ | H1  | A    | A1 $\pm .002$ | E    | M   | N3   |      | LinearRace Mounting Bolt N1 | X | Y | SR Wt. lb/ft |
|-----------------------------|--------------------------------|--------------------------|--------------|-----|------|---------------|------|-----|------|------|-----------------------------|---|---|--------------|
|                             |                                |                          |              |     |      |               |      |     | Hole | Bolt |                             |   |   |              |
| SR-8-PD                     | SRA-8-XS                       | .500                     | 1.125        | .19 | 1.50 | .750          | 1.00 | .25 | .17  | #6   | #6-32 x .88                 | 4 | 2 | .60          |
| SR-16-PD                    | SRA-16-XS                      | 1.000                    | 1.750        | .25 | 2.13 | 1.063         | 1.50 | .50 | .28  | ¼    | ¼-20 x 1.50                 | 6 | 3 | 1.40         |
| SR-24-PD                    | SRA-24-XS                      | 1.500                    | 2.500        | .38 | 3.00 | 1.500         | 2.25 | .69 | .34  | ⅝    | ⅝-16 x 2.50                 | 8 | 4 | 2.60         |
| SR-32-PD                    | SRA-32-XS                      | 2.000                    | 3.250        | .50 | 3.75 | 1.875         | 2.75 | .88 | .41  | ¾    | ¾-13 x 2.50                 | 8 | 4 | 4.20         |

**Type XSR/XSRA 60 Case LinearRace Shaft Support Rails and Assemblies**

Material: Steel Alloy  
Longer lengths are available

**Type XSR/XSRA LinearRace Shaft Support Rails and Assemblies** (Dimensions in inches)

| XSR With Mounting Holes | Assy. With Solid LinearRace | Nominal LinearRace Diameter | H $\pm .001$ | H1   | A    | E    | M    | N2   |             |                | N3  | a   | X             | Y  | XSR Weight lb/ft |      |    |
|-------------------------|-----------------------------|-----------------------------|--------------|------|------|------|------|------|-------------|----------------|-----|-----|---------------|----|------------------|------|----|
|                         |                             |                             |              |      |      |      |      | Hole | Bolt        | Counterbore    |     |     |               |    |                  |      |    |
| XSR-32                  | XSRA-32                     | 2.000                       | 2.750        | 1.00 | 4.50 | 3.13 | .88  | .56  | ½-13 x 2    | 1 x .75 DP     | .56 | .50 | 1 x .63 DP    | 15 | 4                | 1.97 | 16 |
| XSR-48                  | XSRA-48                     | 3.000                       | 4.000        | 1.31 | 6.00 | 4.25 | 1.25 | .81  | ¾-10 x 2.75 | 1.44 x 1.13 DP | .69 | .63 | 1.25 x .75 DP | 25 | 6                | 2.97 | 31 |

**Waymount 60 Case LinearRace Shaft Support Block** J, K are Total Adjustment  
Vertical Adjustment  
Horizontal Adjustment

For installation see ESA12

**Waymount\* LinearRace Shaft Support Block** (Dimensions in inches)

| Waymount Part Number | Nominal LinearRace Diameter $d$ | L    | H    | W    | A    | B    | C    | E    | F   | G <sup>(4)</sup> | J   | K   | M    | N    | P    | Weight lb <sub>f</sub> |
|----------------------|---------------------------------|------|------|------|------|------|------|------|-----|------------------|-----|-----|------|------|------|------------------------|
| WM-8                 | .500                            | 1.50 | 1.06 | 1.75 | .50  | .88  | .25  | .75  | .22 | #8-32            | .05 | .09 | .69  | .50  | .44  | .20                    |
| WM-16                | 1.000                           | 2.00 | 1.50 | 2.50 | .75  | 1.25 | .31  | 1.06 | .28 | ¼-28             | .06 | .13 | .81  | .69  | .69  | .50                    |
| WM-24                | 1.500                           | 2.50 | 2.00 | 3.50 | 1.19 | 1.63 | .44  | 1.19 | .34 | ⅝-24             | .13 | .13 | 1.00 | .75  | .75  | 1.10                   |
| WM-32                | 2.000                           | 3.00 | 2.50 | 4.00 | 1.44 | 1.88 | .50  | 1.38 | .41 | ¾-24             | .13 | .13 | 1.25 | .94  | 1.00 | 1.80                   |
| WM-48                | 3.000                           | 5.00 | 4.31 | 6.75 | 2.38 | 3.38 | .75  | 2.63 | .66 | ⅞-18             | .13 | .13 | 2.25 | 1.63 | 1.50 | 10.20                  |
| WM-64                | 4.000                           | 6.50 | 5.44 | 8.50 | 3.00 | 4.25 | 1.00 | 3.13 | .78 | ¾-16             | .13 | .13 | 2.75 | 2.00 | 2.00 | 21.20                  |

