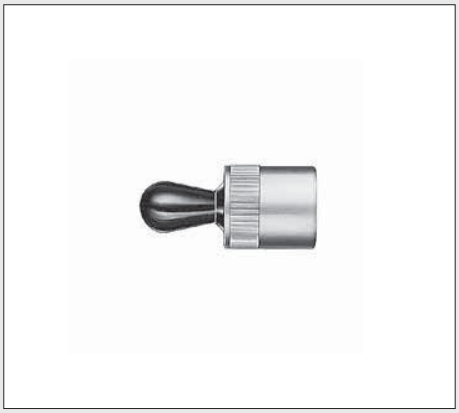
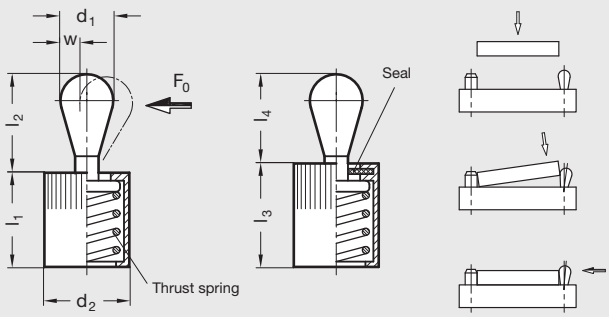
# GN 715 | Press-Fit Side Thrust Pins

Metric Size






ISO 9001 Supplier

Call for RoHS

**Body**
Aluminum

**Without seal**
Silver passivated finish

**With seal**
Gold passivated finish

**Thrust spring color code:**
Low thrust: Silver (except size 5 – copper)
Medium thrust: Gold (except size 5 – silver)
High thrust: Copper (except size 5 – gold)
Seal: Rubber NBR/perbunan
Thrust pins are available in hardened, zinc plated steel or Delrin® plastic. They can be purchased with or without seals.

Spring loaded side thrust pins GN 715 are versatile and practical elements for holding, positioning and clamping of workpieces. They eliminate costly alternatives, are space saving and easy to install. The knurled body requires only a hole tolerance of H8.
Version with seal used in applications involving a fluid or liquid.
For easy insertion a suitable tool, GN 715.1, is available.
See technical details and assembly instructions, next page.

## Steel Thrust Pin

Dimensions in: millimeters *(inches)*

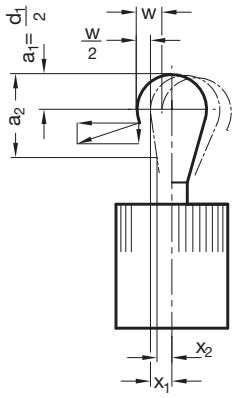
| Part Number Without Seal | Part Number With Seal | $d_1$ | Side Thrust FO (N) | $a_1$ | $a_2$ | $d_2$ | $d_3$ $H_8$ | h min. | $l_1$ -1 mm | $l_2$ | $l_3$ -1 mm | $l_4$ | w | $x_1$ | $x_2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3WZ70/SA | 3WZ70/SB | 3 *(.12)* | 10 | 1.5 *(.06)* | 3.5 *(.14)* | 6 *(.24)* | 6 *(.24)* | 7 *(.28)* | 7 *(.28)* | 4 *(.16)* | 7 *(.28)* | 4 *(.16)* | 1 *(.04)* | 1 *(.04)* | .75 *(.03)* |
| 3WZ71/SA | 3WZ71/SB | | 20 | | | | | | | | | | | | |
| 3WZ72/SA | 3WZ72/SB | | 40 | | | | | | | | | | | | |
| 5WZ73/SA | 5WZ73/SB | 5 *(.20)* | 20 | 2.5 *(.10)* | 5.7 *(.22)* | 10 *(.39)* | 10 *(.39)* | 12 *(.47)* | 11 *(.43)* | 6.7 *(.26)* | 11.5 *(.45)* | 6 *(.24)* | 1.6 *(.06)* | 1.7 *(.07)* | 1.3 *(.05)* |
| 5WZ74/SA | 5WZ74/SB | | 50 | | | | | | | | | | | | |
| 5WZ75/SA | 5WZ75/SB | | 100 | | | | | | | | | | | | |
| 6WZ76/SA | 6WZ76/SB | 6 *(.24)* | 40 | 3 *(.12)* | 7.7 *(.30)* | 10 *(.39)* | 10 *(.39)* | 12 *(.47)* | 11 *(.43)* | 10.7 *(.42)* | 11.5 *(.45)* | 10 *(.39)* | 2 *(.08)* | 1.9 *(.07)* | 1.4 *(.06)* |
| 6WZ77/SA | 6WZ77/SB | | 75 | | | | | | | | | | | | |
| 6WZ78/SA | 6WZ78/SB | | 150 | | | | | | | | | | | | |
| 8WZ79/SA | 8WZ79/SB | 8 *(.31)* | 50 | 4 *(.16)* | 8.9 *(.35)* | 12 *(.47)* | 12 *(.47)* | 14 *(.55)* | 13 *(.51)* | 13.9 *(.55)* | 14 *(.55)* | 13 *(.51)* | 2.6 *(.10)* | 2.7 *(.11)* | 2.1 *(.08)* |
| 8WZ80/SA | 8WZ80/SB | | 100 | | | | | | | | | | | | |
| 8WZ81/SA | 8WZ81/SB | | 200 | | | | | | | | | | | | |
| 10WZ82/SA | 10WZ82/SB | 10 *(.39)* | 100 | 5 *(.20)* | 10.7 *(.42)* | 16 *(.63)* | 16 *(.63)* | 18 *(.71)* | 17 *(.67)* | 16.7 *(.66)* | 18 *(.71)* | 16 *(.63)* | 3.2 *(.13)* | 3.4 *(.13)* | 2.7 *(.11)* |
| 10WZ83/SA | 10WZ83/SB | | 200 | | | | | | | | | | | | |
| 10WZ84/SA | 10WZ84/SB | | 300 | | | | | | | | | | | | |

