

Side Thrust Pins

Steel, Thrust Pin Steel / Plastic, with Thread

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

Steel
Zinc plated, blue passivated

Thrust pin

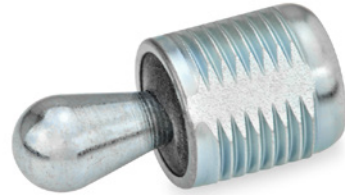
- Steel for SA / SB
 - Hardened
 - Zinc plated, blue passivated
- Plastic, Polyacetal (POM) for KA / KB

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 713 are versatile and practical elements for holding, positioning and clamping workpieces.

They eliminate costly alternatives, are space saving and simple to install. The protruding height of the thrust pin can be adjusted with the threaded body.

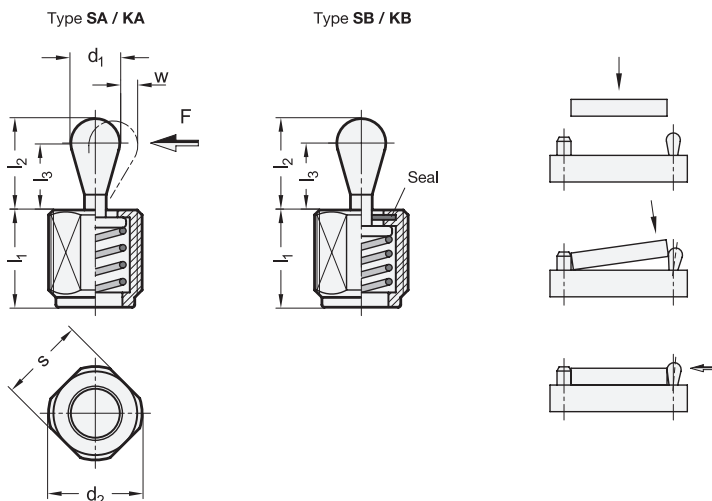
For mounting the side thrust pins a suitable mounting tool GN 713.1 (see page) is available (see table).

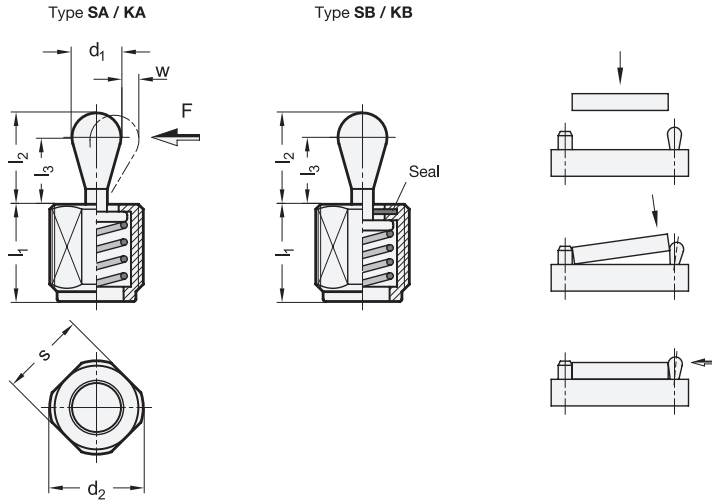
ACCESSORY

- GN 713.1 Mounting Tools (Code no. see table) (see page)



TECHNICAL INFORMATION

- Technical and Installation instructions (see page)
- Plastic Characteristics (see page A2)







