

# SHIPPING CONTAINER MOUNTS

## J-18100 SERIES



### *FOR PROTECTING PRODUCTS IN TRANSIT – SANDWICH MOUNTS WITH SPE® I ELASTOMER*

The LORD series of Shipping Container Mounts are for fragile, valuable products needing predictable, low to medium level protection. Bonded elastomeric sandwich mounts are simple, versatile, economical and easy to install.

These Shipping Container Mounts consist of two metal plates with an elastomer bonded between them. The composition and configuration of the elastomer determines the static and dynamic properties of the part. Sandwich mounts have excellent capacity for energy control, and they exhibit linear shear load deflection characteristics through a significant deflection range.

Offering controlled stiffness in all directions, a rugged one-piece bonded assembly and long service life, they are reusable for years, even under severe shipping conditions.

LORD offers standard Shipping Container Mounts with or without corrosion resistant paint. Standardization includes both elastomer and hardware. Seven different series of parts give you a wide choice of sizes, load capacities and spring rates.

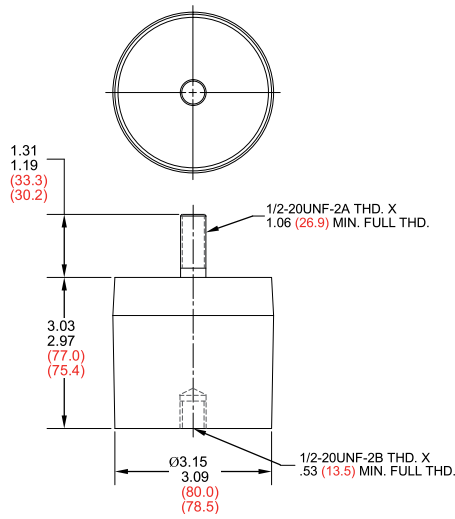
Shipping Container Mounts are made with SPE® I elastomer, a broad-temperature range stock and meet the rigid requirements of military packaging specifications over the entire operational temperature spectrum from -65°F to +165°F (-54°C to +74°C). Low carbon steel metal components are painted for corrosion protection. If paint is not required, they are treated with a rust preventative.

Shipping Container Mounts are designed to meet dynamic load requirements. Drop tests are conducted to determine the energy-absorbing characteristics under specified environmental conditions. Mounts are subject to severe fatigue tests to determine expected life. Still other tests are run to determine dynamic natural frequency, damping values and fatigue life under vibratory conditions.

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## J-18100 SERIES

FIGURE 1 – J-18100 PART DIMENSIONS



Metric values in parenthesis.



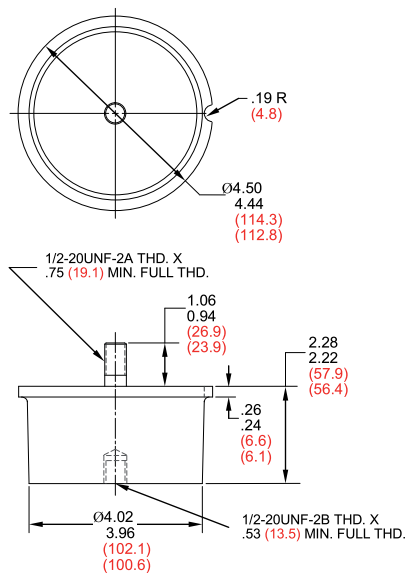
TABLE 1 – J-18100 PERFORMANCE CHARACTERISTICS

| Part Number |            | Shear Ratings |      |              |    |                    |     |
|-------------|------------|---------------|------|--------------|----|--------------------|-----|
|             |            | Spring Rate   |      | Maximum Load |    | Maximum Deflection |     |
| Painted     | Unpainted  | lb/in         | N/mm | lb           | kg | in                 | mm  |
| J-18100-2   | J-18100-12 | 210           | 37   | 80           | 36 | 6.5                | 165 |
| J-18100-3   | J-18100-13 | 235           | 41   | 90           | 41 | 6.2                | 157 |
| J-18100-4   | J-18100-14 | 265           | 46   | 100          | 45 | 5.5                | 140 |
| J-18100-5   | J-18100-15 | 300           | 53   | 115          | 52 | 4.9                | 124 |
| J-18100-6   | J-18100-16 | 355           | 62   | 135          | 61 | 4.1                | 104 |
| J-18100-7   | J-18100-17 | 395           | 69   | 155          | 70 | 3.7                | 94  |

Ratio of compression to shear spring rate of mount (L value) = 6.5 (approx.) for this series.