## Delrin® Thrust Pin

Dimensions in: millimeters *(inches)*

| Part Number Without Seal | Part Number With Seal | $d_1$ | Side Thrust FO (N) | $a_1$ | $a_2$ | $d_2$ | $d_3$ $H_8$ | h min. | $l_1$ -1 mm | $l_2$ | $l_3$ -1 mm | $l_4$ | w | $x_1$ | $x_2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3WZ70/KA | 3WZ70/KB | 3 *(.12)* | 10 | 1.5 *(.06)* | 3.5 *(.14)* | 6 *(.24)* | 6 *(.24)* | 7 *(.28)* | 7 *(.28)* | 4 *(.16)* | 7 *(.28)* | 4 *(.16)* | 1 *(.04)* | 1 *(.04)* | .75 *(.03)* |
| 5WZ73/KA | 5WZ73/KB | 5 *(.20)* | 20 | 2.5 *(.10)* | 5.7 *(.22)* | 10 *(.39)* | 10 *(.39)* | 12 *(.47)* | 11 *(.43)* | 6.7 *(.26)* | 11.5 *(.45)* | 6 *(.24)* | 1.6 *(.06)* | 1.7 *(.07)* | 1.3 *(.05)* |
| 6WZ76/KA | 6WZ76/KB | 6 *(.24)* | 40 | 3 *(.12)* | 7.7 *(.30)* | 10 *(.39)* | 10 *(.39)* | 12 *(.47)* | 11 *(.43)* | 10.7 *(.42)* | 11.5 *(.45)* | 10 *(.39)* | 2 *(.08)* | 1.9 *(.07)* | 1.4 *(.06)* |
| 8WZ79/KA | 8WZ79/KB | 8 *(.31)* | 50 | 4 *(.16)* | 8.9 *(.35)* | 12 *(.47)* | 12 *(.47)* | 14 *(.55)* | 13 *(.51)* | 13.9 *(.55)* | 14 *(.55)* | 13 *(.51)* | 2.6 *(.10)* | 2.7 *(.11)* | 2.1 *(.08)* |
| 10WZ82/KA | 10WZ82/KB | 10 *(.39)* | 100 | 5 *(.20)* | 10.7 *(.42)* | 16 *(.63)* | 16 *(.63)* | 18 *(.71)* | 17 *(.67)* | 16.7 *(.66)* | 18 *(.71)* | 16 *(.63)* | 3.2 *(.13)* | 3.4 *(.13)* | 2.7 *(.11)* |

## Technical Details




w = movement of pin
F = side thrust [N]
initial thrust = F
end thrust = 1.1 x F

$a_2 - a_1$ = clamping range for workpiece

x = distance center line. thrust point at w/2;

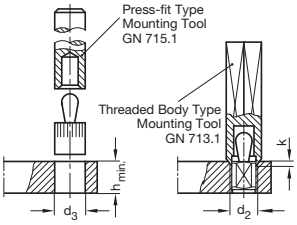
$x_1$ for highest thrust point ($a_1$)

$x_2$ for lowest thrust point ($a_2$)

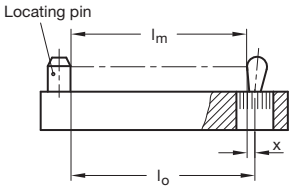
$l_o$ = distance end stop. bore of thrust bush

$l_o$ = lm + x

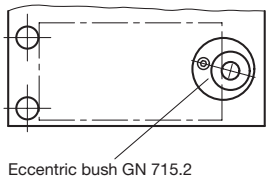
$l_m$ = average length of workpiece (lmax. + lmin.) / 2




For inserting press-fit type side thrust pins, the use of mounting tool GN-715.1 is recommended. For inserting threaded body type side thrust pins, GN 713.1 mounting tool is recommended.




For contact points (workpiece height) between a1 and a2, a value for x has to be used lying between x1 and x2 (interpolating).
By observing the above values, the full movement of the side thrust pin is available to cover the tolerance of the workpiece.



Eccentric bush GN 715.2

Eccentric bushings GN 715.2 are a tooling accessory. They allow the precise-setting of the side thrust pins. This allows the alteration of distance lo for bridging of a larger tolerance on a workpiece than the actual scope of the pin.