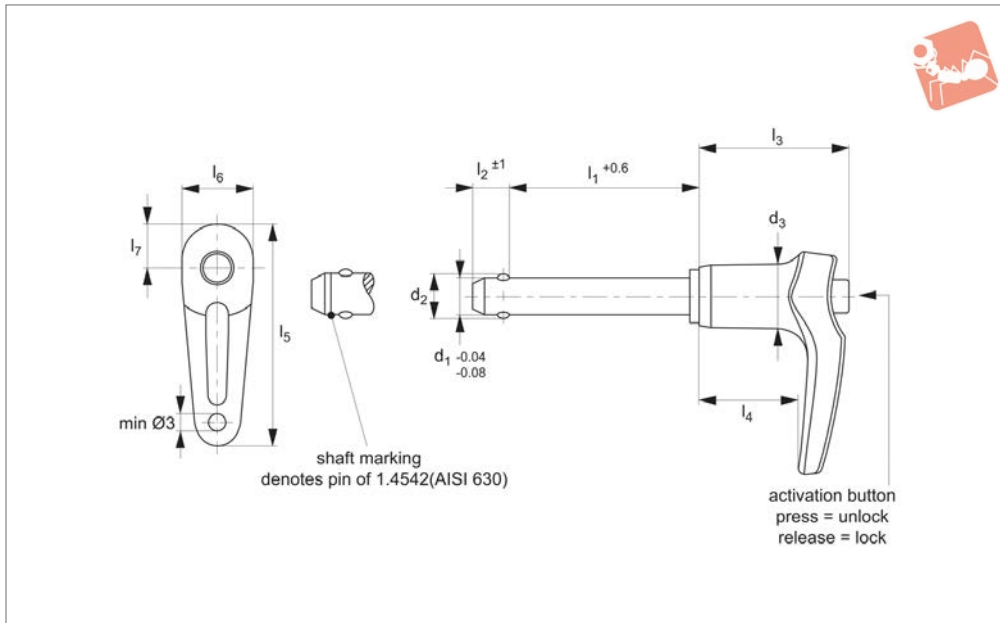




Ball Lock Pins - Single Acting - L- self-locking - stainless 1.4305

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 ₁	l ₁	d ₂	d ₃	l ₂	l ₃	l ₄	l ₅	l ₆	l ₇	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.W0117	Stainless 1.4305	5	35	5.5	11.8	6	31.6	21.9	43.8	12.6	8.5	5	14	24
33220.W0118	Stainless 1.4305	5	40	5.5	11.8	6.0	31.6	21.9	43.8	12.6	8.5	5	14	23
33220.W0107	Stainless 1.4305	5	45	5.5	11.8	6	31.6	21.9	43.8	12.6	8.5	5	14	25
33220.W0108	Stainless 1.4305	5	50	5.5	11.8	6	31.6	21.9	43.8	12.6	8.5	5	14	26
33220.W0109	Stainless 1.4305	5	60	5.5	11.8	6	31.6	21.9	43.8	12.6	8.5	5	14	26
33220.W0110	Stainless 1.4305	5	70	5.5	11.8	6	31.6	21.9	43.8	12.6	8.5	5	14	29
33220.W0111	Stainless 1.4305	5	80	5.5	11.8	6	31.6	21.9	43.8	12.6	8.5	5	14	30
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.W0132	Stainless 1.4305	6	10	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	34
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



Order No.	Material	d ₁	l ₁	d ₂	d ₃	l ₂	l ₃	l ₄	l ₅	l ₆	l ₇	Location hole dia.	Shearing resistance kN	Weight g
33220.W0133	Stainless 1.4305	6	15	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	36
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.W0119	Stainless 1.4305	6	60	7	11.8	7	31.6	21.9	43.8	12.6	8.5	6	21	30
33220.W0120	Stainless 1.4305	6	70	7	11.8	7	31.6	21.9	43.8	12.6	8.5	6	21	33
33220.W0121	Stainless 1.4305	6	80	7	11.8	7	31.6	21.9	43.8	12.6	8.5	6	21	35
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
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.W0131	Stainless 1.4305	8	60	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	52
33220.W0141	Stainless 1.4305	8	70	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	56
33220.W0142	Stainless 1.4305	8	80	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	63
33220.W0143	Stainless 1.4305	8	90	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	63
33220.W0151	Stainless 1.4305	8	100	9.5	14.7	8.2	35.8	24.4	49.7	15.8	9.9	8	38	66
33220.W0159	Stainless 1.4305	10	15	12	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	41
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.W0154	Stainless 1.4305	10	60	12	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	79
33220.W0153	Stainless 1.4305	10	70	12	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	73



