

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19

**BODY**

Passivated aluminium.

- **GN 715-KA:** acetal resin based (POM) technopolymer oscillating pin, without gasket.
- **GN 715-KB:** acetal resin based (POM) technopolymer oscillating pin, with NBR synthetic rubber gasket.
- **GN 715-SA:** zinc-plated hardened steel oscillating pin, without gasket.
- **GN 715-SB:** zinc-plated hardened steel oscillating pin with NBR synthetic rubber gasket.

**SPRING**

Steel with load:

- low (grey colour)
- medium (black colour)
- high (silver colour)

**FEATURES AND APPLICATIONS**

GN 715 side thrust spring pins are practical and versatile elements for positioning and locking pieces to be machined. They are used for operations such as boring, milling, tapping, welding, brazing, mounting, gluing, temporary or permanent equipping, marking, engraving, etc... They completely replace expensive equipment, take a limited space and are easily assembled to holes drilled with H8 tolerance. To make it easier to mount the side thrust spring pins, it is recommended to use GN 715.1 assembly tool (when ordering, please specify the diameter D of the corresponding side thrust spring pin, for example: GN 715.1-8).

prevents the pin from slipping out from the housing hole.

**TECHNICAL DATA**

w = movement of the oscillating pin from the initial position

F(N) = side load

Fo = pre-load

1.1 x Fo = final load

a2 - a1 = contact point area (suggested)

x = distance from pin axis to contact point due to pin movement equal to w/2

x1 = distance x for contact point a1

x2 = distance x for contact point a2

lo = distance from centre of thrust pin attachment to piece support point

l = l<sub>m</sub> + x where l<sub>m</sub> = average length of the piece (l<sub>max</sub> x l<sub>min</sub>) : 2

For contact point between a1 and a2 (according to

For contact point between a1 and a2 (according to the height of the piece), the value x is obtained through interpolation between x1 and x2.

In compliance with the above mentioned data, the movement of the oscillating pin may cover the normal tolerances of the piece to be machined.

**ACCESSORIES ON REQUEST**

To obtain a more precise adjustment of the side thrust spring pins are available eccentric bushings GN 715.2 (see page 632) providing different positionings.

**SPECIAL EXECUTIONS ON REQUEST**

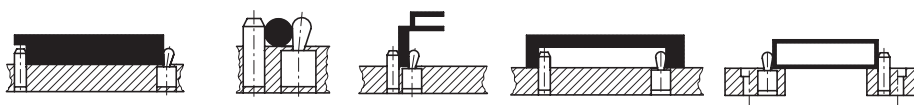
- GN 714: without thrust pin with threaded thrust plate.

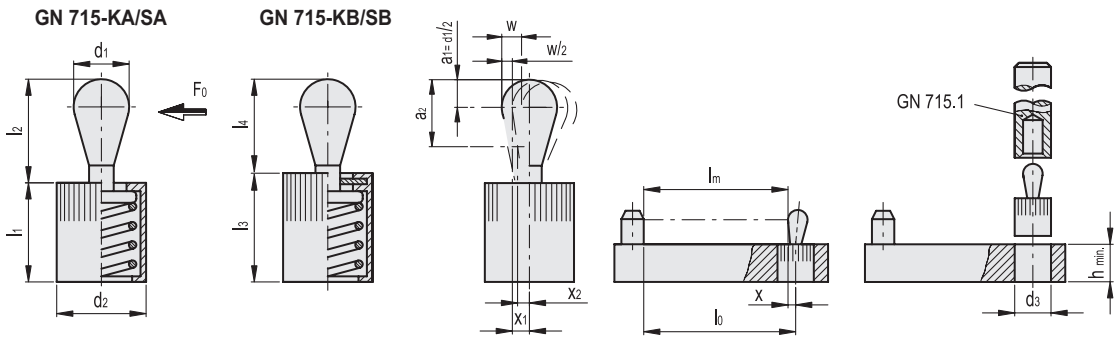


| Conversion Table  |      |
|-------------------|------|
| 1 mm = 0.039 inch |      |
| d1                |      |
| mm                | inch |
| 3                 | 0.18 |
| 5                 | 0.20 |
| 6                 | 0.23 |
| 8                 | 0.31 |
| 10                | 0.39 |

