

P1230

SPRING PINS

Material

Carbon steel (CS70), hardened and tempered to HV420-545.

Technical Notes

To DIN 1481 (ISO 8752). Slotted springs consist of a single coil of spring steel, with an open slot sufficiently wide enough to enable the pin to reduce in diameter, as it is driven into the hole. The ends of the

pin have a bevelled chamfer, they are designed for plain drilled holes, but a countersink makes assembly easier, especially for the ISO 8752 type. Recommended hole tolerance H12.

l_1 tolerances:-
 1-10mm long - $\pm 0,25$
 12-50mm long - $\pm 0,50$
 over 50mm long - $\pm 0,75$.

Pins with a d_1 dimension of $>10\text{mm}$ may be delivered with one chamfer.

Tips

Where pins are to be installed in plastic it is recommended that they are de-oiled before use to avoid embrittlement of the plastic.

Order No.	d_1 nom.	d_1 min.	d_1 max.	Hole min.	Hole max.	d_2	l_1	l_2	w	Double shear kN
P1230.010-004	1.0	1.2	1.3	1.0	1.10	0.8	4	0.15	0.2	0.7
P1230.010-005	1.0	1.2	1.3	1.0	1.10	0.8	5	0.15	0.2	0.7
P1230.010-006	1.0	1.2	1.3	1.0	1.10	0.8	6	0.15	0.2	0.7
P1230.010-008	1.0	1.2	1.3	1.0	1.10	0.8	8	0.15	0.2	0.7
P1230.010-010	1.0	1.2	1.3	1.0	1.10	0.8	10	0.15	0.2	0.7
P1230.010-012	1.0	1.2	1.3	1.0	1.10	0.8	12	0.15	0.2	0.7
P1230.010-014	1.0	1.2	1.3	1.0	1.10	0.8	14	0.15	0.2	0.7
P1230.010-016	1.0	1.2	1.3	1.0	1.10	0.8	16	0.15	0.2	0.7
P1230.010-018	1.0	1.2	1.3	1.0	1.10	0.8	18	0.15	0.2	0.7
P1230.010-020	1.0	1.2	1.3	1.0	1.10	0.8	20	0.15	0.2	0.7
P1230.015-004	1.5	1.7	1.8	1.5	1.60	1.1	4	0.25	0.3	1.58
P1230.015-006	1.5	1.7	1.8	1.5	1.60	1.1	6	0.25	0.3	1.58
P1230.015-008	1.5	1.7	1.8	1.5	1.60	1.1	8	0.25	0.3	1.58
P1230.015-010	1.5	1.7	1.8	1.5	1.60	1.1	10	0.25	0.3	1.58
P1230.015-012	1.5	1.7	1.8	1.5	1.60	1.1	12	0.25	0.3	1.58
P1230.015-014	1.5	1.7	1.8	1.5	1.60	1.1	14	0.25	0.3	1.58
P1230.015-016	1.5	1.7	1.8	1.5	1.60	1.1	16	0.25	0.3	1.58
P1230.015-018	1.5	1.7	1.8	1.5	1.60	1.1	18	0.25	0.3	1.58
P1230.015-020	1.5	1.7	1.8	1.5	1.60	1.1	20	0.25	0.3	1.58
P1230.015-022	1.5	1.7	1.8	1.5	1.60	1.1	22	0.25	0.3	1.58
P1230.015-024	1.5	1.7	1.8	1.5	1.60	1.1	24	0.25	0.3	1.58
P1230.015-026	1.5	1.7	1.8	1.5	1.60	1.1	26	0.25	0.3	1.58
P1230.015-028	1.5	1.7	1.8	1.5	1.60	1.1	28	0.25	0.3	1.58
P1230.015-030	1.5	1.7	1.8	1.5	1.60	1.1	30	0.25	0.3	1.58
P1230.020-004	2.0	2.3	2.4	2.0	2.10	1.5	4	0.35	0.4	2.82
P1230.020-006	2.0	2.3	2.4	2.0	2.10	1.5	5	0.35	0.4	2.82
P1230.020-008	2.0	2.3	2.4	2.0	2.10	1.5	8	0.35	0.4	2.82
P1230.020-010	2.0	2.3	2.4	2.0	2.10	1.5	10	0.35	0.4	2.82



