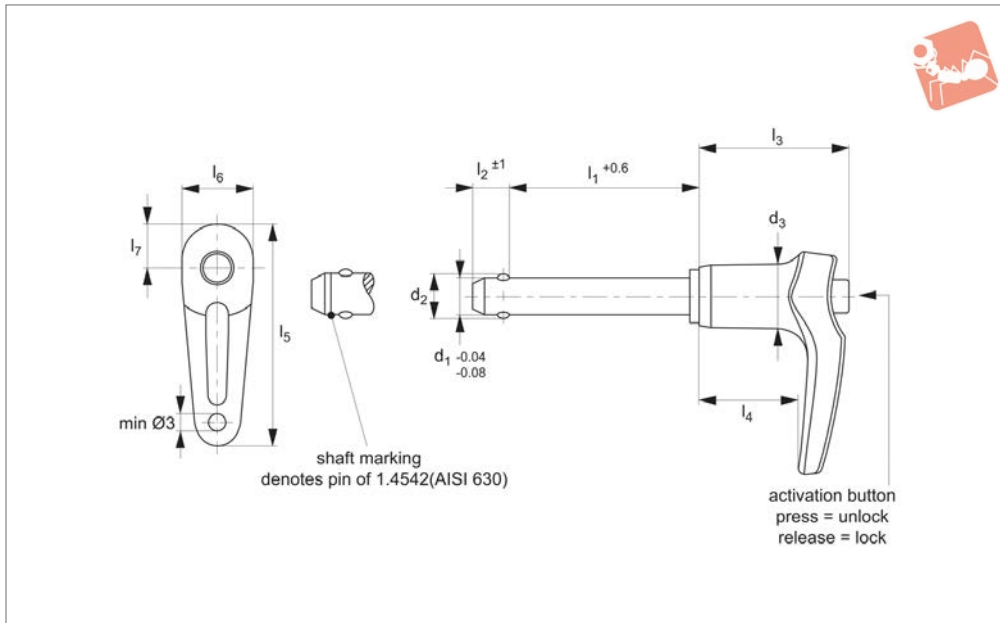




# Ball Lock Pins - Single Acting - L- self-locking - stainless 1.4305

# Ball Lock Pins & Quick Release



## 33220.1

BALL LOCK PINS & QUICK RELEASE PINS

### Material

Pin: stainless steel 1.4305 (AISI 303).  
Ball: stainless steel 1.3541  
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.	Material	d <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	l <sub>7</sub>	Location hole dia.	Shearing resistance kN	Weight g
33220.W0112	Stainless 1.4305	5	10	5.5	11.8	6.0	31.6	21.9	43.8	12.6	8.5	5	14	20
33220.W0113	Stainless 1.4305	5	15	5.5	11.8	6.0	31.6	21.9	43.8	12.6	8.5	5	14	21
33220.W0114	Stainless 1.4305	5	20	5.5	11.8	6.0	31.6	21.9	43.8	12.6	8.5	5	14	21
33220.W0115	Stainless 1.4305	5	25	5.5	11.8	6.0	31.6	21.9	43.8	12.6	8.5	5	14	22
33220.W0116	Stainless 1.4305	5	30	5.5	11.8	6.0	31.6	21.9	43.8	12.6	8.5	5	14	23
33220.W0122	Stainless 1.4305	6	10	7.0	11.8	7.0	31.6	21.9	43.8	12.6	8.5	6	21	21
33220.W0123	Stainless 1.4305	6	15	7.0	11.8	7.0	31.6	21.9	43.8	12.6	8.5	6	21	22
33220.W0124	Stainless 1.4305	6	20	7.0	11.8	7.0	31.6	21.9	43.8	12.6	8.5	6	21	23
33220.W0125	Stainless 1.4305	6	25	7.0	11.8	7.0	31.6	21.9	43.8	12.6	8.5	6	21	24
33220.W0126	Stainless 1.4305	6	30	7.0	11.8	7.0	31.6	21.9	43.8	12.6	8.5	6	21	25
33220.W0127	Stainless 1.4305	6	35	7.0	11.8	7.0	31.6	21.9	43.8	12.6	8.5	6	21	26
33220.W0128	Stainless 1.4305	6	40	7.0	11.8	7.0	31.6	21.9	43.8	12.6	8.5	6	21	27
33220.W0129	Stainless 1.4305	6	45	7.0	11.8	7.0	31.6	21.9	43.8	12.6	8.5	6	21	28
33220.W0130	Stainless 1.4305	6	50	7.0	11.8	7.0	31.6	21.9	43.8	12.6	8.5	6	21	29
33220.W0134	Stainless 1.4305	8	20	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	37

