

## Lateral Plungers · with plastic spring and pin - INCH

### EH 2B150.



#### Product Description

To be used for positioning and applying pressure, e.g. during painting and sandblasting.

#### Material

##### Body

- Aluminium Al

##### Spring

- plastic

##### Pin

- Steel, case-hardened, blackened
- Stainless steel
- Thermoplastic POM, white

#### Assembly

Installation by pressing in.

Formula for calculating the center distance for the mounting hole:

$$l_0 = z/2 + w + x,$$

$l_0$  = center distance,

$y$  = workpiece height,

$w$  = workpiece length,

$x$  = coordinate dimension,

$s$  = stroke,

$z$  = stop diameter

Calculation dimension  $x$ :

$y$  greater than or equal to  $l_2 - d_2/2$ ,

then  $x = d_2/2 - s$

(value  $x$  for this case see table)

or

$y$  smaller than  $l_2 - d_2/2$ ,

then  $x = d_2/2 - s - [(l_2 - d_2/2 - y) * 0,123]$

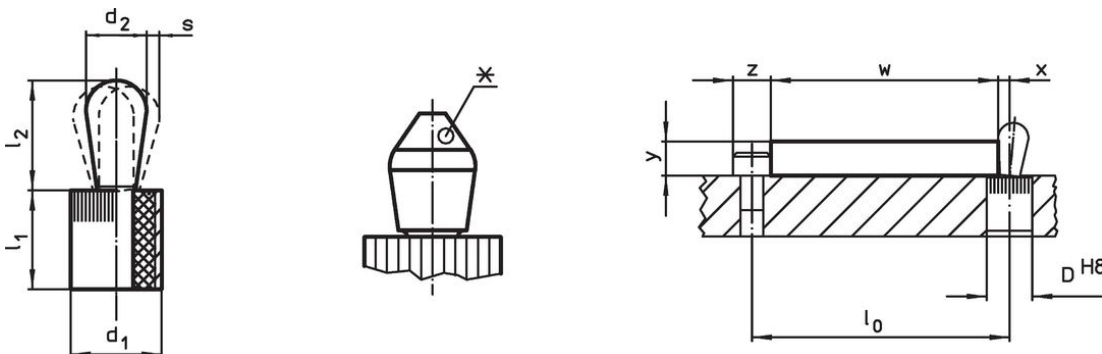
#### Characteristic

Version light spring load = blue spring

Version standard spring load = red spring

Version heavy spring load = green spring

#### Drawing



\*some sizes (see chart) have a deviating pin shape


#### Order information

| Dimensions                   |               | Spring load<br>F<br>max. <sup>1)</sup><br>~<br>[lb] | Dimensions    |               | Stroke<br>s<br>[in] | Location<br>hole<br>D<br>H8<br>[in] | $x^{2)}$<br>[in] | max.<br>[°F] | oz    | Art. No.                 |
|------------------------------|---------------|---|---------------|---------------|---------------------|-------------------------------------|------------------|--------------|-------|--------------------------|
| $d_1$<br>[in]                | $d_2$<br>[in] |   | $l_1$<br>[in] | $l_2$<br>[in] |                     |                                     |                  |              |       |                          |
|                              |               |   | -0.03         | $\pm 0.02$    |                     |                                     |                  |              |       |                          |
| Pin: Steel/Light spring load |               |   |               |               |                     |                                     |                  |              |       |                          |
| 1/4                          | 0.118         | 2.2   | 0.295         | 0.145         | 0.008               | 0.250                               | 0.051            | 212          | 0.020 | 2B150.0210 <sup>3)</sup> |
| 7/16                         | 0.197         | 6.7   | 0.374         | 0.287         | 0.016               | 0.438                               | 0.083            | 212          | 0.092 | 2B150.0220               |
| 7/16                         | 0.236         | 4.4   | 0.374         | 0.406         | 0.020               | 0.438                               | 0.098            | 212          | 0.120 | 2B150.0225               |

<sup>1)</sup> statistical average value

<sup>2)</sup> If the workpiece height ( $y$ ) is less than  $l_2 - d_2/2$ , the coordinate dimension ( $x$ ) must be calculated.

