# **Spring Plungers** • with moveable ceramic ball and slot, stainless steel A4 EH 22051.



#### **Product Description**

Spring plungers can be used for locating or for applying pressure, as a detent or for ejection. The bearing of the ball allows it to unroll, which minimises wear on the counterpart. This also results in a positive locking behaviour depending on the counterpart. Another advantage of the moveable ceramic ball is the electric insulation. Characteristics of the ceramic ball:

- Highly impact-resistant
- Abrasion resistant
- Antimagnetic
- Electrically isolating
- The stainless steel A4 version ensures maximum corrosion resistance.

#### **Material**

#### Body

· Stainless steel A4

#### Bearing

#### plastic

- Ball
- Ceramic

#### Spring

Stainless steel

#### Characteristic

Standard spring load: no marking Heavy spring load: marked with two lines



More information



Standard spring load

Heavy spring load

#### Notes

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

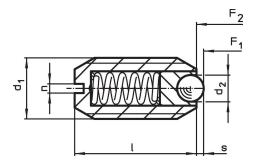
#### References

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

#### **Further products**

• Spring Plungers, with ceramic ball and slot, stainless steel A4

#### Drawing



#### **Order information**

Dimensions				Stroke	Spring load <sup>1)</sup>				Ĭ	Art. No.
d <sub>1</sub>	d <sub>2</sub>	I	n	S	F1	F <sub>2</sub>	min.	max.		
	[mm]			[mm]	[N]		[°C]		[g]	
Standard spr	ring load						• •			
M 5	2.0	12	0.8	0.50	4.8	6.8	-30	90	0.9	22051.0505
M 6	2.5	14	1.0	0.70	6.3	10.0	-30	90	1.5	22051.0506
M 8	3.5	16	1.2	0.95	16.1	24.0	-30	90	3.2	22051.0508
M10	4.5	19	1.5	1.40	18.8	31.7	-30	90	5.8	22051.0510
M12	6.5	22	2.0	2.50	24.0	49.0	-30	90	8.9	22051.0512
M16	8.5	24	2.0	3.10	38.0	68.0	-30	90	19.0	22051.0516

1) statistical average value

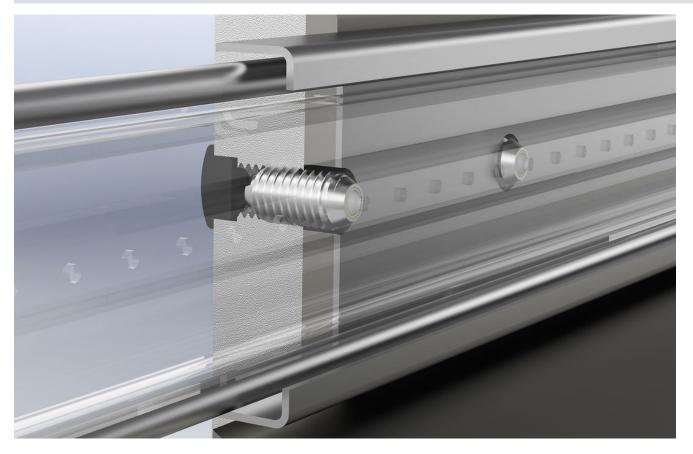
# Machine and Fixture Elements

Spring Plungers

Dimensions				Stroke	Spring load <sup>1)</sup>		<b>B</b>		Ĭ	Art. No.		
d <sub>1</sub>	d <sub>2</sub>	I	n	s	F1	F <sub>2</sub>	min.	max.				
	[mm]			[mm]	[N]		[°C]		[g]			
heavy spring load												
M 5	2.0	12	0.8	0.50	10.0	14.0	-30	90	0.9	22051.0705		
M 6	2.5	14	1.0	0.70	11.0	16.0	-30	90	1.5	22051.0706		
M 8	3.5	16	1.2	0.95	22.9	40.0	-30	90	3.3	22051.0708		
M10	4.5	19	1.5	1.40	28.1	54.3	-30	90	5.8	22051.0710		
M12	6.5	22	2.0	2.50	36.5	77.3	-30	90	9.0	22051.0712		
M16	8.5	24	2.0	3.10	50.0	88.7	-30	90	19.0	22051.0716		

1) statistical average value

# 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.

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.