Order No.	d ₁ nom.	d ₁ min.	d ₁ max.	Hole min.	Hole max.	d ₂	l ₁	l ₂	w	Double shear kN
P1230.020-012	2.0	2.3	2.4	2.0	2.10	1.5	12	0.35	0.4	2.82
P1230.020-014	2.0	2.3	2.4	2.0	2.10	1.5	14	0.35	0.4	2.82
P1230.020-016	2.0	2.3	2.4	2.0	2.10	1.5	16	0.35	0.4	2.82
P1230.020-018	2.0	2.3	2.4	2.0	2.10	1.5	18	0.35	0.4	2.82
P1230.020-020	2.0	2.3	2.4	2.0	2.10	1.5	20	0.35	0.4	2.82
P1230.020-022	2.0	2.3	2.4	2.0	2.10	1.5	22	0.35	0.4	2.82
P1230.020-024	2.0	2.3	2.4	2.0	2.10	1.5	24	0.35	0.4	2.82
P1230.020-026	2.0	2.3	2.4	2.0	2.10	1.5	26	0.35	0.4	2.82
P1230.020-028	2.0	2.3	2.4	2.0	2.10	1.5	28	0.35	0.4	2.82
P1230.020-030	2.0	2.3	2.4	2.0	2.10	1.5	30	0.35	0.4	2.82
P1230.020-035	2.0	2.3	2.4	2.0	2.10	1.5	35	0.35	0.4	2.82
P1230.020-040	2.0	2.3	2.4	2.0	2.10	1.5	40	0.35	0.4	2.82
P1230.025-004	2.5	2.8	2.9	2.5	2.60	1.8	4	0.4	0.5	4.38
P1230.025-005	2.5	2.8	2.9	2.5	2.60	1.8	5	0.4	0.5	4.38
P1230.025-006	2.5	2.8	2.9	2.5	2.60	1.8	6	0.4	0.5	4.38
P1230.025-008	2.5	2.8	2.9	2.5	2.60	1.8	8	0.4	0.5	4.38
P1230.025-010	2.5	2.8	2.9	2.5	2.60	1.8	10	0.4	0.5	4.38
P1230.025-012	2.5	2.8	2.9	2.5	2.60	1.8	12	0.4	0.5	4.38
P1230.025-014	2.5	2.8	2.9	2.5	2.60	1.8	14	0.4	0.5	4.38
P1230.025-016	2.5	2.8	2.9	2.5	2.60	1.8	16	0.4	0.5	4.38
P1230.025-018	2.5	2.8	2.9	2.5	2.60	1.8	18	0.4	0.5	4.38
P1230.025-020	2.5	2.8	2.9	2.5	2.60	1.8	20	0.4	0.5	4.38
P1230.025-022	2.5	2.8	2.9	2.5	2.60	1.8	22	0.4	0.5	4.38
P1230.025-024	2.5	2.8	2.9	2.5	2.60	1.8	24	0.4	0.5	4.38
P1230.025-026	2.5	2.8	2.9	2.5	2.60	1.8	26	0.4	0.5	4.38
P1230.025-028	2.5	2.8	2.9	2.5	2.60	1.8	28	0.4	0.5	4.38
P1230.025-030	2.5	2.8	2.9	2.5	2.60	1.8	30	0.4	0.5	4.38
P1230.025-035	2.5	2.8	2.9	2.5	2.60	1.8	35	0.4	0.5	4.38
P1230.025-040	2.5	2.8	2.9	2.5	2.60	1.8	40	0.4	0.5	4.38
P1230.030-004	3.0	3.3	3.5	3.0	3.10	2.1	4	0.5	0.6	6.32
P1230.030-005	3.0	3.3	3.5	3.0	3.10	2.1	5	0.5	0.6	6.32
P1230.030-006	3.0	3.3	3.5	3.0	3.10	2.1	6	0.5	0.6	6.32
P1230.030-008	3.0	3.3	3.5	3.0	3.10	2.1	8	0.5	0.6	6.32
P1230.030-010	3.0	3.3	3.5	3.0	3.10	2.1	10	0.5	0.6	6.32
P1230.030-012	3.0	3.3	3.5	3.0	3.10	2.1	12	0.5	0.6	6.32
P1230.030-014	3.0	3.3	3.5	3.0	3.10	2.1	14	0.5	0.6	6.32
P1230.030-016	3.0	3.3	3.5	3.0	3.10	2.1	16	0.5	0.6	6.32
P1230.030-018	3.0	3.3	3.5	3.0	3.10	2.1	18	0.5	0.6	6.32
P1230.030-020	3.0	3.3	3.5	3.0	3.10	2.1	20	0.5	0.6	6.32
P1230.030-022	3.0	3.3	3.5	3.0	3.10	2.1	22	0.5	0.6	6.32
P1230.030-024	3.0	3.3	3.5	3.0	3.10	2.1	24	0.5	0.6	6.32
P1230.030-026	3.0	3.3	3.5	3.0	3.10	2.1	26	0.5	0.6	6.32
P1230.030-028	3.0	3.3	3.5	3.0	3.10	2.1	28	0.5	0.6	6.32
P1230.030-030	3.0	3.3	3.5	3.0	3.10	2.1	30	0.5	0.6	6.32
P1230.030-035	3.0	3.3	3.5	3.0	3.10	2.1	35	0.5	0.6	6.32
P1230.030-040	3.0	3.3	3.5	3.0	3.10	2.1	40	0.5	0.6	6.32
P1230.030-045	3.0	3.3	3.5	3.0	3.10	2.1	45	0.5	0.6	6.32
P1230.035-004	3.5	3.8	4.0	3.5	3.62	2.3	4	0.6	0.7	9.06
P1230.035-005	3.5	3.8	4.0	3.5	3.62	2.3	5	0.6	0.7	9.06
P1230.035-006	3.5	3.8	4.0	3.5	3.62	2.3	6	0.6	0.7	9.06
P1230.035-008	3.5	3.8	4.0	3.5	3.62	2.3	8	0.6	0.7	9.06
P1230.035-010	3.5	3.8	4.0	3.5	3.62	2.3	10	0.6	0.7	9.06
P1230.035-012	3.5	3.8	4.0	3.5	3.62	2.3	12	0.6	0.7	9.06
P1230.035-014	3.5	3.8	4.0	3.5	3.62	2.3	14	0.6	0.7	9.06
P1230.035-016	3.5	3.8	4.0	3.5	3.62	2.3	16	0.6	0.7	9.06
P1230.035-018	3.5	3.8	4.0	3.5	3.62	2.3	18	0.6	0.7	9.06
P1230.035-020	3.5	3.8	4.0	3.5	3.62	2.3	20	0.6	0.7	9.06
P1230.035-022	3.5	3.8	4.0	3.5	3.62	2.3	22	0.6	0.7	9.06
P1230.035-024	3.5	3.8	4.0	3.5	3.62	2.3	24	0.6	0.7	9.06
P1230.035-026	3.5	3.8	4.0	3.5	3.62	2.3	26	0.6	0.7	9.06
P1230.035-028	3.5	3.8	4.0	3.5	3.62	2.3	28	0.6	0.7	9.06
P1230.035-030	3.5	3.8	4.0	3.5	3.62	2.3	30	0.6	0.7	9.06
P1230.035-035	3.5	3.8	4.0	3.5	3.62	2.3	35	0.6	0.7	9.06
P1230.035-040	3.5	3.8	4.0	3.5	3.62	2.3	40	0.6	0.7	9.06
P1230.035-045	3.5	3.8	4.0	3.5	3.62	2.3	45	0.6	0.7	9.06
P1230.035-050	3.5	3.8	4.0	3.5	3.62	2.3	50	0.6	0.7	9.06
P1230.040-004	4.0	4.4	4.6	4.0	4.12	2.8	4	0.65	0.8	11.24
P1230.040-005	4.0	4.4	4.6	4.0	4.12	2.8	5	0.65	0.8	11.24



