# Lateral Plungers • with thread, with seal

22150.0451



#### **Product Description**

To be used for positioning and applying pressure, e.g. during painting and sandblasting. Sealed against chips and dirt.

#### Material

#### Seal

• CR

#### **Body**

· Steel, zinc-plated by galvanization

#### **Spring**

· Steel, blackened

· Steel, case-hardened, zinc-plated by galvanization

#### **Assembly**

Lateral plungers are installed by screwing in by means of a mounting tool.

Formula for calculating the center distance for the mounting hole:

 $I_0 = z/2 + w + x$ 

 $I_0$  = 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  $x = d_2/2 - s$ 

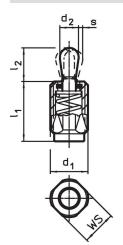
y smaller than  $l_2 - d_2/2$ ,

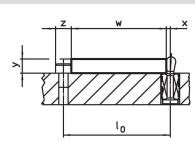
then  $x = d_2/2 - s - [(l_2 - d_2/2 - y) * 0,123]$ 

#### Characteristic

Version standard spring load = spring from steel, blackened

#### **Drawing**





#### **Order information**

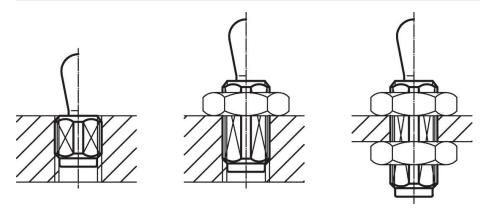
| Dimensions                      |          |                            |                |                | Stroke | ws   |      | I   | Art. No.   |  |  |
|---------------------------------|----------|----------------------------|----------------|----------------|--------|------|------|-----|------------|--|--|
| d <sub>1</sub>                  | l₁<br>-2 | Spring load  F  max. 1)  ~ | d <sub>2</sub> | l <sub>2</sub> | s      |      | max. | -   |            |  |  |
| [mm]                            |          | [N]                        | [m             | m]             | [mm]   | [mm] | [°C] | [g] |            |  |  |
| Pin: Steel/Standard spring load |          |                            |                |                |        |      |      |     |            |  |  |
| M18 x 1,5                       | 18       | 150                        | 10             | 16             | 1.6    | 16   | 110  | 20  | 22150.0451 |  |  |

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

#### **Accessories**

| assembly tool | Dimensions<br>d <sub>1</sub><br>[mm] | [9] | Art. No.   |
|---------------|--------------------------------------|-----|------------|
|               | M18 x 1,5                            | 137 | 22150.0822 |

# **Application example**



# Compliance

#### **RoHS** compliant

Contains lead - compliant according to exceptions 6a / 6b / 6c.

# Contains SVHC substances >0,1% w/w

Contains lead - SVHC list [REACH] as of 23.01.2024.

# **Contains Proposition 65 substances**



Lead can cause cancer and reproductive harm from exposure https://www.P65Warnings.ca.gov/

# **Free from Conflict Minerals**

This product does not contain any substances designated as "conflict minerals" such as tantalum, tin, gold or tungsten from the Democratic Republic of Congo or adjacent countries.



Halder, Inc. www.halderusa.com