

# Ball lock pins with mushroom grip

stainless steel, with high shear strength, adjustable



### Material:

Mushroom grip, locknut, adjusting nut and push button, 1.4305 stainless steel.

Pin, 1.4542 stainless steel.

Balls, 1.4125 stainless steel.

Compression spring, 1.4310 stainless steel.

### Version:

Bright.

### Sample order:

K1299.12510050

### Note:

Ball lock pins are used for easy fastening or joining of components.

The two balls are disengaged by pressing the push button and the pin can be slipped into holes in the workpieces. When the push button is released, the balls lock the connection securely.

Shear force double shear ( $F$ ) =  $S \cdot \tau \cdot aB$  max.

The values given for the shear force are the theoretical breaking load.

These are non-binding reference values without consideration of safety factors and exclude any liability. The values given are for information purposes only and do not constitute a legally binding assurance of properties.

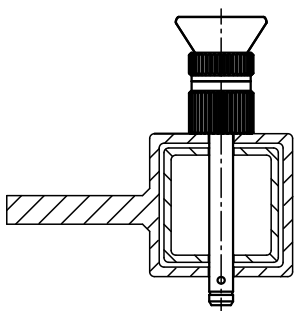
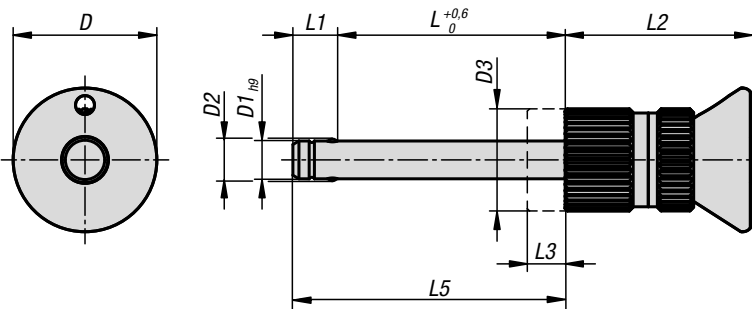
The load values have been calculated in accordance with DIN 50141. Each user must determine individually whether the ball lock pin is suitable for the respective application.

Different materials in which the ball lock pins are used, weather conditions and wear can influence the determined values.

Ball lock pins with high shear strength are identified by a groove marking on the pin.

### Advantages:

- Higher loading in comparison to standard ball lock pins.
- The length range is infinitely adjustable using the locknut and adjustment nut. This enables play-free positioning on the workpiece.
- The pins made from 1.4542 stainless steel are hardened, have a higher shear resistance and are extremely durable.



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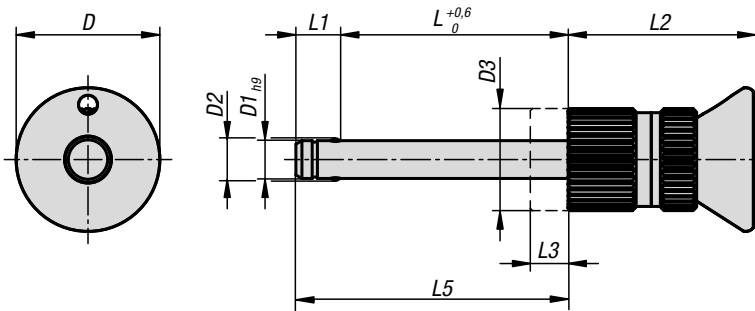
## KIPP Ball lock pins with mushroom grip, stainless steel, with high shear strength, adjustable