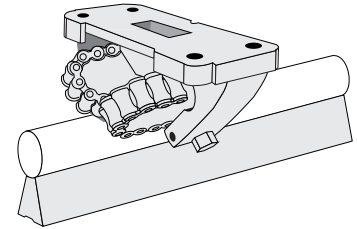
<sup>(4)</sup> Supplied with Waymount LinearRace Shaft support block

# RoundWay 1WA

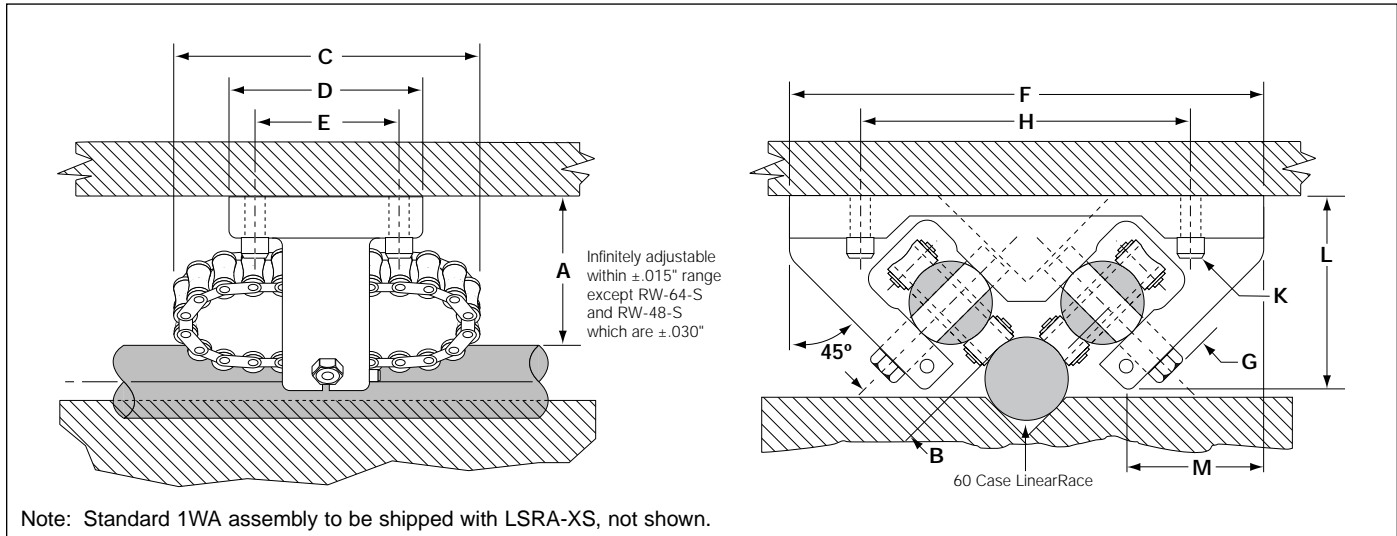
## Linear Guide #11

### Dual Type

Contaminated Environments,  
High Shock Loads



**INCH**



**RoundWay Linear Guide 1WA (Single Type) and 60 Case\* LinearRace\* Shaft** (Dimensions in inches)

| Part Number | Type of Support†         | Nom. Dia. | A    | B    | C    | D     | E    | F     | G   | H    | J    | K    |      | L    | M    | 60 Case LinearRace Diameter d | 60 Case LinearRace Maximum Length | 60 Case Solid LinearRace lb/in | Bearing Mass lb | Dyn. <sup>(1)</sup> Load Cap. lbf |
|-------------|--------------------------|-----------|------|------|------|-------|------|-------|-----|------|------|------|------|------|------|-------------------------------|-----------------------------------|--------------------------------|-----------------|-----------------------------------|
|             |                          |           |      |      |      |       |      |       |     |      |      | Bolt | Hole |      |      |                               |                                   |                                |                 |                                   |
| 1WA-08-VAO  | LSRA08-XS                | .500      | 1.00 | .45  | 1.38 | 2.38  | 1.00 | 3.00  | .19 | 2.25 | .31  | #8   | .19  | 1.38 | .69  | .4995/.4990                   | 168                               | .06                            | 1.10            | 1370                              |
| 1WA-16-VAO  | LSRA16-XS                | 1.000     | 1.75 | .80  | 2.25 | 3.75  | 1.63 | 5.75  | .25 | 4.0  | .50  | #10  | .25  | 2.38 | 1.56 | .9995/.9990                   | 180                               | .22                            | 4.90            | 4300                              |
| 1WA-24-VAO  | LSRA24-XS                | 1.500     | 2.50 | 1.15 | 2.75 | 5.38  | 2.00 | 7.88  | .31 | 6.0  | .63  | .31  | .38  | 3.38 | 2.13 | 1.4994/1.4989                 | 204                               | .50                            | 11.70           | 8600                              |
| 1WA-32-VAO  | LSRA32-XS                | 2.000     | 3.25 | 1.50 | 3.50 | 7.38  | 2.50 | 9.75  | .38 | 7.5  | .75  | .38  | .44  | 4.38 | 2.50 | 1.9994/1.9987                 | 204                               | .89                            | 25.20           | 17500                             |
