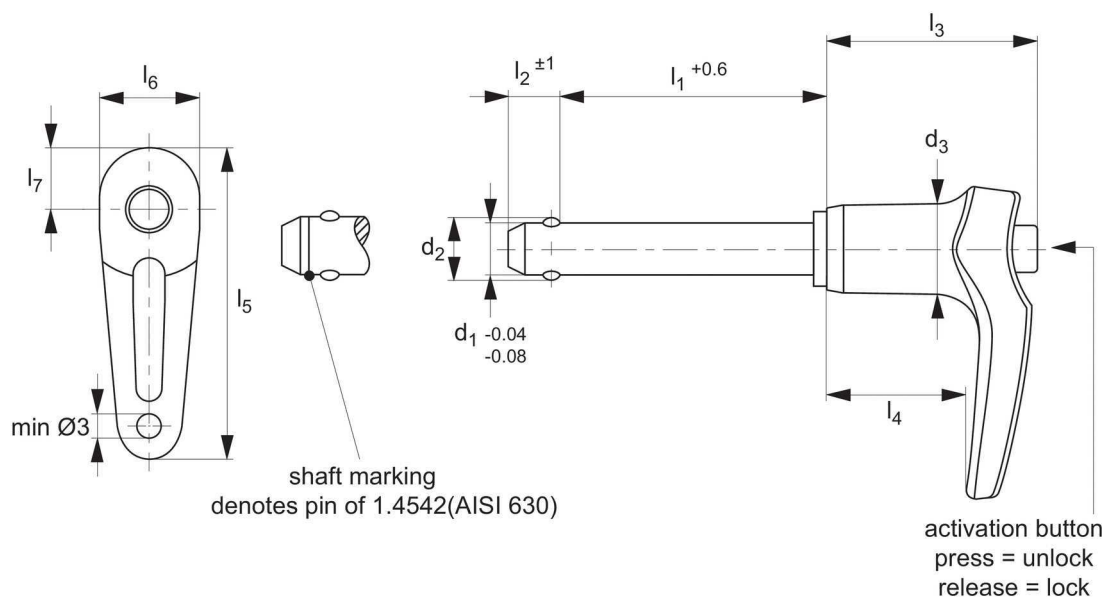


Ball Lock Pins - Single Acting - L-Handle

self-locking



33220



Material

Type One -
Pin: stainless steel 1.4305 (AISI 303).
Spring: stainless steel

Type Two -
Pin: stainless steel 1.4542 (AISI 630). Precipitation hardened, blast finish. Offering extreme load capacity. (Marked at end of shaft to denote 1.4542 material).
Handle: aluminum, black (RAL9003).
Spring: stainless steel.

Technical Notes

Pressing = unlocking.
Releasing = locking.
Temperature resistance -30°C to +150°C.
For quick fastening and locking of frequently repeated connections.

Tips

For lanyards & retaining cables see aprt no. 33250. Easy install locating bushes available see part no. 33248.

Important Notes

*Shearing resistance similar to DIN 50141.



