

GN 715

Side thrust pins

• Body

Blank aluminium.

- Execution **SA**: without gasket. For universal use, preferably in environments without machining residues. Maximum working temperature: 250°C.

- Execution **SB**: with NBR synthetic rubber gasket. For universal use, also in environments with machining residues. Maximum working temperature: 120°C (avoid contact with halocarbons, hydraulic fluids with a phosphoric ester base, nitrated hydrocarbons, ketons, toluol, strong acids).

• Oscillating pin

Zinc-plated hardened steel, blue passivated.

- Execution **KA**: acetal resin based (POM) technopolymer, without gasket.

- Execution **KB**: acetal resin based (POM) technopolymer, with NBR synthetic rubber gasket.

• Spring

Steel with:

- low spring load (grey)

- medium spring load (black)

- high spring load (silver).



8

Accessories on request

Eccentric bushings type GN 715.2 (see page 569) are available to obtain a more precise adjustment of the side thrust pins, providing different positionings.

Special executions on request (For sufficient quantities)

GN 714: without thrust pin with threaded thrust plate.

Features and applications

GN 715 side thrust 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 pins, it is recommended to use GN 715.1 assembly tool (when ordering, please specify the diameter D of the corresponding side thrust pin, for example: GN 715.1-8).

The knurling on the aluminium body prevents the pin from slipping out from the housing hole.

Technical data

w = movement of the oscillating pin from the initial position

F = side load [N]

F₀ = pre-load

1.1 x F₀ = 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

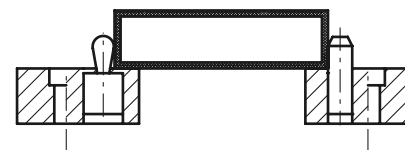
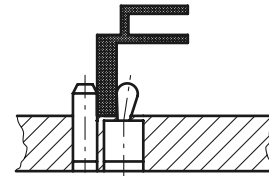
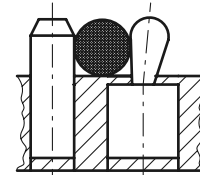
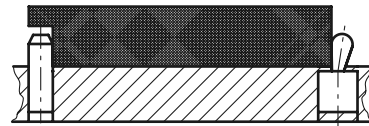
l₀ = distance from centre of thrust pin attachment to piece support point

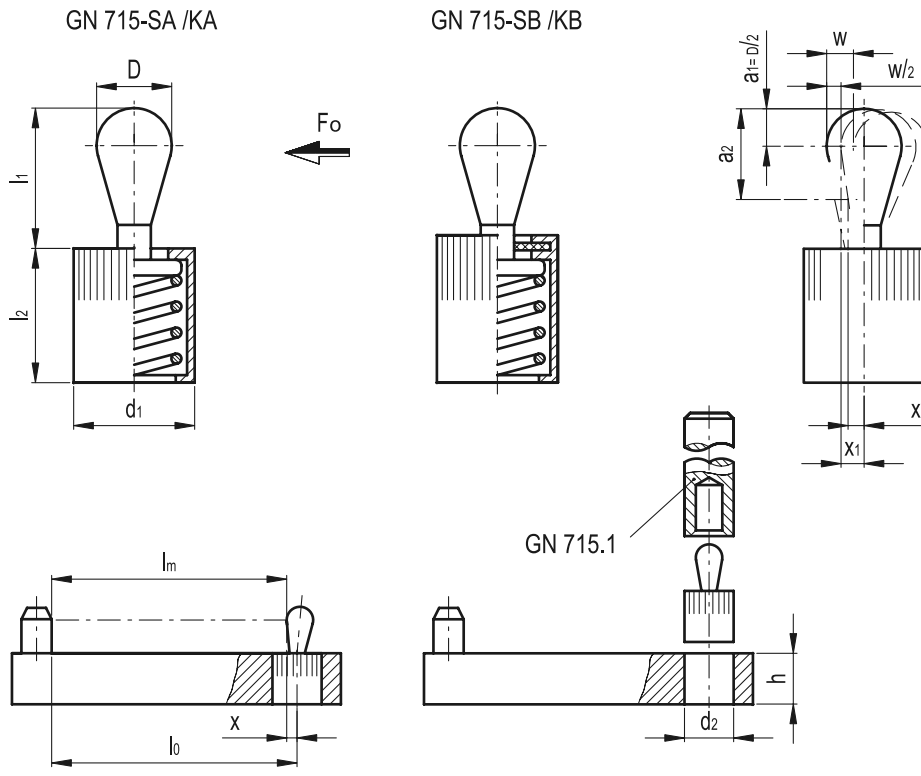
l₀ = l_m + x where l_m = average length of the piece (l_{max} + l_{min}):2

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.

