

Side Thrust Pins

Housing Aluminum, Thrust Pin Steel / Plastic,
Press-On Type

SPECIFICATION

Types

- Type **SA**: Thrust pin steel, without seal
- Type **KA**: Thrust pin plastic, without seal
- Type **SB**: Thrust pin steel, with seal
- Type **KB**: Thrust pin plastic, with seal

Housing
Aluminum
Plain

Thrust pin
Steel for type SA / SB
Hardened
Zinc plated, blue passivated

Plastic for type KA / KB
Polyacetal (POM)

Thrust spring
Side thrust force light
Stainless steel AISI 301
Side thrust force medium
Spring steel blackened
Side thrust force heavy
Spring steel zinc plated, blue passivated
Seal
Chloroprene rubber (CR)

INFORMATION

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.

For mounting the side thrust pins a suitable mounting tool GN 715.1 (see page) is available (see table).

TECHNICAL INFORMATION

- ISO-Fundamental Tolerances (see page A21)
- Plastic Characteristics (see page A2)

TECHNICAL AND ASSEMBLY INSTRUCTIONS

w = Movement of pin

F = Side thrust in N

initial thrust = F_0

end thrust = $1.1 \times F_0$

$a_2 - a_1$ = Clamping range for workpiece

x = distance centre line – thrust point at w_2

x_1 for highest thrust point (a_1)

x_2 for lowest thrust point (a_2)

l_0 = Distance end stop – bore of thrust bush

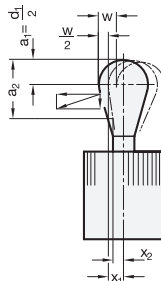
$l_0 = l_m + x$

l_m = Average length of workpiece $l_{max.} + l_{min.} / 2$

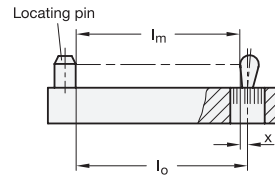
For contact points (workpiece height) between a_1 and

a_2 a value for x has to be used lying between x_1 and

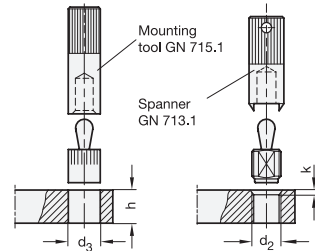
x_2 (interpolation).



By observing the above values the full movement of the side thrust pin will be available to cover the tolerance of the workpiece.



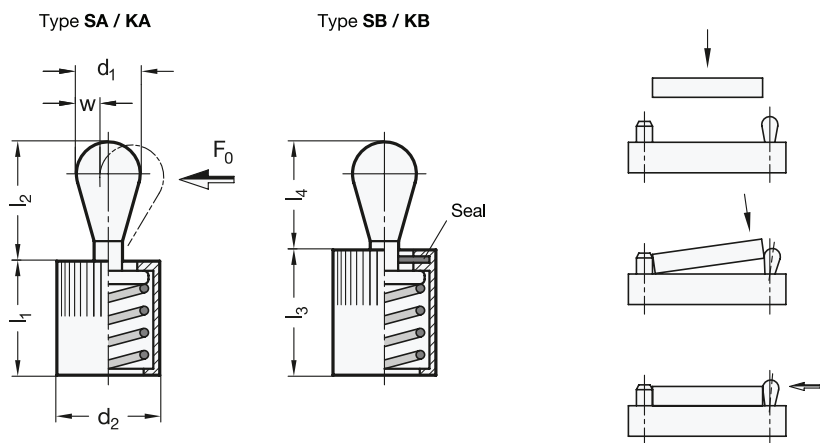
For inserting the side thrust pins the use of a mounting tool GN 715.1 or spanner GN 713.1 is recommended.



Eccentric bushes GN 715.2 (see page 867) are tooling accessory for GN 714 (see page 862)/GN 715. They enable a precise optimum setting of side thrust pins. This allows an adjustment to l_0 to accommodate for instance a larger tolerance range on a workpiece.