| 1WA-48-VAO  | LSRA48-XS <sup>(2)</sup> | 3.000     | 5.00 | 2.30 | 5.50 | 11.00 | 4.00 | 15.50 | .63 | 12.0 | 1.25 | .63  | .69  | 7.00 | 4.25 | 2.9992/2.9983                 | 204                               | 2.00                           | 90              | 35000                             |
| 1WA-64-VAO  | LSRA64-XS <sup>(2)</sup> | 4.000     | 6.50 | 3.00 | 7.00 | 14.88 | 5.00 | 19.25 | .75 | 15.0 | 1.50 | .75  | .81  | 8.63 | 5.00 | 3.9988/3.9976                 | 204                               | 3.56                           | 193             | 70000                             |

<sup>(1)</sup> Dynamic Load Capacity is based on 10 million inches of travel.

<sup>(2)</sup> Contact factory for availability

† Other supports available as special options, see next page

For more information, or to place an order, please contact your local authorized Thomson distributor or Thomson Industries, at 1-800-55-4-THOMSON, Fax: 1-800-445-0329, or E-mail at [linearguides@thomsonmail.com](mailto:linearguides@thomsonmail.com).

# 60 Case\* LinearRace\* Shaft Support Rails and Assemblies for Continuously Supported Applications

**Type LSR and LSR-PD LinearRace Shaft Support Rails**

Material: Steel Alloy  
Longer lengths are available

| Type LSR and LSR-PD LinearRace Shaft Support Rails (Dimensions in inches) |                                |              |      |      |      |      |        |   |   |                  |
|---|--------------------------------|--------------|------|------|------|------|--------|---|---|------------------|
| LSR-PD Standard w/PreDrilled Holes  | Nomina LinearRace Diameter $d$ | H $\pm .002$ | H1   | A    | M    | N2   |        | X | Y | LSR Weight lb/ft |
|   |                                |              |      |      |      | Hole | Bolt   |   |   |                  |
| LSR-8-PD  | .500                           | .562         | .34  | .37  | .25  | .17  | #6-32  | 4 | 2 | .32              |
| LSR-16-PD   | 1.000                          | 1.000        | .56  | .69  | .50  | .28  | 1/4-20 | 6 | 3 | 1.01             |
| LSR-24-PD   | 1.500                          | 1.375        | .70  | .93  | .69  | .41  | 3/8-16 | 8 | 4 | 1.68             |
| LSR-32-PD   | 2.000                          | 1.750        | .85  | 1.18 | .88  | .53  | 1/2-13 | 8 | 4 | 2.59             |
| LSR-48-PD   | 3.000                          | 2.750        | 1.40 | 1.88 | 1.38 | .81  | 3/4-10 | 8 | 4 | 6.98             |
| LSR-64-PD   | 4.000                          | 3.500        | 1.75 | 2.50 | 1.88 | 1.06 | 1-8    | 8 | 4 | 11.80            |

