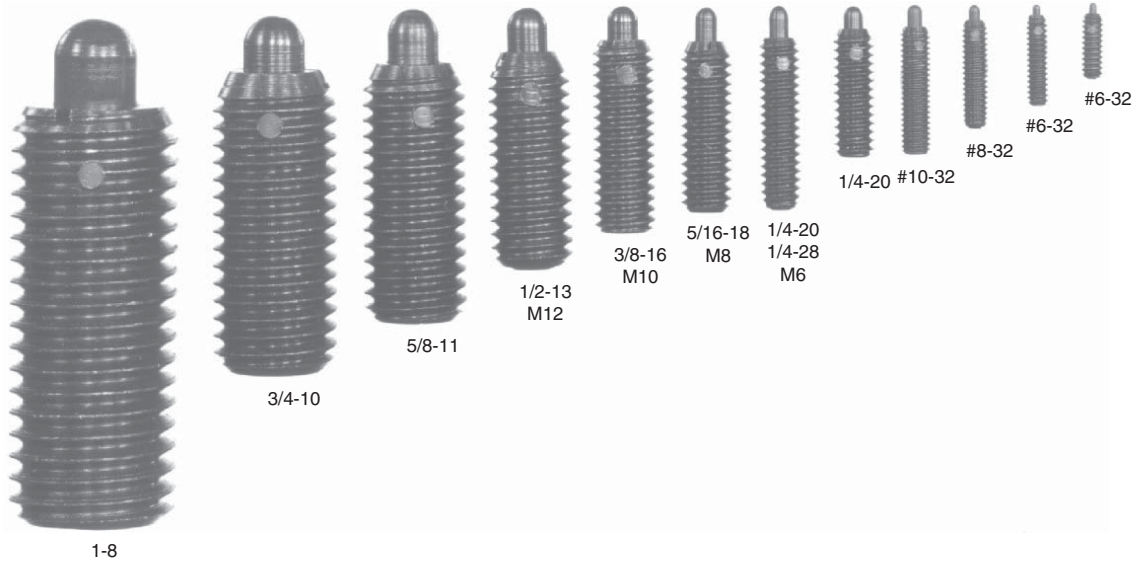


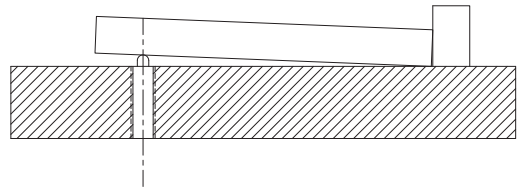
SPRING PLUNGERS

STEEL – BODY: 12L14 STEEL, BLACK OXIDE FINISH (METRIC SIZES ZINC PLATED CLEAR CHROMATE).
PLUNGER NOSE: 12L14 STEEL, CARBURIZED-HARDENED, BLACK OXIDE FINISH OR
ZINC PLATED CLEAR CHROMATE (OR DELRIN). SPRING: MUSIC WIRE.
STAINLESS STEEL – BODY: 300-SERIES STAINLESS.
PLUNGER NOSE: 300-SERIES STAINLESS (OR DELRIN). SPRING: 302 STAINLESS.

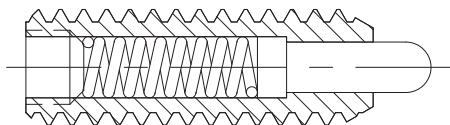


Self-contained plunger-and-spring device available in many sizes and forces. Long bearing length on plunger for smooth operation. Locking element holds the unit securely in place after installation. Install and/or adjust from either end (when using the slot at the plunger end, install with a Plunger Wrench to avoid over-compressing the spring).

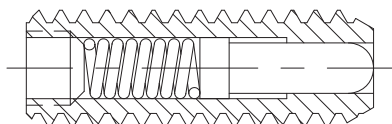
Available in thread sizes from #6-32 to 1"-8 (M6 to M12 in metric). Choice of light or heavy force in each thread size. Available in steel, with hardened plunger nose, or stainless steel. Optionally available with a Delrin® nose to prevent marring. Note: Catalog photos are actual size.