Steel Slotted Pins



Spring Pins

Order No.	d ₁ nom.	d ₁ min.	d ₁ max.	Hole min.	Hole max.	d ₂	l ₁	l ₂	w	Double shear kN
P1230.040-006	4.0	4.4	4.6	4.0	4.12	2.8	6	0.65	0.8	11.24
P1230.040-008	4.0	4.4	4.6	4.0	4.12	2.8	8	0.65	0.8	11.24
P1230.040-010	4.0	4.4	4.6	4.0	4.12	2.8	10	0.65	0.8	11.24
P1230.040-012	4.0	4.4	4.6	4.0	4.12	2.8	12	0.65	0.8	11.24
P1230.040-014	4.0	4.4	4.6	4.0	4.12	2.8	14	0.65	0.8	11.24
P1230.040-016	4.0	4.4	4.6	4.0	4.12	2.8	16	0.65	0.8	11.24
P1230.040-018	4.0	4.4	4.6	4.0	4.12	2.8	18	0.65	0.8	11.24
P1230.040-020	4.0	4.4	4.6	4.0	4.12	2.8	20	0.65	0.8	11.24
P1230.040-022	4.0	4.4	4.6	4.0	4.12	2.8	22	0.65	0.8	11.24
P1230.040-024	4.0	4.4	4.6	4.0	4.12	2.8	24	0.65	0.8	11.24
P1230.040-026	4.0	4.4	4.6	4.0	4.12	2.8	26	0.65	0.8	11.24
P1230.040-028	4.0	4.4	4.6	4.0	4.12	2.8	28	0.65	0.8	11.24
P1230.040-030	4.0	4.4	4.6	4.0	4.12	2.8	30	0.65	0.8	11.24
P1230.040-035	4.0	4.4	4.6	4.0	4.12	2.8	35	0.65	0.8	11.24
P1230.040-040	4.0	4.4	4.6	4.0	4.12	2.8	40	0.65	0.8	11.24
P1230.040-045	4.0	4.4	4.6	4.0	4.12	2.8	45	0.65	0.8	11.24
P1230.040-050	4.0	4.4	4.6	4.0	4.12	2.8	50	0.65	0.8	11.24
P1230.040-055	4.0	4.4	4.6	4.0	4.12	2.8	55	0.65	0.8	11.24
P1230.040-060	4.0	4.4	4.6	4.0	4.12	2.8	60	0.65	0.8	11.24
P1230.050-006	5.0	5.4	5.6	5.0	5.12	3.4	6	0.9	1.0	17.54
P1230.050-008	5.0	5.4	5.6	5.0	5.12	3.4	8	0.9	1.0	17.54
P1230.050-010	5.0	5.4	5.6	5.0	5.12	3.4	10	0.9	1.0	17.54
P1230.050-012	5.0	5.4	5.6	5.0	5.12	3.4	12	0.9	1.0	17.54
P1230.050-014	5.0	5.4	5.6	5.0	5.12	3.4	14	0.9	1.0	17.54
P1230.050-016	5.0	5.4	5.6	5.0	5.12	3.4	16	0.9	1.0	17.54
P1230.050-018	5.0	5.4	5.6	5.0	5.12	3.4	18	0.9	1.0	17.54
P1230.050-020	5.0	5.4	5.6	5.0	5.12	3.4	20	0.9	1.0	17.54
P1230.050-022	5.0	5.4	5.6	5.0	5.12	3.4	22	0.9	1.0	17.54
P1230.050-024	5.0	5.4	5.6	5.0	5.12	3.4	24	0.9	1.0	17.54
P1230.050-026	5.0	5.4	5.6	5.0	5.12	3.4	26	0.9	1.0	17.54
P1230.050-028	5.0	5.4	5.6	5.0	5.12	3.4	28	0.9	1.0	17.54
P1230.050-030	5.0	5.4	5.6	5.0	5.12	3.4	30	0.9	1.0	17.54
P1230.050-035	5.0	5.4	5.6	5.0	5.12	3.4	35	0.9	1.0	17.54
P1230.050-040	5.0	5.4	5.6	5.0	5.12	3.4	40	0.9	1.0	17.54
P1230.050-045	5.0	5.4	5.6	5.0	5.12	3.4	45	0.9	1.0	17.54
P1230.050-050	5.0	5.4	5.6	5.0	5.12	3.4	50	0.9	1.0	17.54
P1230.050-055	5.0	5.4	5.6	5.0	5.12	3.4	55	0.9	1.0	17.54
P1230.050-060	5.0	5.4	5.6	5.0	5.12	3.4	60	0.9	1.0	17.54
P1230.050-065	5.0	5.4	5.6	5.0	5.12	3.4	65	0.9	1.0	17.54
P1230.050-070	5.0	5.4	5.6	5.0	5.12	3.4	70	0.9	1.0	17.54
P1230.050-075	5.0	5.4	5.6	5.0	5.12	3.4	75	0.9	1.0	17.54
P1230.050-080	5.0	5.4	5.6	5.0	5.12	3.4	80	0.9	1.0	17.54
P1230.060-008	6.0	6.4	6.7	6.0	6.12	3.9	8	1.2	1.2	26.04
P1230.060-010	6.0	6.4	6.7	6.0	6.12	3.9	10	1.2	1.2	26.04
P1230.060-012	6.0	6.4	6.7	6.0	6.12	3.9	12	1.2	1.2	26.04
P1230.060-014	6.0	6.4	6.7	6.0	6.12	3.9	14	1.2	1.2	26.04
P1230.060-016	6.0	6.4	6.7	6.0	6.12	3.9	16	1.2	1.2	26.04
P1230.060-018	6.0	6.4	6.7	6.0	6.12	3.9	18	1.2	1.2	26.04
P1230.060-020	6.0	6.4	6.7	6.0	6.12	3.9	20	1.2	1.2	26.04
P1230.060-022	6.0	6.4	6.7	6.0	6.12	3.9	22	1.2	1.2	26.04
P1230.060-024	6.0	6.4	6.7	6.0	6.12	3.9	24	1.2	1.2	26.04
P1230.060-026	6.0	6.4	6.7	6.0	6.12	3.9	26	1.2	1.2	26.04
P1230.060-028	6.0	6.4	6.7	6.0	6.12	3.9	28	1.2	1.2	26.04
P1230.060-030	6.0	6.4	6.7	6.0	6.12	3.9	30	1.2	1.2	26.04
P1230.060-035	6.0	6.4	6.7	6.0	6.12	3.9	35	1.2	1.2	26.04
P1230.060-040	6.0	6.4	6.7	6.0	6.12	3.9	40	1.2	1.2	26.04
P1230.060-045	6.0	6.4	6.7	6.0	6.12	3.9	45	1.2	1.2	26.04
P1230.060-050	6.0	6.4	6.7	6.0	6.12	3.9	50	1.2	1.2	26.04
P1230.060-055	6.0	6.4	6.7	6.0	6.12	3.9	55	1.2	1.2	26.04
P1230.060-060	6.0	6.4	6.7	6.0	6.12	3.9	60	1.2	1.2	26.04
P1230.060-065	6.0	6.4	6.7	6.0	6.12	3.9	65	1.2	1.2	26.04
P1230.060-070	6.0	6.4	6.7	6.0	6.12	3.9	70	1.2	1.2	26.04
P1230.060-075	6.0	6.4	6.7	6.0	6.12	3.9	75	1.2	1.2	26.04
P1230.060-080	6.0	6.4	6.7	6.0	6.12	3.9	80	1.2	1.2	26.04
P1230.060-085	6.0	6.4	6.7	6.0	6.12	3.9	85	1.2	1.2	26.04
P1230.060-090	6.0	6.4	6.7	6.0	6.12	3.9	90	1.2	1.2	26.04
P1230.060-095	6.0	6.4	6.7	6.0	6.12	3.9	95	1.2	1.2	26.04
P1230.060-100	6.0	6.4	6.7	6.0	6.12	3.9	100	1.2	1.2	26.04

