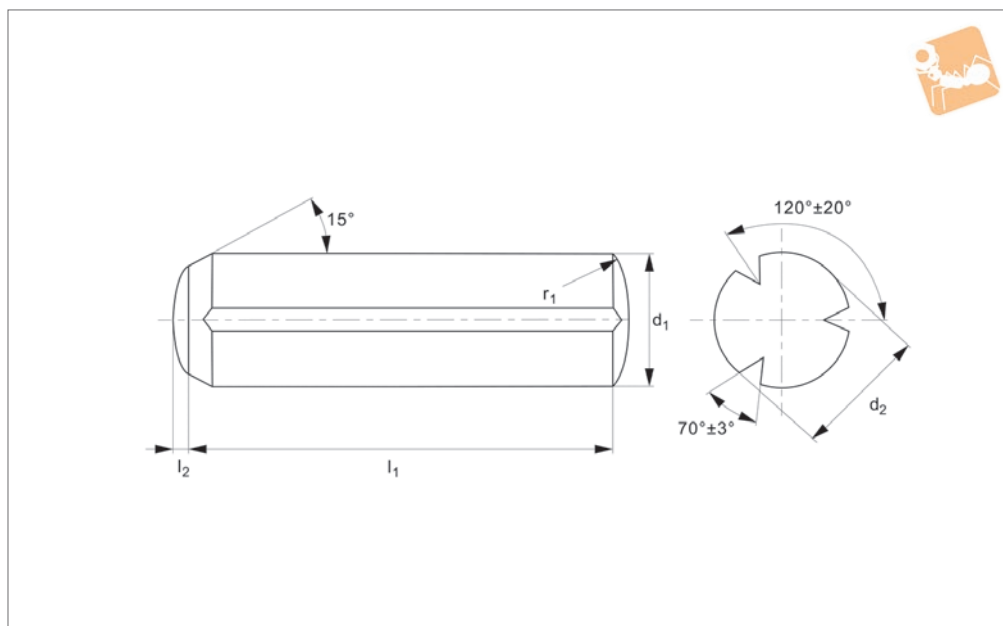
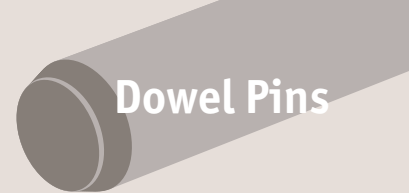




P1208

DOWEL PINS

Material

Mild steel (WS 1,0718, 9SMnPb28).

Technical Notes

To DIN 1473 (GP 3, similar to ISO 8740).

Full length grooves.

Diameters tolerance: under $\varnothing 4$ h9, over $\varnothing 4$ tolerance h11.

Nominal length l_1 does not include radiused ends.

Tips

Three swaged grooves at 120° pitch all along the length.

When the pin is driven into the drilled hole

the material displaced is forced back, to close up the groove and lock the pin into place. Allows the use of non precision holes.

Used to fix two or more components together with maximum rigidity.

Order No.	d_1 tol. h9/h11	l_1 tol. js15	l_2	d_2 over grooves	Hole min.	Hole max.	Double shear kN
P1208.010-004	1.0	4	0.14	1.05	1.0	1.025	0.7
P1208.010-005	1.0	5	0.14	1.05	1.0	1.025	0.7
P1208.010-006	1.0	6	0.14	1.05	1.0	1.025	0.7
P1208.010-008	1.0	8	0.14	1.05	1.0	1.025	0.7
P1208.012-004	1.2	4	0.16	1.25	1.2	1.225	1.0
P1208.012-005	1.2	5	0.16	1.25	1.2	1.225	1.0
P1208.012-006	1.2	6	0.16	1.25	1.2	1.225	1.0
P1208.012-008	1.2	8	0.16	1.25	1.2	1.225	1.0
P1208.015-004	1.5	4	0.20	1.60	1.5	1.525	1.6
P1208.015-005	1.5	5	0.20	1.60	1.5	1.525	1.6
P1208.015-006	1.5	6	0.20	1.60	1.5	1.525	1.6
P1208.015-008	1.5	8	0.20	1.60	1.5	1.525	1.6
P1208.015-010	1.5	10	0.20	1.60	1.5	1.525	1.6
P1208.015-012	1.5	12	0.20	1.60	1.5	1.525	1.6
P1208.015-014	1.5	14	0.20	1.60	1.5	1.525	1.6
P1208.015-016	1.5	16	0.20	1.60	1.5	1.525	1.6
P1208.015-018	1.5	18	0.20	1.60	1.5	1.525	1.6
P1208.015-020	1.5	20	0.20	1.60	1.5	1.525	1.6
P1208.020-004	2.0	4	0.25	2.15	2.0	2.025	2.85
P1208.020-005	2.0	5	0.25	2.15	2.0	2.025	2.85
P1208.020-006	2.0	6	0.25	2.15	2.0	2.025	2.85
P1208.020-008	2.0	8	0.25	2.15	2.0	2.025	2.85
P1208.020-010	2.0	10	0.25	2.15	2.0	2.025	2.85
P1208.020-012	2.0	12	0.25	2.15	2.0	2.025	2.85
P1208.020-014	2.0	14	0.25	2.15	2.0	2.025	2.85
P1208.020-016	2.0	16	0.25	2.15	2.0	2.025	2.85
P1208.020-018	2.0	18	0.25	2.15	2.0	2.025	2.85
P1208.020-020	2.0	20	0.25	2.15	2.0	2.025	2.85
P1208.020-024	2.0	24	0.25	2.15	2.0	2.025	2.85
P1208.020-026	2.0	26	0.25	2.15	2.0	2.025	2.85