**Type LSRA 60 Case Smart Rail Assemblies**

Material: Steel Alloy  
Longer lengths are available

| Type LSRA Smart Rail* Linear Guide Assemblies (Dimensions in inches) |                                    |                     |               |      |       |     |                |      |    |
|--|------------------------------------|---------------------|---------------|------|-------|-----|----------------|------|----|
| Part Number  |                                    | LinearRace Diameter | H $\pm .0002$ | A    | A1    | Y   | Mounting Holes |      |    |
| Smart Rail Assembly <sup>(1)</sup>                                   | Smart Rail Assembly <sup>(2)</sup> |                     |               |      |       |     | Std.           | X1   | N1 |
| LSRA10-XS  | LSRA10-XSCR                        | 0.625               | 0.687         | 0.45 | 0.225 | 1.0 | 2              | #5   |    |
| LSRA12-XS  | LSRA12-XSCR                        | 0.750               | 0.750         | 0.51 | 0.255 | 1.5 | 3              | #6   |    |
| LSRA16-XS  | LSRA16-XSCR                        | 1.000               | 1.000         | 0.69 | 0.345 | 1.5 | 3              | #10  |    |
| LSRA20-XS  | LSRA20-XSCR                        | 1.250               | 1.187         | 0.78 | 0.390 | 1.5 | 3              | 5/16 |    |
| LSRA24-XS  | LSRA24-XSCR                        | 1.500               | 1.375         | 0.93 | 0.465 | 2.0 | 4              | 3/8  |    |

(1) = Consists of black oxidized steel rail and high carbon steel LinearRace Shaft (HRC 60-65).

(2) = Consists of zinc plated steel rail and 440C St. St'l. LinearRace Shaft (HRC 50-55).

† RoundWay Linear Guides used with LSRA Assemblies are recommended for download only.

**Type SR and SR-PD 60 Case LinearRace Shaft Support Rails and Assemblies**

Material: Aluminum Alloy  
Longer lengths are available

| Type SR/SR-PD LinearRace Shaft Support Rails and Assemblies (Dimensions in inches) |                                |                          |              |     |      |               |      |     |      |      |                             |              |      |
|--|--------------------------------|--------------------------|--------------|-----|------|---------------|------|-----|------|------|-----------------------------|--------------|------|
| SR-PD With PreDrilled Holes  | Assembly With Solid LinearRace | Nom. LinearRace Dia. $d$ | H $\pm .002$ | H1  | A    | A1 $\pm .002$ | E    | M   | N3   |      | LinearRace Mounting Bolt N1 | SR Wt. lb/ft |      |
|  |                                |                          |              |     |      |               |      |     | Hole | Bolt |                             |              |      |
| SR-8-PD  | SRA-8-XS                       | .500                     | 1.125        | .19 | 1.50 | .750          | 1.00 | .25 | .17  | #6   | #6-32 x .88                 | 4 2          | .60  |
| SR-16-PD   | SRA-16-XS                      | 1.000                    | 1.750        | .25 | 2.13 | 1.063         | 1.50 | .50 | .28  | 1/4  | 1/4-20 x 1.50               | 6 3          | 1.40 |
| SR-24-PD   | SRA-24-XS                      | 1.500                    | 2.500        | .38 | 3.00 | 1.500         | 2.25 | .69 | .34  | 5/16 | 3/8-16 x 2.50               | 8 4          | 2.60 |
| SR-32-PD   | SRA-32-XS                      | 2.000                    | 3.250        | .50 | 3.75 | 1.875         | 2.75 | .88 | .41  | 3/8  | 1/2-13 x 2.50               | 8 4          | 4.20 |

