

Nitrogen Gas Spring Two Post Lifter

SL2.300 – 1/3 ton / 3 kN

NEW!

| Part No. | T* mm inch | C | E | Mini Gas Spring |
|---------------|------------------|--------------|----------------|-----------------|
| SL2.300.025** | 23 0.91 | 47 1.85 | 73 2.874 | L.300.025 |
| SL2.300.038 | 35.5 1.40 | 59.5 2.34 | 85.5 3.366 | L.300.038 |
| SL2.300.050 | 48 1.89 | 72 2.83 | 98 3.858 | L.300.050 |
| SL2.300.063 | 60.5 2.38 | 84.5 3.33 | 110.5 4.350 | L.300.063 |
| SL2.300.080 | 78 3.07 | 102 4.02 | 128 5.039 | L.300.080 |
| SL2.300.100 | 98 3.86 | 122 4.80 | 148 5.827 | L.300.100 |
| SL2.300.125 | 123 4.84 | 147 5.79 | 173 6.811 | L.300.125 |
| SL2.300.150 | 148 5.83 | 172 6.77 | 198 7.795 | L.300.150 |
| SL2.300.175 | 173 6.81 | 197 7.76 | 223 8.780 | L.300.175 |
| SL2.300.200 | 198 7.80 | 222 8.74 | 248 9.764 | L.300.200 |

* Available gas spring travel.

** Only available with M1/E1 Rail Plate Option.

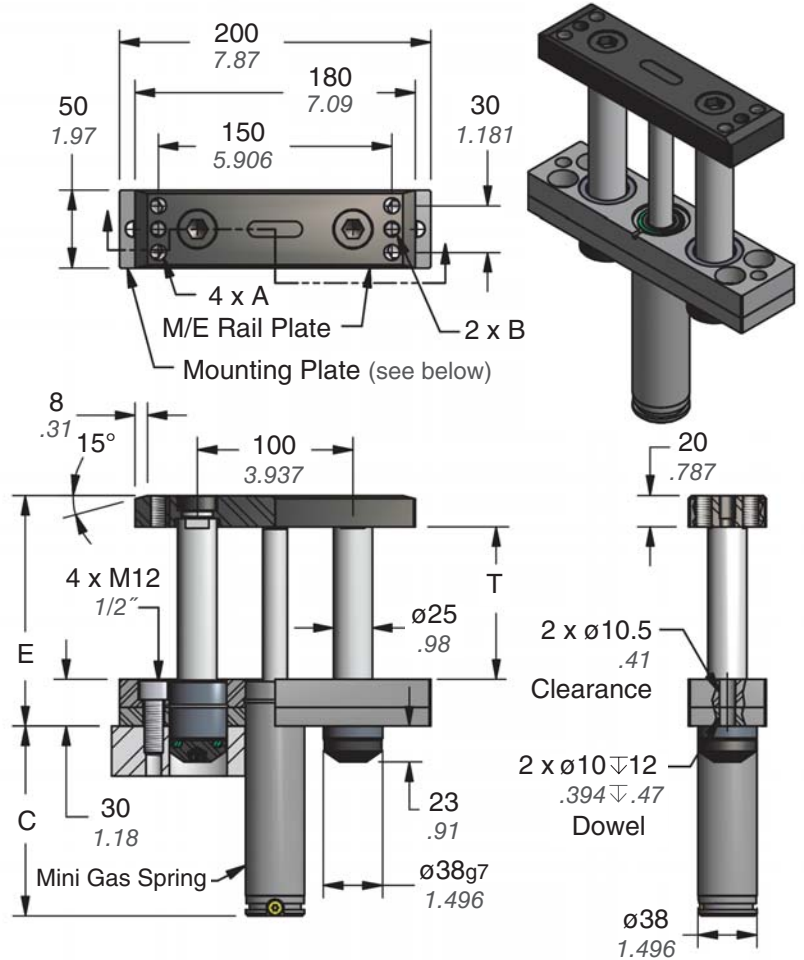
| Rail Plate | A | øB Dowel |
|------------|--------------|--------------------|
| M/M1 | M12 x 1.75 | 10 mm x 15 Deep |
| E/E1 | 1/2" -13 UNC | 3/8" x .59 Deep |