Order No.	D	D1	D2	D3	L	L1	L2	L3	L5	Receiving hole H11	Shearing force double shear max.kN
K1299.11905010	19	5	5,5	13,5	2-10	5,9	25	8	7,9-15,9	5	24
K1299.11905015	19	5	5,5	13,5	7-15	5,9	25	8	12,9-20,9	5	24
K1299.11905020	19	5	5,5	13,5	12-20	5,9	25	8	17,9-25,9	5	24
K1299.11905025	19	5	5,5	13,5	17-25	5,9	25	8	22,9-30,9	5	24
K1299.11905030	19	5	5,5	13,5	22-30	5,9	25	8	27,9-35,9	5	24
K1299.11906010	19	6	6,85	13,5	2-10	6,8	25	8	8,8-16,8	6	35
K1299.11906015	19	6	6,85	13,5	7-15	6,8	25	8	13,8-21,8	6	35
K1299.11906020	19	6	6,85	13,5	12-20	6,8	25	8	18,8-26,8	6	35
K1299.11906025	19	6	6,85	13,5	17-25	6,8	25	8	23,8-31,8	6	35
K1299.11906030	19	6	6,85	13,5	22-30	6,8	25	8	28,8-36,8	6	35
K1299.11906035	19	6	6,85	13,5	27-35	6,8	25	8	33,8-41,8	6	35
K1299.11906040	19	6	6,85	13,5	32-40	6,8	25	8	38,8-46,8	6	35
K1299.11906045	19	6	6,85	13,5	37-45	6,8	25	8	43,8-51,8	6	35
K1299.11906050	19	6	6,85	13,5	42-50	6,8	25	8	48,8-56,8	6	35
K1299.12508020	25	8	9,5	17	10-20	7,8	33	10	17,8-27,8	8	63
K1299.12508025	25	8	9,5	17	15-25	7,8	33	10	22,8-32,8	8	63
K1299.12508030	25	8	9,5	17	20-30	7,8	33	10	27,8-37,8	8	63
K1299.12508035	25	8	9,5	17	25-35	7,8	33	10	32,8-42,8	8	63
K1299.12508040	25	8	9,5	17	30-40	7,8	33	10	37,8-47,8	8	63
K1299.12508045	25	8	9,5	17	35-45	7,8	33	10	42,8-52,8	8	63
K1299.12508050	25	8	9,5	17	40-50	7,8	33	10	47,8-57,8	8	63
K1299.12510020	25	10	12	17	10-20	8,9	33	10	18,9-28,9	10	100
K1299.12510025	25	10	12	17	15-25	8,9	33	10	23,9-33,9	10	100
K1299.12510030	25	10	12	17	20-30	8,9	33	10	28,9-38,9	10	100
K1299.12510035	25	10	12	17	25-35	8,9	33	10	33,9-43,9	10	100
K1299.12510040	25	10	12	17	30-40	8,9	33	10	38,9-48,9	10	100
K1299.12510045	25	10	12	17	35-45	8,9	33	10	43,9-53,9	10	100
K1299.12510050	25	10	12	17	40-50	8,9	33	10	48,9-58,9	10	100
K1299.12510060	25	10	12	17	50-60	8,9	33	10	58,9-68,9	10	100
K1299.13512025	35	12	14,5	26	13-25	9,9	39,5	12	22,9-34,9	12	144
K1299.13512030	35	12	14,5	26	18-30	9,9	39,5	12	27,9-39,9	12	144
K1299.13512035	35	12	14,5	26	13-35	9,9	39,5	12	22,9-44,9	12	144
K1299.13512040	35	12	14,5	26	28-30	9,9	39,5	12	37,9-39,9	12	144
K1299.13512045	35	12	14,5	26	33-45	9,9	39,5	12	42,9-54,9	12	144
K1299.13512050	35	12	14,5	26	38-50	9,9	39,5	12	47,9-59,9	12	144
K1299.13512060	35	12	14,5	26	48-60	9,9	39,5	12	57,9-69,9	12	144
K1299.13512070	35	12	14,5	26	58-70	9,9	39,5	12	67,9-79,9	12	144
K1299.13512080	35	12	14,5	26	68-80	9,9	39,5	12	77,9-89,9	12	144
K1299.13516030	35	16	19	26	18-30	13,1	39,5	12	31,1-43,1	16	257
K1299.13516035	35	16	19	26	23-35	13,1	39,5	12	36,1-48,1	16	257
K1299.13516040	35	16	19	26	28-40	13,1	39,5	12	41,1-53,1	16	257
K1299.13516045	35	16	19	26	33-45	13,1	39,5	12	46,1-58,1	16	257
K1299.13516050	35	16	19	26	38-50	13,1	39,5	12	51,1-63,1	16	257
K1299.13516060	35	16	19	26	48-60	13,1	39,5	12	61,1-73,1	16	257
K1299.13516070	35	16	19	26	58-70	13,1	39,5	12	71,1-83,1	16	257
K1299.13516080	35	16	19	26	68-80	13,1	39,5	12	81,1-93,1	16	257



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### Version:

Bright.