Indexing and positioning elements

Application example





GN 715-KA

METRIC

| Code     | Description      | d1 | d2 | d3 H8 | l1 -1 | l2   | l4 | hmin | a1  | a2   | x1  | x2   | w   | F0 [N] | ⚖️ |
|----------|------------------|----|----|-------|-------|------|----|------|-----|------|-----|------|-----|--------|----|
| GN.37100 | GN 715-3-10-KA   | 3  | 6  | 6     | 7     | 4    | 4  | 7    | 1.5 | 3.5  | 1   | 0.75 | 1   | 10     | 1  |
| GN.37110 | GN 715-5-20-KA   | 5  | 10 | 10    | 11    | 6.7  | 6  | 12   | 2.5 | 5.7  | 1.7 | 1.3  | 1.6 | 20     | 2  |
| GN.37120 | GN 715-6-40-KA   | 6  | 10 | 10    | 11    | 10.7 | 10 | 12   | 3   | 7.7  | 1.9 | 1.4  | 2   | 40     | 3  |
| GN.37130 | GN 715-8-50-KA   | 8  | 12 | 12    | 13    | 13.9 | 13 | 14   | 4   | 8.9  | 2.7 | 2.1  | 2.6 | 50     | 4  |
| GN.37140 | GN 715-10-100-KA | 10 | 16 | 16    | 17    | 16.7 | 16 | 18   | 5   | 10.7 | 3.4 | 2.7  | 3.2 | 100    | 6  |

GN 715-KB

| Code     | Description      | d1 | d2 | d3 H8 | l1 -1 | l3 -1 | l4 | hmin | a1  | a2   | x1  | x2   | w   | F0 [N] | ⚖️ |
|----------|------------------|----|----|-------|-------|-------|----|------|-----|------|-----|------|-----|--------|----|
| GN.37102 | GN 715-3-10-KB   | 3  | 6  | 6     | 7     | 7     | 4  | 7    | 1.5 | 3.5  | 1   | 0.75 | 1   | 10     | 1  |
| GN.37112 | GN 715-5-20-KB   | 5  | 10 | 10    | 11    | 11.5  | 6  | 12   | 2.5 | 5.7  | 1.7 | 1.3  | 1.6 | 20     | 2  |
| GN.37122 | GN 715-6-40-KB   | 6  | 10 | 10    | 11    | 11.5  | 10 | 12   | 3   | 7.7  | 1.9 | 1.4  | 2   | 40     | 3  |
| GN.37132 | GN 715-8-50-KB   | 8  | 12 | 12    | 13    | 14    | 13 | 14   | 4   | 8.9  | 2.7 | 2.1  | 2.6 | 50     | 4  |
| GN.37142 | GN 715-10-100-KB | 10 | 16 | 16    | 17    | 18    | 16 | 18   | 5   | 10.7 | 3.4 | 2.7  | 3.2 | 100    | 7  |

GN 715-SA

| Code     | Description      | d1 | d2 | d3 H8 | l1 -1 | l2   | l4 | hmin | a1  | a2   | x1  | x2   | w   | F0 [N] | ⚖️ |
|----------|------------------|----|----|-------|-------|------|----|------|-----|------|-----|------|-----|--------|----|
| GN.37101 | GN 715-3-10-SA   | 3  | 6  | 6     | 7     | 4    | 4  | 7    | 1.5 | 3.5  | 1   | 0.75 | 1   | 10     | 1  |
| GN.37103 | GN 715-3-20-SA   | 3  | 6  | 6     | 7     | 4    | 4  | 7    | 1.5 | 3.5  | 1   | 0.75 | 1   | 20     | 1  |
| GN.37106 | GN 715-3-40-SA   | 3  | 6  | 6     | 7     | 4    | 4  | 7    | 1.5 | 3.5  | 1   | 0.75 | 1   | 40     | 1  |
| GN.37111 | GN 715-5-20-SA   | 5  | 10 | 10    | 11    | 6.7  | 6  | 12   | 2.5 | 5.7  | 1.7 | 1.3  | 1.6 | 20     | 3  |
| GN.37113 | GN 715-5-50-SA   | 5  | 10 | 10    | 11    | 6.7  | 6  | 12   | 2.5 | 5.7  | 1.7 | 1.3  | 1.6 | 50     | 3  |
| GN.37116 | GN 715-5-100-SA  | 5  | 10 | 10    | 11    | 6.7  | 6  | 12   | 2.5 | 5.7  | 1.7 | 1.3  | 1.6 | 100    | 3  |
| GN.37121 | GN 715-6-40-SA   | 6  | 10 | 10    | 11    | 10.7 | 10 | 12   | 3   | 7.7  | 1.9 | 1.4  | 2   | 40     | 4  |
| GN.37123 | GN 715-6-75-SA   | 6  | 10 | 10    | 11    | 10.7 | 10 | 12   | 3   | 7.7  | 1.9 | 1.4  | 2   | 75     | 4  |
| GN.37126 | GN 715-6-100-SA  | 6  | 10 | 10    | 11    | 10.7 | 10 | 12   | 3   | 7.7  | 1.9 | 1.4  | 2   | 100    | 4  |
| GN.37131 | GN 715-8-50-SA   | 8  | 12 | 12    | 13    | 13.9 | 13 | 14   | 4   | 8.9  | 2.7 | 2.1  | 2.6 | 50     | 7  |
| GN.37133 | GN 715-8-100-SA  | 8  | 12 | 12    | 13    | 13.9 | 13 | 14   | 4   | 8.9  | 2.7 | 2.1  | 2.6 | 100    | 7  |
| GN.37136 | GN 715-8-150-SA  | 8  | 12 | 12    | 13    | 13.9 | 13 | 14   | 4   | 8.9  | 2.7 | 2.1  | 2.6 | 150    | 7  |
| GN.37141 | GN 715-10-100-SA | 10 | 16 | 16    | 17    | 16.7 | 16 | 18   | 5   | 10.7 | 3.4 | 2.7  | 3.2 | 100    | 15 |
| GN.37143 | GN 715-10-150-SA | 10 | 16 | 16    | 17    | 16.7 | 16 | 18   | 5   | 10.7 | 3.4 | 2.7  | 3.2 | 150    | 15 |
| GN.37146 | GN 715-10-205-SA | 10 | 16 | 16    | 17    | 16.7 | 16 | 18   | 5   | 10.7 | 3.4 | 2.7  | 3.2 | 205    | 15 |