Order No.	Type	Order No.	Type	d ₁	l ₁	d ₂	d ₃	l ₂	l ₃	l ₄	l ₅	l ₆	l ₇	Location hole H11	Shearing resistance kN type 1.4305*	Shearing resistance kN type 1.4542*	g
33220.W0112	33220.W0312	5	10	5,5	11,8	6,0	31,6	21,9	43,8	12,6	8,5	5	14	24	20		
33220.W0113	33220.W0313	5	15	5,5	11,8	6,0	31,6	21,9	43,8	12,6	8,5	5	14	24	21		
33220.W0114	33220.W0314	5	20	5,5	11,8	6,0	31,6	21,9	43,8	12,6	8,5	5	14	24	21		
33220.W0115	33220.W0315	5	25	5,5	11,8	6,0	31,6	21,9	43,8	12,6	8,5	5	14	24	22		
33220.W0116	33220.W0316	5	30	5,5	11,8	6,0	31,6	21,9	43,8	12,6	8,5	5	14	24	23		
33220.W0122	33220.W0322	6	10	7,0	11,8	7,0	31,6	21,9	43,8	12,6	8,5	6	21	35	21		
33220.W0123	33220.W0323	6	15	7,0	11,8	7,0	31,6	21,9	43,8	12,6	8,5	6	21	35	22		
33220.W0124	33220.W0324	6	20	7,0	11,8	7,0	31,6	21,9	43,8	12,6	8,5	6	21	35	23		
33220.W0125	33220.W0325	6	25	7,0	11,8	7,0	31,6	21,9	43,8	12,6	8,5	6	21	35	24		
33220.W0126	33220.W0326	6	30	7,0	11,8	7,0	31,6	21,9	43,8	12,6	8,5	6	21	35	25		
33220.W0127	33220.W0327	6	35	7,0	11,8	7,0	31,6	21,9	43,8	12,6	8,5	6	21	35	26		
33220.W0128	33220.W0328	6	40	7,0	11,8	7,0	31,6	21,9	43,8	12,6	8,5	6	21	35	27		
33220.W0129	33220.W0329	6	45	7,0	11,8	7,0	31,6	21,9	43,8	12,6	8,5	6	21	35	28		
33220.W0130	33220.W0330	6	50	7,0	11,8	7,0	31,6	21,9	43,8	12,6	8,5	6	21	35	29		
33220.W0134	33220.W0334	8	20	9,5	14,7	8,2	35,8	24,4	49,7	15,8	9,9	8	38	63	37		
33220.W0135	33220.W0335	8	25	9,5	14,7	8,2	35,8	24,4	49,7	15,8	9,9	8	38	63	39		
33220.W0136	33220.W0336	8	30	9,5	14,7	8,2	35,8	24,4	49,7	15,8	9,9	8	38	63	41		
33220.W0137	33220.W0337	8	35	9,5	14,7	8,2	35,8	24,4	49,7	15,8	9,9	8	38	63	43		
33220.W0138	33220.W0338	8	40	9,5	14,7	8,2	35,8	24,4	49,7	15,8	9,9	8	38	63	45		
33220.W0139	33220.W0339	8	45	9,5	14,7	8,2	35,8	24,4	49,7	15,8	9,9	8	38	63	46		
33220.W0140	33220.W0340	8	50	9,5	14,7	8,2	35,8	24,4	49,7	15,8	9,9	8	38	63	48		
33220.W0144	33220.W0344	10	20	12,0	14,7	9,6	35,8	24,4	49,7	15,8	9,9	10	60	100	44		
33220.W0145	33220.W0345	10	25	12,0	14,7	9,6	35,8	24,4	49,7	15,8	9,9	10	60	100	47		
33220.W0146	33220.W0346	10	30	12,0	14,7	9,6	35,8	24,4	49,7	15,8	9,9	10	60	100	50		
33220.W0147	33220.W0347	10	35	12,0	14,7	9,6	35,8	24,4	49,7	15,8	9,9	10	60	100	53		
33220.W0148	33220.W0348	10	40	12,0	14,7	9,6	35,8	24,4	49,7	15,8	9,9	10	60	100	56		
33220.W0149	33220.W0349	10	45	12,0	14,7	9,6	35,8	24,4	49,7	15,8	9,9	10	60	100	58		
33220.W0150	33220.W0350	10	50	12,0	14,7	9,6	35,8	24,4	49,7	15,8	9,9	10	60	100	62		
33220.W0152	33220.W0352	10	60	12,0	14,7	9,6	35,8	24,4	49,7	15,8	9,9	10	60	100	67		
33220.W0165	33220.W0365	12	25	14,5	18,2	10,6	35,1	22,7	57,1	20,2	12,6	12	87	144	73		
33220.W0166	33220.W0366	12	30	14,5	18,2	10,6	35,1	22,7	57,1	20,2	12,6	12	87	144	77		
33220.W0167	33220.W0367	12	35	14,5	18,2	10,6	35,1	22,7	57,1	20,2	12,6	12	87	144	82		
33220.W0168	33220.W0368	12	40	14,5	18,2	10,6	35,1	22,7	57,1	20,2	12,6	12	87	144	86		
33220.W0169	33220.W0369	12	45	14,5	18,2	10,6	35,1	22,7	57,1	20,2	12,6	12	87	144	90		
33220.W0170	33220.W0370	12	50	14,5	18,2	10,6	35,1	22,7	57,1	20,2	12,6	12	87	144	94		
33220.W0172	33220.W0372	12	60	14,5	18,2	10,6	35,1	22,7	57,1	20,2	12,6	12	87	144	103		
33220.W0174	33220.W0374	12	70	14,5	18,2	10,6	35,1	22,7	57,1	20,2	12,6	12	87	144	111		
33220.W0176	33220.W0376	12	80	14,5	18,2	10,6	35,1	22,7	57,1	20,2	12,6	12	87	144	120		