### Sample order:

K1299.02510050

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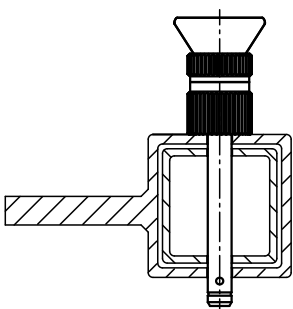
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K1299.01905010	19	5	5,5	13,5	2-10	5,9	25	8	7,9-15,9	5	15
K1299.01905015	19	5	5,5	13,5	7-15	5,9	25	8	12,9-20,9	5	15
K1299.01905020	19	5	5,5	13,5	12-20	5,9	25	8	17,9-25,9	5	15
K1299.01905025	19	5	5,5	13,5	17-25	5,9	25	8	22,9-30,9	5	15
K1299.01905030	19	5	5,5	13,5	22-30	5,9	25	8	27,9-35,9	5	15
K1299.01906010	19	6	6,85	13,5	2-10	6,8	25	8	8,8-16,8	6	22
K1299.01906015	19	6	6,85	13,5	7-15	6,8	25	8	13,8-21,8	6	22
K1299.01906020	19	6	6,85	13,5	12-20	6,8	25	8	18,8-26,8	6	22
K1299.01906025	19	6	6,85	13,5	17-25	6,8	25	8	23,8-31,8	6	22
K1299.01906030	19	6	6,85	13,5	22-30	6,8	25	8	28,8-36,8	6	22
K1299.01906035	19	6	6,85	13,5	27-35	6,8	25	8	33,8-41,8	6	22
K1299.01906040	19	6	6,85	13,5	32-40	6,8	25	8	38,8-46,8	6	22
K1299.01906045	19	6	6,85	13,5	37-45	6,8	25	8	43,8-51,8	6	22
K1299.01906050	19	6	6,85	13,5	42-50	6,8	25	8	48,8-56,8	6	22
K1299.02508020	25	8	9,5	17	10-20	7,8	33	10	17,8-27,8	8	38
K1299.02508025	25	8	9,5	17	15-25	7,8	33	10	22,8-32,8	8	38
K1299.02508030	25	8	9,5	17	20-30	7,8	33	10	27,8-37,8	8	38
K1299.02508035	25	8	9,5	17	25-35	7,8	33	10	32,8-42,8	8	38
K1299.02508040	25	8	9,5	17	30-40	7,8	33	10	37,8-47,8	8	38
K1299.02508045	25	8	9,5	17	35-45	7,8	33	10	42,8-52,8	8	38
K1299.02508050	25	8	9,5	17	40-50	7,8	33	10	47,8-57,8	8	38
K1299.02510020	25	10	12	17	10-20	8,9	33	10	18,9-28,9	10	60
K1299.02510025	25	10	12	17	15-25	8,9	33	10	23,9-33,9	10	60
K1299.02510030	25	10	12	17	20-30	8,9	33	10	28,9-38,9	10	60
K1299.02510035	25	10	12	17	25-35	8,9	33	10	33,9-43,9	10	60
K1299.02510040	25	10	12	17	30-40	8,9	33	10	38,9-48,9	10	60
K1299.02510045	25	10	12	17	35-45	8,9	33	10	43,9-53,9	10	60
K1299.02510050	25	10	12	17	40-50	8,9	33	10	48,9-58,9	10	60
K1299.02510060	25	10	12	17	50-60	8,9	33	10	58,9-68,9	10	60
K1299.03512025	35	12	14,5	26	13-25	9,9	39,5	12	22,9-34,9	12	86
K1299.03512030	35	12	14,5	26	18-30	9,9	39,5	12	27,9-39,9	12	86
K1299.03512035	35	12	14,5	26	23-35	9,9	39,5	12	32,9-44,9	12	86
K1299.03512040	35	12	14,5	26	28-40	9,9	39,5	12	37,9-49,9	12	86
K1299.03512045	35	12	14,5	26	33-45	9,9	39,5	12	42,9-54,9	12	86
K1299.03512050	35	12	14,5	26	38-50	9,9	39,5	12	47,9-59,9	12	86
K1299.03512060	35	12	14,5	26	48-60	9,9	39,5	12	57,9-69,9	12	86
K1299.03512070	35	12	14,5	26	58-70	9,9	39,5	12	67,9-79,9	12	86
K1299.03512080	35	12	14,5	26	68-80	9,9	39,5	12	77,9-89,9	12	86
K1299.03516030	35	16	19	26	18-30	13,1	39,5	12	31,1-43,1	16	153
K1299.03516035	35	16	19	26	23-35	13,1	39,5	12	36,1-48,1	16	153
K1299.03516040	35	16	19	26	28-40	13,1	39,5	12	41,1-53,1	16	153
K1299.03516045	35	16	19	26	33-45	13,1	39,5	12	46,1-58,1	16	153
K1299.03516050	35	16	19	26	38-50	13,1	39,5	12	51,1-63,1	16	153
K1299.03516060	35	16	19	26	48-60	13,1	39,5	12	61,1-73,1	16	153
K1299.03516070	35	16	19	26	58-70	13,1	39,5	12	71,1-83,1	16	153
K1299.03516080	35	16	19	26	68-80	13,1	39,5	12	81,1-93,1	16	153