Eccentric bushing GN 715.2



GN 715

Description	d1	Side thrust F0 in N	a1	a2	d2	d3 H8	h min.	l1 -1	l2 ±0.5	l3 -2	l4	w	x1	x2	Code no. Mounting tool	
GN 715-3-10-SA	3	10	1.5	3.5	6	6	7	7	4	7	4	1	1	0.75	GN 715.1-3	1
GN 715-3-20-SA	3	20	1.5	3.5	6	6	7	7	4	7	4	1	1	0.75	GN 715.1-3	1
GN 715-3-40-SA	3	40	1.5	3.5	6	6	7	7	4	7	4	1	1	0.75	GN 715.1-3	1
GN 715-5-20-SA	5	20	2.5	5.7	10	10	12	11	6.7	11.5	6	1.6	1.7	1.3	GN 715.1-5.6	3
GN 715-5-50-SA	5	50	2.5	5.7	10	10	12	11	6.7	11.5	6	1.6	1.7	1.3	GN 715.1-5.6	3
GN 715-5-100-SA	5	100	2.5	5.7	10	10	12	11	6.7	11.5	6	1.6	1.7	1.3	GN 715.1-5.6	3
GN 715-6-40-SA	6	40	3	7.7	10	10	12	11	10.7	11.5	10	2	1.9	1.4	GN 715.1-5.6	4
GN 715-6-75-SA	6	75	3	7.7	10	10	12	11	10.7	11.5	10	2	1.9	1.4	GN 715.1-5.6	4
GN 715-6-100-SA	6	100	3	7.7	10	10	12	11	10.7	11.5	10	2	1.9	1.4	GN 715.1-5.6	4
GN 715-8-50-SA	8	50	4	8.9	12	12	14	13	13.9	14	13	2.6	2.7	2.1	GN 715.1-8	7
GN 715-8-100-SA	8	100	4	8.9	12	12	14	13	13.9	14	13	2.6	2.7	2.1	GN 715.1-8	7
GN 715-8-150-SA	8	150	4	8.9	12	12	14	13	13.9	14	13	2.6	2.7	2.1	GN 715.1-8	7
GN 715-10-100-SA	10	100	5	10.7	16	16	18	17	16.7	18	16	3.2	3.4	2.7	GN 715.1-10	15
GN 715-10-150-SA	10	150	5	10.7	16	16	18	17	16.7	18	16	3.2	3.4	2.7	GN 715.1-10	15
GN 715-10-205-SA	10	205	5	10.7	16	16	18	17	16.7	18	16	3.2	3.4	2.7	GN 715.1-10	15
GN 715-3-10-KA	3	10	1.5	3.5	6	6	7	7	4	7	4	1	1	0.75	GN 715.1-3	1
GN 715-5-20-KA	5	20	2.5	5.7	10	10	12	11	6.7	11.5	6	1.6	1.7	1.3	GN 715.1-5.6	2
GN 715-6-40-KA	6	40	3	7.7	10	10	12	11	10.7	11.5	10	2	1.9	1.4	GN 715.1-5.6	3
GN 715-8-50-KA	8	50	4	8.9	12	12	14	13	13.9	14	13	2.6	2.7	2.1	GN 715.1-8	4
GN 715-10-100-KA	10	100	5	10.7	16	16	18	17	16.7	18	16	3.2	3.4	2.7	GN 715.1-10	6
GN 715-3-10-SB	3	10	1.5	3.5	6	6	7	7	4	7	4	1	1	0.75	GN 715.1-3	1
GN 715-3-20-SB	3	20	1.5	3.5	6	6	7	7	4	7	4	1	1	0.75	GN 715.1-3	1
GN 715-3-40-SB	3	40	1.5	3.5	6	6	7	7	4	7	4	1	1	0.75	GN 715.1-3	1
GN 715-5-20-SB	5	20	2.5	5.7	10	10	12	11	6.7	11.5	6	1.6	1.7	1.3	GN 715.1-5.6	3
GN 715-5-50-SB	5	50	2.5	5.7	10	10	12	11	6.7	11.5	6	1.6	1.7	1.3	GN 715.1-5.6	3
GN 715-5-100-SB	5	100	2.5	5.7	10	10	12	11	6.7	11.5	6	1.6	1.7	1.3	GN 715.1-5.6	3
GN 715-6-40-SB	6	40	3	7.7	10	10	12	11	10.7	11.5	10	2	1.9	1.4	GN 715.1-5.6	4
GN 715-6-75-SB	6	75	3	7.7	10	10	12	11	10.7	11.5	10	2	1.9	1.4	GN 715.1-5.6	4
GN 715-6-100-SB	6	100	3	7.7	10	10	12	11	10.7	11.5	10	2	1.9	1.4	GN 715.1-5.6	4
GN 715-8-50-SB	8	50	4	8.9	12	12	14	13	13.9	14	13	2.6	2.7	2.1	GN 715.1-8	7
GN 715-8-100-SB	8	100	4	8.9	12	12	14	13	13.9	14	13	2.6	2.7	2.1	GN 715.1-8	7
GN 715-8-150-SB	8	150	4	8.9	12	12	14	13	13.9	14	13	2.6	2.7	2.1	GN 715.1-8	7
GN 715-10-100-SB	10	100	5	10.7	16	16	18	17	16.7	18	16	3.2	3.4	2.7	GN 715.1-10	15
GN 715-10-150-SB	10	150	5	10.7	16	16	18	17	16.7	18	16	3.2	3.4	2.7	GN 715.1-10	15
GN 715-10-205-SB	10	205	5	10.7	16	16	18	17	16.7	18	16	3.2	3.4	2.7	GN 715.1-10	15
GN 715-3-10-KB	3	10	1.5	3.5	6	6	7	7	4	7	4	1	1	0.75	GN 715.1-3	1
GN 715-5-20-KB	5	20	2.5	5.7	10	10	12	11	6.7	11.5	6	1.6	1.7	1.3	GN 715.1-5.6	2
GN 715-6-40-KB	6	40	3	7.7	10	10	12	11	10.7	11.5	10	2	1.9	1.4	GN 715.1-5.6	3
GN 715-8-50-KB	8	50	4	8.9	12	12	14	13	13.9	14	13	2.6	2.7	2.1	GN 715.1-8	4
GN 715-10-100-KB	10	100	5	10.7	16	16	18	17	16.7	18	16	3.2	3.4	2.7	GN 715.1-10	7