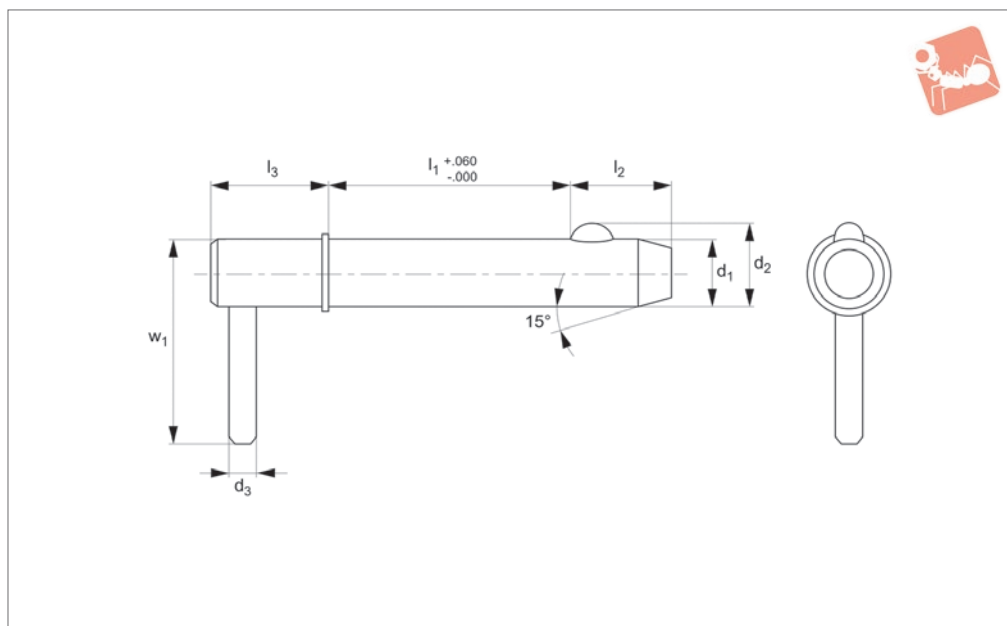


Detent Pin - L Handle - Shoulder steel

Ball Lock Pins & Quick Release



33022

BALL LOCK PINS & QUICK RELEASE PINS

Material

Shaft: Carbon steel (C1144), zinc plated.
Ball & spring: Stainless steel AISI 316.

Technical Notes

Detent Pins are very economical for use in commercial and military equipment.
The solid body with direct spring loaded

ball ensures reliable operation.
Can be used for locking telescopic tubing, securing bracket assemblies, as anchor clevis fittings, hinge pins and as replacement for cotter pins where frequent removal is necessary.
Hole sizes - commercial drills provide clear-

ance for our standard pins.
Inch dimensions in brackets ().

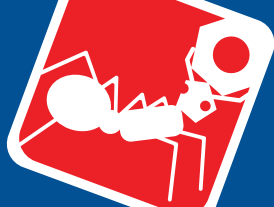
Tips

Also available in stainless steel see part no. 33024.