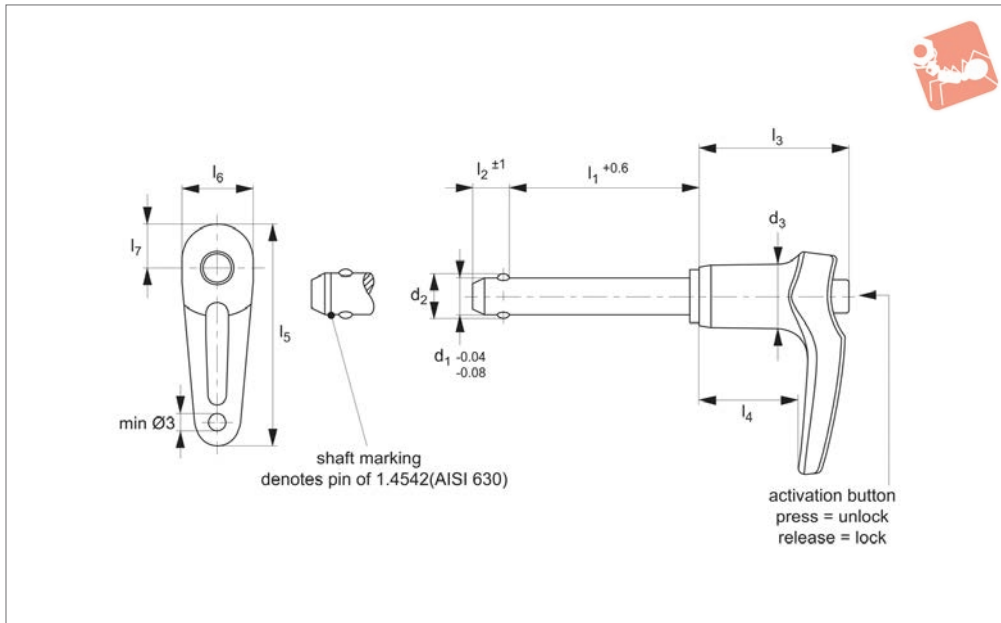


Order No.	Material	d <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	l <sub>7</sub>	Location hole dia.	Shearing resistance kN	Weight g
33220.W0135	Stainless 1.4305	8	25	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	39
33220.W0136	Stainless 1.4305	8	30	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	41
33220.W0137	Stainless 1.4305	8	35	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	43
33220.W0138	Stainless 1.4305	8	40	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	45
33220.W0139	Stainless 1.4305	8	45	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	46
33220.W0140	Stainless 1.4305	8	50	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	48
33220.W0144	Stainless 1.4305	10	20	12.0	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	44
33220.W0145	Stainless 1.4305	10	25	12.0	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	47
33220.W0146	Stainless 1.4305	10	30	12.0	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	50
33220.W0147	Stainless 1.4305	10	35	12.0	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	53
33220.W0148	Stainless 1.4305	10	40	12.0	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	56
33220.W0149	Stainless 1.4305	10	45	12.0	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	58
33220.W0150	Stainless 1.4305	10	50	12.0	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	62
33220.W0152	Stainless 1.4305	10	60	12.0	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	67
33220.W0165	Stainless 1.4305	12	25	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	73
33220.W0166	Stainless 1.4305	12	30	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	77
33220.W0167	Stainless 1.4305	12	35	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	82
33220.W0168	Stainless 1.4305	12	40	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	86
33220.W0169	Stainless 1.4305	12	45	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	90
33220.W0170	Stainless 1.4305	12	50	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	94
33220.W0172	Stainless 1.4305	12	60	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	103
33220.W0174	Stainless 1.4305	12	70	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	111
33220.W0176	Stainless 1.4305	12	80	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	120