GN 713-SA

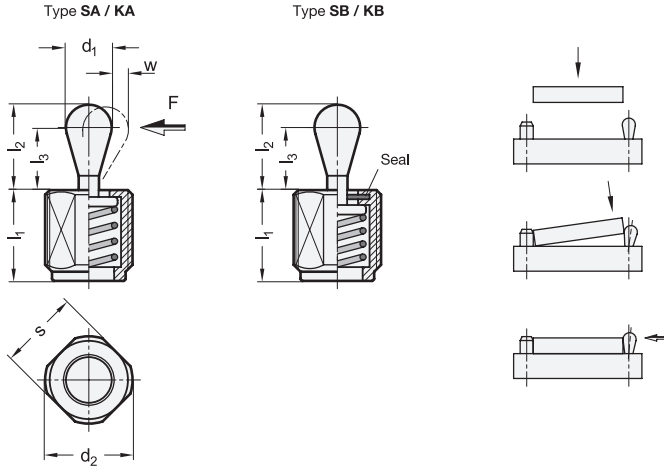
Description	d ₁	Side thrust force F in N ≈	l ₁ - 2	d ₂	l ₂	l ₃	s	w	Code no. for mounting tool 	
GN 713-5-20-11.5-SA	5	20	11.5	M 12	6.4	3.9	10	1.6	GN 713.1-5.6	4
GN 713-5-50-11.5-SA	5	50	11.5	M 12	6.4	3.9	10	1.6	GN 713.1-5.6	4
GN 713-5-100-11.5-SA	5	100	11.5	M 12	6.4	3.9	10	1.6	GN 713.1-5.6	4
GN 713-5-20-19-SA	5	20	19	M 12	6.4	3.9	10	1.6	GN 713.1-5.6	6
GN 713-5-50-19-SA	5	50	19	M 12	6.4	3.9	10	1.6	GN 713.1-5.6	6
GN 713-5-100-19-SA	5	100	19	M 12	6.4	3.9	10	1.6	GN 713.1-5.6	7
GN 713-5-20-26.5-SA	5	20	26.5	M 12	6.4	3.9	10	1.6	GN 713.1-5.6	8
GN 713-5-50-26.5-SA	5	50	26.5	M 12	6.4	3.9	10	1.6	GN 713.1-5.6	8
GN 713-5-100-26.5-SA	5	100	26.5	M 12	6.4	3.9	10	1.6	GN 713.1-5.6	9
GN 713-6-40-11.5-SA	6	40	11.5	M 12	10.4	7.4	10	2	GN 713.1-5.6	5
GN 713-6-75-11.5-SA	6	75	11.5	M 12	10.4	7.4	10	2	GN 713.1-5.6	5
GN 713-6-100-11.5-SA	6	100	11.5	M 12	10.4	7.4	10	2	GN 713.1-5.6	5
GN 713-6-40-19-SA	6	40	19	M 12	10.4	7.4	10	2	GN 713.1-5.6	7
GN 713-6-75-19-SA	6	75	19	M 12	10.4	7.4	10	2	GN 713.1-5.6	7
GN 713-6-100-19-SA	6	100	19	M 12	10.4	7.4	10	2	GN 713.1-5.6	8
GN 713-6-40-26.5-SA	6	40	26.5	M 12	10.4	7.4	10	2	GN 713.1-5.6	9
GN 713-6-75-26.5-SA	6	75	26.5	M 12	10.4	7.4	10	2	GN 713.1-5.6	10
GN 713-6-100-26.5-SA	6	100	26.5	M 12	10.4	7.4	10	2	GN 713.1-5.6	10
GN 713-10-100-18-SA	10	100	18	M 18 x 1.5	16.9	11.9	16	3.2	GN 713.1-10	19
GN 713-10-150-18-SA	10	150	18	M 18 x 1.5	16.9	11.9	16	3.2	GN 713.1-10	20
GN 713-10-205-18-SA	10	205	18	M 18 x 1.5	16.9	11.9	16	3.2	GN 713.1-10	20
GN 713-10-100-31.5-SA	10	100	31.5	M 18 x 1.5	16.9	11.9	16	3.2	GN 713.1-10	28
GN 713-10-150-31.5-SA	10	150	31.5	M 18 x 1.5	16.9	11.9	16	3.2	GN 713.1-10	29
GN 713-10-205-31.5-SA	10	205	31.5	M 18 x 1.5	16.9	11.9	16	3.2	GN 713.1-10	30
GN 713-10-100-45-SA	10	100	45	M 18 x 1.5	16.9	11.9	16	3.2	GN 713.1-10	36
GN 713-10-150-45-SA	10	150	45	M 18 x 1.5	16.9	11.9	16	3.2	GN 713.1-10	38
GN 713-10-205-45-SA	10	205	45	M 18 x 1.5	16.9	11.9	16	3.2	GN 713.1-10	40