Application example





Standard Elements	Main dimensions				Mounting dimensions							Preload	⚖	Mounting tool
Description	D	l ₁	l ₂ ⁻¹	d ₁	d ₂ H8	a ₁	a ₂	h min.	w	x ₁	x ₂	F ₀ [N]	g	Description
GN 715-3-10-SA	3	4	7	6	6	1.5	3.5	7	0.9	1	0.75	10	1	GN 715.1-3
GN 715-3-20-SA	3	4	7	6	6	1.5	3.5	7	0.9	1	0.75	20	1	GN 715.1-3
GN 715-3-40-SA	3	4	7	6	6	1.5	3.5	7	0.9	1	0.75	40	1	GN 715.1-3
GN 715-5-20-SA	5	6.7	11	10	10	2.5	5.7	12	1.6	1.7	1.3	20	3	GN 715.1-5.6
GN 715-5-50-SA	5	6.7	11	10	10	2.5	5.7	12	1.6	1.7	1.3	50	3	GN 715.1-5.6
GN 715-5-100-SA	5	6.7	11	10	10	2.5	5.7	12	1.6	1.7	1.3	100	3	GN 715.1-5.6
GN 715-6-40-SA	6	10.7	11	10	10	3	7.7	12	1.8	1.9	1.4	40	3	GN 715.1-5.6
GN 715-6-75-SA	6	10.7	11	10	10	3	7.7	12	1.8	1.9	1.4	75	4	GN 715.1-5.6
GN 715-6-150-SA	6	10.7	11	10	10	3	7.7	12	1.8	1.9	1.4	150	4	GN 715.1-5.6
GN 715-8-50-SA	8	13.9	13	12	12	4	8.9	14	2.6	2.7	2.1	50	7	GN 715.1-8
GN 715-8-100-SA	8	13.9	13	12	12	4	8.9	14	2.6	2.7	2.1	100	7	GN 715.1-8
GN 715-8-200-SA	8	13.9	13	12	12	4	8.9	14	2.6	2.7	2.1	200	7	GN 715.1-8
GN 715-10-100-SA	10	16.7	17	16	16	5	10.7	18	3.2	3.4	2.7	100	15	GN 715.1-10
GN 715-10-200-SA	10	16.7	17	16	16	5	10.7	18	3.2	3.4	2.7	200	15	GN 715.1-10
GN 715-10-300-SA	10	16.7	17	16	16	5	10.7	18	3.2	3.4	2.7	300	16	GN 715.1-10
GN 715-3-10-SB	3	4	7	6	6	1.5	3.5	7	0.9	1	0.75	10	1	GN 715.1-3
GN 715-3-20-SB	3	4	7	6	6	1.5	3.5	7	0.9	1	0.75	20	1	GN 715.1-3
GN 715-3-40-SB	3	4	7	6	6	1.5	3.5	7	0.9	1	0.75	40	1	GN 715.1-3
GN 715-5-20-SB	5	6	11.5	10	10	2.5	5.7	12	1.6	1.7	1.3	20	3	GN 715.1-5.6
GN 715-5-50-SB	5	6	11.5	10	10	2.5	5.7	12	1.6	1.7	1.3	50	3	GN 715.1-5.6
GN 715-5-100-SB	5	6	11.5	10	10	2.5	5.7	12	1.6	1.7	1.3	100	3	GN 715.1-5.6
GN 715-6-40-SB	6	10	11.5	10	10	3	7.7	12	1.8	1.9	1.4	40	3	GN 715.1-5.6
GN 715-6-75-SB	6	10	11.5	10	10	3	7.7	12	1.8	1.9	1.4	75	4	GN 715.1-5.6
GN 715-6-150-SB	6	10	11.5	10	10	3	7.7	12	1.8	1.9	1.4	150	4	GN 715.1-5.6
GN 715-8-50-SB	8	13	14	12	12	4	8.9	14	2.6	2.7	2.1	50	7	GN 715.1-8
GN 715-8-100-SB	8	13	14	12	12	4	8.9	14	2.6	2.7	2.1	100	7	GN 715.1-8
GN 715-8-200-SB	8	13	14	12	12	4	8.9	14	2.6	2.7	2.1	200	7	GN 715.1-8
GN 715-10-100-SB	10	16	18	16	16	5	10.7	18	3.2	3.4	2.7	100	15	GN 715.1-10
GN 715-10-200-SB	10	16	18	16	16	5	10.7	18	3.2	3.4	2.7	200	14	GN 715.1-10
GN 715-10-300-SB	10	16	18	16	16	5	10.7	18	3.2	3.4	2.7	300	16	GN 715.1-10
GN 715-3-10-KA	3	4	7	6	6	1.5	3.5	7	0.9	1	0.75	10	1	GN 715.1-3
GN 715-5-20-KA	5	6.7	11	10	10	2.5	5.7	12	1.6	1.7	1.3	20	1	GN 715.1-5.6
GN 715-6-40-KA	6	10.7	11	10	10	3	7.7	12	1.8	1.9	1.4	40	1	GN 715.1-5.6
GN 715-8-50-KA	8	13.9	13	12	12	4	8.9	14	2.6	2.7	2.1	50	3	GN 715.1-8
GN 715-10-100-KA	10	16.7	17	16	16	5	10.7	18	3.2	3.4	2.7	100	6	GN 715.1-10
GN 715-3-10-KB	3	4	7	6	6	1.5	3.5	7	0.9	1	0.75	10	1	GN 715.1-3
GN 715-5-20-KB	5	6	11.5	10	10	2.5	5.7	12	1.6	1.7	1.3	20	1	GN 715.1-5.6
GN 715-6-40-KB	6	10	11.5	10	10	3	7.7	12	1.8	1.9	1.4	40	2	GN 715.1-5.6
GN 715-8-50-KB	8	13	14	12	12	4	8.9	14	2.6	2.7	2.1	50	3	GN 715.1-8
GN 715-10-100-KB	10	16	18	16	16	5	10.7	18	3.2	3.4	2.7	100	7	GN 715.1-10