# Ball Lock Pins - Single Acting - L- self-locking - stainless 1.4542

# Ball Lock Pins & Quick Release



## 33220.2

BALL LOCK PINS & QUICK RELEASE PINS

### Material

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).  
Ball: stainless steel 1.3541  
Handle: aluminium, 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.	Material	d <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	Weight g
33220.W0312	Stainless 1.4542	5	10	5.5	11.8	20
33220.W0313	Stainless 1.4542	5	15	5.5	11.8	21
33220.W0314	Stainless 1.4542	5	20	5.5	11.8	21
33220.W0315	Stainless 1.4542	5	25	5.5	11.8	22
33220.W0316	Stainless 1.4542	5	30	5.5	11.8	23
33220.W0322	Stainless 1.4542	6	10	7.0	11.8	21
33220.W0323	Stainless 1.4542	6	15	7.0	11.8	22
33220.W0324	Stainless 1.4542	6	20	7.0	11.8	23
33220.W0325	Stainless 1.4542	6	25	7.0	11.8	24
33220.W0326	Stainless 1.4542	6	30	7.0	11.8	25
33220.W0327	Stainless 1.4542	6	35	7.0	11.8	26
33220.W0328	Stainless 1.4542	6	40	7.0	11.8	27
33220.W0329	Stainless 1.4542	6	45	7.0	11.8	28
33220.W0330	Stainless 1.4542	6	50	7.0	11.8	29
33220.W0334	Stainless 1.4542	8	20	9.5	14.7	37
33220.W0335	Stainless 1.4542	8	25	9.5	14.7	39
33220.W0336	Stainless 1.4542	8	30	9.5	14.7	41
33220.W0337	Stainless 1.4542	8	35	9.5	14.7	43
33220.W0338	Stainless 1.4542	8	40	9.5	14.7	45
33220.W0339	Stainless 1.4542	8	45	9.5	14.7	46
33220.W0340	Stainless 1.4542	8	50	9.5	14.7	48
33220.W0344	Stainless 1.4542	10	20	12.0	14.7	44
33220.W0345	Stainless 1.4542	10	25	12.0	14.7	47
33220.W0346	Stainless 1.4542	10	30	12.0	14.7	50
33220.W0347	Stainless 1.4542	10	35	12.0	14.7	53
33220.W0348	Stainless 1.4542	10	40	12.0	14.7	56
33220.W0349	Stainless 1.4542	10	45	12.0	14.7	58
33220.W0350	Stainless 1.4542	10	50	12.0	14.7	62
33220.W0352	Stainless 1.4542	10	60	12.0	14.7	67

# Ball Lock Pins & Quick Release

# Ball Lock Pins - Single Acting - L- self-locking - stainless 1.4542



BALL LOCK PINS & QUICK RELEASE PINS

Order No.	Material	d <sub>1</sub>	l <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	Weight g
33220.W0365	Stainless 1.4542	12	25	14.5	18.2	73
33220.W0366	Stainless 1.4542	12	30	14.5	18.2	77
33220.W0367	Stainless 1.4542	12	35	14.5	18.2	82
33220.W0368	Stainless 1.4542	12	40	14.5	18.2	86
33220.W0369	Stainless 1.4542	12	45	14.5	18.2	90
33220.W0370	Stainless 1.4542	12	50	14.5	18.2	94
33220.W0372	Stainless 1.4542	12	60	14.5	18.2	103
33220.W0374	Stainless 1.4542	12	70	14.5	18.2	111
33220.W0376	Stainless 1.4542	12	80	14.5	18.2	120