**Type XSR/XSRA 60 Case LinearRace Shaft Support Rails and Assemblies**

Lock washers recommended

| Type XSR/XSRA LinearRace Support Rails and Assemblies (Dimensions in inches) |                             |                             |              |      |      |      |      |      |               |                |      |      |               |                  |      |
|--|-----------------------------|-----------------------------|--------------|------|------|------|------|------|---------------|----------------|------|------|---------------|------------------|------|
| XSR With Mounting Holes  | Assy. With Solid LinearRace | Nominal LinearRace Diameter | H $\pm .001$ | H1   | A    | E    | M    | N2   |               |                | N3   |      |               | XSR Weight lb/ft |      |
|  |                             |                             |              |      |      |      |      | Hole | Bolt          | Counterbore    | Hole | Bolt | Counterbore   |                  |      |
| XSR-32   | XSRA-32                     | 2.000                       | 2.750        | 1.00 | 4.50 | 3.13 | .88  | .56  | 1/2-13 x 2    | 1 x .75 DP     | .56  | .50  | 1 x .63 DP    | 15 4             | 1.97 |
| XSR-48   | XSRA-48                     | 3.000                       | 4.000        | 1.31 | 6.00 | 4.25 | 1.25 | .81  | 3/4-10 x 2.75 | 1.44 x 1.13 DP | .69  | .63  | 1.25 x .75 DP | 25 6             | 2.97 |

**Waymount 60 Case LinearRace Shaft Support Block** J, K are Total Adjustment Vertical Adjustment  
Horizontal Adjustment

