# **Centering Clamping Elements •** with clamping balls, operation from the bottom 23340.0338



## **Product Description**

To be used for accurate centering and clamping in blind holes of workpieces with locating hole. Exact self-centering with a precision of  $\pm 0,025$  mm. The clamping balls frictionally center and hold workpieces with raw or pre-machined surfaces down to the bearing points. Large adjustment stroke and a small building height are a feature of this center clamping element. **Mounting from either top or bottom**.

#### **Material**

## Body

· Tool steel, hardened, blackened

#### Spring

Stainless steel

#### Clamping balls

Stainless steel 1.4112, hardened and ground

#### **Assembly**

Assembly instruction for mounting from above: Remove clamping plate and screw. Screw in threaded pin from below, and tighten from above using female WS<sub>2</sub>.

Further or detailed information can be found in the assembly and operating instructions.

#### **Operation**

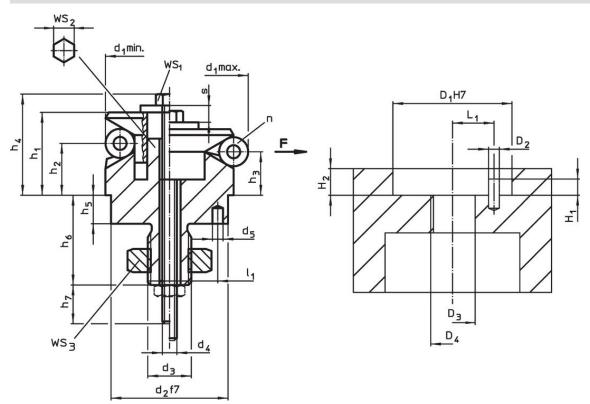
Operation from bottom manually or automatically with either pneumatic or hydraulic actuation.

#### More information

### **Further products**

- Centering Clamping Elements, with clamping segments
- Centering Clamping Elements, with clamping balls
- Centering Clamping Elements, with clamping segments, operation from the bottom

## **Drawing**





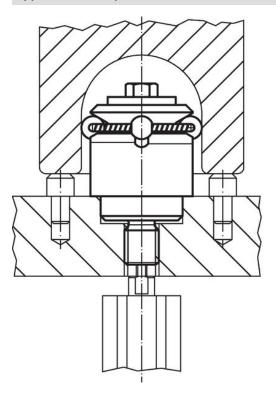
Erwin Halder KG www.halder.com Page 1 of 2

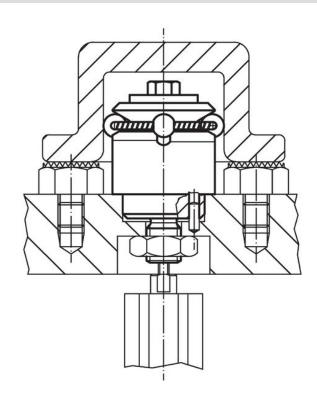
Published on: 6.4.2024

#### **Order information**

|                | Dimensions Numb |                |       |                |      |                |                |                |                |                |                |                |                |         |   | Stroke | ws   |                 |                 | ClampingTightening Location |         |                           | Art. No.   |
|----------------|-----------------|----------------|-------|----------------|------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------|---|--------|------|-----------------|-----------------|-----------------------------|---------|---------------------------|------------|
|                | of b            |                |       |                |      |                |                |                |                |                |                |                |                |         |   | s      |      |                 |                 | force                       | torque  | hole                      |            |
| d <sub>1</sub> | d <sub>1</sub>  | d <sub>2</sub> | $d_3$ | d <sub>4</sub> | d₅   | h <sub>1</sub> | h <sub>2</sub> | h <sub>3</sub> | h <sub>4</sub> | h <sub>5</sub> | h <sub>6</sub> | h <sub>7</sub> | I <sub>1</sub> | Ball    | n |        | ws₁  | WS <sub>2</sub> | WS <sub>3</sub> | F                           | max.    | DDDDHHL                   |            |
| min.           | max.            | f7             |       |                | +0.3 |                |                |                | -2             |                | +1             | ~              | ±0.10          | liamete |   |        |      |                 |                 | max.                        |         | H7 +0±0.                  |            |
|                | [mm]            |                |       |                |      |                |                |                |                |                |                |                |                |         |   | [mm]   | [mm] |                 | [kN]            | [Nm]                        | [mm] [g |                           |            |
| 38.5           | 46.5            | 30             | M12   | M6             | 4    | 27.1           | 18             | 15.5           | 33             | 7.5            | 22.5           | 20             | 11             | 8       | 6 | 4.6    | 10   | 8               | 18              | 6.5                         | 17      | 30 <b>41121 123.52</b> 69 | 23340.0338 |

## **Application example**





## Compliance

## **RoHS** compliant

Compliant according to Directive 2011/65/EU and Directive 2015/863.

### Does not contain SVHC substances

No SVHC substances with more than 0.1% w/w contained - SVHC list [REACH] as of 23.01.2024.

Erwin Halder KG

## **Does not contain Proposition 65 substances**

No Proposition 65 substances included. 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.



www.halder.com Pa

Page 2 of 2 Published on: 6.4.2024