Order No.	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	l <sub>7</sub>	Location hole dia. tol. H11	Shearing resistance kN
33220.W0312	6.0	31.6	21.9	43.8	12.6	8.5	5	24
33220.W0313	6.0	31.6	21.9	43.8	12.6	8.5	5	24
33220.W0314	6.0	31.6	21.9	43.8	12.6	8.5	5	24
33220.W0315	6.0	31.6	21.9	43.8	12.6	8.5	5	24
33220.W0316	6.0	31.6	21.9	43.8	12.6	8.5	5	24
33220.W0322	7.0	31.6	21.9	43.8	12.6	8.5	6	35
33220.W0323	7.0	31.6	21.9	43.8	12.6	8.5	6	35
33220.W0324	7.0	31.6	21.9	43.8	12.6	8.5	6	35
33220.W0325	7.0	31.6	21.9	43.8	12.6	8.5	6	35
33220.W0326	7.0	31.6	21.9	43.8	12.6	8.5	6	35
33220.W0327	7.0	31.6	21.9	43.8	12.6	8.5	6	35
33220.W0328	7.0	31.6	21.9	43.8	12.6	8.5	6	35
33220.W0329	7.0	31.6	21.9	43.8	12.6	8.5	6	35
33220.W0330	7.0	31.6	21.9	43.8	12.6	8.5	6	35
33220.W0334	8.2	35.8	24.4	49.7	15.8	9.9	8	63
33220.W0335	8.2	35.8	24.4	49.7	15.8	9.9	8	63
33220.W0336	8.2	35.8	24.4	49.7	15.8	9.9	8	63
33220.W0337	8.2	35.8	24.4	49.7	15.8	9.9	8	63
33220.W0338	8.2	35.8	24.4	49.7	15.8	9.9	8	63
33220.W0339	8.2	35.8	24.4	49.7	15.8	9.9	8	63
33220.W0340	8.2	35.8	24.4	49.7	15.8	9.9	8	63
33220.W0344	9.6	35.8	24.4	49.7	15.8	9.9	10	100
33220.W0345	9.6	35.8	24.4	49.7	15.8	9.9	10	100
33220.W0346	9.6	35.8	24.4	49.7	15.8	9.9	10	100
33220.W0347	9.6	35.8	24.4	49.7	15.8	9.9	10	100
33220.W0348	9.6	35.8	24.4	49.7	15.8	9.9	10	100
33220.W0349	9.6	35.8	24.4	49.7	15.8	9.9	10	100
33220.W0350	9.6	35.8	24.4	49.7	15.8	9.9	10	100
33220.W0352	9.6	35.8	24.4	49.7	15.8	9.9	10	100
33220.W0365	10.6	35.1	22.7	57.1	20.2	12.6	12	144
33220.W0366	10.6	35.1	22.7	57.1	20.2	12.6	12	144
33220.W0367	10.6	35.1	22.7	57.1	20.2	12.6	12	144
33220.W0368	10.6	35.1	22.7	57.1	20.2	12.6	12	144
33220.W0369	10.6	35.1	22.7	57.1	20.2	12.6	12	144
33220.W0370	10.6	35.1	22.7	57.1	20.2	12.6	12	144
33220.W0372	10.6	35.1	22.7	57.1	20.2	12.6	12	144
33220.W0374	10.6	35.1	22.7	57.1	20.2	12.6	12	144
33220.W0376	10.6	35.1	22.7	57.1	20.2	12.6	12	144



