

Spring Plungers • with moveable ball and slot

EH 22051.



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
- Stainless steel 1.4305

Bearing

- plastic

Ball

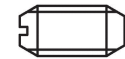
- Ball-bearing steel, hardened
- Stainless steel, hardened

Spring

- Stainless steel

Characteristic

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



Standard spring load



Heavy spring load

More information

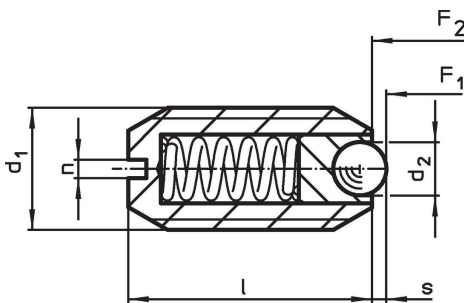
Notes

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

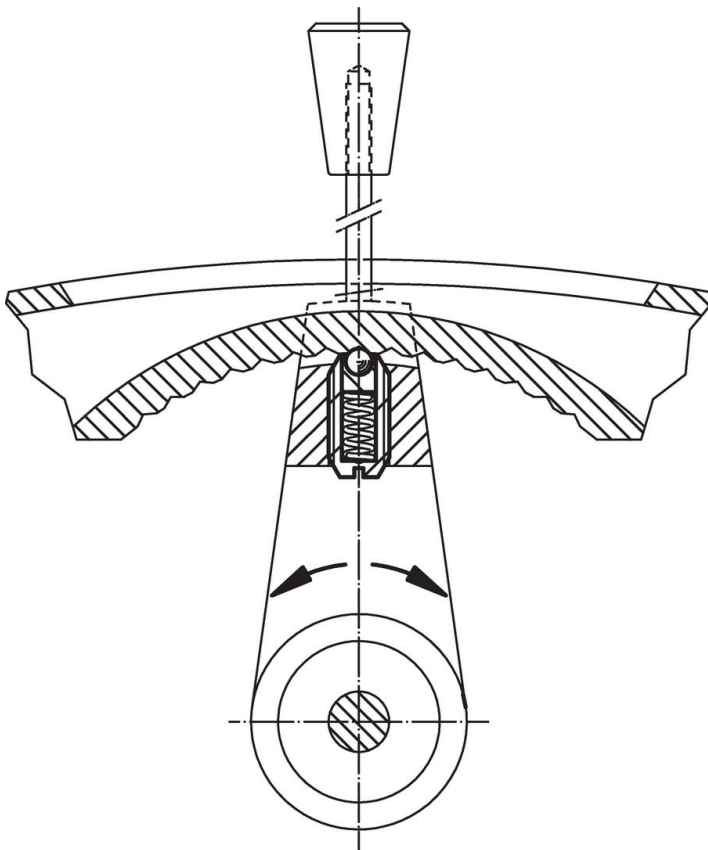
| Dimensions | | | | Stroke s [mm] | Spring load ¹⁾ | | min. max. | | [g] | Art. No. |
|---|----------------|----|-----|---------------------|----------------------------|---------------------|-------------|----|------|------------|
| d ₁ | d ₂ | l | n | | F ₁ ~ [N] | F ₂ ~ | [°C] | | | |
| [mm] | | | | | | | | | | |
| free cutting steel, standard spring load | | | | | | | | | | |
| M 5 | 2.0 | 12 | 0.8 | 0.50 | 4.8 | 6.8 | -30 | 90 | 0.8 | 22051.0005 |
| M 6 | 2.5 | 14 | 1.0 | 0.70 | 6.3 | 10.0 | -30 | 90 | 1.5 | 22051.0006 |
| M 8 | 3.5 | 16 | 1.2 | 0.95 | 16.0 | 24.0 | -30 | 90 | 3.3 | 22051.0008 |
| M10 | 4.5 | 19 | 1.5 | 1.40 | 18.8 | 31.7 | -30 | 90 | 5.9 | 22051.0010 |
| M12 | 6.5 | 22 | 2.0 | 2.50 | 24.0 | 49.0 | -30 | 90 | 9.3 | 22051.0012 |
| M16 | 8.5 | 24 | 2.0 | 3.10 | 38.0 | 68.0 | -30 | 90 | 20.0 | 22051.0016 |
| free cutting steel, reinforced spring load | | | | | | | | | | |
| M 5 | 2.0 | 12 | 0.8 | 0.50 | 10.0 | 14.0 | -30 | 90 | 0.9 | 22051.0205 |
| M 6 | 2.5 | 14 | 1.0 | 0.70 | 11.0 | 16.0 | -30 | 90 | 1.5 | 22051.0206 |
| M 8 | 3.5 | 16 | 1.2 | 0.95 | 23.0 | 40.0 | -30 | 90 | 3.3 | 22051.0208 |
| M10 | 4.5 | 19 | 1.5 | 1.40 | 28.0 | 54.3 | -30 | 90 | 6.0 | 22051.0210 |
| M12 | 6.5 | 22 | 2.0 | 2.50 | 36.5 | 77.3 | -30 | 90 | 9.4 | 22051.0212 |
| M16 | 8.5 | 24 | 2.0 | 3.10 | 50.0 | 88.7 | -30 | 90 | 20.0 | 22051.0216 |