SPRING PINS



Order No.	d ₁ nom.	d ₁ min.	d ₁ max.	Hole min.	Hole max.	d ₂	l ₁	l ₂	w	Double shear kN
P1230.080-008	8.0	8.5	8.8	8.0	8.15	5.5	8	2.0	1.5	42.76
P1230.080-010	8.0	8.5	8.8	8.0	8.15	5.5	10	2.0	1.5	42.76
P1230.080-012	8.0	8.5	8.8	8.0	8.15	5.5	12	2.0	1.5	42.76
P1230.080-014	8.0	8.5	8.8	8.0	8.15	5.5	14	2.0	1.5	42.76
P1230.080-016	8.0	8.5	8.8	8.0	8.15	5.5	16	2.0	1.5	42.76
P1230.080-018	8.0	8.5	8.8	8.0	8.15	5.5	18	2.0	1.5	42.76
P1230.080-020	8.0	8.5	8.8	8.0	8.15	5.5	20	2.0	1.5	42.76
P1230.080-022	8.0	8.5	8.8	8.0	8.15	5.5	22	2.0	1.5	42.76
P1230.080-024	8.0	8.5	8.8	8.0	8.15	5.5	24	2.0	1.5	42.76
P1230.080-026	8.0	8.5	8.8	8.0	8.15	5.5	26	2.0	1.5	42.76
P1230.080-028	8.0	8.5	8.8	8.0	8.15	5.5	28	2.0	1.5	42.76
P1230.080-030	8.0	8.5	8.8	8.0	8.15	5.5	30	2.0	1.5	42.76
P1230.080-035	8.0	8.5	8.8	8.0	8.15	5.5	35	2.0	1.5	42.76
P1230.080-040	8.0	8.5	8.8	8.0	8.15	5.5	40	2.0	1.5	42.76
P1230.080-045	8.0	8.5	8.8	8.0	8.15	5.5	45	2.0	1.5	42.76
P1230.080-050	8.0	8.5	8.8	8.0	8.15	5.5	50	2.0	1.5	42.76
P1230.080-055	8.0	8.5	8.8	8.0	8.15	5.5	55	2.0	1.5	42.76
P1230.080-060	8.0	8.5	8.8	8.0	8.15	5.5	60	2.0	1.5	42.76
P1230.080-065	8.0	8.5	8.8	8.0	8.15	5.5	65	2.0	1.5	42.76
P1230.080-070	8.0	8.5	8.8	8.0	8.15	5.5	70	2.0	1.5	42.76
P1230.080-075	8.0	8.5	8.8	8.0	8.15	5.5	75	2.0	1.5	42.76
P1230.080-080	8.0	8.5	8.8	8.0	8.15	5.5	80	2.0	1.5	42.76
P1230.080-085	8.0	8.5	8.8	8.0	8.15	5.5	85	2.0	1.5	42.76
P1230.080-090	8.0	8.5	8.8	8.0	8.15	5.5	90	2.0	1.5	42.76
P1230.080-095	8.0	8.5	8.8	8.0	8.15	5.5	95	2.0	1.5	42.76
P1230.080-100	8.0	8.5	8.8	8.0	8.15	5.5	100	2.0	1.5	42.76
P1230.080-120	8.0	8.5	8.8	8.0	8.15	5.5	120	2.0	1.5	42.76
P1230.100-010	10.0	10.5	10.8	10.0	10.5	6.5	10	2.0	2.0	70.16
P1230.100-012	10.0	10.5	10.8	10.0	10.5	6.5	12	2.0	2.0	70.16
P1230.100-014	10.0	10.5	10.8	10.0	10.5	6.5	14	2.0	2.0	70.16
P1230.100-016	10.0	10.5	10.8	10.0	10.5	6.5	16	2.0	2.0	70.16
P1230.100-018	10.0	10.5	10.8	10.0	10.5	6.5	18	2.0	2.0	70.16
P1230.100-020	10.0	10.5	10.8	10.0	10.5	6.5	20	2.0	2.0	70.16
P1230.100-022	10.0	10.5	10.8	10.0	10.5	6.5	22	2.0	2.0	70.16
P1230.100-024	10.0	10.5	10.8	10.0	10.5	6.5	24	2.0	2.0	70.16
P1230.100-026	10.0	10.5	10.8	10.0	10.5	6.5	26	2.0	2.0	70.16
P1230.100-028	10.0	10.5	10.8	10.0	10.5	6.5	28	2.0	2.0	70.16
P1230.100-030	10.0	10.5	10.8	10.0	10.5	6.5	30	2.0	2.0	70.16
P1230.100-035	10.0	10.5	10.8	10.0	10.5	6.5	35	2.0	2.0	70.16
P1230.100-040	10.0	10.5	10.8	10.0	10.5	6.5	40	2.0	2.0	70.16
P1230.100-045	10.0	10.5	10.8	10.0	10.5	6.5	45	2.0	2.0	70.16
P1230.100-050	10.0	10.5	10.8	10.0	10.5	6.5	50	2.0	2.0	70.16
P1230.100-055	10.0	10.5	10.8	10.0	10.5	6.5	55	2.0	2.0	70.16
P1230.100-060	10.0	10.5	10.8	10.0	10.5	6.5	60	2.0	2.0	70.16
P1230.100-065	10.0	10.5	10.8	10.0	10.5	6.5	65	2.0	2.0	70.16
P1230.100-070	10.0	10.5	10.8	10.0	10.5	6.5	70	2.0	2.0	70.16
P1230.100-075	10.0	10.5	10.8	10.0	10.5	6.5	75	2.0	2.0	70.16
P1230.100-080	10.0	10.5	10.8	10.0	10.5	6.5	80	2.0	2.0	70.16
P1230.100-085	10.0	10.5	10.8	10.0	10.5	6.5	85	2.0	2.0	70.16
P1230.100-090	10.0	10.5	10.8	10.0	10.5	6.5	90	2.0	2.0	70.16
P1230.100-095	10.0	10.5	10.8	10.0	10.5	6.5	95	2.0	2.0	70.16
P1230.100-100	10.0	10.5	10.8	10.0	10.5	6.5	100	2.0	2.0	70.16
P1230.100-120	10.0	10.5	10.8	10.0	10.5	6.5	120	2.0	2.0	70.16
P1230.100-130	10.0	10.5	10.8	10.0	10.5	6.5	130	2.0	2.0	70.16
P1230.100-140	10.0	10.5	10.8	10.0	10.5	6.5	140	2.0	2.0	70.16
P1230.100-150	10.0	10.5	10.8	10.0	10.5	6.5	150	2.0	2.0	70.16
P1230.100-160	10.0	10.5	10.8	10.0	10.5	6.5	160	2.0	2.0	70.16
P1230.120-010	12.0	12.5	12.8	12.0	12.17	7.5	10	2.0	2.5	104.1
P1230.120-012	12.0	12.5	12.8	12.0	12.17	7.5	12	2.0	2.5	104.1
P1230.120-014	12.0	12.5	12.8	12.0	12.17	7.5	14	2.0	2.5	104.1
P1230.120-016	12.0	12.5	12.8	12.0	12.17	7.5	16	2.0	2.5	104.1
P1230.120-018	12.0	12.5	12.8	12.0	12.17	7.5	18	2.0	2.5	104.1
P1230.120-020	12.0	12.5	12.8	12.0	12.17	7.5	20	2.0	2.5	104.1
P1230.120-022	12.0	12.5	12.8	12.0	12.17	7.5	22	2.0	2.5	104.1
P1230.120-024	12.0	12.5	12.8	12.0	12.17	7.5	24	2.0	2.5	104.1
P1230.120-026	12.0	12.5	12.8	12.0	12.17	7.5	26	2.0	2.5	104.1
P1230.120-028	12.0	12.5	12.8	12.0	12.17	7.5	28	2.0	2.5	104.1
P1230.120-030	12.0	12.5	12.8	12.0	12.17	7.5	30	2.0	2.5	104.1