On-Contact Force

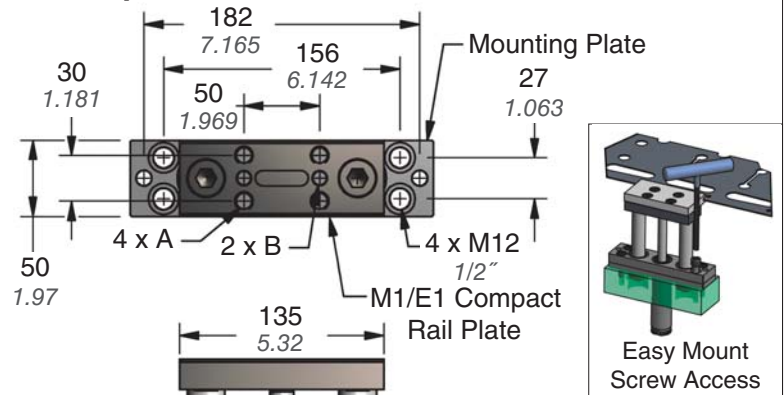
Metric

Imperial

| bar charging pressure | daN theoretical lifting force | psi charging pressure | lb.-f theoretical lifting force |
|-----------------------------|-------------------------------------|-----------------------------|---------------------------------------|
| 150 | 302 | 2175 | 678 |
| 125 | 251 | 2000 | 623 |
| 100 | 201 | 1750 | 545 |
| 75 | 151 | 1500 | 467 |
| 50 | 101 | 1000 | 312 |
| 25 | 50 | 500 | 156 |
| 20 | 40 | 250 | 78 |



Mounting Plate Detail and M1/E1 Compact Rail Plate Option



Ordering Example:

SL2.300. 080. B5. M. 150

Part Number: _____
Includes Series and Model

Stroke Length: _____
025, 038, 050, 063, 080, 100, 125, 150,
175 and 200.
Other stroke lengths are available,
contact DADCO for more information.

Charging Pressure of Mini Gas Spring:
Specify Pressure: 15 – 150 bar (220 – 2175 psi).
When not specified, default is 150 bar.

Rail Plate: M, E, M1 or E1
When not specified, default is M.

Mount Option:
B5 = Vertical

B11105

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Repair Kits

SL2.RK.300

Kit includes bearing assemblies (2) with snap rings (2), dampening devices (2) and maintenance manual. *Replacement Mini (L Series) Gas Spring sold separately.*

90.103.00300 (for L Series Gas Spring)

Kit includes fully assembled cartridge, dust cover, bottle of assembly oil and maintenance manual.

Operating Specifications

Charging Medium: Nitrogen Gas
 Charging Pressure Range: 15 - 150 bar (220 - 2175 psi)
 Maximum Speed: 800 mm/sec (31 in/sec)
 Operating Temperature: -6°C - 71°C (20°F - 160°F)

TRAVEL SHOULD NOT EXCEED 90% OF STROKE
 DESIGN ADEQUATE SAFETY SO LIFTER IS NOT
 OVER STROKED

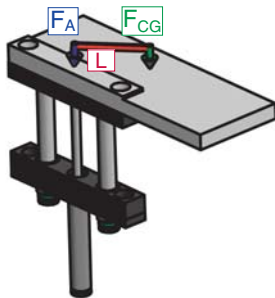
Maximum Attachment Capacity Per Lifter

F_A = Compression force to depress the lifter on the lifter centerline.

F_{CG} = Force at the center of gravity of the attachment.

L = Distance from F_A to F_{CG} .

To maximize the reliability of the lifter, actuate as close to F_A as possible. Good design practice should minimize L and locate F_{CG} on the centerline of the lifter. Increased wear on the bearing will occur if L exceeds 50 mm (2") or if F_A is offset from the centerline. If a large offset is required, reduce the attachment load or add a second lifter.