¹⁾ statistical average value

| d ₁ | Dimensions | | | Stroke s [mm] | Spring load ¹⁾ | | min. max. | | [g] | Art. No. |
|--|----------------|----|-----|---------------------|----------------------------|----------------------------|-------------|----|------|----------------------------|
| | d ₂ | l | n | | F ₁ ~ [N] | F ₂ ~ [N] | [°C] | | | |
| [mm] | | | | | | | | | | |
| stainless steel, standard spring load | | | | | | | | | | |
| M 5 | 2.0 | 12 | 0.8 | 0.50 | 4.8 | 6.8 | -30 | 90 | 0.9 | 22051.0405 |
| M 6 | 2.5 | 14 | 1.0 | 0.70 | 6.3 | 10.0 | -30 | 90 | 1.5 | 22051.0406 |
| M 8 | 3.5 | 16 | 1.2 | 0.95 | 16.0 | 24.0 | -30 | 90 | 3.3 | 22051.0408 |
| M10 | 4.5 | 19 | 1.5 | 1.40 | 18.8 | 31.7 | -30 | 90 | 5.9 | 22051.0410 |
| M12 | 6.5 | 22 | 2.0 | 2.50 | 24.0 | 49.0 | -30 | 90 | 9.4 | 22051.0412 |
| M16 | 8.2 | 24 | 2.0 | 3.10 | 38.0 | 68.0 | -30 | 90 | 20.0 | 22051.0416 |
| stainless steel, heavy spring load | | | | | | | | | | |
| M 5 | 2.0 | 12 | 0.8 | 0.50 | 10.0 | 14.0 | -30 | 90 | 0.9 | 22051.0605 |
| M 6 | 2.5 | 14 | 1.0 | 0.70 | 11.0 | 16.0 | -30 | 90 | 1.5 | 22051.0606 |
| M 8 | 3.5 | 16 | 1.2 | 0.95 | 23.0 | 40.0 | -30 | 90 | 3.4 | 22051.0608 |
| M10 | 4.5 | 19 | 1.5 | 1.40 | 28.0 | 54.3 | -30 | 90 | 6.0 | 22051.0610 |
| M12 | 6.5 | 22 | 2.0 | 2.50 | 36.5 | 77.3 | -30 | 90 | 9.5 | 22051.0612 |
| M16 | 8.5 | 24 | 2.0 | 3.10 | 50.0 | 88.7 | -30 | 90 | 20.0 | 22051.0616 |

¹⁾ statistical average value

Application example



Compliance

For detailed compliance information please select the desired article number.