# Wixroyd Ball Lock Pins

applications

33060 - 33250

Positioning Elements

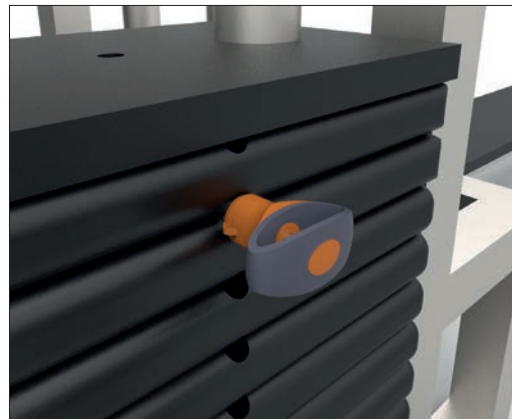
## Sound Rigging Systems

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

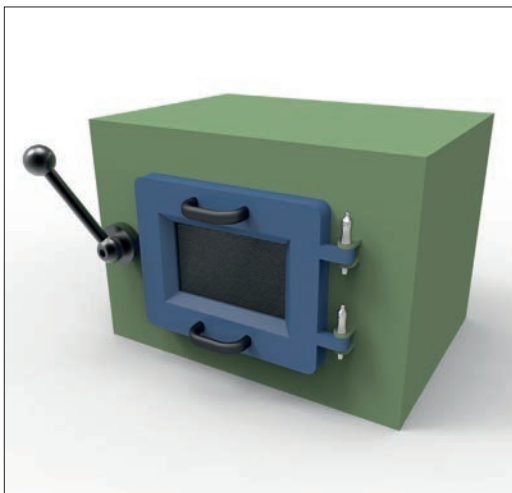
In addition full black powder coating of grip and actuation button eliminates glare from other stage lighting.



## Gym Equipment



## Scientific and Medical



BALL LOCK PINS & QUICK RELEASE PINS

ov-W33060.BK-A-TOR1706-W33250-A-TLA1066-a-rmh - Updated - 27-10-2022



## Pin Material

1.4305 (AISI 303) - shear force approx. 60% of higher material version 1.4542

1.4542 (AISI 630) - identified by the ridge on the pin

CRES 17-4PH (AMS 5643) aviation standard



## Handle Style



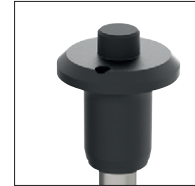
Plastic tri-star



T-handled, metal



L-handled, metal



Mushroom, metal



Single piece metal, contoured



Special plastic self-spring



Adjustable grip length, plastic



Key ring



Safety, metal



Mushroom Type B aviation



Type R aviation

## Lanyards and Locating Bushes



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

## Actuation



Press = unlock  
Release = lock (standard)



Press = unlock and position  
Release = lock and simultaneous clamp



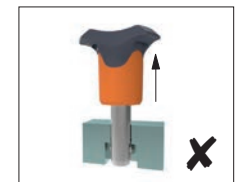
Simple spring loaded balls "pullout pin"

## Important Note

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



Shear force



Lifting force

## Special Variations

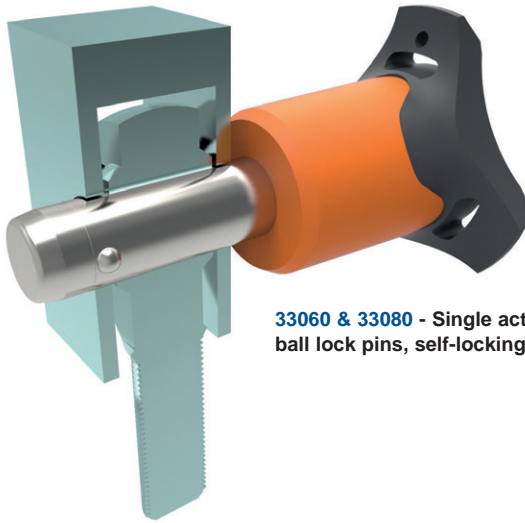


Variations on our standard designs are possible, please contact our sales team for technical assistance. Quick production on specials can be as little as 3 weeks.



### 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.



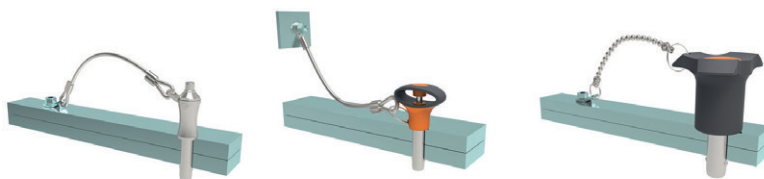
**33140** - Socket pins, non-locking, spring loaded balls.



**33100** - Single acting ball lock pin, self locking.



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



**33250 & 33270** - Lanyards.



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