

Ball Lock Pins • self-locking, with adjustable handle

EH 22370. /EH 22380.



Product Description

For fixing and clamping of two parts or play-free application to the counterpart. Clamping range infinitely variable by hand via nut/lock nut.

All versions are corrosion resistant. When using stainless steel 1.4542: high-strength, hardened, abrasion resistant pin with high load capacity.

Material

Pin part

- Stainless steel 1.4305
- Stainless steel 1.4542, precipitation-hardened

Lock nut

- Thermoplastic, black

Spring

- Stainless steel

Adjusting nut

- Thermoplastic, silver

Operation

The balls are unlocked by pressing the button.

Characteristic

Types from stainless steel 1.4542 with marking below the balls.

More information

Notes

Customized design on request.

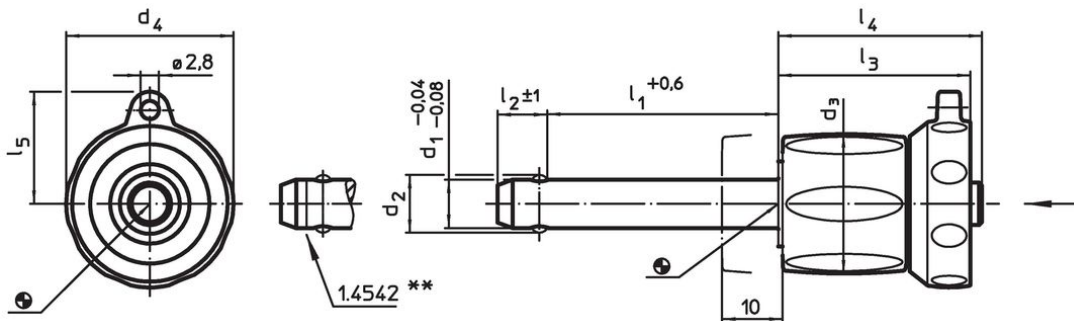
Accessories

Can easily be fitted with retaining cable EH 22400.

Further products

- Locating Bushings, for ball lock pins and socket pins
- Locating Bushings, with flange, for ball lock pins and socket pins
- Retaining Cables
- Positioning Bushings, with collar, DIN 172 A
- Positioning Bushings, without collar, DIN 179 A

Drawing





** Types from stainless steel 1.4542 with marking.



Order information

Dimensions									Location hole H11	Temperature		Weight	Shearing resistance, two-shear ¹⁾ min.	Art. No.
d ₁	l ₁	d ₂	d ₃	d ₄	l ₂	l ₃	l ₄	l ₅	[mm]	min.	max.	[g]	[kN]	
-0.04	+0.6				±1				[mm]	[°C]				
-0.08														
Stainless steel 1.4305														
5	0 – 10	5.5	17.6	23.6	6.0	25.7	26.2	15.9	5	-30	80	24	14	22370.0592
5	5 – 15	5.5	17.6	23.6	6.0	25.7	26.2	15.9	5	-30	80	25	14	22370.0593
5	10 – 20	5.5	17.6	23.6	6.0	25.7	26.2	15.9	5	-30	80	26	14	22370.0594
5	15 – 25	5.5	17.6	23.6	6.0	25.7	26.2	15.9	5	-30	80	26	14	22370.0595
5	20 – 30	5.5	17.6	23.6	6.0	25.7	26.2	15.9	5	-30	80	27	14	22370.0596
6	0 – 10	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	26	21	22370.0602
6	5 – 15	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	27	21	22370.0603