Order No.	d ₁ +0.00 -0.08	l ₁ grip +1.50 -0.00	d ₂	d ₃	l ₂	l ₃	Pull out strength kg	w ₁	Single shear strength kN min.
33022.W1803	4,76 (3/16")	7,62 (0,3")	5.18	2.38	5.08	17.45	1,9 - 2,3	25.4	10.8
33022.W1805	4,76 (3/16")	12,7 (0,5")	5.18	2.38	5.08	17.45	1,9 - 2,3	25.4	10.8
33022.W1810	4,76 (3/16")	25,4 (1")	5.18	2.38	5.08	17.45	1,9 - 2,3	25.4	10.8
33022.W1815	4,76 (3/16")	38,1 (1,5")	5.18	2.38	5.08	17.45	1,9 - 2,3	25.4	10.8
33022.W1820	4,76 (3/16")	50,8 (2")	5.18	2.38	5.08	17.45	1,9 - 2,3	25.4	10.8
33022.W1825	4,76 (3/16")	63,5 (2,5")	5.18	2.38	5.08	17.45	1,9 - 2,3	25.4	10.8
33022.W1830	4,76 (3/16")	76,2 (3")	5.18	2.38	5.08	17.45	1,9 - 2,3	25.4	10.8
33022.W1835	4,76 (3/16")	88,9 (3,5")	5.18	2.38	5.08	17.45	1,9 - 2,3	25.4	10.8
33022.W1840	4,76 (3/16")	101,6 (4")	5.18	2.38	5.08	17.45	1,9 - 2,3	25.4	10.8
33022.W2505	6,35 (1/4")	12,7 (0,5")	7.26	3.17	7.92	18.29	2,27 - 2,73	25.4	19.3
33022.W2506	6,35 (1/4")	15,24 (0,6")	7.26	3.17	7.92	18.29	2,27 - 2,73	25.4	19.3
33022.W2510	6,35 (1/4")	25,4 (1")	7.26	3.17	7.92	18.29	2,27 - 2,73	25.4	19.3
33022.W2515	6,35 (1/4")	38,1 (1,5")	7.26	3.17	7.92	18.29	2,27 - 2,73	25.4	19.3
33022.W2520	6,35 (1/4")	50,8 (2")	7.26	3.17	7.92	18.29	2,27 - 2,73	25.4	19.3
33022.W2525	6,35 (1/4")	63,5 (2,5")	7.26	3.17	7.92	18.29	2,27 - 2,73	25.4	19.3
33022.W2530	6,35 (1/4")	76,2 (3")	7.26	3.17	7.92	18.29	2,27 - 2,73	25.4	19.3
33022.W2535	6,35 (1/4")	88,9 (3,5")	7.26	3.17	7.92	18.29	2,27 - 2,73	25.4	19.3
33022.W2540	6,35 (1/4")	101,6 (4")	7.26	3.17	7.92	18.29	2,27 - 2,73	25.4	19.3
33022.W3105	7,94 (5/16")	12,7 (0,5")	9.09	3.96	9.53	19.05	2,27 - 2,73	25.4	30.0
33022.W3110	7,94 (5/16")	25,4 (1")	9.09	3.96	9.53	19.05	2,27 - 2,73	25.4	30.0
33022.W3115	7,94 (5/16")	38,1 (1,5")	9.09	3.96	9.53	19.05	2,27 - 2,73	25.4	30.0
33022.W3120	7,94 (5/16")	50,8 (2")	9.09	3.96	9.53	19.05	2,27 - 2,73	25.4	30.0
33022.W3125	7,94 (5/16")	63,5 (2,5")	9.09	3.96	9.53	19.05	2,27 - 2,73	25.4	30.0
33022.W3130	7,94 (5/16")	76,2 (3")	9.09	3.96	9.53	19.05	2,27 - 2,73	25.4	30.0
33022.W3135	7,94 (5/16")	88,9 (3,5")	9.09	3.96	9.53	19.05	2,27 - 2,73	25.4	30.0
33022.W3140	7,94 (5/16")	101,6 (4")	9.09	3.96	9.53	19.05	2,27 - 2,73	25.4	30.0
33022.W3145	7,94 (5/16")	114,3 (4,5")	9.09	3.96	9.53	19.05	2,27 - 2,73	25.4	30.0
33022.W3150	7,94 (5/16")	127 (5")	9.09	3.96	9.53	19.05	2,27 - 2,73	25.4	30.0
33022.W3705	9,53 (3,8")	12,7 (0,5")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3