Spring plungers are often used to lift parts after machining to make unloading easier.



Nose Extended

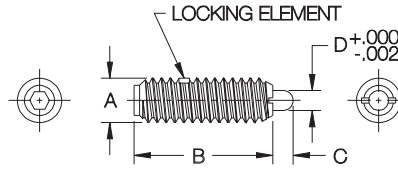


Nose Retracted

PLUNGER NOSE COLOR CODES

| BODY | NOSE | FORCE | COLOR CODE |
|-----------|-----------|-------|------------|
| STEEL | STEEL | LIGHT | SILVER |
| | | HEAVY | BLACK |
| | DELRIN | LIGHT | WHITE |
| | | HEAVY | BROWN |
| STAINLESS | STAINLESS | LIGHT | PLAIN |
| | | HEAVY | PLAIN |
| | DELRIN | LIGHT | WHITE |
| | | HEAVY | BROWN |

SPRING PLUNGERS



STANDARD PLUNGER NOSE, LIGHT FORCE (USA)

| PART NO. | | A | END FORCE (LBS) | | B | C | D DIA |
|-------------|--------------|---------|-----------------|-------|---------|------|-------|
| STEEL | STAINLESS | | INITIAL | FINAL | | | |
| CL-10-SPS-2 | CL-10-SSPS-2 | #6-32 | 0.5 | 1.5 | 17/32 | 1/16 | .046 |
| CL-20-SPS-2 | CL-20-SSPS-2 | #8-32 | 0.7 | 2.3 | 5/8 | 3/32 | .070 |
| CL-30-SPS-2 | CL-30-SSPS-2 | #10-32 | 1.3 | 2.7 | 3/4 | 1/8 | .093 |
| CL-40-SPS-2 | CL-40-SSPS-2 | 1/4-20 | 1 | 4 | 1 | 3/16 | .119 |
| CL-41-SPS-2 | CL-41-SSPS-2 | 1/4-28 | 1 | 4 | 1 | 3/16 | .119 |
| CL-50-SPS-2 | CL-50-SSPS-2 | 5/16-18 | 1.5 | 4.5 | 1 | 3/16 | .135 |
| CL-60-SPS-2 | CL-60-SSPS-2 | 3/8-16 | 2.8 | 7.2 | 1-1/8 | 3/16 | .186 |
| CL-70-SPS-2 | CL-70-SSPS-2 | 1/2-13 | 2.7 | 9.3 | 1-1/4 | 1/4 | .248 |
| CL-80-SPS-2 | — | 5/8-11 | 3.5 | 10.5 | 1-1/2 | 5/16 | .310 |
| CL-90-SPS-2 | — | 3/4-10 | 4 | 16 | 1-3/4 | 5/16 | .374 |
| CL-95-SPS-2 | — | 1"-8 | 4 | 31 | 2-13/32 | 1/2 | .499 |

DELTRIN® PLUNGER NOSE, LIGHT FORCE (USA)

| PART NO. | | A | END FORCE (LBS) | | B | C | D DIA |
|-------------|--------------|---------|-----------------|-------|-------|------|-------|
| STEEL | STAINLESS | | INITIAL | FINAL | | | |
| — | — | #6-32 | — | — | — | — | — |
| CL-20-SPN-2 | CL-20-SSPN-2 | #8-32 | 0.7 | 2.3 | 5/8 | 3/32 | .070 |
| CL-30-SPN-2 | CL-30-SSPN-2 | #10-32 | 1.3 | 2.7 | 3/4 | 1/8 | .093 |
| CL-40-SPN-2 | CL-40-SSPN-2 | 1/4-20 | 1 | 4 | 1 | 3/16 | .119 |
| — | — | 1/4-28 | — | — | — | — | — |
| CL-50-SPN-2 | CL-50-SSPN-2 | 5/16-18 | 1.5 | 4.5 | 1 | 3/16 | .135 |
| CL-60-SPN-2 | CL-60-SSPN-2 | 3/8-16 | 2.8 | 7.2 | 1-1/8 | 3/16 | .186 |
| CL-70-SPN-2 | CL-70-SSPN-2 | 1/2-13 | 2.7 | 9.3 | 1-1/4 | 1/4 | .248 |
| CL-80-SPN-2 | — | 5/8-11 | 3.5 | 10.5 | 1-1/2 | 5/16 | .310 |
| — | — | 3/4-10 | — | — | — | — | — |
| — | — | 1"-8 | — | — | — | — | — |