## J-18101 SERIES

FIGURE 2 – J-18101 PART DIMENSIONS



Metric values in parenthesis.



TABLE 2 – J-18101 PERFORMANCE CHARACTERISTICS

| Part Number |            | Shear Ratings |      |              |     |                    |     |
|-------------|------------|---------------|------|--------------|-----|--------------------|-----|
|             |            | Spring Rate   |      | Maximum Load |     | Maximum Deflection |     |
| Painted     | Unpainted  | lb/in         | N/mm | lb           | kg  | in                 | mm  |
| J-18101-2   | J-18101-12 | 525           | 96   | 205          | 93  | 4.6                | 117 |
| J-18101-3   | J-18101-13 | 570           | 100  | 220          | 100 | 4.2                | 107 |
| J-18101-4   | J-18101-14 | 605           | 106  | 235          | 107 | 4.0                | 102 |
| J-18101-5   | J-18101-15 | 675           | 118  | 265          | 120 | 3.6                | 91  |
| J-18101-6   | J-18101-16 | 875           | 153  | 310          | 141 | 2.7                | 69  |
| J-18101-7   | J-18101-17 | 965           | 169  | 310          | 141 | 2.5                | 64  |

Ratio of compression to shear spring rate of mount (L value) = 8 (approx.) for this series.

# SHIPPING CONTAINER MOUNTS

## J-18102 SERIES

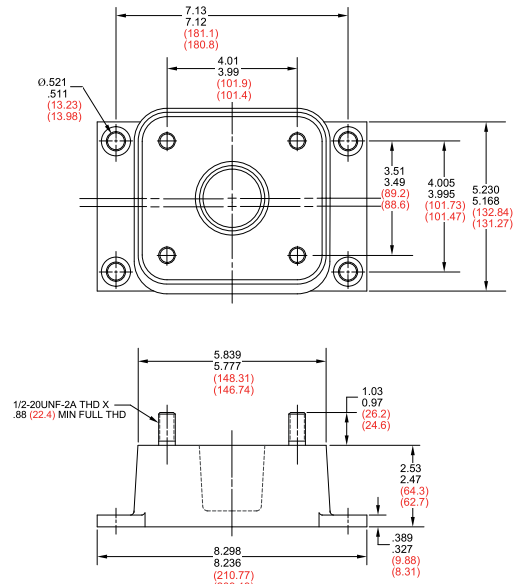


TABLE 3 – J-18102 PERFORMANCE CHARACTERISTICS

| Part Number |            | Shear Ratings |      |              |     |                    |     |
|-------------|------------|---------------|------|--------------|-----|--------------------|-----|
|             |            | Spring Rate   |      | Maximum Load |     | Maximum Deflection |     |
| Painted     | Unpainted  | lb/in         | N/mm | lb           | kg  | in                 | mm  |
| J-18102-2   | J-18102-12 | 1060          | 188  | 415          | 189 | 4.9                | 124 |
| J-18102-3   | J-18102-13 | 1295          | 227  | 505          | 230 | 4.0                | 102 |
| J-18102-4   | J-18102-14 | 1420          | 249  | 555          | 252 | 3.7                | 94  |
| J-18102-5   | J-18102-15 | 1680          | 294  | 655          | 298 | 3.1                | 79  |
| J-18102-6   | J-18102-16 | 2130          | 373  | 680          | 309 | 2.4                | 61  |
| J-18102-7   | J-18102-17 | 2435          | 427  | 680          | 309 | 2.1                | 53  |

Ratio of compression to shear spring rate of mount (L value) = 12 (approx.) for this series.

FIGURE 3 – J-18102 PART DIMENSIONS



Metric values in parenthesis.