Order No.	d ₁ +0.00 -0.08	l ₁ grip +1.50 -0.00	d ₂	d ₃	l ₂	l ₃	Pull out strength kg	w ₁	Single shear strength kN min.
33022.W3706	9,53 (3,8")	15,24 (0,6")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W3710	9,53 (3,8")	25,4 (1")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W3715	9,53 (3,8")	38,1 (1,5")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W3718	9,53 (3,8")	45,72 (1,8")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W3720	9,53 (3,8")	50,8 (2")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W3725	9,53 (3,8")	63,5 (2,5")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W3730	9,53 (3,8")	76,2 (3")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W3735	9,53 (3,8")	88,9 (3,5")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W3740	9,53 (3,8")	101,6 (4")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W3745	9,53 (3,8")	114,3 (4,5")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W3750	9,53 (3,8")	127 (5")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W3755	9,53 (3,8")	139,7 (5,5")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W3760	9,53 (3,8")	152,4 (6")	10.82	3.96	12.7	19.05	3,63 - 4,54	25.4	43.3
33022.W4305	11,11 (7,16")	12,7 (0,5")	12.6	3.96	14.27	24.13	4,09 - 5,45	25.4	58.9
33022.W4310	11,11 (7,16")	25,4 (1")	12.6	3.96	14.27	24.13	4,09 - 5,45	25.4	58.9
33022.W4315	11,11 (7,16")	38,1 (1,5")	12.6	3.96	14.27	24.13	4,09 - 5,45	25.4	58.9
33022.W4320	11,11 (7,16")	50,8 (2")	12.6	3.96	14.27	24.13	4,09 - 5,45	25.4	58.9
33022.W4325	11,11 (7,16")	63,5 (2,5")	12.6	3.96	14.27	24.13	4,09 - 5,45	25.4	58.9
33022.W4330	11,11 (7,16")	76,2 (3")	12.6	3.96	14.27	24.13	4,09 - 5,45	25.4	58.9
33022.W4335	11,11 (7,16")	88,9 (3,5")	12.6	3.96	14.27	24.13	4,09 - 5,45	25.4	58.9
33022.W4340	11,11 (7,16")	101,6 (4")	12.6	3.96	14.27	24.13	4,09 - 5,45	25.4	58.9
33022.W4345	11,11 (7,16")	114,3 (4,5")	12.6	3.96	14.27	24.13	4,09 - 5,45	25.4	58.9
33022.W4350	11,11 (7,16")	127 (5")	12.6	3.96	14.27	24.13	4,09 - 5,45	25.4	58.9
33022.W4355	11,11 (7,16")	139,7 (5,5")	12.6	3.96	14.27	24.13	4,09 - 5,45	25.4	58.9
33022.W4360	11,11 (7,16")	152,4 (6")	12.6	3.96	14.27	24.13	4,09 - 5,45	25.4	58.9
33022.W5005	12,7 (1/2")	12,7 (0,5")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5010	12,7 (1/2")	25,4 (1")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5013	12,7 (1/2")	33,02 (1,3")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5015	12,7 (1/2")	38,1 (1,5")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5020	12,7 (1/2")	50,8 (2")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5025	12,7 (1/2")	63,5 (2,5")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5035	12,7 (1/2")	88,9 (3,5")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5040	12,7 (1/2")	101,6 (4")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5045	12,7 (1/2")	114,3 (4,5")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5050	12,7 (1/2")	127 (5")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5055	12,7 (1/2")	139,7 (5,5")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5060	12,7 (1/2")	152,4 (6")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5065	12,7 (1/2")	165,1 (6,5")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5070	12,7 (1/2")	177,8 (7")	14.48	4.76	15.88	25.7	4,54 - 5,45	31.75	77.0
33022.W5610	14,29 (9/16")	25,4 (1")	16.31	4.76	17.45	25.7	5,45 - 6,81	31.75	97.6
33022.W5615	14,29 (9/16")	38,1 (1,5")	16.31	4.76	17.45	25.7	5,45 - 6,81	31.75	97.6
33022.W5620	14,29 (9/16")	50,8 (2")	16.31	4.76	17.45	25.7	5,45 - 6,81	31.75	97.6
33022.W5625	14,29 (9/16")	63,5 (2,5")	16.31	4.76	17.45	25.7	5,45 - 6,81	31.75	97.6
33022.W5630	14,29 (9/16")	76,2 (3")	16.31	4.76	17.45	25.7	5,45 - 6,81	31.75	97.6
33022.W5635	14,29 (9/16")	88,9 (3,5")	16.31	4.76	17.45	25.7	5,45 - 6,81	31.75	97.6
33022.W5640	14,29 (9/16")	101,6 (4")	16.31	4.76	17.45	25.7	5,45 - 6,81	31.75	97.6
33022.W5645	14,29 (9/16")	114,3 (4,5")	16.31	4.76	17.45	25.7	5,45 - 6,81	31.75	97.6
33022.W5650	14,29 (9/16")	127 (5")	16.31	4.76	17.45	25.7	5,45 - 6,81	31.75	97.6
33022.W5655	14,29 (9/16")	139,7 (5,5")	16.31	4.76	17.45	25.7	5,45 - 6,81	31.75	97.6
33022.W5660	14,29 (9/16")	152,4 (6")	16.31	4.76	17.45	25.7	5,45 - 6,81	31.75	97.6
33022.W5670	14,29 (9/16")	177,8 (7")	16.31	4.76	17.45	25.7	5,45 - 6,81	31.75	97.6
33022.W6210	15,88 (5/8")	25,4 (1")	18.03	6.35	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W6215	15,88 (5/8")	38,1 (1,5")	18.03	6.35	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W6220	15,88 (5/8")	50,8 (2")	18.03	6.35	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W6225	15,88 (5/8")	63,5 (2,5")	18.03	6.35	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W6230	15,88 (5/8")	76,2 (3")	18.03	6.35	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W6235	15,88 (5/8")	88,9 (3,5")	18.03	6.35	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W6240	15,88 (5/8")	101,6 (4")	18.03	6.35	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W6245	15,88 (5/8")	114,3 (4,5")	18.03	6.35	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W6250	15,88 (5/8")	127 (5")	18.03	6.35	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W6255	15,88 (5/8")	139,7 (5,5")	18.03	6.35	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W6260	15,88 (5/8")	152,4 (6")	18.03	6.35	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W6270	15,88 (5/8")	177,8 (7")	18.03	6.35	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W6280	15,88 (5/8")	203,2 (8")	18.03	57.15	19.05	27.31	6,36 - 7,26	31.75	121.6
33022.W7510	19,05 (3/4")	25,4 (1")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6
33022.W7515	19,05 (3/4")	38,1 (1,5")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6
33022.W7520	19,05 (3/4")	50,8 (2")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6