GN 713-KA



Description	d ₁	Side thrust force F in N ≈	l ₁ - 2	d ₂	l ₂	l ₃	s	w	Code no. for mounting tool 	
GN 713-5-20-11.5-KA	5	20	11.5	M 12	6.4	3.9	10	1.6	GN 713.1-5.6	3
GN 713-5-20-19-KA	5	20	19	M 12	6.4	3.9	10	1.6	GN 713.1-5.6	5
GN 713-5-20-26.5-KA	5	20	26.5	M 12	6.4	3.9	10	1.6	GN 713.1-5.6	7
GN 713-6-40-11.5-KA	6	40	11.5	M 12	10.4	7.4	10	2	GN 713.1-5.6	3
GN 713-6-40-19-KA	6	40	19	M 12	10.4	7.4	10	2	GN 713.1-5.6	5
GN 713-6-40-26.5-KA	6	40	26.5	M 12	10.4	7.4	10	2	GN 713.1-5.6	7
GN 713-10-100-18-KA	10	100	18	M 18 x 1.5	16.9	11.9	16	3.2	GN 713.1-10	12
GN 713-10-100-31.5-KA	10	100	31.5	M 18 x 1.5	16.9	11.9	16	3.2	GN 713.1-10	20
GN 713-10-100-45-KA	10	100	45	M 18 x 1.5	16.9	11.9	16	3.2	GN 713.1-10	30





Indexing elements



GN 713-SB

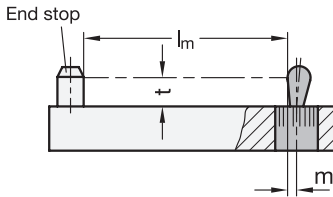
Description	d ₁	Side thrust force F in N ≈	l ₁ - 2	d ₂	l ₂	l ₃	s	w	Code no. for mountig tool 	
GN 713-5-20-11,5-SB	5	20	11,5	M 12	6	3,5	10	0,8	GN 713.1-5,6	4
GN 713-5-50-11,5-SB	5	50	11,5	M 12	6	3,5	10	0,8	GN 713.1-5,6	4
GN 713-5-100-11,5-SB	5	100	11,5	M 12	6	3,5	10	0,8	GN 713.1-5,6	4
GN 713-5-20-19-SB	5	20	19	M 12	6	3,5	10	0,8	GN 713.1-5,6	6
GN 713-5-50-19-SB	5	50	19	M 12	6	3,5	10	0,8	GN 713.1-5,6	6
GN 713-5-100-19-SB	5	100	19	M 12	6	3,5	10	0,8	GN 713.1-5,6	7
GN 713-5-20-26,5-SB	5	20	26,5	M 12	6	3,5	10	0,8	GN 713.1-5,6	8
GN 713-5-50-26,5-SB	5	50	26,5	M 12	6	3,5	10	0,8	GN 713.1-5,6	8
GN 713-5-100-26,5-SB	5	100	26,5	M 12	6	3,5	10	0,8	GN 713.1-5,6	9
GN 713-6-40-11,5-SB	6	40	11,5	M 12	10	7	10	1	GN 713.1-5,6	5
GN 713-6-75-11,5-SB	6	75	11,5	M 12	10	7	10	1	GN 713.1-5,6	5
GN 713-6-100-11,5-SB	6	100	11,5	M 12	10	7	10	1	GN 713.1-5,6	5
GN 713-6-40-19-SB	6	40	19	M 12	10	7	10	1	GN 713.1-5,6	6
GN 713-6-75-19-SB	6	75	19	M 12	10	7	10	1	GN 713.1-5,6	7
GN 713-6-100-19-SB	6	100	19	M 12	10	7	10	1	GN 713.1-5,6	8
GN 713-6-40-26,5-SB	6	40	26,5	M 12	10	7	10	1	GN 713.1-5,6	8
GN 713-6-75-26,5-SB	6	75	26,5	M 12	10	7	10	1	GN 713.1-5,6	9
GN 713-6-100-26,5-SB	6	100	26,5	M 12	10	7	10	1	GN 713.1-5,6	10
GN 713-10-100-18-SB	10	100	18	M 18 x 1,5	16	11	16	1,6	GN 713.1-10	20
GN 713-10-150-18-SB	10	150	18	M 18 x 1,5	16	11	16	1,6	GN 713.1-10	20
GN 713-10-205-18-SB	10	205	18	M 18 x 1,5	16	11	16	1,6	GN 713.1-10	20
GN 713-10-100-31,5-SB	10	100	31,5	M 18 x 1,5	16	11	16	1,6	GN 713.1-10	28
GN 713-10-150-31,5-SB	10	150	31,5	M 18 x 1,5	16	11	16	1,6	GN 713.1-10	29
GN 713-10-205-31,5-SB	10	205	31,5	M 18 x 1,5	16	11	16	1,6	GN 713.1-10	29
GN 713-10-100-45-SB	10	100	45	M 18 x 1,5	16	11	16	1,6	GN 713.1-10	36
GN 713-10-150-45-SB	10	150	45	M 18 x 1,5	16	11	16	1,6	GN 713.1-10	40
GN 713-10-205-45-SB	10	205	45	M 18 x 1,5	16	11	16	1,6	GN 713.1-10	38