## J-18103 SERIES

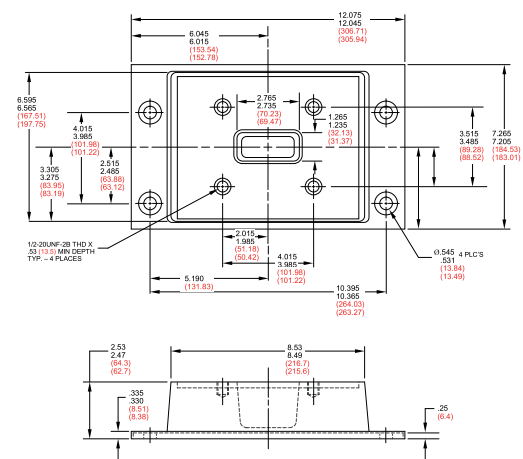


TABLE 4 – J-18103 PERFORMANCE CHARACTERISTICS

| Part Number |            | Shear Ratings |      |              |     |                    |     |
|-------------|------------|---------------|------|--------------|-----|--------------------|-----|
|             |            | Spring Rate   |      | Maximum Load |     | Maximum Deflection |     |
| Painted     | Unpainted  | lb/in         | N/mm | lb           | kg  | in                 | mm  |
| J-18103-2   | J-18103-12 | 2165          | 379  | 850          | 386 | 4.6                | 117 |
| J-18103-3   | J-18103-13 | 2425          | 425  | 950          | 432 | 4.1                | 104 |
| J-18103-4   | J-18103-14 | 2765          | 484  | 1080         | 491 | 3.6                | 91  |
| J-18103-5   | J-18103-15 | 3245          | 569  | 1270         | 577 | 3.1                | 79  |
| J-18103-6   | J-18103-16 | 3540          | 620  | 1310         | 595 | 2.8                | 71  |
| J-18103-7   | J-18103-17 | 3880          | 680  | 1310         | 595 | 2.6                | 66  |

Ratio of compression to shear spring rate of mount (L value) = 9 (approx.) for this series.

FIGURE 4 – J-18103 PART DIMENSIONS

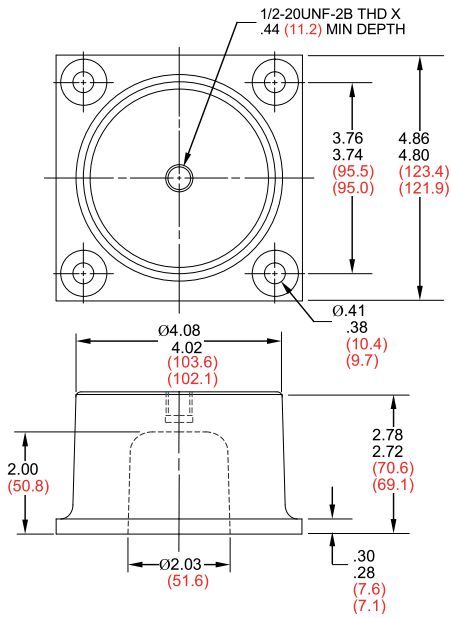


Metric values in parenthesis.

# SHIPPING CONTAINER MOUNTS

## J-18104 SERIES

FIGURE 5 – J-18104 PART DIMENSIONS



Metric values in parenthesis.



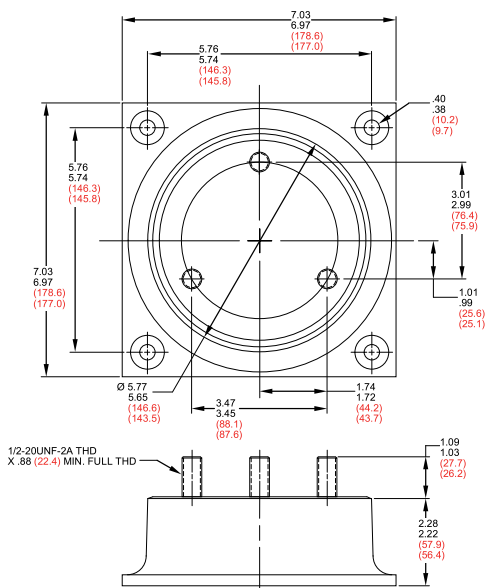
TABLE 5 – J-18104 PERFORMANCE CHARACTERISTICS

| Part Number |            | Shear Ratings |      |              |     |                    |     |
|-------------|------------|---------------|------|--------------|-----|--------------------|-----|
|             |            | Spring Rate   |      | Maximum Load |     | Maximum Deflection |     |
| Painted     | Unpainted  | lb/in         | N/mm | lb           | kg  | in                 | mm  |
| J-18104-2   | J-18104-12 | 290           | 51   | 110          | 50  | 5.9                | 150 |
| J-18104-3   | J-18104-13 | 310           | 54   | 120          | 55  | 5.9                | 150 |
| J-18104-4   | J-18104-14 | 365           | 64   | 140          | 64  | 5.1                | 130 |
| J-18104-5   | J-18104-15 | 410           | 72   | 160          | 73  | 4.5                | 114 |
| J-18104-6   | J-18104-16 | 525           | 92   | 205          | 93  | 3.5                | 89  |
| J-18104-7   | J-18104-17 | 575           | 101  | 225          | 102 | 3.2                | 81  |