¹⁾ Shearing resistance similar to DIN 50141

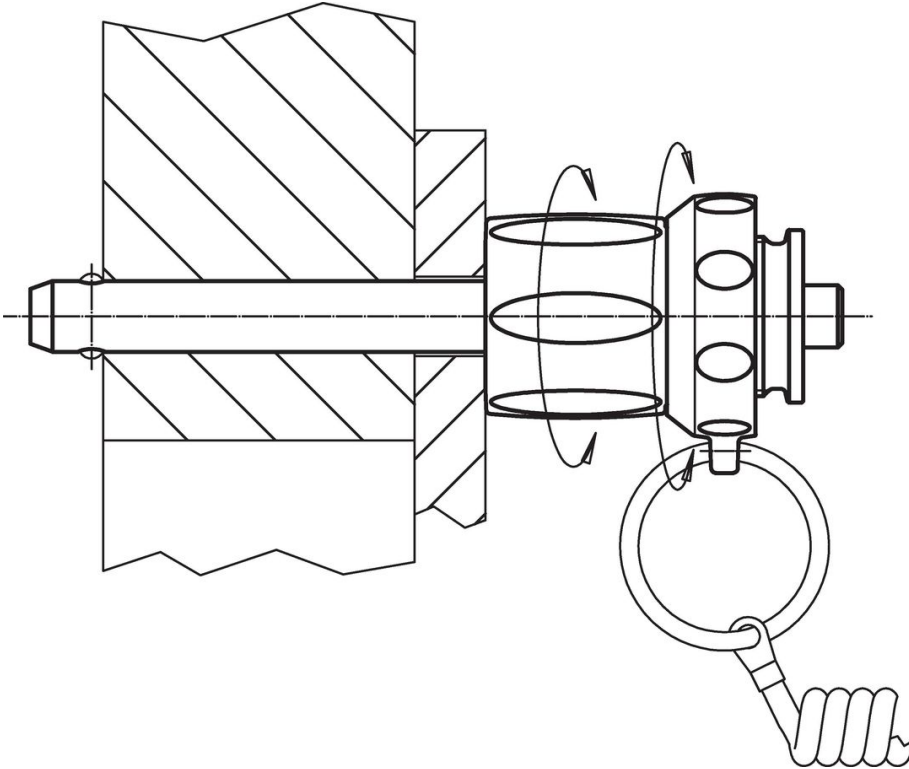
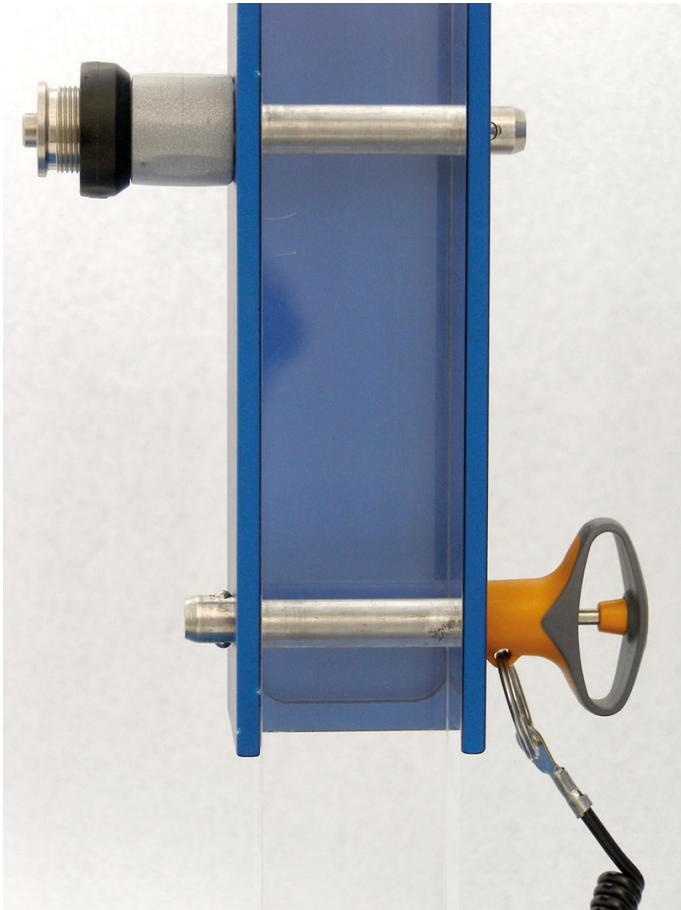
d ₁ -0.04 -0.08	l ₁ +0.6	Dimensions							Location hole H11 [mm]	 min. max. [°C]		 [g]	Shearing resistance, two-shear ¹⁾ min. [kN]	Art. No.
		d ₂	d ₃	d ₄	l ₂ ±1	l ₃	l ₄	l ₅		[mm]	[°C]			
6	10 – 20	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	27	21	22370.0604
6	15 – 25	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	28	21	22370.0605
6	20 – 30	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	27	21	22370.0606
6	25 – 35	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	30	21	22370.0607
6	30 – 40	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	31	21	22370.0608
6	35 – 45	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	32	21	22370.0609
6	40 – 50	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	33	21	22370.0610
8	10 – 20	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	58	38	22370.0614
8	15 – 25	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	60	38	22370.0615
8	20 – 30	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	60	38	22370.0616
8	25 – 35	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	62	38	22370.0617
8	30 – 40	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	64	38	22370.0618
8	35 – 45	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	65	38	22370.0619
8	40 – 50	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	65	38	22370.0620
10	10 – 20	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	65	60	22370.0624
10	15 – 25	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	66	60	22370.0625
10	20 – 30	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	69	60	22370.0626
10	25 – 35	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	72	60	22370.0627
10	30 – 40	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	75	60	22370.0628
10	35 – 45	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	78	60	22370.0629
10	40 – 50	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	80	60	22370.0630
10	50 – 60	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	86	60	22370.0632
12	15 – 25	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	121	87	22370.0635
12	20 – 30	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	130	87	22370.0636
12	25 – 35	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	130	87	22370.0637
12	30 – 40	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	134	87	22370.0638
12	35 – 45	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	138	87	22370.0639
12	40 – 50	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	142	87	22370.0640
12	50 – 60	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	150	87	22370.0642
12	60 – 70	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	159	87	22370.0644
12	70 – 80	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	167	87	22370.0646
16	20 – 30	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	159	155	22370.0656
16	25 – 35	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	165	155	22370.0657
16	30 – 40	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	173	155	22370.0658
16	35 – 45	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	180	155	22370.0659
16	40 – 50	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	188	155	22370.0660
16	50 – 60	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	203	155	22370.0662
16	60 – 70	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	218	155	22370.0664
16	70 – 80	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	234	155	22370.0666
Stainless steel 1.4542, precipitation-hardened														
5	0 – 10	5.5	17.6	23.6	6.0	25.7	26.2	15.9	5	-30	80	24	24	22380.0592
5	5 – 15	5.5	17.6	23.6	6.0	25.7	26.2	15.9	5	-30	80	25	24	22380.0593
5	10 – 20	5.5	17.6	23.6	6.0	25.7	26.2	15.9	5	-30	80	26	24	22380.0594
5	15 – 25	5.5	17.6	23.6	6.0	25.7	26.2	15.9	5	-30	80	26	24	22380.0595
5	20 – 30	5.5	17.6	23.6	6.0	25.7	26.2	15.9	5	-30	80	27	24	22380.0596
6	0 – 10	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	26	35	22380.0602
6	5 – 15	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	27	35	22380.0603
6	10 – 20	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	27	35	22380.0604
6	15 – 25	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	28	35	22380.0605
6	20 – 30	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	27	35	22380.0606
6	25 – 35	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	30	35	22380.0607
6	30 – 40	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	31	35	22380.0608
6	35 – 45	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	32	35	22380.0609
6	40 – 50	7.0	17.6	23.6	7.0	25.7	26.2	15.9	6	-30	80	33	35	22380.0610
8	10 – 20	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	58	63	22380.0614
8	15 – 25	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	60	63	22380.0615
8	20 – 30	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	60	63	22380.0616
8	25 – 35	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	62	63	22380.0617