<sup>3)</sup> deviating pin shape (see drawing)



| Dimensions                                       |                        | Spring load<br>F<br>max. <sup>1)</sup><br>~<br>[lb] | Dimensions                      |                                 | Stroke<br>s<br>[in] | Location<br>hole<br>D<br>H8<br>[in] | x <sup>2)</sup><br>[in] | max.<br>[°F] | <br>[oz] | Art. No.                 |
|--|------------------------|---|---------------------------------|---------------------------------|---------------------|-------------------------------------|-------------------------|--------------|---|--------------------------|
| d <sub>1</sub><br>[in]                           | d <sub>2</sub><br>[in] |   | l <sub>1</sub><br>-0.03<br>[in] | l <sub>2</sub><br>±0.02<br>[in] |                     |                                     |                         |              |   |                          |
| <b>Pin: Steel/Standard spring load</b>           |                        |   |                                 |                                 |                     |                                     |                         |              |   |                          |
| 1/4  | 0.118                  | 4.4   | 0.295                           | 0.145                           | 0.008               | 0.250                               | 0.051                   | 212          | 0.020   | 2B150.0211 <sup>3)</sup> |
| 7/16   | 0.197                  | 13.5  | 0.374                           | 0.287                           | 0.016               | 0.438                               | 0.083                   | 212          | 0.092   | 2B150.0221               |
| 7/16   | 0.236                  | 6.7   | 0.374                           | 0.406                           | 0.020               | 0.438                               | 0.098                   | 212          | 0.120   | 2B150.0226               |
| 1/2  | 0.315                  | 11.1  | 0.553                           | 0.515                           | 0.024               | 0.500                               | 0.134                   | 212          | 0.260   | 2B150.0230               |
| 5/8  | 0.394                  | 18.0  | 0.675                           | 0.678                           | 0.031               | 0.625                               | 0.166                   | 212          | 0.534   | 2B150.0240               |
| <b>Pin: Steel/Heavy spring load</b>              |                        |   |                                 |                                 |                     |                                     |                         |              |   |                          |
| 7/16   | 0.197                  | 20.0  | 0.374                           | 0.287                           | 0.016               | 0.438                               | 0.083                   | 212          | 0.092   | 2B150.0222               |
| 7/16   | 0.236                  | 13.5  | 0.374                           | 0.406                           | 0.020               | 0.438                               | 0.098                   | 212          | 0.121   | 2B150.0227               |
| 1/2  | 0.315                  | 22.2  | 0.553                           | 0.515                           | 0.024               | 0.500                               | 0.134                   | 212          | 0.262   | 2B150.0231               |
| 5/8  | 0.394                  | 36.0  | 0.675                           | 0.678                           | 0.031               | 0.625                               | 0.166                   | 212          | 0.540   | 2B150.0241               |
| <b>Pin: Stainless steel/Light spring load</b>    |                        |   |                                 |                                 |                     |                                     |                         |              |   |                          |
| 1/4  | 0.118                  | 2.2   | 0.295                           | 0.145                           | 0.008               | 0.250                               | 0.051                   | 212          | 0.022   | 2B150.0310 <sup>3)</sup> |
| 7/16   | 0.197                  | 6.7   | 0.374                           | 0.287                           | 0.016               | 0.438                               | 0.083                   | 212          | 0.093   | 2B150.0320               |
| 7/16   | 0.236                  | 4.4   | 0.374                           | 0.406                           | 0.020               | 0.438                               | 0.098                   | 212          | 0.121   | 2B150.0325               |
| <b>Pin: Stainless steel/Standard spring load</b> |                        |   |                                 |                                 |                     |                                     |                         |              |   |                          |
| 1/4  | 0.118                  | 4.4   | 0.295                           | 0.145                           | 0.008               | 0.250                               | 0.051                   | 212          | 0.021   | 2B150.0311 <sup>3)</sup> |
| 7/16   | 0.197                  | 13.5  | 0.374                           | 0.287                           | 0.016               | 0.438                               | 0.083                   | 212          | 0.093   | 2B150.0321               |
| 7/16   | 0.236                  | 6.7   | 0.374                           | 0.406                           | 0.020               | 0.438                               | 0.098                   | 212          | 0.121   | 2B150.0326               |
| 1/2  | 0.315                  | 11.1  | 0.553                           | 0.515                           | 0.024               | 0.500                               | 0.134                   | 212          | 0.247   | 2B150.0330               |