Ratio of compression to shear spring rate of mount (L value) = 6 (approx.) for this series.

## J-18105 SERIES

FIGURE 6 – J-18105 PART DIMENSIONS



Metric values in parenthesis.



TABLE 6 – J-18105 PERFORMANCE CHARACTERISTICS

| Part Number |            | Shear Ratings |      |              |     |                    |     |
|-------------|------------|---------------|------|--------------|-----|--------------------|-----|
|             |            | Spring Rate   |      | Maximum Load |     | Maximum Deflection |     |
| Painted     | Unpainted  | lb/in         | N/mm | lb           | kg  | in                 | mm  |
| J-18105-2   | J-18105-12 | 750           | 131  | 290          | 132 | 4.6                | 117 |
| J-18105-3   | J-18105-13 | 815           | 143  | 320          | 149 | 4.3                | 109 |
| J-18105-4   | J-18105-14 | 890           | 156  | 350          | 159 | 3.9                | 99  |
| J-18105-5   | J-18105-15 | 1000          | 175  | 390          | 177 | 3.4                | 86  |
| J-18105-6   | J-18105-16 | 1150          | 201  | 450          | 205 | 3.0                | 76  |
| J-18105-7   | J-18105-17 | 1275          | 233  | 450          | 205 | 2.7                | 69  |

Ratio of compression to shear spring rate of mount (L value) = 8 (approx.) for this series.

# SHIPPING CONTAINER MOUNTS

## J-18106 SERIES

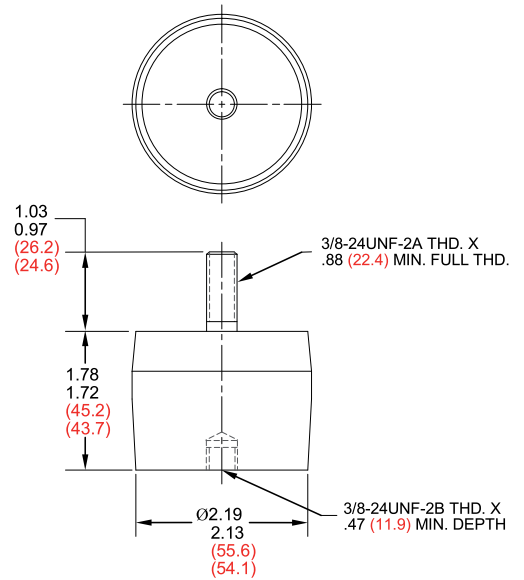


**TABLE 7 – J-18106 PERFORMANCE CHARACTERISTICS**

| Part Number |            | Shear Ratings |      |              |    |                    |    |
|-------------|------------|---------------|------|--------------|----|--------------------|----|
|             |            | Spring Rate   |      | Maximum Load |    | Maximum Deflection |    |
| Painted     | Unpainted  | lb/in         | N/mm | lb           | kg | in                 | mm |
| J-18106-2   | J-18106-12 | 155           | 27   | 55           | 25 | 3.4                | 86 |
| J-18106-3   | J-18106-13 | 180           | 32   | 60           | 27 | 3.4                | 86 |
| J-18106-4   | J-18106-14 | 215           | 38   | 75           | 34 | 3.3                | 84 |
| J-18106-5   | J-18106-15 | 240           | 42   | 80           | 36 | 2.9                | 74 |
| J-18106-6   | J-18106-16 | 320           | 56   | 90           | 41 | 2.2                | 56 |
| J-18106-7   | J-18106-17 | 350           | 61   | 90           | 41 | 2.0                | 51 |

Ratio of compression to shear spring rate of mount (L value) = 11 (approx.) for this series.

**FIGURE 7 – J-18106 PART DIMENSIONS**



*Metric values in parenthesis.*