**33060
-33250**

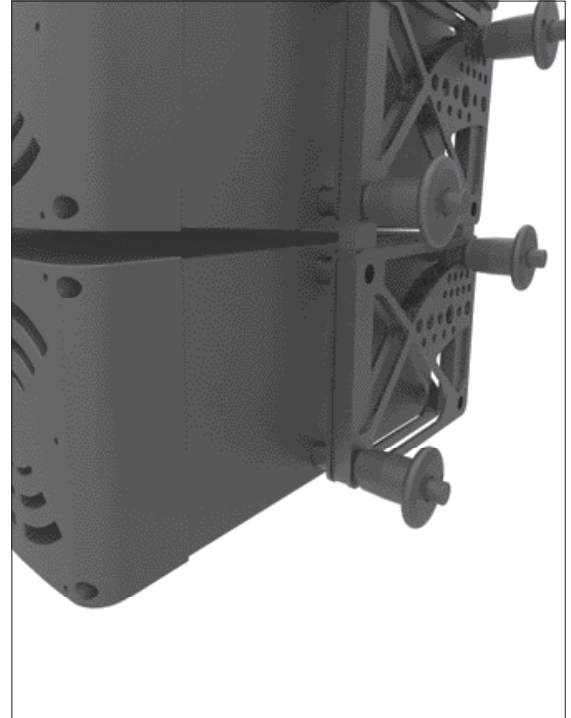
Wixroyd Ball Lock Pins
applications



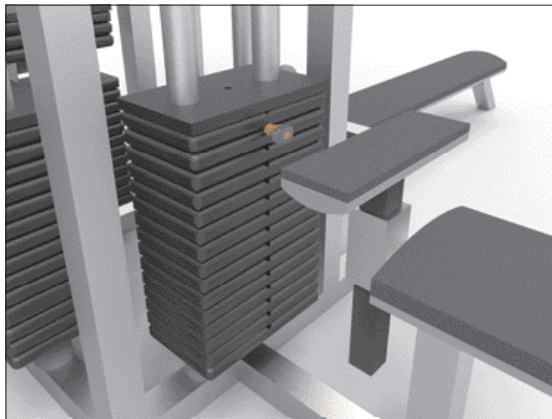
Sound rigging systems

Ball lock pins on a sound rigging system. Offering secure fixing with high shear forces and easy fitting for operators at heights.

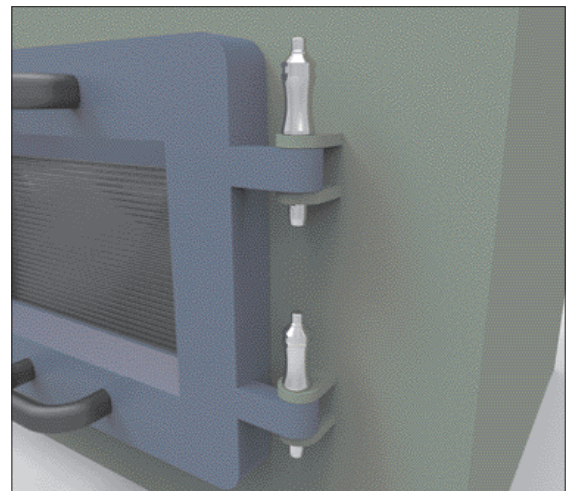
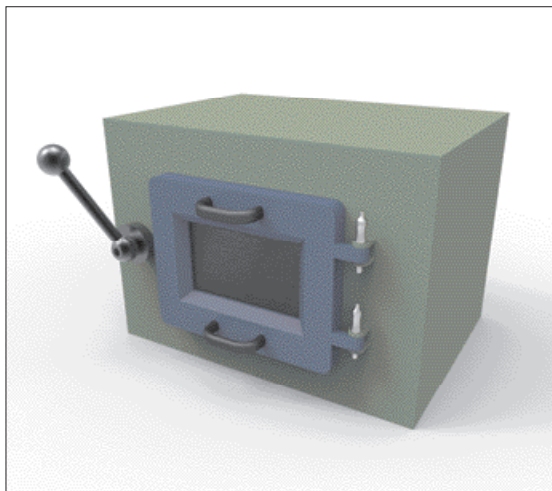
In addition full black powder coating of grip and actuation button eliminates glare from other stage lighting.



Gym equipment



Scientific and medical

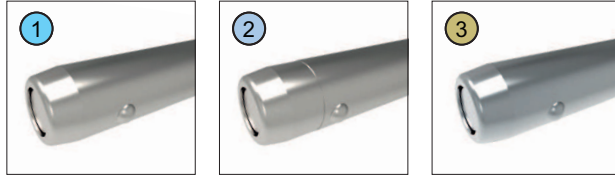


Wixroyd Ball Lock Pins

features



- ① 1.4305 (AISI 303) - shear force approx. 60% of higher material version 1.4542
- ② 1.4542 (AISI 630) - identified by the ridge on the pin
- ③ CRES 17-4PH (AMS 5643) aviation standard



Pin material



Plastic tri-star

T-handled, metal

L-handled, metal

Mushroom, metal

Single piece metal, contoured

Handle style



Special plastic self-spring

Adjustable grip length, plastic

Key ring

Safety, metal

Mushroom Type B aviation

Type R aviation



Stainless wire - (coated) - 2 x key ring

Stainless wire - Key ring and fixing loop

Plastic - 2 x cable tie

Steel wire - (coated) - 2 x key ring

Stainless bead chain - 2 x key ring

Locating bushes

Lanyards and locating bushes



Press = unlock
Release = lock (standard)