Order No.	d ₁ tol. h9/h11	l ₁ tol. js15	l ₂	d ₂ over grooves	Hole min.	Hole max.	Double shear kN
P1208.020-028	2.0	28	0.25	2.15	2.0	2.025	2.85
P1208.020-030	2.0	30	0.25	2.15	2.0	2.025	2.85
P1208.025-006	2.5	6	0.30	2.65	2.5	2.525	4.25
P1208.025-008	2.5	8	0.30	2.65	2.5	2.525	4.25
P1208.025-010	2.5	10	0.30	2.65	2.5	2.525	4.25
P1208.025-012	2.5	12	0.30	2.65	2.5	2.525	4.25
P1208.025-014	2.5	14	0.30	2.65	2.5	2.525	4.25
P1208.025-016	2.5	16	0.30	2.65	2.5	2.525	4.25
P1208.025-018	2.5	18	0.30	2.65	2.5	2.525	4.25
P1208.025-020	2.5	20	0.30	2.65	2.5	2.525	4.25
P1208.025-024	2.5	24	0.30	2.65	2.5	2.525	4.25
P1208.025-026	2.5	26	0.30	2.65	2.5	2.525	4.25
P1208.025-028	2.5	28	0.30	2.65	2.5	2.525	4.25
P1208.025-030	2.5	30	0.30	2.65	2.5	2.525	4.25
P1208.030-006	3.0	6	0.40	3.20	3.0	3.025	6.15
P1208.030-008	3.0	8	0.40	3.20	3.0	3.025	6.15
P1208.030-010	3.0	10	0.40	3.20	3.0	3.025	6.15
P1208.030-012	3.0	12	0.40	3.20	3.0	3.025	6.15
P1208.030-014	3.0	14	0.40	3.20	3.0	3.025	6.15
P1208.030-016	3.0	16	0.40	3.20	3.0	3.025	6.15
P1208.030-018	3.0	18	0.40	3.20	3.0	3.025	6.15
P1208.030-020	3.0	20	0.40	3.20	3.0	3.025	6.15
P1208.030-024	3.0	24	0.40	3.20	3.0	3.025	6.15
P1208.030-026	3.0	26	0.40	3.20	3.0	3.025	6.15
P1208.030-028	3.0	28	0.40	3.20	3.0	3.025	6.15
P1208.030-030	3.0	30	0.40	3.20	3.0	3.025	6.15
P1208.040-006	4.0	6	0.50	4.25	4.0	4.075	10.6
P1208.040-008	4.0	8	0.50	4.25	4.0	4.075	10.6
P1208.040-010	4.0	10	0.50	4.25	4.0	4.075	10.6
P1208.040-012	4.0	12	0.50	4.25	4.0	4.075	10.6
P1208.040-014	4.0	14	0.50	4.25	4.0	4.075	10.6
P1208.040-016	4.0	16	0.50	4.25	4.0	4.075	10.6
P1208.040-018	4.0	18	0.50	4.25	4.0	4.075	10.6
P1208.040-020	4.0	20	0.50	4.25	4.0	4.075	10.6
P1208.040-024	4.0	24	0.50	4.25	4.0	4.075	10.6
P1208.040-026	4.0	26	0.50	4.25	4.0	4.075	10.6
P1208.040-028	4.0	28	0.50	4.25	4.0	4.075	10.6
P1208.040-030	4.0	30	0.50	4.25	4.0	4.075	10.6
P1208.040-032	4.0	32	0.50	4.25	4.0	4.075	10.6
P1208.040-036	4.0	36	0.50	4.25	4.0	4.075	10.6
P1208.040-040	4.0	40	0.50	4.25	4.0	4.075	10.6
P1208.040-045	4.0	45	0.50	4.25	4.0	4.075	10.6
P1208.040-050	4.0	50	0.50	4.25	4.0	4.075	10.6
P1208.050-008	5.0	8	0.60	5.25	5.0	5.075	16.5
P1208.050-010	5.0	10	0.60	5.25	5.0	5.075	16.5
P1208.050-012	5.0	12	0.60	5.25	5.0	5.075	16.5
P1208.050-014	5.0	14	0.60	5.25	5.0	5.075	16.5
P1208.050-016	5.0	16	0.60	5.25	5.0	5.075	16.5
P1208.050-018	5.0	18	0.60	5.25	5.0	5.075	16.5
P1208.050-020	5.0	20	0.60	5.25	5.0	5.075	16.5
P1208.050-024	5.0	24	0.60	5.25	5.0	5.075	16.5
P1208.050-026	5.0	26	0.60	5.25	5.0	5.075	16.5
P1208.050-028	5.0	28	0.60	5.25	5.0	5.075	16.5
P1208.050-030	5.0	30	0.60	5.25	5.0	5.075	16.5
P1208.050-032	5.0	32	0.60	5.25	5.0	5.075	16.5
P1208.050-036	5.0	34	0.60	5.25	5.0	5.075	16.5
P1208.050-040	5.0	40	0.60	5.25	5.0	5.075	16.5
P1208.050-045	5.0	45	0.60	5.25	5.0	5.075	16.5
P1208.050-050	5.0	50	0.60	5.25	5.0	5.075	16.5
P1208.060-008	6.0	8	0.80	6.30	6.0	6.075	6.0
P1208.060-010	6.0	10	0.80	6.30	6.0	6.075	6.0
P1208.060-012	6.0	12	0.80	6.30	6.0	6.075	6.0
P1208.060-014	6.0	14	0.80	6.30	6.0	6.075	6.0
P1208.060-016	6.0	16	0.80	6.30	6.0	6.075	6.0
P1208.060-018	6.0	18	0.80	6.30	6.0	6.075	6.0
P1208.060-020	6.0	20	0.80	6.30	6.0	6.075	6.0
P1208.060-024	6.0	24	0.80	6.30	6.0	6.075	6.0
P1208.060-026	6.0	26	0.80	6.30	6.0	6.075	6.0