GN 713-KB

Description	d ₁	Side thrust force F in N ≈	l ₁ - 2	d ₂	l ₂	l ₃	s	w	Code no. for mountig tool 	
GN 713-5-20-11,5-KB	5	20	11,5	M 12	6	3,5	10	0,8	GN 713.1-5,6	3
GN 713-5-20-19-KB	5	20	19	M 12	6	3,5	10	0,8	GN 713.1-5,6	4
GN 713-5-20-26,5-KB	5	20	26,5	M 12	6	3,5	10	0,8	GN 713.1-5,6	6
GN 713-6-40-11,5-KB	6	40	11,5	M 12	10	7	10	1	GN 713.1-5,6	3
GN 713-6-40-19-KB	6	40	19	M 12	10	7	10	1	GN 713.1-5,6	4
GN 713-6-40-26,5-KB	6	40	26,5	M 12	10	7	10	1	GN 713.1-5,6	6
GN 713-10-100-18-KB	10	100	18	M 18 x 1,5	16	11	16	1,6	GN 713.1-10	12
GN 713-10-100-31,5-KB	10	100	31,5	M 18 x 1,5	16	11	16	1,6	GN 713.1-10	21
GN 713-10-100-45-KB	10	100	45	M 18 x 1,5	16	11	16	1,6	GN 713.1-10	30

Indexing elements 8

Technical and Installation instructions GN 713 | GN 714 | GN 715

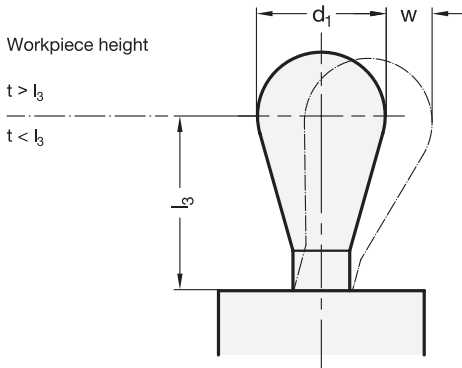


The position of the mounting hole results from the workpiece length l_m plus the hole offset m , which is calculated as shown below:

w = Maximum movement range of the thrust pin

t = Workpiece height

m = Hole offset



Case 1:

The workpiece height t is greater than the cone height l_3

$$m = \frac{d_1}{2} - \frac{w}{2}$$

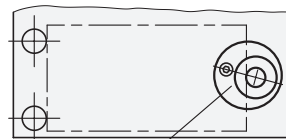
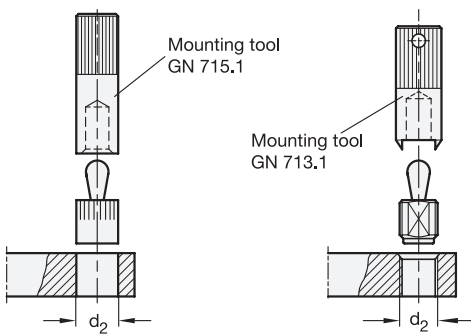
Case 2:

The workpiece height t is smaller than the cone height l_3

$$m = \frac{d_1}{2} - (l_3 - t) \times 0,123$$

If the position of the mounting hole is determined as specified, the full movement of the side thrust pin will be available to cover the tolerance of the workpiece.

In case 1, the lateral clamping force is coupled with a downward pull that presses the workpiece against the contact surface.



Eccentric bushing GN 715.2

The use of a mounting tool GN 715.1 or mounting tool GN 713.1 is recommended for installation.

Eccentric bushings GN 715.2 are an assembly aid for side thrust pins GN 714 / GN 715. They enable adjustment of the side thrust pins to the most favorable clamping position, e.g. to bridge larger tolerance ranges of a workpiece.