STANDARD PLUNGER NOSE, HEAVY FORCE (USA)

| PART NO. | | A | END FORCE (LBS) | | B | C | D DIA |
|-------------|--------------|---------|-----------------|-------|---------|------|-------|
| STEEL | STAINLESS | | INITIAL | FINAL | | | |
| CL-11-SPS-1 | CL-11-SSPS-1 | #6-32 | 1.0 | 1.6 | 3/8 | 1/16 | .046 |
| CL-10-SPS-1 | CL-10-SSPS-1 | | 1.5 | 4.5 | 17/32 | | |
| CL-20-SPS-1 | CL-20-SSPS-1 | #8-32 | 2.7 | 7.3 | 5/8 | 3/32 | .070 |
| CL-30-SPS-1 | CL-30-SSPS-1 | #10-32 | 2.9 | 11.1 | 3/4 | 1/8 | .093 |
| CL-42-SPS-1 | CL-42-SSPS-1 | 1/4-20 | 2 | 9 | 3/4 | 1/8 | .119 |
| CL-40-SPS-1 | CL-40-SSPS-1 | | 3 | 13 | 1 | | |
| CL-41-SPS-1 | CL-41-SSPS-1 | 1/4-28 | 3 | 13 | 1 | 3/16 | .119 |
| CL-50-SPS-1 | CL-50-SSPS-1 | 5/16-18 | 3 | 15 | 1 | 3/16 | .135 |
| CL-60-SPS-1 | CL-60-SSPS-1 | 3/8-16 | 5.5 | 14.5 | 1-1/8 | 3/16 | .186 |
| CL-70-SPS-1 | CL-70-SSPS-1 | 1/2-13 | 6.6 | 17.4 | 1-1/4 | 1/4 | .248 |
| CL-80-SPS-1 | — | 5/8-11 | 10.5 | 25.5 | 1-1/2 | 5/16 | .310 |
| CL-90-SPS-1 | — | 3/4-10 | 6.7 | 37.3 | 1-3/4 | 5/16 | .374 |
| CL-95-SPS-1 | — | 1"-8 | 16 | 68 | 2-13/32 | 1/2 | .499 |

DELTRIN® PLUNGER NOSE, HEAVY FORCE (USA)

| PART NO. | | A | END FORCE (LBS) | | B | C | D DIA |
|-------------|--------------|---------|-----------------|-------|-------|------|-------|
| STEEL | STAINLESS | | INITIAL | FINAL | | | |
| — | — | #6-32 | — | — | — | — | — |
| CL-20-SPN-1 | CL-20-SSPN-1 | #8-32 | 2.7 | 7.3 | 5/8 | 3/32 | .070 |
| CL-30-SPN-1 | CL-30-SSPN-1 | #10-32 | 2.9 | 11.1 | 3/4 | 1/8 | .093 |
| — | — | 1/4-20 | — | — | — | — | — |
| CL-40-SPN-1 | CL-40-SSPN-1 | 1/4-20 | 3 | 13 | 1 | 3/16 | .119 |
| — | — | 1/4-28 | — | — | — | — | — |
| CL-50-SPN-1 | CL-50-SSPN-1 | 5/16-18 | 3 | 15 | 1 | 3/16 | .135 |
| CL-60-SPN-1 | CL-60-SSPN-1 | 3/8-16 | 5.5 | 14.5 | 1-1/8 | 3/16 | .186 |
| CL-70-SPN-1 | CL-70-SSPN-1 | 1/2-13 | 6.6 | 17.4 | 1-1/4 | 1/4 | .248 |
| CL-80-SPN-1 | — | 5/8-11 | 10.5 | 25.5 | 1-1/2 | 5/16 | .310 |
| — | — | 3/4-10 | — | — | — | — | — |
| — | — | 1"-8 | — | — | — | — | — |

