

## SPRING - LOADED DEVICES PLUNGERS

### Description:

Metric-Steel Standard Plungers offer metric thread sizes and large bearing surfaces that prevent binding and assure perfect alignment of the plunger at any extension.

### Features/Benefits:

- Long travel
- Heavy & light end forces
- Black oxide finish

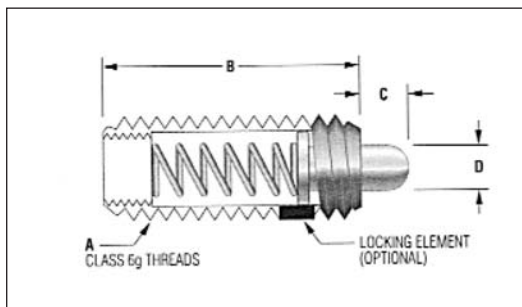
### Typical Uses:

- Ejecting
- Position & secure
- Positive locking
- Tensioning
- Indexing
- Electrical contacts

### PLEASE NOTE . . .

Spring-Loaded Devices are available in both steel and stainless steel.

Add suffix "S" to order stainless steel items.



| Heavy End Forces |                    |             |       |                    |      |      |      |
|------------------|--------------------|-------------|-------|--------------------|------|------|------|
| Part No          | Part No Nylon Lock | End Force N |       | A Class 6g Threads | B mm | C mm | D mm |
|                  |                    | Initial     | Final |                    |      |      |      |
| 61002-01         | 62002-01           | 18          | 50    | M6 x 1.0           | 20   | 2.5  | 2.7  |
| 61002-02         | 62002-02           | 25          | 70    | M8 x 1.25          | 22   | 3    | 3.5  |
| 61002-03         | 62002-03           | 25          | 70    | M10 x 1.5          | 22   | 3    | 4    |
| 61002-04         | 62002-04           | 45          | 110   | M12 x 1.75         | 28   | 4    | 6    |

| Light End Forces |                    |             |       |                    |      |      |      |
|------------------|--------------------|-------------|-------|--------------------|------|------|------|
| Part No          | Part No Nylon Lock | End Force N |       | A Class 6g Threads | B mm | C mm | D mm |
|                  |                    | Initial     | Final |                    |      |      |      |
| 61003-01         | 62003-01           | 7           | 20    | M6 x 1.0           | 20   | 2.5  | 2.7  |
| 61003-02         | 62003-02           | 9           | 35    | M8 x 1.25          | 22   | 3    | 3.5  |
| 61003-03         | 62003-03           | 9           | 35    | M10 x 1.5          | 22   | 3    | 4    |
| 61003-04         | 62003-04           | 10          | 55    | M12 x 1.75         | 28   | 4    | 6    |

# SPRING - LOADED DEVICES BALL PLUNGERS

## Description:

Metric-Steel Ball Plungers provide all the benefits of standard ball plungers in a metric thread design. Bodies are color-coded to indicate end forces:

- zinc plated = light and force;
- black = standard end force;
- gold = heavy end force.

## Ball Materials:

- 440C stainless steel
- Numerous materials available for special design.

## Features/Benefits:

- Smallest and lightest spring-loaded device
- Withstands side loading
- Controlled end forces
- Screwdriver installation.

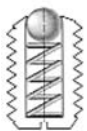
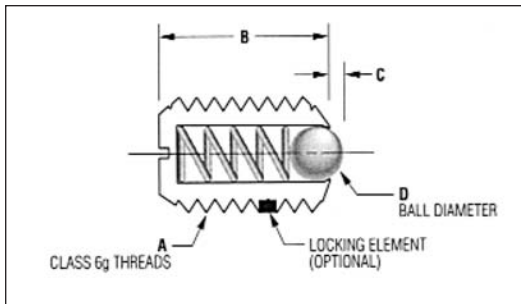
## Typical Uses:

- Indexing applications
- Gear shifters
- Locaters
- Torque-limiting devices
- Positioning levers

PLEASE NOTE . . .

Spring-Loaded Devices are available in both steel and stainless steel.

Add suffix "S" to order stainless steel items.



| Heavy End Forces |                    |            |             |       |                    |      |      |      |
|------------------|--------------------|------------|-------------|-------|--------------------|------|------|------|
| Part No          | Part No Nylon Lock | Color Code | End Force N |       | A Class 6g Threads | B mm | C mm | D mm |
|                  |                    |            | Initial     | Final |                    |      |      |      |
| 61153-01         | 62153-01           | Black      | 4           | 10    | M4 x .07           | 9    | .8   | 2.5  |
| 61153-02         | 62153-02           | Black      | 9           | 13    | M6 x 1.0           |      |      |      |
| 61154-01         | 62154-01           | Zinc       | 2           | 6     | M6 x 1.0           | 14   | 1    | 3.5  |
| 61155-01         | 62155-01           | Gold       | 28          | 40    | M6 x 1.0           |      |      |      |
| 61153-03         | 62153-03           | Black      | 15          | 30    | M8 x 1.25          |      |      |      |
| 61154-02         | 62154-02           | Zinc       | 5           | 10    | M8 x 1.25          | 16   | 1.5  | 3.5  |
| 61155-02         | 62155-02           | Gold       | 40          | 60    | M8 x 1.25          |      |      |      |
| 61153-04         | 62153-04           | Black      | 20          | 35    | M10 x 1.5          |      |      |      |
| 61154-03         | 62154-03           | Zinc       | 8           | 15    | M10 x 1.5          | 19   | 2    | 6    |
| 61155-03         | 62155-03           | Gold       | 60          | 90    | M10 x 1.5          |      |      |      |
| 61153-05         | 62153-05           | Black      | 30          | 55    | M12 x 1.75         |      |      |      |
| 61154-04         | 62154-04           | Zinc       | 10          | 20    | M12 x 1.75         | 22   | 2.5  | 8    |
| 61155-04         | 62155-04           | Gold       | 75          | 115   | M12 x 1.75         |      |      |      |