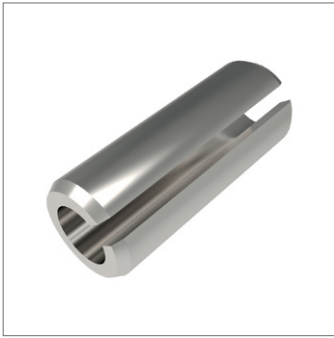
Steel Slotted Pins



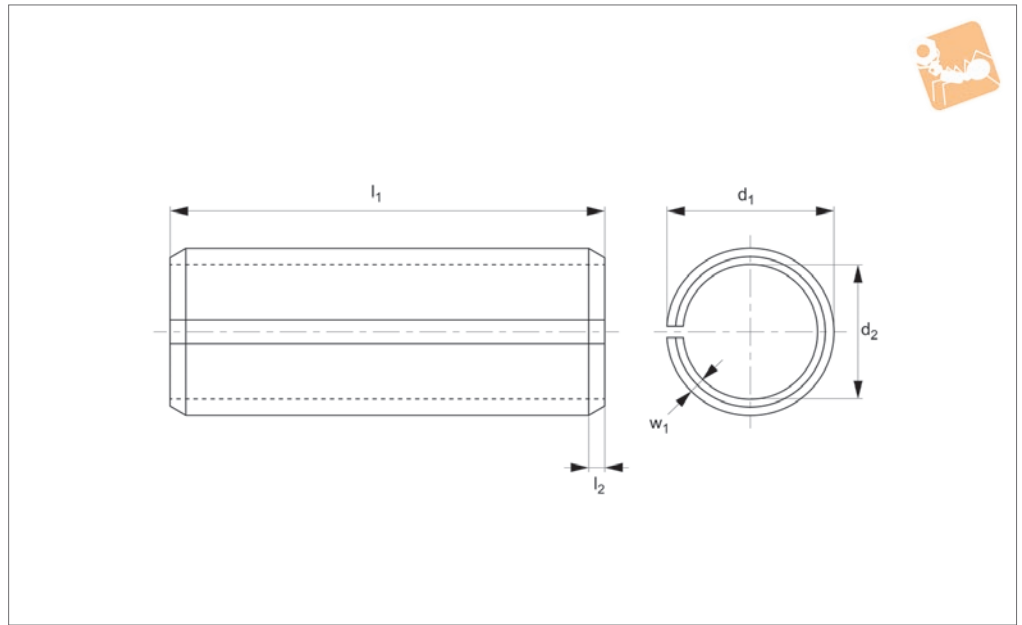
Spring Pins

Order No.	d ₁ nom.	d ₁ min.	d ₁ max.	Hole min.	Hole max.	d ₂	l ₁	l ₂	w	Double shear kN
P1230.120-035	12.0	12.5	12.8	12.0	12.17	7.5	35	2.0	2.5	104.1
P1230.120-040	12.0	12.5	12.8	12.0	12.17	7.5	40	2.0	2.5	104.1
P1230.120-045	12.0	12.5	12.8	12.0	12.17	7.5	45	2.0	2.5	104.1
P1230.120-050	12.0	12.5	12.8	12.0	12.17	7.5	50	2.0	2.5	104.1
P1230.120-055	12.0	12.5	12.8	12.0	12.17	7.5	55	2.0	2.5	104.1
P1230.120-060	12.0	12.5	12.8	12.0	12.17	7.5	60	2.0	2.5	104.1
P1230.120-065	12.0	12.5	12.8	12.0	12.17	7.5	65	2.0	2.5	104.1
P1230.120-070	12.0	12.5	12.8	12.0	12.17	7.5	70	2.0	2.5	104.1
P1230.120-075	12.0	12.5	12.8	12.0	12.17	7.5	75	2.0	2.5	104.1
P1230.120-080	12.0	12.5	12.8	12.0	12.17	7.5	80	2.0	2.5	104.1
P1230.120-085	12.0	12.5	12.8	12.0	12.17	7.5	85	2.0	2.5	104.1
P1230.120-090	12.0	12.5	12.8	12.0	12.17	7.5	90	2.0	2.5	104.1
P1230.120-095	12.0	12.5	12.8	12.0	12.17	7.5	95	2.0	2.5	104.1
P1230.120-100	12.0	12.5	12.8	12.0	12.17	7.5	100	2.0	2.5	104.1
P1230.120-120	12.0	12.5	12.8	12.0	12.17	7.5	120	2.0	2.5	104.1
P1230.120-130	12.0	12.5	12.8	12.0	12.17	7.5	130	2.0	2.5	104.1
P1230.120-140	12.0	12.5	12.8	12.0	12.17	7.5	140	2.0	2.5	104.1
P1230.120-150	12.0	12.5	12.8	12.0	12.17	7.5	150	2.0	2.5	104.1
P1230.120-160	12.0	12.5	12.8	12.0	12.17	7.5	160	2.0	2.5	104.1

SPRING PINS



P1231



Material
Stainless steel (A2).

Technical Notes
To DIN 1481 (ISO 8752). Slotted springs consist of a single coil of spring steel, with an open slot sufficiently wide enough to enable the pin to reduce in diameter, as it is driven into the hole. The ends of the

pin have a bevelled chamfer, they are designed for plain drilled holes, but a countersink makes assembly easier, especially for the ISO 8752 type. Recommended hole tolerance H12.
 l_1 tolerances:-
 1-10mm long - $\pm 0,25$
 12-50mm long - $\pm 0,50$

over 50mm long - $\pm 0,75$.
 Pins with a d_1 dimension of $>10\text{mm}$ may be delivered with one chamfer.

Tips
Where pins are to be installed in plastic it is recommended that they are de-oiled before use to avoid embrittlement of the plastic.

Order No.	d_1 nom.	d_1 min.	d_1 max.	Hole min.	Hole max.	d_2	l_1	l_2	w_1	Double shear kN
P1231.010-004	1.0	1.2	1.3	1.0	1.10	0.8	4	0.15	0.2	0.4
P1231.010-005	1.0	1.2	1.3	1.0	1.10	0.8	5	0.15	0.2	0.4
P1231.010-006	1.0	1.2	1.3	1.0	1.10	0.8	6	0.15	0.2	0.4
P1231.010-008	1.0	1.2	1.3	1.0	1.10	0.8	8	0.15	0.2	0.4
P1231.010-010	1.0	1.2	1.3	1.0	1.10	0.8	10	0.15	0.2	0.4
P1231.010-012	1.0	1.2	1.3	1.0	1.10	0.8	12	0.15	0.2	0.4
P1231.010-014	1.0	1.2	1.3	1.0	1.10	0.8	14	0.15	0.2	0.4
P1231.010-016	1.0	1.2	1.3	1.0	1.10	0.8	16	0.15	0.2	0.4
P1231.010-018	1.0	1.2	1.3	1.0	1.10	0.8	18	0.15	0.2	0.4
P1231.010-020	1.0	1.2	1.3	1.0	1.10	0.8	20	0.15	0.2	0.4
P1231.015-004	1.5	1.7	1.8	1.5	1.60	1.1	4	0.25	0.3	0.98
P1231.015-005	1.5	1.7	1.8	1.5	1.60	1.1	5	0.25	0.3	0.98
P1231.015-006	1.5	1.7	1.8	1.5	1.60	1.1	6	0.25	0.3	0.98
P1231.015-008	1.5	1.7	1.8	1.5	1.60	1.1	8	0.25	0.3	0.98
P1231.015-010	1.5	1.7	1.8	1.5	1.60	1.1	10	0.25	0.3	0.98
P1231.015-012	1.5	1.7	1.8	1.5	1.60	1.1	12	0.25	0.3	0.98
P1231.015-014	1.5	1.7	1.8	1.5	1.60	1.1	14	0.25	0.3	0.98
P1231.015-016	1.5	1.7	1.8	1.5	1.60	1.1	16	0.25	0.3	0.98
P1231.015-018	1.5	1.7	1.8	1.5	1.60	1.1	18	0.25	0.3	0.98
P1231.015-020	1.5	1.7	1.8	1.5	1.60	1.1	20	0.25	0.3	0.98
P1231.015-022	1.5	1.7	1.8	1.5	1.60	1.1	22	0.25	0.3	0.98
P1231.015-024	1.5	1.7	1.8	1.5	1.60	1.1	24	0.25	0.3	0.98
P1231.020-004	2.0	2.3	2.4	2.0	2.10	1.5	4	0.35	0.4	1.81
P1231.020-005	2.0	2.3	2.4	2.0	2.10	1.5	5	0.35	0.4	1.81
P1231.020-006	2.0	2.3	2.4	2.0	2.10	1.5	6	0.35	0.4	1.81
P1231.020-008	2.0	2.3	2.4	2.0	2.10	1.5	8	0.35	0.4	1.81
P1231.020-010	2.0	2.3	2.4	2.0	2.10	1.5	10	0.35	0.4	1.81
P1231.020-012	2.0	2.3	2.4	2.0	2.10	1.5	12	0.35	0.4	1.81
P1231.020-014	2.0	2.3	2.4	2.0	2.10	1.5	14	0.35	0.4	1.81