¹⁾ Shearing resistance similar to DIN 50141

d ₁ -0.04 -0.08	l ₁ +0.6	Dimensions							Location hole H11 [mm]	 min. max. [°C]		 [g]	Shearing resistance, two-shear ¹⁾ min. [kN]	Art. No.
		d ₂	d ₃	d ₄	l ₂ ±1	l ₃	l ₄	l ₅						
8	30 – 40	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	64	63	22380.0618
8	35 – 45	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	65	63	22380.0619
8	40 – 50	9.5	23.0	27.6	8.2	31.2	33.1	18.0	8	-30	80	65	63	22380.0620
10	10 – 20	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	65	100	22380.0624
10	15 – 25	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	66	100	22380.0625
10	20 – 30	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	69	100	22380.0626
10	25 – 35	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	72	100	22380.0627
10	30 – 40	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	75	100	22380.0628
10	35 – 45	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	78	100	22380.0629
10	40 – 50	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	80	100	22380.0630
10	50 – 60	12.0	23.0	27.6	9.6	31.2	33.1	18.0	10	-30	80	86	100	22380.0632
12	15 – 25	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	121	144	22380.0635
12	20 – 30	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	130	144	22380.0636
12	25 – 35	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	130	144	22380.0637
12	30 – 40	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	134	144	22380.0638
12	35 – 45	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	138	144	22380.0639
12	40 – 50	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	142	144	22380.0640
12	50 – 60	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	150	144	22380.0642
12	60 – 70	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	159	144	22380.0644
12	70 – 80	14.5	29.0	34.6	10.6	36.7	39.5	21.8	12	-30	80	167	144	22380.0646
16	20 – 30	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	159	257	22380.0656
16	25 – 35	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	165	257	22380.0657
16	30 – 40	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	173	257	22380.0658
16	35 – 45	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	180	257	22380.0659
16	40 – 50	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	188	257	22380.0660
16	50 – 60	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	203	257	22380.0662
16	60 – 70	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	218	257	22380.0664
16	70 – 80	19.0	29.0	34.6	14.0	36.7	39.5	21.8	16	-30	80	234	257	22380.0666

¹⁾ Shearing resistance similar to DIN 50141

Application example



Compliance

RoHS compliant

Compliant according to Directive 2011/65/EU and Directive 2015/863.

Does not contain SVHC substances

No SVHC substances with more than 0.1% w/w contained - SVHC list [REACH] as of 27.06.2024.

Does not contain Proposition 65 substances

No Proposition 65 substances included.

<https://www.P65Warnings.ca.gov/>

Free from Conflict Minerals

This product does not contain any substances designated as "conflict minerals" such as tantalum, tin, gold or tungsten from the Democratic Republic of Congo or adjacent countries.