Metric

Imperial

| Ram Velocity | Attachment Mass (kg) | Ram Velocity | Attachment Mass (lb.-mass) |
|--------------|----------------------|--------------|----------------------------|
| mm/s | SL2.300 | fpm in/s | SL2.300 |
| 300 | 46 | 59 12 | 102 |
| 400 | 26 | 79 16 | 57 |
| 500 | 17 | 98 20 | 37 |
| 600 | 12 | 118 24 | 25 |
| 700 | 8 | 138 28 | 19 |
| 800 | 6 | 157 31 | 14 |

Determine ram velocity and reference the recommended attachment mass per lifter. Use multiple lifters to accommodate attachment loads that exceed velocity or mass limits.

Installation and Application Examples

Basic Installation

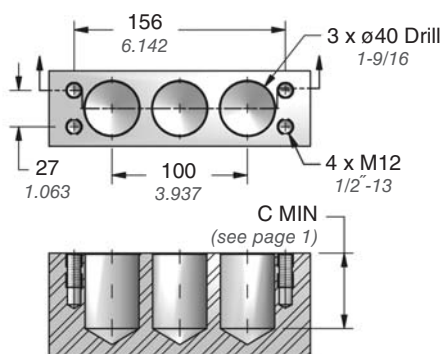


Fig. 1

Precise Installation

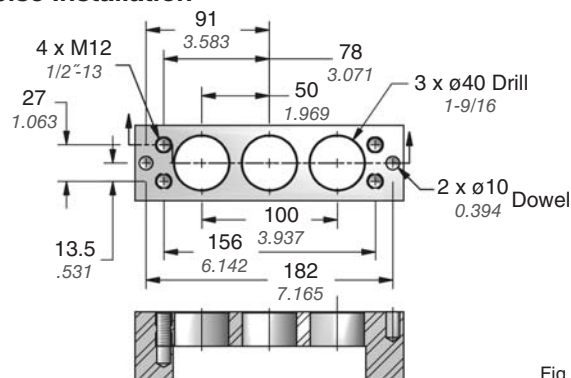


Fig. 2

The SL2 lifter may be installed using the basic installation, shown in Figure 1. For higher precision, use the two ø10 mm dowel locations to dowel the lifter, shown in Figure 2.

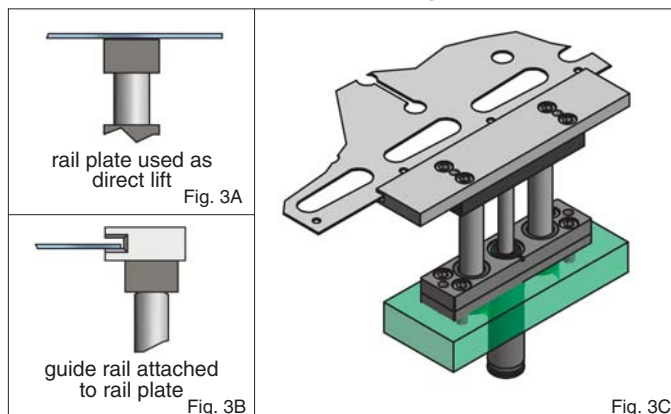


Fig. 3C

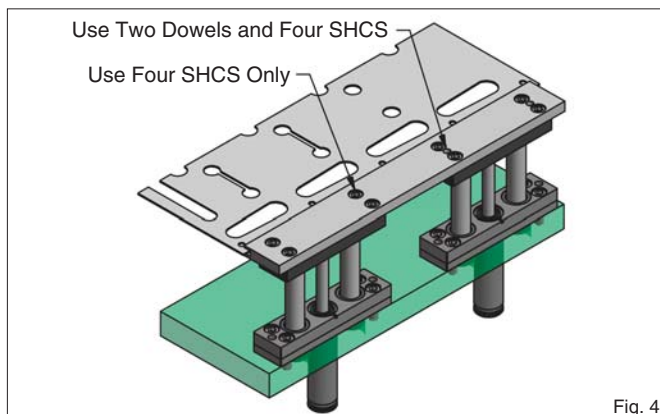


Fig. 4

Rails may be attached to the SL2 rail plate using the four tapped holes. Figure 3C depicts a rail plate with a customized guide rail attached, permitting continuous feed of material during operation.

When using multiple lifters, key or dowel the locations on only one lifter, to prevent binding. SL2 lifters may be piped with DADCO's *MINILink*® system to provide control and adjustment from outside the die.