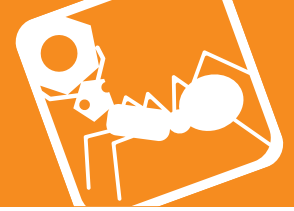
Stainless Slotted Spring Pins



Spring Pins

Order No.	d ₁ nom.	d ₁ min.	d ₁ max.	Hole min.	Hole max.	d ₂	l ₁	l ₂	w ₁	Double shear kN
P1231.020-016	2.0	2.3	2.4	2.0	2.10	1.5	16	0.35	0.4	1.81
P1231.020-018	2.0	2.3	2.4	2.0	2.10	1.5	18	0.35	0.4	1.81
P1231.020-020	2.0	2.3	2.4	2.0	2.10	1.5	20	0.35	0.4	1.81
P1231.020-022	2.0	2.3	2.4	2.0	2.10	1.5	22	0.35	0.4	1.81
P1231.020-024	2.0	2.3	2.4	2.0	2.10	1.5	24	0.35	0.4	1.81
P1231.020-026	2.0	2.3	2.4	2.0	2.10	1.5	26	0.35	0.4	1.81
P1231.020-028	2.0	2.3	2.4	2.0	2.10	1.5	28	0.35	0.4	1.81
P1231.020-030	2.0	2.3	2.4	2.0	2.10	1.5	30	0.35	0.4	1.81
P1231.020-035	2.0	2.3	2.4	2.0	2.10	1.5	35	0.35	0.4	1.81
P1231.020-040	2.0	2.3	2.4	2.0	2.10	1.5	40	0.35	0.4	1.81
P1231.025-004	2.5	2.8	2.9	2.5	2.60	1.8	4	0.4	0.5	2.84
P1231.025-005	2.5	2.8	2.9	2.5	2.60	1.8	5	0.4	0.5	2.84
P1231.025-006	2.5	2.8	2.9	2.5	2.60	1.8	6	0.4	0.5	2.84
P1231.025-008	2.5	2.8	2.9	2.5	2.60	1.8	8	0.4	0.5	2.84
P1231.025-010	2.5	2.8	2.9	2.5	2.60	1.8	10	0.4	0.5	2.84
P1231.025-012	2.5	2.8	2.9	2.5	2.60	1.8	12	0.4	0.5	2.84
P1231.025-014	2.5	2.8	2.9	2.5	2.60	1.8	14	0.4	0.5	2.84
P1231.025-016	2.5	2.8	2.9	2.5	2.60	1.8	16	0.4	0.5	2.84
P1231.025-018	2.5	2.8	2.9	2.5	2.60	1.8	18	0.4	0.5	2.84
P1231.025-020	2.5	2.8	2.9	2.5	2.60	1.8	20	0.4	0.5	2.84
P1231.025-022	2.5	2.8	2.9	2.5	2.60	1.8	22	0.4	0.5	2.84
P1231.025-024	2.5	2.8	2.9	2.5	2.60	1.8	24	0.4	0.5	2.84
P1231.025-026	2.5	2.8	2.9	2.5	2.60	1.8	26	0.4	0.5	2.84
P1231.025-028	2.5	2.8	2.9	2.5	2.60	1.8	28	0.4	0.5	2.84
P1231.025-030	2.5	2.8	2.9	2.5	2.60	1.8	30	0.4	0.5	2.84
P1231.025-035	2.5	2.8	2.9	2.5	2.60	1.8	35	0.4	0.5	2.84
P1231.025-040	2.5	2.8	2.9	2.5	2.60	1.8	40	0.4	0.5	2.84
P1231.030-004	3.0	3.3	3.5	3.0	3.10	2.1	4	0.5	0.6	4.07
P1231.030-005	3.0	3.3	3.5	3.0	3.10	2.1	5	0.5	0.6	4.07
P1231.030-006	3.0	3.3	3.5	3.0	3.10	2.1	6	0.5	0.6	4.07
P1231.030-008	3.0	3.3	3.5	3.0	3.10	2.1	8	0.5	0.6	4.07
P1231.030-010	3.0	3.3	3.5	3.0	3.10	2.1	10	0.5	0.6	4.07
P1231.030-012	3.0	3.3	3.5	3.0	3.10	2.1	12	0.5	0.6	4.07
P1231.030-014	3.0	3.3	3.5	3.0	3.10	2.1	14	0.5	0.6	4.07
P1231.030-016	3.0	3.3	3.5	3.0	3.10	2.1	16	0.5	0.6	4.07
P1231.030-018	3.0	3.3	3.5	3.0	3.10	2.1	18	0.5	0.6	4.07
P1231.030-020	3.0	3.3	3.5	3.0	3.10	2.1	20	0.5	0.6	4.07
P1231.030-022	3.0	3.3	3.5	3.0	3.10	2.1	22	0.5	0.6	4.07
P1231.030-024	3.0	3.3	3.5	3.0	3.10	2.1	24	0.5	0.6	4.07
P1231.030-026	3.0	3.3	3.5	3.0	3.10	2.1	26	0.5	0.6	4.07
P1231.030-028	3.0	3.3	3.5	3.0	3.10	2.1	28	0.5	0.6	4.07
P1231.030-030	3.0	3.3	3.5	3.0	3.10	2.1	30	0.5	0.6	4.07
P1231.030-035	3.0	3.3	3.5	3.0	3.10	2.1	35	0.5	0.6	4.07
P1231.030-040	3.0	3.3	3.5	3.0	3.10	2.1	40	0.5	0.6	4.07
P1231.030-045	3.0	3.3	3.5	3.0	3.10	2.1	45	0.5	0.6	4.07
P1231.030-050	3.0	3.3	3.5	3.0	3.10	2.1	50	0.5	0.6	4.07
P1231.035-004	3.5	3.8	4.0	3.5	3.62	2.3	4	0.6	0.7	5.80
P1231.035-005	3.5	3.8	4.0	3.5	3.62	2.3	5	0.6	0.7	5.80
P1231.035-006	3.5	3.8	4.0	3.5	3.62	2.3	6	0.6	0.7	5.80
P1231.035-008	3.5	3.8	4.0	3.5	3.62	2.3	8	0.6	0.7	5.80
P1231.035-010	3.5	3.8	4.0	3.5	3.62	2.3	10	0.6	0.7	5.80
P1231.035-012	3.5	3.8	4.0	3.5	3.62	2.3	12	0.6	0.7	5.80
P1231.035-014	3.5	3.8	4.0	3.5	3.62	2.3	14	0.6	0.7	5.80
P1231.035-016	3.5	3.8	4.0	3.5	3.62	2.3	16	0.6	0.7	5.80
P1231.035-018	3.5	3.8	4.0	3.5	3.62	2.3	18	0.6	0.7	5.80
P1231.035-020	3.5	3.8	4.0	3.5	3.62	2.3	20	0.6	0.7	5.80
P1231.035-022	3.5	3.8	4.0	3.5	3.62	2.3	22	0.6	0.7	5.80
P1231.035-024	3.5	3.8	4.0	3.5	3.62	2.3	24	0.6	0.7	5.80
P1231.035-026	3.5	3.8	4.0	3.5	3.62	2.3	26	0.6	0.7	5.80
P1231.035-028	3.5	3.8	4.0	3.5	3.62	2.3	28	0.6	0.7	5.80
P1231.035-030	3.5	3.8	4.0	3.5	3.62	2.3	30	0.6	0.7	5.80
P1231.035-035	3.5	3.8	4.0	3.5	3.62	2.3	35	0.6	0.7	5.80
P1231.035-040	3.5	3.8	4.0	3.5	3.62	2.3	40	0.6	0.7	5.80
P1231.035-045	3.5	3.8	4.0	3.5	3.62	2.3	45	0.6	0.7	5.80
P1231.035-050	3.5	3.8	4.0	3.5	3.62	2.3	50	0.6	0.7	5.80
P1231.040-004	4.0	4.4	4.6	4.0	4.12	2.8	4	0.65	0.8	7.25
P1231.040-005	4.0	4.4	4.6	4.0	4.12	2.8	5	0.65	0.8	7.25
P1231.040-006	4.0	4.4	4.6	4.0	4.12	2.8	6	0.65	0.8	7.25

