chanhvinh.com

Spring Plungers • plastic

EH 22040.



Product Description

Spring plungers plastic can be used for positioning, locking, resting, pressing and fixing of components.
They are suitable for applications where a defined spring force is required while ensuring gentle contact with the mating surface.
Thanks to the plastic body and the ball – optionally available in plastic or stainless steel – these spring plungers offer a cost-effective solution for a wide range of applications.
Compared to fully metallic versions, their lower weight provides a design advantage.
Typical applications include recurring positioning and retention functions in mechanical assemblies and technical components.
The spring plunger consists of a threaded sleeve with an integrated spring-loaded ball.
The preloaded compression spring generates a defined axial spring force, which is transmitted to the mating component via the ball. When the ball is depressed, the spring is compressed and stores mechanical energy. After the load is released, the spring automatically and repeatedly returns the ball to its initial position. The ball is securely retained within the sleeve and designed to be captive.
These spring plungers are characterised by the following features:

- Metric thread with slotted drive for simple and secure installation
- Corrosion-resistant design due to plastic and stainless steel components
- Reduced weight compared to fully metallic versions
- Tested and defined spring force for repeatable positioning and locking
- Ball securely retained and designed to be captive
- High wear resistance due to hardened ball design

Material

Body

- Thermoplastic POM, blue
- Thermoplastic POM, black

Ball

- Stainless steel, hardened
- Thermoplastic POM, white
- Thermoplastic POM, black

Spring

- Stainless steel

More information

Notes

Customized design on request.
Spring plungers are specially tested for spring range and spring load.

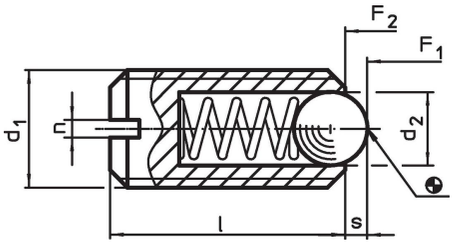
References

Calculation of indexing resistance, please refer to application example

Further products

- Locators, bolt-on, for spring plungers
- Locators, smooth, for spring plungers
- Holders, for spring plungers

Drawing



Order information

Dimensions				Stroke	Spring load[1]					Art. No.
d_1	d_2	l	n	s	F_1 ~	F_2 ~	min.	max.		
[mm]				[mm]	[N]		[°C]		[g]	
body from thermoplastic, blue, ball from stainless steel, standard spring load										
M 6	3.5	14	1.0	0.9	12	17	-30	50	0.5	22040.0006
M 8	5.0	16	1.2	1.5	20	35	-30	50	1.3	22040.0008
M10	6.0	19	1.5	1.9	25	45	-30	50	2.5	22040.0010

[1] statistical average value

chanhvinh.com

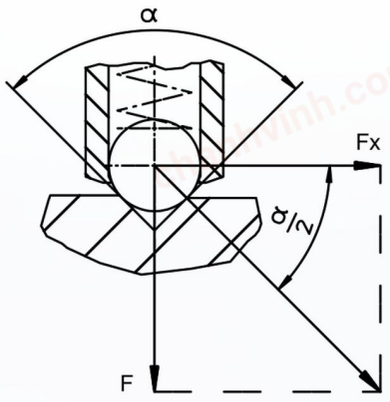
Dimensions				Stroke	Spring load[1]					Art. No.
d_1	d_2	l	n	s	F_1 ~	F_2 ~	min.	max.		
[mm]				[mm]	[N]		[°C]		[g]	
body from thermoplastic, blue, ball from thermoplastic, white, standard spring load										
M 6	3.5	14	1.0	0.9	12	17	-30	50	0.4	22040.0406
M 8	5.0	16	1.2	1.5	20	35	-30	50	0.9	22040.0408
M10	6.0	19	1.5	1.9	25	45	-30	50	1.8	22040.0410
body from thermoplastic, black, ball from stainless steel, standard spring load										
M 6	3.5	14	1.0	0.9	12	17	-30	50	0.5	22040.0606
M 8	5.0	16	1.2	1.5	20	35	-30	50	1.3	22040.0608
M10	6.0	19	1.5	1.9	25	45	-30	50	2.5	22040.0610
body and ball from thermoplastic, black, standard spring load										
M 6	3.5	14	1.0	0.9	12	17	-30	50	0.4	22040.0706
M 8	5.0	16	1.2	1.5	20	35	-30	50	0.9	22040.0708
M10	6.0	19	1.5	1.9	25	45	-30	50	1.8	22040.0710

[1] statistical average value

Application example

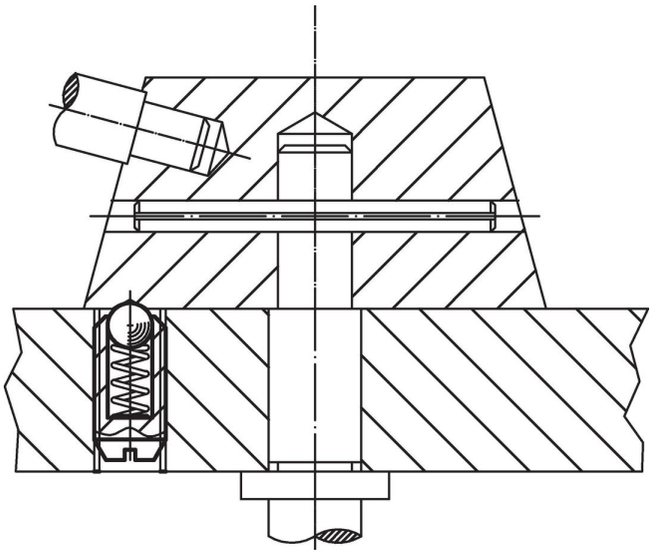


CALCULATION OF THE INDEXING RESISTANCE



Sample calculation for:
α = 60°, Fx = 1,732 x F
α = 90°, Fx = F
α = 120°, Fx = 0,577 x F

$$Fx = \frac{F}{\tan \frac{\alpha}{2}}$$



chanhvinh.com

Compliance

RoHS-compliant
Compliant with Directive 2011/65/EU [RoHS].

Does not contain SVHC substances
No SVHC substances with more than 0.1% w/w contained - SVHC list [REACH] as of 04.02.2026.

SCIP-code
N/A

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.

POP-compliant
Contains no persistent organic pollutants – Stockholm Convention [POP] as of September 2025.

PFAS-compliant
Contains no per- and polyfluoroalkyl substances (PFAS).

TSCA-compliant
Agent concentration in this product does not exceed the specified threshold.