

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

23340.0370



### 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 the top: Take-off clamping plate and screw. Fasten body by means of threaded pin via WS<sub>2</sub>.

### Operation

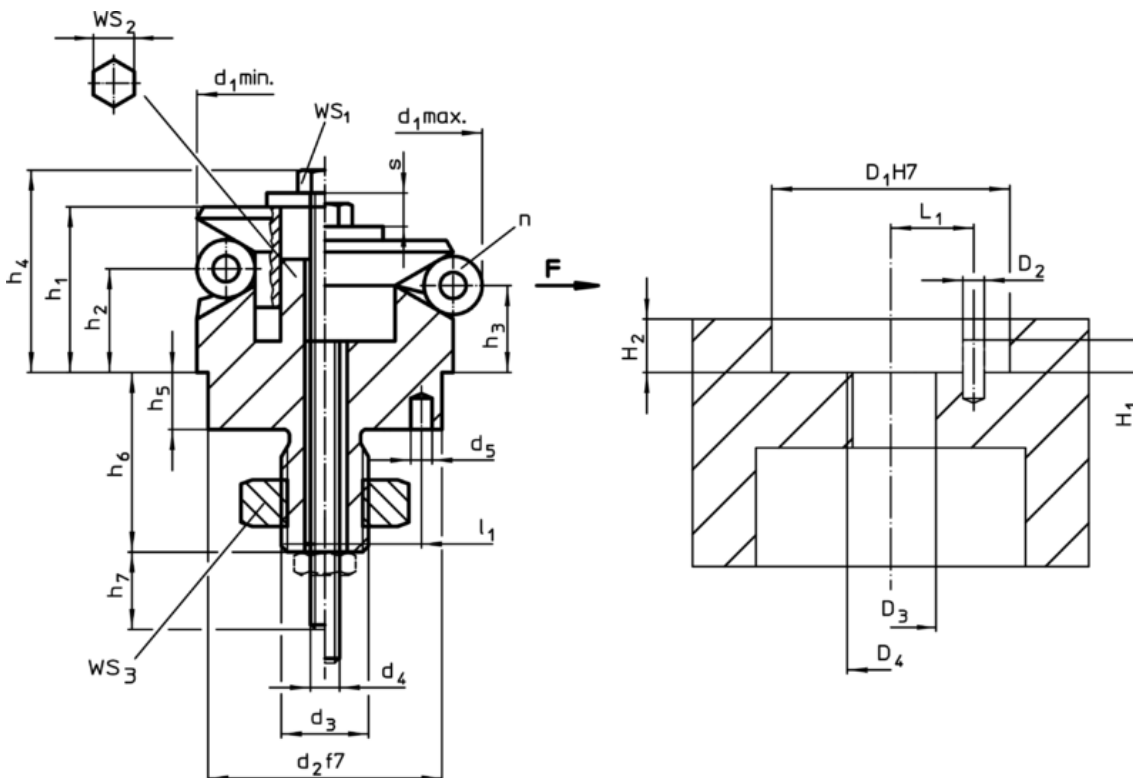
Operation from bottom manually or automatically with either pneumatic or hydraulic actuation.

### More information

### Further products

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

### Drawing



### Order information

Dimensions															Number of balls n	Stroke s [mm]	WS			Clamping force F max. [kN]	Tightening torque max. [Nm]	Location hole		Art. No.
d <sub>1</sub> min.	d <sub>1</sub> max.	d <sub>2</sub> f7	d <sub>3</sub>	d <sub>4</sub>	d <sub>5</sub> +0,3	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub> -2	h <sub>5</sub>	h <sub>6</sub> +1	h <sub>7</sub> ~	l <sub>1</sub> ±0,1	Ball Ø			WS <sub>1</sub>	WS <sub>2</sub>	WS <sub>3</sub>			DDD	D <sub>4</sub> HLL	
70,5	86,5	60	M16 x 1,5	M8	5	46,1	28,3	23,7	55,4	10	29,4	20	17	16	6	9,2	13	12	24	10	43	6016 x 15027	23340.0370	

Application example