SPRING PINS



Order No.	d ₁ nom.	d ₁ min.	d ₁ max.	Hole min.	Hole max.	d ₂	l ₁	l ₂	w ₁	Double shear kN
P1231.040-008	4.0	4.4	4.6	4.0	4.12	2.8	8	0.65	0.8	7.25
P1231.040-010	4.0	4.4	4.6	4.0	4.12	2.8	10	0.65	0.8	7.25
P1231.040-012	4.0	4.4	4.6	4.0	4.12	2.8	12	0.65	0.8	7.25
P1231.040-014	4.0	4.4	4.6	4.0	4.12	2.8	14	0.65	0.8	7.25
P1231.040-016	4.0	4.4	4.6	4.0	4.12	2.8	16	0.65	0.8	0.65
P1231.040-018	4.0	4.4	4.6	4.0	4.12	2.8	18	0.65	0.8	7.25
P1231.040-020	4.0	4.4	4.6	4.0	4.12	2.8	20	0.65	0.8	7.25
P1231.040-022	4.0	4.4	4.6	4.0	4.12	2.8	22	0.65	0.8	7.25
P1231.040-024	4.0	4.4	4.6	4.0	4.12	2.8	24	0.65	0.8	7.25
P1231.040-026	4.0	4.4	4.6	4.0	4.12	2.8	26	0.65	0.8	7.25
P1231.040-028	4.0	4.4	4.6	4.0	4.12	2.8	28	0.65	0.8	7.25
P1231.040-030	4.0	4.4	4.6	4.0	4.12	2.8	30	0.65	0.8	7.25
P1231.040-035	4.0	4.4	4.6	4.0	4.12	2.8	36	0.65	0.8	7.25
P1231.040-040	4.0	4.4	4.6	4.0	4.12	2.8	40	0.65	0.8	7.25
P1231.040-045	4.0	4.4	4.6	4.0	4.12	2.8	45	0.65	0.8	7.25
P1231.040-050	4.0	4.4	4.6	4.0	4.12	2.8	50	0.65	0.8	7.25
P1231.040-055	4.0	4.4	4.6	4.0	4.12	2.8	55	0.65	0.8	7.25
P1231.040-060	4.0	4.4	4.6	4.0	4.12	2.8	60	0.65	0.8	7.25
P1231.050-006	5.0	5.4	5.6	5.0	5.12	3.4	6	0.9	1.0	10.75
P1231.050-008	5.0	5.4	5.6	5.0	5.12	3.4	8	0.9	1.0	10.75
P1231.050-010	5.0	5.4	5.6	5.0	5.12	3.4	10	0.9	1.0	10.75
P1231.050-012	5.0	5.4	5.6	5.0	5.12	3.4	12	0.9	1.0	10.75
P1231.050-014	5.0	5.4	5.6	5.0	5.12	3.4	14	0.9	1.0	10.75
P1231.050-016	5.0	5.4	5.6	5.0	5.12	3.4	16	0.9	1.0	10.75
P1231.050-018	5.0	5.4	5.6	5.0	5.12	3.4	18	0.9	1.0	10.75
P1231.050-020	5.0	5.4	5.6	5.0	5.12	3.4	20	0.9	1.0	10.75
P1231.050-022	5.0	5.4	5.6	5.0	5.12	3.4	22	0.9	1.0	10.75
P1231.050-024	5.0	5.4	5.6	5.0	5.12	3.4	24	0.9	1.0	10.75
P1231.050-026	5.0	5.4	5.6	5.0	5.12	3.4	26	0.9	1.0	10.75
P1231.050-028	5.0	5.4	5.6	5.0	5.12	3.4	28	0.9	1.0	10.75
P1231.050-030	5.0	5.4	5.6	5.0	5.12	3.4	30	0.9	1.0	10.75
P1231.050-035	5.0	5.4	5.6	5.0	5.12	3.4	35	0.9	1.0	10.75
P1231.050-040	5.0	5.4	5.6	5.0	5.12	3.4	40	0.9	1.0	10.75
P1231.050-045	5.0	5.4	5.6	5.0	5.12	3.4	45	0.9	1.0	10.75
P1231.050-050	5.0	5.4	5.6	5.0	5.12	3.4	50	0.9	1.0	10.75
P1231.050-055	5.0	5.4	5.6	5.0	5.12	3.4	55	0.9	1.0	10.75
P1231.050-060	5.0	5.4	5.6	5.0	5.12	3.4	60	0.9	1.0	10.75
P1231.050-065	5.0	5.4	5.6	5.0	5.12	3.4	65	0.9	1.0	10.75
P1231.050-070	5.0	5.4	5.6	5.0	5.12	3.4	70	0.9	1.0	10.75
P1231.050-075	5.0	5.4	5.6	5.0	5.12	3.4	75	0.9	1.0	10.75
P1231.050-080	5.0	5.4	5.6	5.0	5.12	3.4	80	0.9	1.0	10.75
P1231.060-008	6.0	6.4	6.7	6.0	6.12	3.9	8	1.2	1.2	16.17
P1231.060-010	6.0	6.4	6.7	6.0	6.12	3.9	10	1.2	1.2	16.17
P1231.060-012	6.0	6.4	6.7	6.0	6.12	3.9	12	1.2	1.2	16.17
P1231.060-014	6.0	6.4	6.7	6.0	6.12	3.9	14	1.2	1.2	16.17
P1231.060-016	6.0	6.4	6.7	6.0	6.12	3.9	16	1.2	1.2	16.17
P1231.060-018	6.0	6.4	6.7	6.0	6.12	3.9	18	1.2	1.2	16.17
P1231.060-020	6.0	6.4	6.7	6.0	6.12	3.9	20	1.2	1.2	16.17
P1231.060-022	6.0	6.4	6.7	6.0	6.12	3.9	22	1.2	1.2	16.17
P1231.060-024	6.0	6.4	6.7	6.0	6.12	3.9	24	1.2	1.2	16.17
P1231.060-026	6.0	6.4	6.7	6.0	6.12	3.9	26	1.2	1.2	16.17
P1231.060-028	6.0	6.4	6.7	6.0	6.12	3.9	28	1.2	1.2	16.17
P1231.060-030	6.0	6.4	6.7	6.0	6.12	3.9	30	1.2	1.2	16.17
P1231.060-035	6.0	6.4	6.7	6.0	6.12	3.9	35	1.2	1.2	16.17
P1231.060-040	6.0	6.4	6.7	6.0	6.12	3.9	40	1.2	1.2	16.17
P1231.060-045	6.0	6.4	6.7	6.0	6.12	3.9	45	1.2	1.2	16.17
P1231.060-050	6.0	6.4	6.7	6.0	6.12	3.9	50	1.2	1.2	16.17
P1231.060-055	6.0	6.4	6.7	6.0	6.12	3.9	55	1.2	1.2	16.17
P1231.060-060	6.0	6.4	6.7	6.0	6.12	3.9	60	1.2	1.2	16.17
P1231.060-065	6.0	6.4	6.7	6.0	6.12	3.9	65	1.2	1.2	16.17
P1231.060-070	6.0	6.4	6.7	6.0	6.12	3.9	70	1.2	1.2	16.17
P1231.060-075	6.0	6.4	6.7	6.0	6.12	3.9	75	1.2	1.2	16.17
P1231.060-080	6.0	6.4	6.7	6.0	6.12	3.9	80	1.2	1.2	16.17
P1231.060-085	6.0	6.4	6.7	6.0	6.12	3.9	85	1.2	1.2	16.17
P1231.060-090	6.0	6.4	6.7	6.0	6.12	3.9	90	1.2	1.2	16.17
P1231.060-095	6.0	6.4	6.7	6.0	6.12	3.9	95	1.2	1.2	16.17
P1231.060-100	6.0	6.4	6.7	6.0	6.12	3.9	100	1.2	1.2	16.17
P1231.080-010	8.0	8.5	8.8	8.0	8.15	5.5	10	1.5	1.5	26.46