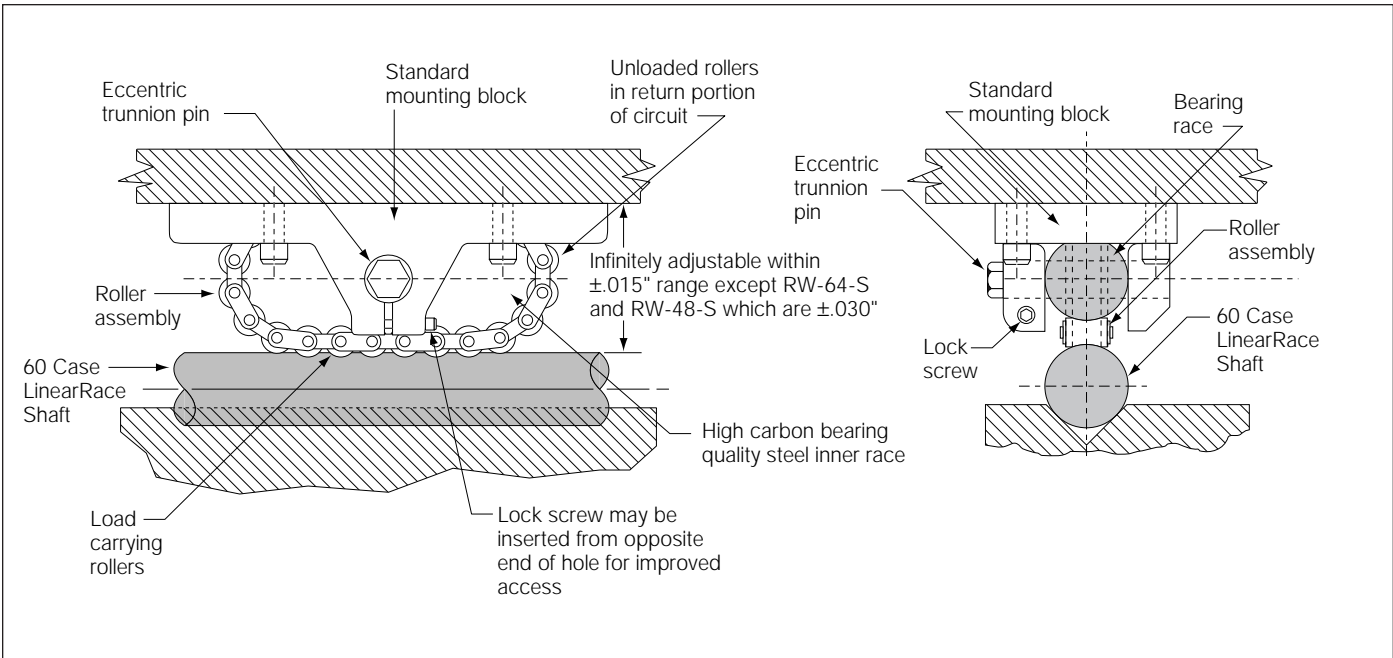
For installation see ESA12

| Waymount* LinearRace Shaft Support Block (Dimensions in inches) |                                 |      |      |      |      |      |      |      |     |                  |     |     |      |      |      |                        |
|---|---------------------------------|------|------|------|------|------|------|------|-----|------------------|-----|-----|------|------|------|------------------------|
| Waymount Part Number  | Nominal LinearRace Diameter $d$ | L    | H    | W    | A    | B    | C    | E    | F   | G <sup>(4)</sup> | J   | K   | M    | N    | P    | Weight lb <sub>f</sub> |
| WM-8  | .500                            | 1.50 | 1.06 | 1.75 | .50  | .88  | .25  | .75  | .22 | 8-32             | .05 | .09 | .69  | .50  | .44  | .20                    |
| WM-16   | 1.000                           | 2.00 | 1.50 | 2.50 | .75  | 1.25 | .31  | 1.06 | .28 | 1/4-28           | .06 | .13 | .81  | .69  | .69  | .50                    |
| WM-24   | 1.500                           | 2.50 | 2.00 | 3.50 | 1.19 | 1.63 | .44  | 1.19 | .34 | 5/16-24          | .13 | .13 | 1.00 | .75  | .75  | 1.10                   |
| WM-32   | 2.000                           | 3.00 | 2.50 | 4.00 | 1.44 | 1.88 | .50  | 1.38 | .41 | 3/8-24           | .13 | .13 | 1.25 | .94  | 1.00 | 1.80                   |
| WM-48   | 3.000                           | 5.00 | 4.31 | 6.75 | 2.38 | 3.38 | .75  | 2.63 | .66 | 5/8-18           | .13 | .13 | 2.25 | 1.63 | 1.50 | 10.20                  |
| WM-64   | 4.000                           | 6.50 | 5.44 | 8.50 | 3.00 | 4.25 | 1.00 | 3.13 | .78 | 3/4-16           | .13 | .13 | 2.75 | 2.00 | 2.00 | 21.20                  |

<sup>(4)</sup> Supplied with Waymount LinearRace Shaft support block

# RoundWay Linear Roller Bearings

## RoundWay Operating Principle



Thomson invented the RoundWay\* Linear roller bearing for use in high load, heavy duty applications. Each RoundWay bearing combines the high load capacity of hardened and ground steel recirculating rollers with a rigid malleable iron pillow block providing extremely high load capacity with smooth linear travel. The RoundWay linear roller bearing comes in both a single and dual version. A single RoundWay linear roller bearing does not resist side loads and is therefore always used in conjunction with a dual version.

Each RoundWay linear roller bearing is designed for use on 60 Case\* LinearRace\* Shaft. The 60 Case LinearRace Shaft can be continuously supported using type LSR, SR, or XSR 60 Case LinearRace Shaft support rails or intermittently supported using the adjustable Waymount\* LinearRace Shaft supports type WM.

The RoundWay linear roller bearing consists of four basic parts: the bearing race, the roller assembly, the eccentric trunnion pin and the mounting block. The rolling elements of a RoundWay linear roller bearing are a series of concave rollers interconnected and linked by a chain assembly. As load is applied to the mounting block it is

transferred through the bearing race and roller assembly to the supported 60 Case LinearRace Shaft. Connecting the mounting block to the RoundWay bearing and roller assembly is an eccentric trunnion pin that allows the height of the RoundWay linear roller bearing to be adjusted to compensate for variations in the mounting surfaces or the build-up of tolerances between component elements. The eccentric trunnion pin can also be used to preload the RoundWay bearing by eliminating internal bearing clearance. After the eccentric trunnion pin has been adjusted it can be held in place by simply tightening the lock screw.