Press = unlock and position
Release = lock and simultaneous clamp

Simple spring loaded balls "pullout pin"

Actuation

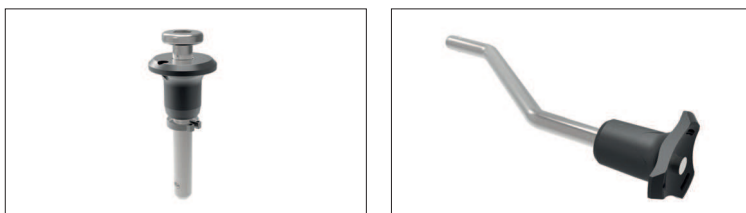
Important Note: Ball lock pins are not suited to lifting applications!
For quick release lifting pins, see part 33400.



Shear force

Lifting force

Important note



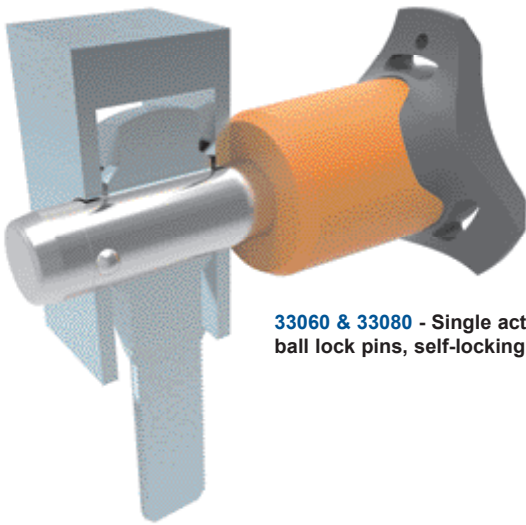
Variations on our standard designs are possible, please contact our sales team for technical assistance. Quick production on specials can be as little as 3 weeks.

Special variations



Applications

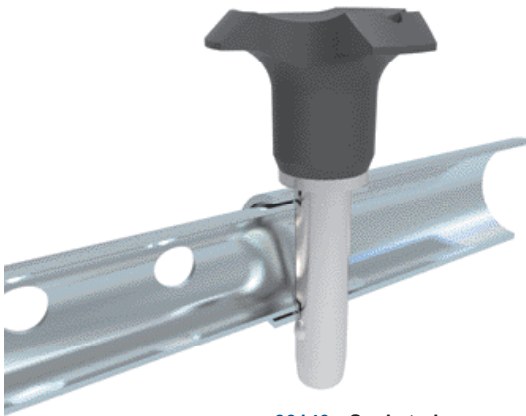
- Positioning.
- Lifting.
- Locking.
- Indexing.
- Joining.



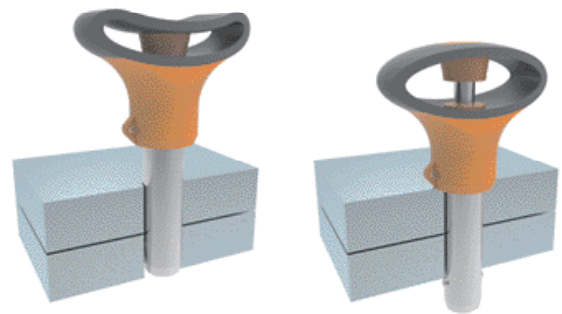
33060 & 33080 - Single acting ball lock pins, self-locking.



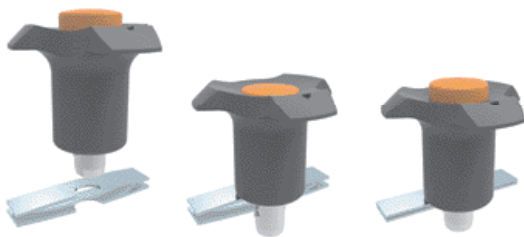
33194 - Single acting ball lock pins, self locking, simple finish.



33140 - Socket pins, non-locking, spring loaded balls.



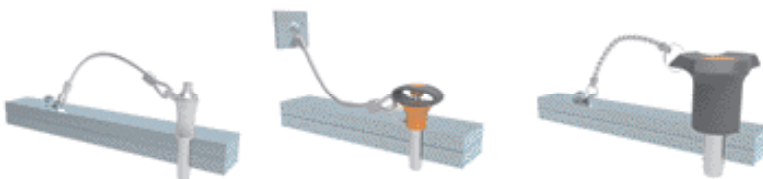
33100 - Single acting ball lock pin, self locking.



33180 - Clamping pins, with span compensation, self-locking.



33220 - Ball lock pins, single acting - L-handle



33250 & 33270 - Lanyards.