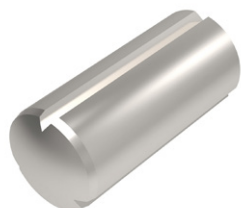


Steel Grooved Pins

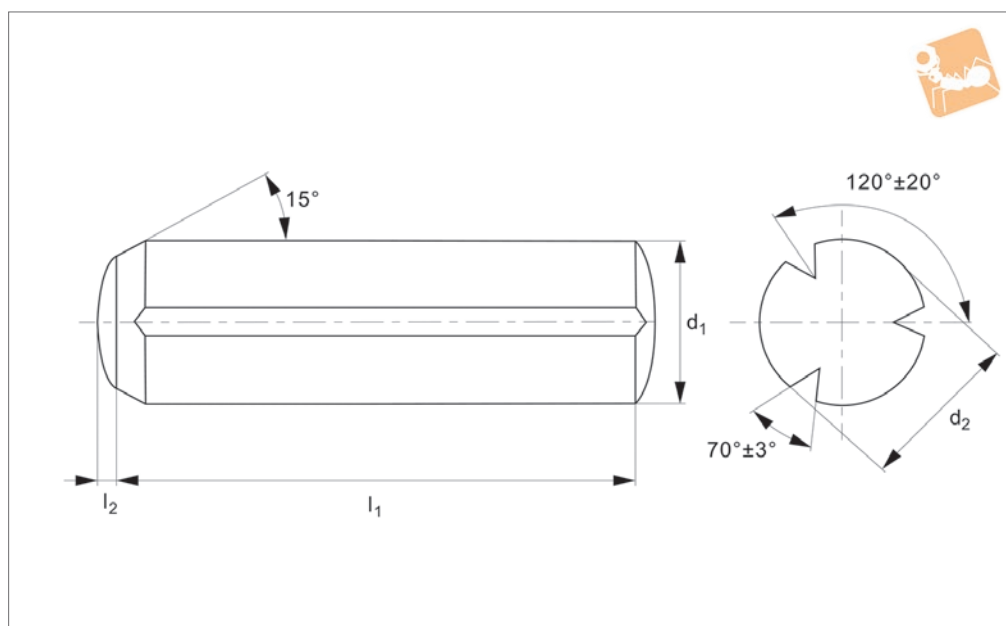


Order No.	d ₁ tol. h9/h11	l ₁ tol. js15	l ₂	d ₂ over grooves	Hole min.	Hole max.	Double shear kN
P1208.060-028	6.0	28	0.80	6.30	6.0	6.075	6.0
P1208.060-030	6.0	30	0.80	6.30	6.0	6.075	6.0
P1208.060-032	6.0	32	0.80	6.30	6.0	6.075	6.0
P1208.060-036	6.0	36	0.80	6.30	6.0	6.075	6.0
P1208.060-040	6.0	40	0.80	6.30	6.0	6.075	6.0
P1208.060-045	6.0	45	0.80	6.30	6.0	6.075	6.0
P1208.060-050	6.0	50	0.80	6.30	6.0	6.075	6.0
P1208.060-055	6.0	55	0.80	6.30	6.0	6.075	6.0
P1208.080-010	8.0	10	1.00	8.30	8.0	8.090	40.5
P1208.080-012	8.0	12	1.00	8.30	8.0	8.090	40.5
P1208.080-014	8.0	14	1.00	8.30	8.0	8.090	40.5
P1208.080-016	8.0	16	1.00	8.30	8.0	8.090	40.5
P1208.080-018	8.0	18	1.00	8.30	8.0	8.090	40.5
P1208.080-020	8.0	20	1.00	8.30	8.0	8.090	40.5
P1208.080-024	8.0	24	1.00	8.30	8.0	8.090	40.5
P1208.080-026	8.0	26	1.00	8.30	8.0	8.090	40.5
P1208.080-028	8.0	28	1.00	8.30	8.0	8.090	40.5
P1208.080-030	8.0	30	1.00	8.30	8.0	8.090	40.5
P1208.080-032	8.0	32	1.00	8.30	8.0	8.090	40.5
P1208.080-036	8.0	36	1.00	8.30	8.0	8.090	40.5
P1208.080-040	8.0	40	1.00	8.30	8.0	8.090	40.5
P1208.080-045	8.0	45	1.00	8.30	8.0	8.090	40.5
P1208.080-050	8.0	50	1.00	8.30	8.0	8.090	40.5
P1208.080-055	8.0	55	1.00	8.30	8.0	8.090	40.5
P1208.080-060	8.0	60	1.00	8.30	8.0	8.090	40.5
P1208.080-065	8.0	65	1.00	8.30	8.0	8.090	40.5
P1208.080-070	8.0	70	1.00	8.30	8.0	8.090	40.5
P1208.100-014	10.0	14	1.20	10.35	10.0	10.09	63.2
P1208.100-016	10.0	16	1.20	10.35	10.0	10.09	63.2
