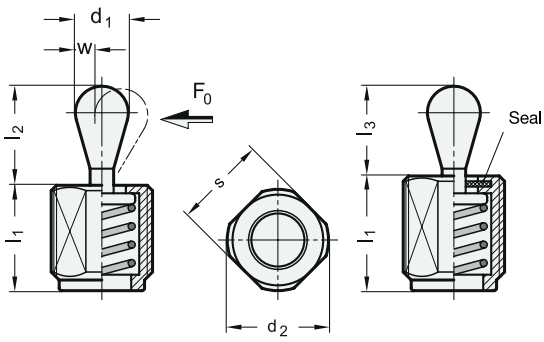
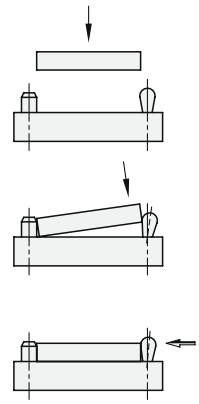
Side Thrust Pins

Steel, with Threaded Body





Metric

4 Type

SB Steel thrust pin, with seal

SA* Steel thrust pin, without seal

Metric table

Dimensions in: millimeters / inches

1 d_1	2 Side thrust force $F_0 \approx$ at l_2			3 l_1 –2			d_2	a_1	a_2
5 0.20	20 N 4.50 lbf	50 N 11.24 lbf	100 N 22.48 lbf	11.5 0.45	19 0.75	26.5* 1.04	M 12	2.5 0.10	5.7 0.22
6 0.24	40 N 8.99 lbf	75 N 16.86 lbf	100 N 22.48 lbf	11.5 0.45	19 0.75	26.5* 1.04	M 12	3 0.12	7.7 0.30
10 0.39	100 N 22.48 lbf	150 N 33.72 lbf	205 N 46.09 lbf	18 0.71	31.5 1.24	45* 1.77	M 18 x 1.5	5 0.20	10.7 0.42

d_1	k	l_2	l_3	s	w	x_1	x_2	Part number installation tool
5 0.20	1.5 x 45°	6.7 0.26	6 0.24	10 0.39	1.6 0.06	1.7 0.07	1.3 0.05	713.1-5.6
6 0.24	1.5 x 45°	10.7 0.42	10 0.39	10 0.39	1.8 0.07	1.9 0.07	1.4 0.06	713.1-5.6
10 0.39	2 x 45°	16.7 0.66	16 0.63	16 0.63	3.2 0.13	3.4 0.13	2.7 0.11	713.1-10

* Not available from stock, requires a minimum order quantity

Specification

Housing
Steel, zinc plated, blue passivated

Thrust pin
Steel
- Hardened
- Zinc plated, blue passivated

Thrust spring
- Side thrust force light
  Stainless steel AISI 301
- Side thrust force medium
  Spring steel, blackened finish
- Side thrust force heavy
  Spring steel, zinc plated, blue passivated

Seal
Chloroprene rubber (CR)

RoHS

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 is available (see table).

see also...	Page
GN 715 Press-Fit Side Thrust Pins	QVX

Technical Information

Technical instructions GN 713 / GN 715	QVX
Plastic Characteristics	QVX

Accessory

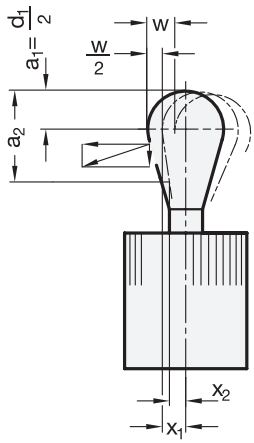
GN 713.1 Mounting Tools (Part number, see table)	QVX

How to order

1 2 3 4
GN 713-6-75-11.5-SB

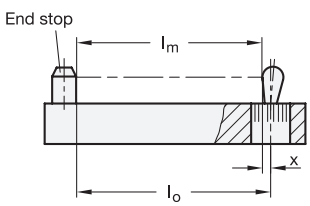
1	Diameter d_1
2	Side thrust force F_0
3	Thread engagement l_1
4	Type

Technical and assembly instructions

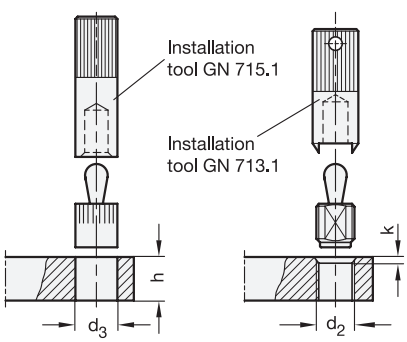


w	=	Movement of pin
F	=	Side thrust in N / lbf Initial thrust = F_0 End thrust = 1.1 x F_0
$a_2 - a_1$	=	Clamping range for workpiece
x	=	Distance centre line – Thrust point at $\frac{w}{2}$ x_1 for highest thrust point (a_1) x_2 for lowest thrust point (a_2)
l_0	=	Distance end stop – Bore of side thrust pin
l_0	=	$l_m + x$ l_m = average length of workpiece $\frac{l_{max.} + l_{min.}}{2}$

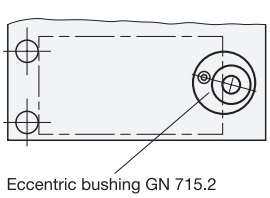
For contact points (workpiece height) between a_1 and a_2 a value for x has to be used lying between x_1 and x_2 (interpolation).



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 installation tool GN 715.1 or GN 713.1 is recommended.



Eccentric bushings GN 715.2 are a tooling accessory for GN 714 / 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.