Stainless Slotted Spring Pins



Spring Pins

Order No.	d ₁ nom.	d ₁ min.	d ₁ max.	Hole min.	Hole max.	d ₂	l ₁	l ₂	w ₁	Double shear kN
P1231.080-012	8.0	8.5	8.8	8.0	8.15	5.5	12	1.5	1.5	26.46
P1231.080-014	8.0	8.5	8.8	8.0	8.15	5.5	14	1.5	1.5	26.46
P1231.080-016	8.0	8.5	8.8	8.0	8.15	5.5	16	1.5	1.5	26.46
P1231.080-018	8.0	8.5	8.8	8.0	8.15	5.5	18	1.5	1.5	26.46
P1231.080-020	8.0	8.5	8.8	8.0	8.15	5.5	20	1.5	1.5	26.46
P1231.080-022	8.0	8.5	8.8	8.0	8.15	5.5	22	1.5	1.5	26.46
P1231.080-024	8.0	8.5	8.8	8.0	8.15	5.5	24	1.5	1.5	26.46
P1231.080-026	8.0	8.5	8.8	8.0	8.15	5.5	26	1.5	1.5	26.46
P1231.080-028	8.0	8.5	8.8	8.0	8.15	5.5	28	1.5	1.5	26.46
P1231.080-030	8.0	8.5	8.8	8.0	8.15	5.5	30	1.5	1.5	26.46
P1231.080-035	8.0	8.5	8.8	8.0	8.15	5.5	35	1.5	1.5	26.46
P1231.080-040	8.0	8.5	8.8	8.0	8.15	5.5	40	1.5	1.5	26.46
P1231.080-045	8.0	8.5	8.8	8.0	8.15	5.5	45	1.5	1.5	26.46
P1231.080-050	8.0	8.5	8.8	8.0	8.15	5.5	50	1.5	1.5	26.46
P1231.080-055	8.0	8.5	8.8	8.0	8.15	5.5	55	1.5	1.5	26.46
P1231.080-060	8.0	8.5	8.8	8.0	8.15	5.5	60	1.5	1.5	26.46
P1231.080-065	8.0	8.5	8.8	8.0	8.15	5.5	65	1.5	1.5	26.46
P1231.080-070	8.0	8.5	8.8	8.0	8.15	5.5	70	1.5	1.5	26.46
P1231.080-075	8.0	8.5	8.8	8.0	8.15	5.5	75	1.5	1.5	26.46
P1231.080-080	8.0	8.5	8.8	8.0	8.15	5.5	80	1.5	1.5	26.46
P1231.080-085	8.0	8.5	8.8	8.0	8.15	5.5	85	1.5	1.5	26.46
P1231.080-090	8.0	8.5	8.8	8.0	8.15	5.5	90	1.5	1.5	26.46
P1231.080-095	8.0	8.5	8.8	8.0	8.15	5.5	95	1.5	1.5	26.46
P1231.080-100	8.0	8.5	8.8	8.0	8.15	5.5	100	1.5	1.5	26.46
P1231.080-120	8.0	8.5	8.8	8.0	8.15	5.5	120	1.5	1.5	26.46
P1231.100-010	10.0	10.5	10.8	10.0	10.15	6.5	10	2.0	2.0	42.14
P1231.100-012	10.0	10.5	10.8	10.0	10.15	6.5	12	2.0	2.0	42.14
P1231.100-014	10.0	10.5	10.8	10.0	10.15	6.5	14	2.0	2.0	42.14
P1231.100-016	10.0	10.5	10.8	10.0	10.15	6.5	16	2.0	2.0	42.14
P1231.100-018	10.0	10.5	10.8	10.0	10.15	6.5	18	2.0	2.0	42.14
P1231.100-020	10.0	10.5	10.8	10.0	10.15	6.5	20	2.0	2.0	42.14
P1231.100-022	10.0	10.5	10.8	10.0	10.15	6.5	22	2.0	2.0	42.14
P1231.100-024	10.0	10.5	10.8	10.0	10.15	6.5	24	2.0	2.0	42.14
P1231.100-026	10.0	10.5	10.8	10.0	10.15	6.5	26	2.0	2.0	42.14
P1231.100-028	10.0	10.5	10.8	10.0	10.15	6.5	28	2.0	2.0	42.14
P1231.100-030	10.0	10.5	10.8	10.0	10.15	6.5	30	2.0	2.0	42.14
P1231.100-035	10.0	10.5	10.8	10.0	10.15	6.5	35	2.0	2.0	42.14
P1231.100-040	10.0	10.5	10.8	10.0	10.15	6.5	40	2.0	2.0	42.14
P1231.100-045	10.0	10.5	10.8	10.0	10.15	6.5	45	2.0	2.0	42.14
P1231.100-050	10.0	10.5	10.8	10.0	10.15	6.5	50	2.0	2.0	42.14
P1231.100-055	10.0	10.5	10.8	10.0	10.15	6.5	55	2.0	2.0	42.14
P1231.100-060	10.0	10.5	10.8	10.0	10.15	6.5	60	2.0	2.0	42.14
P1231.100-065	10.0	10.5	10.8	10.0	10.15	6.5	65	2.0	2.0	42.14
P1231.100-070	10.0	10.5	10.8	10.0	10.15	6.5	70	2.0	2.0	42.14
P1231.100-075	10.0	10.5	10.8	10.0	10.15	6.5	75	2.0	2.0	42.14
P1231.100-080	10.0	10.5	10.8	10.0	10.15	6.5	80	2.0	2.0	42.14
P1231.100-085	10.0	10.5	10.8	10.0	10.15	6.5	85	2.0	2.0	42.14
P1231.100-090	10.0	10.5	10.8	10.0	10.15	6.5	90	2.0	2.0	42.14
P1231.100-095	10.0	10.5	10.8	10.0	10.15	6.5	95	2.0	2.0	42.14
P1231.100-100	10.0	10.5	10.8	10.0	10.15	6.5	100	2.0	2.0	42.14
P1231.100-120	10.0	10.5	10.8	10.0	10.15	6.5	120	2.0	2.0	42.14
P1231.100-130	10.0	10.5	10.8	10.0	10.15	6.5	130	2.0	2.0	42.14
P1231.100-140	10.0	10.5	10.8	10.0	10.15	6.5	140	2.0	2.0	42.14
P1231.100-150	10.0	10.5	10.8	10.0	10.15	6.5	150	2.0	2.0	42.14
P1231.100-160	10.0	10.5	10.8	10.0	10.15	6.5	160	2.0	2.0	42.14

SPRING PINS