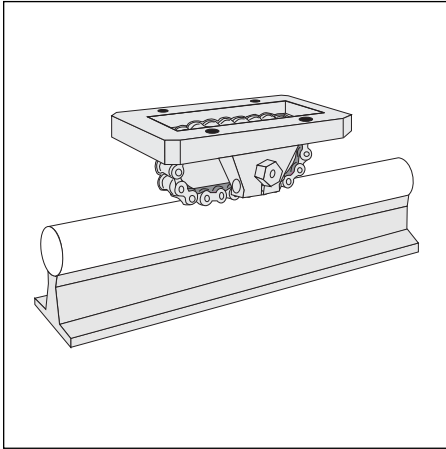
### Self-Aligning

The RoundWay single and dual bearings are designed with a built-in self-aligning capability that absorbs misalignment caused by inaccuracies in carriage or base machining. The RoundWay single bearing has an additional built-in self-aligning capability that allows it to absorb misalignment caused by two slightly out of parallel 60 Case LinearRace Shafts. This feature is realized when two RoundWay single bearings are mounted on one 60 Case LinearRace Shaft and two dual RoundWay bearings are on a parallel 60 Case LinearRace Shaft.

For more information, or to place an order, please contact your local authorized Thomson distributor or Thomson Industries, at 1-800-55-4-THOMSON, Fax: 1-800-445-0329, or E-mail at [linearguides@thomsonmail.com](mailto:linearguides@thomsonmail.com).

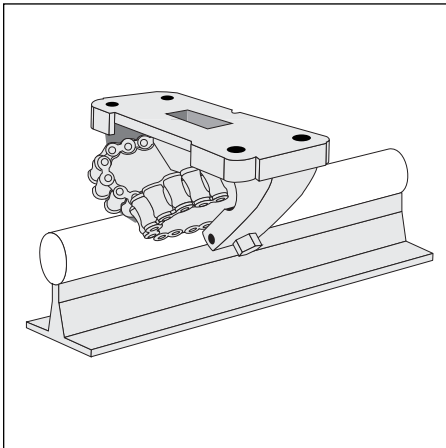
# RoundWay Linear Roller Bearings

## for Continuously Supported Applications



### RoundWay Linear Roller Bearing (Single Type)

- Available in 1/2 through 4 inch diameters.
- Load capacity range between 970 and 48,000 lbf.
- Travel speeds up to 100 ft/s.
- Accelerations up to 450 ft/s<sup>2</sup>.
- Can be adjusted to compensate for variations in the mounting surface.
- Self-aligning in all directions.
- Designed to compensate for two 60 Case\* LinearRace\* Shafts that are slightly out of parallel (see page RW4 figure 1).
- Should always be used in conjunction with RoundWay Dual version.
- Can be mounted in a custom housing.
- Available with a two piece seal that retains lubrication while protecting the bearing from the ingress of dirt or contaminants.
- Easily mounted to carriage with four mounting bolts.



### RoundWay Linear Roller Bearing (Dual Type)

- Available in 1/2 through 4 inch diameters.
- Load capacity range between 1370 and 70,000 lbf.
- Travel speeds up to 100 ft/s.
- Accelerations up to 450 ft/s<sup>2</sup>.
- Can be adjusted to compensate for variations in the mounting surface.
- Self-aligning in all directions.
- Available with a two piece seal that retains lubrication while protecting the bearing from the ingress of dirt or contaminants.
- Easily mounted to carriage with four mounting bolts.

For more information, or to place an order, please contact your local authorized Thomson distributor or Thomson Industries, at 1-800-55-4-THOMSON, Fax: 1-800-445-0329, or E-mail at [linearguides@thomsonmail.com](mailto:linearguides@thomsonmail.com).