| 5/8  | 0.394                  | 18.0  | 0.675                           | 0.678                           | 0.031               | 0.625                               | 0.166                   | 212          | 0.543   | 2B150.0340               |
| <b>Pin: Stainless steel/Heavy spring load</b>    |                        |   |                                 |                                 |                     |                                     |                         |              |   |                          |
| 7/16   | 0.197                  | 20.0  | 0.374                           | 0.287                           | 0.016               | 0.438                               | 0.083                   | 212          | 0.095   | 2B150.0322               |
| 7/16   | 0.236                  | 13.5  | 0.374                           | 0.406                           | 0.020               | 0.438                               | 0.098                   | 212          | 0.122   | 2B150.0327               |
| 1/2  | 0.315                  | 22.2  | 0.553                           | 0.515                           | 0.024               | 0.500                               | 0.134                   | 212          | 0.263   | 2B150.0331               |
| 5/8  | 0.394                  | 36.0  | 0.675                           | 0.678                           | 0.031               | 0.625                               | 0.166                   | 212          | 0.546   | 2B150.0341               |
| <b>Pin: Thermoplastic/Light spring load</b>      |                        |   |                                 |                                 |                     |                                     |                         |              |   |                          |
| 1/4  | 0.118                  | 2.2   | 0.295                           | 0.145                           | 0.008               | 0.250                               | 0.051                   | 176          | 0.013   | 2B150.0410 <sup>3)</sup> |
| 7/16   | 0.197                  | 6.7   | 0.374                           | 0.287                           | 0.016               | 0.438                               | 0.083                   | 176          | 0.054   | 2B150.0420               |
| 7/16   | 0.236                  | 4.4   | 0.374                           | 0.406                           | 0.020               | 0.438                               | 0.098                   | 176          | 0.058   | 2B150.0425               |
| <b>Pin: Thermoplastic/Standard spring load</b>   |                        |   |                                 |                                 |                     |                                     |                         |              |   |                          |
| 1/4  | 0.118                  | 4.4   | 0.295                           | 0.145                           | 0.008               | 0.250                               | 0.051                   | 176          | 0.012   | 2B150.0411 <sup>3)</sup> |
| 7/16   | 0.197                  | 13.5  | 0.374                           | 0.287                           | 0.016               | 0.438                               | 0.083                   | 176          | 0.052   | 2B150.0421               |
| 7/16   | 0.236                  | 6.7   | 0.374                           | 0.406                           | 0.020               | 0.438                               | 0.098                   | 176          | 0.057   | 2B150.0426               |
| 1/2  | 0.315                  | 11.1  | 0.553                           | 0.515                           | 0.024               | 0.500                               | 0.134                   | 176          | 0.104   | 2B150.0430               |
| 5/8  | 0.394                  | 18.0  | 0.675                           | 0.678                           | 0.031               | 0.625                               | 0.166                   | 176          | 0.196   | 2B150.0440               |
| <b>Pin: Thermoplastic/Heavy spring load</b>      |                        |   |                                 |                                 |                     |                                     |                         |              |   |                          |
| 7/16   | 0.197                  | 20.0  | 0.374                           | 0.287                           | 0.016               | 0.438                               | 0.083                   | 176          | 0.054   | 2B150.0422               |
| 7/16   | 0.236                  | 13.5  | 0.374                           | 0.406                           | 0.020               | 0.438                               | 0.098                   | 176          | 0.058   | 2B150.0427               |
| 1/2  | 0.315                  | 22.2  | 0.553                           | 0.515                           | 0.024               | 0.500                               | 0.134                   | 176          | 0.106   | 2B150.0431               |
| 5/8  | 0.394                  | 36.0  | 0.675                           | 0.678                           | 0.031               | 0.625                               | 0.166                   | 176          | 0.200   | 2B150.0441               |

<sup>1)</sup> statistical average value

<sup>2)</sup> If the workpiece height (y) is less than l2-d2/2, the coordinate dimension (x) must be calculated.

<sup>3)</sup> deviating pin shape (see drawing)

Accessories

|   | Dimensions<br>d <sub>1</sub><br>[in] | <br>[oz] | Art. No.                   |
|---|--------------------------------------|---|----------------------------|
| <b>assembly tool</b>  |                                      |   |                            |
|  | 1/4                                  | 0.678   | <a href="#">22150.0830</a> |
|   | 7/16                                 | 1.749   | <a href="#">22150.0831</a> |
|   | 1/2                                  | 2.321   | <a href="#">22150.0832</a> |
|   | 5/8                                  | 3.749   | <a href="#">22150.0833</a> |

Compliance

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