Detent Pin - L Handle - Shoulder steel

Ball Lock Pins & Quick Release

Order No.	d ₁ +0.00 -0.08	l ₁ grip +1.50 -0.00	d ₂	d ₃	l ₂	l ₃	Pull out strength kg	w ₁	Single shear strength kN min.
33022.W7525	19,05 (3/4")	63,5 (2,5")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6
33022.W7530	19,05 (3/4")	76,2 (3")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6
33022.W7535	19,05 (3/4")	88,9 (3,5")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6
33022.W7540	19,05 (3/4")	101,6 (4")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6
33022.W7545	19,05 (3/4")	114,3 (4,5")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6
33022.W7550	19,05 (3/4")	127 (5")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6
33022.W7555	19,05 (3/4")	139,7 (5,5")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6
33022.W7560	19,05 (3/4")	152,4 (6")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6
33022.W7570	19,05 (3/4")	177,8 (7")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6
33022.W7580	19,05 (3/4")	203,2 (8")	21.74	6.35	23.8	34.93	8,17 - 9,98	38.1	173.6
33022.W8810	22,23 (7/8")	25,4 (1")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8815	22,23 (7/8")	38,1 (1,5")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8820	22,23 (7/8")	50,8 (2")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8825	22,23 (7/8")	63,5 (2,5")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8830	22,23 (7/8")	76,2 (3")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8835	22,23 (7/8")	88,9 (3,5")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8840	22,23 (7/8")	101,6 (4")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8845	22,23 (7/8")	114,3 (4,5")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8850	22,23 (7/8")	127 (5")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8855	22,23 (7/8")	139,7 (5,5")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8860	22,23 (7/8")	152,4 (6")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8865	22,23 (7/8")	165,1 (6,5")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8870	22,23 (7/8")	177,8 (7")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W8880	22,23 (7/8")	203,2 (8")	25.3	9.52	25.4	38.1	12,71 - 14,07	38.1	239.4
33022.W1010	25,4 (1")	25,4 (1")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3
33022.W1015	25,4 (1")	38,1 (1,5")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3
33022.W1020	25,4 (1")	50,8 (2")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3
33022.W1025	25,4 (1")	63,5 (2,5")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3
33022.W1030	25,4 (1")	76,2 (3")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3
33022.W1035	25,4 (1")	88,9 (3,5")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3
33022.W1040	25,4 (1")	101,6 (4")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3
33022.W1045	25,4 (1")	114,3 (4,5")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3
33022.W1050	25,4 (1")	127 (5")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3
33022.W1055	25,4 (1")	139,7 (5,5")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3
33022.W1060	25,4 (1")	152,4 (6")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3
33022.W1070	25,4 (1")	177,8 (7")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3
33022.W1080	25,4 (1")	203,2 (8")	28.96	9.52	31.75	38.1	15,88 - 18,15	38.1	312.3