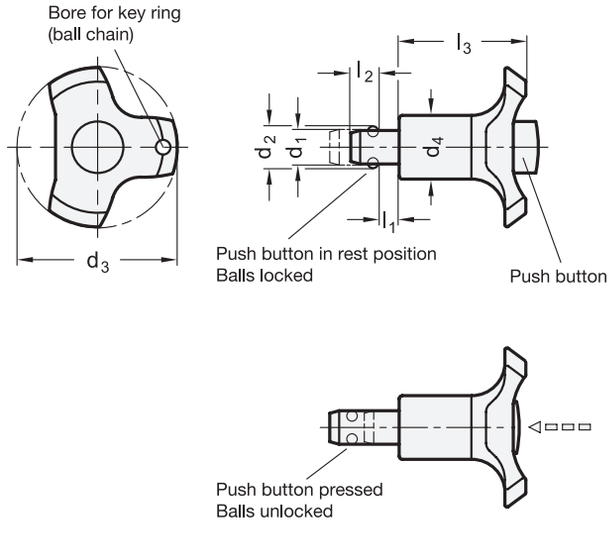
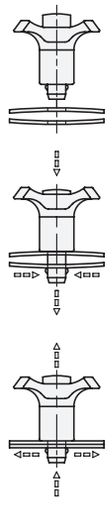
GN 113.1 Ball Lock Pins

Plastic Grip, with Stainless Steel Shank, 3-Prong Grip

JW WINCO® A Ganter Company



Application example



Metric

SS Stainless Steel

Metric table

Dimensions in: millimeters - *inches*

d_1 $^{-0.04}_{-0.08}$ [1]	l_1 (5 mm stroke) max. [2]	l_1 (5 mm stroke) min. [2]	d_2	d_3	d_4	l_2	l_3	Location bore H11	Clamping force max. ≈
6 *0.24*	5 *0.20*	0	7 *0.28*	38 *1.50*	17.5 *0.69*	5 *0.20*	30 *1.18*	6 *0.24*	16 N *3.60 lbf*
6 *0.24*	10 *0.39*	5 *0.20*	7 *0.28*	38 *1.50*	17.5 *0.69*	5 *0.20*	30 *1.18*	6 *0.24*	18 N *4.05 lbf*
8 *0.31*	5 *0.20*	0	9.5 *0.37*	38 *1.50*	17.5 *0.69*	6.5 *0.26*	30 *1.18*	8 *0.31*	16 N *3.60 lbf*
8 *0.31*	10 *0.39*	5 *0.20*	9.5 *0.37*	38 *1.50*	17.5 *0.69*	6.5 *0.26*	30 *1.18*	8 *0.31*	18 N *4.05 lbf*
10 *0.39*	5 *0.20*	0	12 *0.47*	47 *1.85*	23 *0.91*	8.7 *0.34*	36 *1.42*	10 *0.39*	21 N *4.72 lbf*
10 *0.39*	10 *0.39*	5 *0.20*	12 *0.47*	47 *1.85*	23 *0.91*	8.7 *0.34*	36 *1.42*	10 *0.39*	23 N *5.17 lbf*
12 *0.47*	5 *0.20*	0	14 *0.55*	47 *1.85*	23 *0.91*	9.4 *0.37*	36 *1.42*	12 *0.47*	21 N *4.72 lbf*
12 *0.47*	10 *0.39*	5 *0.20*	14 *0.55*	47 *1.85*	23 *0.91*	9.4 *0.37*	36 *1.42*	12 *0.47*	23 N *5.17 lbf*

Specification

- Shank pin
  Stainless steel AISI 303
- Handle
  Plastic (Polyamide PA)
  - Black-gray
  - Push button: red
  - Temperature resistant up to 176 °F (80 °C)
- Balls
  Stainless steel AISI 420C
- Spring
  Stainless steel AISI 631
- *ISO Fundamental Tolerances → page 2129*
- *Plastic Characteristics → page 2135*
- *Stainless Steel Characteristics → page 2143*
- RoHS compliant

Information

GN 113.1 ball lock pins are used for rapid clamping and simultaneously play-free connecting of thin components in particular where frequent clamping and releasing is required. A typical application is the alignment and clamping of sheet metal during a welding process.

By depressing the spring-loaded push button, the pin advances by the length l_2 and at the same time frees the two balls. When the push button is released the balls are locked in their forward position and at the same time use the clamping force to clamp the components together.

see also...

- *List of Lock Pin Types → page 1058*

Accessory

- Ball chains GN 111 / GN 111.5 → *page 1236*
- Retaining cables GN 111.2 → *page 1238*
- Spiral retaining cables GN 111.4 → *page 1237*

How to order

GN 113.1-6-5

1	Pin diameter d_1
2	Length l_1 min.