STANDARD PLUNGER NOSE, LIGHT FORCE (METRIC)

| PART NO. | | A | END FORCE (LBS) | | B | C | D DIA |
|--------------|---------------|-----|-----------------|-------|-------|------|-------|
| STEEL | STAINLESS | | INITIAL | FINAL | | | |
| CLM-6-SPS-1 | CLM-6-SSPS-1 | M6 | 1.0 | 4.0 | 1 | 3/16 | .119 |
| CLM-8-SPS-1 | CLM-8-SSPS-1 | M8 | 1.5 | 4.5 | 1 | 3/16 | .135 |
| CLM-10-SPS-1 | CLM-10-SSPS-1 | M10 | 2.8 | 7.2 | 1-1/8 | 3/16 | .186 |
| CLM-12-SPS-1 | CLM-12-SSPS-1 | M12 | 2.7 | 9.3 | 1-1/4 | 1/4 | .248 |

DELTRIN® PLUNGER NOSE, LIGHT FORCE (METRIC)

| PART NO. | | A | END FORCE (LBS) | | B | C | D DIA |
|--------------|---------------|-----|-----------------|-------|-------|------|-------|
| STEEL | STAINLESS | | INITIAL | FINAL | | | |
| CLM-6-SPN-1 | CLM-6-SSPN-1 | M6 | 1.0 | 4.0 | 1 | 3/16 | .119 |
| CLM-8-SPN-1 | CLM-8-SSPN-1 | M8 | 1.5 | 4.5 | 1 | 3/16 | .135 |
| CLM-10-SPN-1 | CLM-10-SSPN-1 | M10 | 2.8 | 7.2 | 1-1/8 | 3/16 | .186 |
| CLM-12-SPN-1 | CLM-12-SSPN-1 | M12 | 2.7 | 9.3 | 1-1/4 | 1/4 | .248 |

STANDARD PLUNGER NOSE, HEAVY FORCE (METRIC)

| PART NO. | | A | END FORCE (LBS) | | B | C | D DIA |
|--------------|---------------|-----|-----------------|-------|-------|------|-------|
| STEEL | STAINLESS | | INITIAL | FINAL | | | |
| CLM-6-SPS-2 | CLM-6-SSPS-2 | M6 | 3.0 | 13.0 | 1 | 3/16 | .119 |
| CLM-8-SPS-2 | CLM-8-SSPS-2 | M8 | 3.0 | 15.0 | 1 | 3/16 | .135 |
| CLM-10-SPS-2 | CLM-10-SSPS-2 | M10 | 5.5 | 14.5 | 1-1/8 | 3/16 | .186 |
| CLM-12-SPS-2 | CLM-12-SSPS-2 | M12 | 6.6 | 17.4 | 1-1/4 | 1/4 | .248 |

DELTRIN® PLUNGER NOSE, HEAVY FORCE (METRIC)

| PART NO. | | A | END FORCE (LBS) | | B | C | D DIA |
|--------------|---------------|-----|-----------------|-------|-------|------|-------|
| STEEL | STAINLESS | | INITIAL | FINAL | | | |
| CLM-6-SPN-2 | CLM-6-SSPN-2 | M6 | 3.0 | 13.0 | 1 | 3/16 | .119 |
| CLM-8-SPN-2 | CLM-8-SSPN-2 | M8 | 3.0 | 15.0 | 1 | 3/16 | .135 |
| CLM-10-SPN-2 | CLM-10-SSPN-2 | M10 | 5.5 | 14.5 | 1-1/8 | 3/16 | .186 |
| CLM-12-SPN-2 | CLM-12-SSPN-2 | M12 | 5.5 | 17.4 | 1-1/4 | 1/4 | .248 |