

## Spring Plungers · with moveable ball and internal hexagon

### 22031.0010



#### Product Description

Spring plungers can be used for locating or for applying pressure, as a detent or for ejection. The running of the ball minimises wear on the counterpart, this also results in a positive locking behaviour depending on the counterpart. Another advantage of the plastic ball is the electric insulation.

#### Material

##### Body

- Free cutting steel, blackened

##### Bearing

- plastic

##### Ball

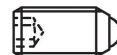
- Ball-bearing steel, hardened

##### Spring

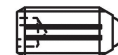
- Stainless steel

#### Characteristic

Standard spring load: no marking



Standard spring load



Heavy spring load

#### More information

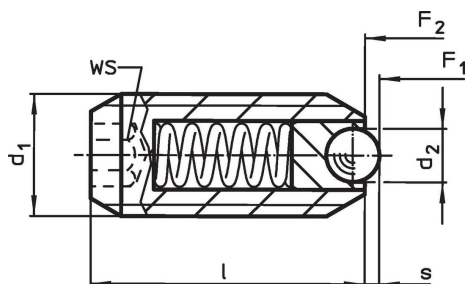
#### Notes

Special types on request.  
Spring plungers are specially tested for spring range and forces.

#### References

Thread lock on request, please refer to appendix - Technical Data -  
Calculation of indexing resistance, please refer to appendix - Technical Data -

#### Drawing



#### Order information

Dimensions			WS [mm]	Stroke s [mm]	Spring load <sup>1)</sup>		Temperature		Weight [g]	Art. No.
d <sub>1</sub>	d <sub>2</sub>	l			F <sub>1</sub>	F <sub>2</sub>	min.	max.		
[mm]					[N]	[N]	[°C]			
<b>free cutting steel, standard spring load</b>										
M10	4.5	23	5	1.4	18.8	31.7	-30	90	7.4	22031.0010

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

### 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.