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

Ball Lock Pins & Quick Release

Order No.	Material	d ₁	l ₁	d ₂	d ₃	l ₂	l ₃	l ₄	l ₅	l ₆	l ₇	Location hole dia.	Shearing resistance kN	Weight g
33220.W0155	Stainless 1.4305	10	90	12	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	85
33220.W0156	Stainless 1.4305	10	100	12	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	91
33220.W0157	Stainless 1.4305	10	110	12	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	97
33220.W0158	Stainless 1.4305	10	120	12	14.7	9.6	35.8	24.4	49.7	15.8	9.9	10	60	103
33220.W0164	Stainless 1.4305	12	20	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	70
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
33220.W0160	Stainless 1.4305	12	90	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	129
33220.W0161	Stainless 1.4305	12	100	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	138
33220.W0162	Stainless 1.4305	12	110	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	145
33220.W0163	Stainless 1.4305	12	120	14.5	18.2	10.6	35.1	22.7	57.1	20.2	12.6	12	87	154
33220.W0171	Stainless 1.4305	16	30	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	149
33220.W0173	Stainless 1.4305	16	35	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	161
33220.W0175	Stainless 1.4305	16	40	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	165
33220.W0177	Stainless 1.4305	16	45	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	172
33220.W0178	Stainless 1.4305	16	50	19	23.4	14	42.2	37.3	67.6	24.7	15.1	16	155	180
33220.W0189	Stainless 1.4305	16	50	24.8	23.4	14	43.1	27.3	67.6	24.7	15.1	20	244	245
33220.W0179	Stainless 1.4305	16	60	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	200
33220.W0180	Stainless 1.4305	16	70	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	216
33220.W0181	Stainless 1.4305	16	80	90	19	23.4	14	42.2	27.3	67.6	24.7	15.1	155	231
33220.W0182	Stainless 1.4305	16	90	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	246
33220.W0183	Stainless 1.4305	16	100	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	262
33220.W0184	Stainless 1.4305	16	110	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	272
33220.W0185	Stainless 1.4305	16	120	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	287
33220.W0186	Stainless 1.4305	16	130	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	302
33220.W0187	Stainless 1.4305	16	140	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	318
33220.W0188	Stainless 1.4305	16	150	19	23.4	14	42.2	27.3	67.6	24.7	15.1	16	155	333

BALL LOCK PINS & QUICK RELEASE PINS

Ball Lock Pins & Quick Release



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



BALL LOCK PINS & QUICK RELEASE PINS

Order No.	Material	d ₁	l ₁	d ₂	d ₃	l ₂	l ₃	l ₄	l ₅	l ₆	l ₇	Location hole dia.	Shearing resistance kN	Weight g
33220.W0190	Stainless 1.4305	20	60	24.8	23.4	14	43.1	27.3	67.6	24.7	15.1	20	244	272
33220.W0191	Stainless 1.4305	20	70	24.8	23.4	17	43.1	27.3	67.6	24.7	15.1	20	244	292
33220.W0192	Stainless 1.4305	20	80	24.8	23.4	17	43.1	27.3	67.6	24.7	15.1	20	244	313
33220.W0193	Stainless 1.4305	20	90	24.8	23.4	17	43.1	27.3	67.6	24.7	15.1	20	244	337
33220.W0194	Stainless 1.4305	20	100	24.8	23.4	17	43.1	27.3	67.6	24.7	15.1	20	244	362
33220.W0195	Stainless 1.4305	20	110	24.8	23.4	17	43.1	27.3	67.6	24.7	15.1	20	244	392
33220.W0196	Stainless 1.4305	20	110	24.8	23.4	17	43.1	27.3	67.6	24.7	15.1	20	244	392
33220.W0197	Stainless 1.4305	20	130	24.8	23.4	17	43.1	27.3	67.6	24.7	15.1	20	244	437
33220.W0198	Stainless 1.4305	20	140	24.8	23.4	17	43.1	27.3	67.6	24.7	15.1	20	244	457
33220.W0199	Stainless 1.4305	20	150	24.8	23.4	17	43.1	27.3	67.6	24.7	15.1	20	244	480
33220.W0200	Stainless 1.4305	25	50	31	30.4	22	54.8	34.2	83.9	33.3	20.1	25	286	453
33220.W0201	Stainless 1.4305	25	60	31	30.4	22	54.8	34.2	83.9	33.3	20.1	25	286	490
33220.W0202	Stainless 1.4305	25	70	31	30.4	22	54.8	34.2	83.9	33.3	20.1	25	286	523
33220.W0203	Stainless 1.4305	25	80	31	30.4	22	54.8	34.2	83.9	33.3	20.1	25	386	567
33220.W0204	Stainless 1.4305	25	90	31	30.4	22	54.8	34.2	83.9	33.3	20.1	25	386	596
33220.W0205	Stainless 1.4305	25	100	31	30.4	22	54.8	34.2	83.9	33.3	20.1	25	386	635
33220.W0206	Stainless 1.4305	25	110	31	30.4	22	54.8	34.2	83.9	33.3	20.1	25	386	672
33220.W0207	Stainless 1.4305	25	120	31	30.4	22	54.8	34.2	83.9	33.3	20.1	25	386	710
33220.W0208	Stainless 1.4305	25	130	31	30.4	22	54.8	34.2	83.9	33.3	20.1	25	386	754
33220.W0105	Stainless 1.4305	25	140	31	30.4	22	54.8	34.2	83.9	33.3	20.1	25	386	784
33220.W0106	Stainless 1.4305	25	150	31	30.4	22	54.8	34.2	83.9	33.3	20.1	25	386	830