GN 715-SB

| Code     | Description      | d1 | d2 | d3 H8 | l1 -1 | l2 | l3 -1 | l4 | hmin | a1  | a2   | x1  | x2   | w   | F0 [N] | ⚖️ |
|----------|------------------|----|----|-------|-------|----|-------|----|------|-----|------|-----|------|-----|--------|----|
| GN.37201 | GN 715-3-10-SB   | 3  | 6  | 6     | 7     | 4  | 7     | 4  | 7    | 1.5 | 3.5  | 1   | 0.75 | 1   | 10     | 1  |
| GN.37203 | GN 715-3-20-SB   | 3  | 6  | 6     | 7     | 4  | 7     | 4  | 7    | 1.5 | 3.5  | 1   | 0.75 | 1   | 20     | 1  |
| GN.37206 | GN 715-3-40-SB   | 3  | 6  | 6     | 7     | 4  | 7     | 4  | 7    | 1.5 | 3.5  | 1   | 0.75 | 1   | 40     | 1  |
| GN.37211 | GN 715-5-20-SB   | 5  | 10 | 10    | 11    | 6  | 11.5  | 6  | 12   | 2.5 | 5.7  | 1.7 | 1.3  | 1.6 | 20     | 3  |
| GN.37213 | GN 715-5-50-SB   | 5  | 10 | 10    | 11    | 6  | 11.5  | 6  | 12   | 2.5 | 5.7  | 1.7 | 1.3  | 1.6 | 50     | 3  |
| GN.37216 | GN 715-5-100-SB  | 5  | 10 | 10    | 11    | 6  | 11.5  | 6  | 12   | 2.5 | 5.7  | 1.7 | 1.3  | 1.6 | 100    | 3  |
| GN.37221 | GN 715-6-40-SB   | 6  | 10 | 10    | 11    | 10 | 11.5  | 10 | 12   | 3   | 7.7  | 1.9 | 1.4  | 2   | 40     | 4  |
| GN.37223 | GN 715-6-75-SB   | 6  | 10 | 10    | 11    | 10 | 11.5  | 10 | 12   | 3   | 7.7  | 1.9 | 1.4  | 2   | 75     | 4  |
| GN.37226 | GN 715-6-100-SB  | 6  | 10 | 10    | 11    | -  | 11.5  | 10 | 12   | 3   | 7.7  | 1.9 | 1.4  | 2   | 100    | 4  |
| GN.37231 | GN 715-8-50-SB   | 8  | 12 | 12    | 13    | 13 | 14    | 13 | 14   | 4   | 8.9  | 2.7 | 2.1  | 2.6 | 50     | 7  |
| GN.37233 | GN 715-8-100-SB  | 8  | 12 | 12    | 13    | 13 | 14    | 13 | 14   | 4   | 8.9  | 2.7 | 2.1  | 2.6 | 100    | 7  |
| GN.37236 | GN 715-8-150-SB  | 8  | 12 | 12    | 13    | -  | 14    | 13 | 14   | 4   | 8.9  | 2.7 | 2.1  | 2.6 | 150    | 7  |
| GN.37241 | GN 715-10-100-SB | 10 | 16 | 16    | 17    | 16 | 18    | 16 | 18   | 5   | 10.7 | 3.4 | 2.7  | 3.2 | 100    | 15 |
| GN.37243 | GN 715-10-150-SB | 10 | 16 | 16    | -     | -  | 18    | 16 | 18   | 5   | 10.7 | 3.4 | 2.7  | 3.2 | 150    | 15 |
| GN.37246 | GN 715-10-205-SB | 10 | 16 | 16    | 17    | -  | 18    | 16 | 18   | 5   | 10.7 | 3.4 | 2.7  | 3.2 | 205    | 15 |