Wixroyd Ball Lock Pins

applications

33060 - 33250

Positioning Elements

Sound Rigging Systems

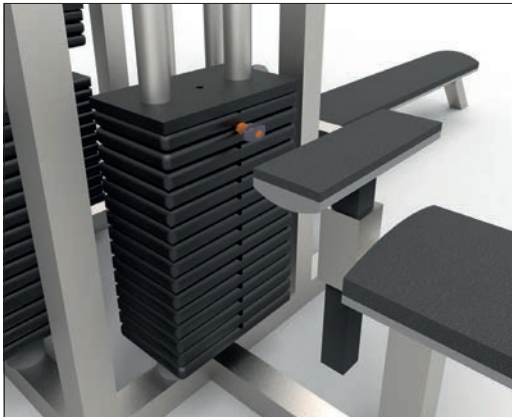
Ball lock pins on a sound rigging system. Offering secure fixing with high shear forces and easy fitting for operators at heights.

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

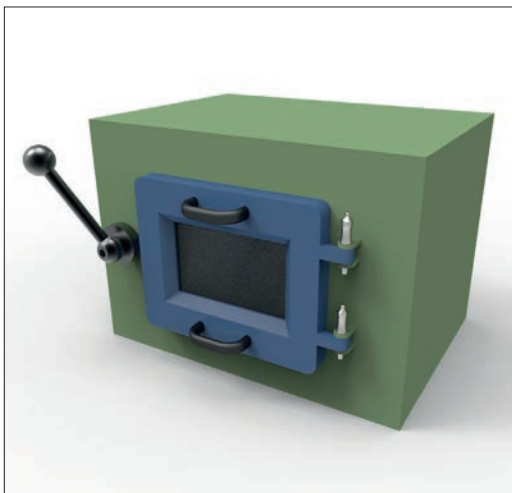


BALL LOCK PINS & QUICK RELEASE PINS

Gym Equipment



Scientific and Medical



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



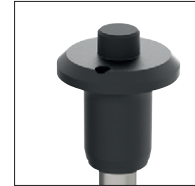
Plastic tri-star



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



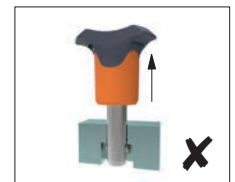
Simple spring loaded balls "pullout pin"

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

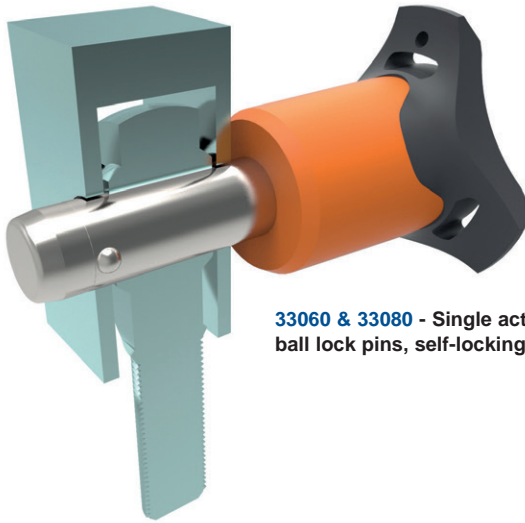


Variations on our standard designs are possible, please contact our sales team for technical assistance. Quick production on specials can be as little as 3 weeks.



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.



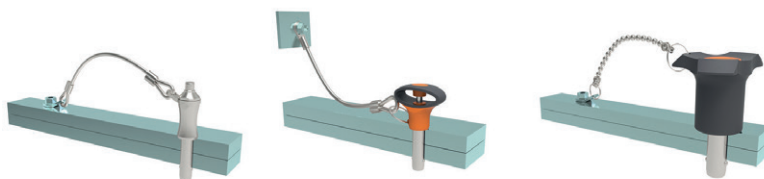
33140 - Socket pins, non-locking, spring loaded balls.



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