P1208.100-018	10.0	18	1.20	10.35	10.0	10.09	63.2
P1208.100-020	10.0	20	1.20	10.35	10.0	10.09	63.2
P1208.100-024	10.0	24	1.20	10.35	10.0	10.09	63.2
P1208.100-026	10.0	26	1.20	10.35	10.0	10.09	63.2
P1208.100-028	10.0	28	1.20	10.35	10.0	10.09	63.2
P1208.100-030	10.0	30	1.20	10.35	10.0	10.09	63.2
P1208.100-032	10.0	32	1.20	10.35	10.0	10.09	63.2
P1208.100-036	10.0	36	1.20	10.35	10.0	10.09	63.2
P1208.100-040	10.0	40	1.20	10.35	10.0	10.09	63.2
P1208.100-045	10.0	45	1.20	10.35	10.0	10.09	63.2
P1208.100-050	10.0	50	1.20	10.35	10.0	10.09	63.2
P1208.100-055	10.0	55	1.20	10.35	10.0	10.09	63.2
P1208.100-060	10.0	60	1.20	10.35	10.0	10.09	63.2
P1208.100-065	10.0	65	1.20	10.35	10.0	10.09	63.2
P1208.100-070	10.0	70	1.20	10.35	10.0	10.09	63.2
P1208.100-075	10.0	75	1.20	10.35	10.0	10.09	63.2
P1208.100-080	10.0	80	1.20	10.35	10.0	10.09	63.2
P1208.120-014	12.0	14	1.60	12.35	12.0	12.11	91
P1208.120-016	12.0	16	1.60	12.35	12.0	12.11	91
P1208.120-018	12.0	18	1.60	12.35	12.0	12.11	91
P1208.120-020	12.0	20	1.60	12.35	12.0	12.11	91
P1208.120-024	12.0	24	1.60	12.35	12.0	12.11	91
P1208.120-026	12.0	26	1.60	12.35	12.0	12.11	91
P1208.120-028	12.0	28	1.60	12.35	12.0	12.11	91
P1208.120-030	12.0	30	1.60	12.35	12.0	12.11	91
P1208.120-032	12.0	32	1.60	12.35	12.0	12.11	91
P1208.120-036	12.0	36	1.60	12.35	12.0	12.11	91
P1208.120-040	12.0	40	1.60	12.35	12.0	12.11	91
P1208.120-045	12.0	45	1.60	12.35	12.0	12.11	91
P1208.120-050	12.0	50	1.60	12.35	12.0	12.11	91
P1208.120-055	12.0	55	1.60	12.35	12.0	12.11	91
P1208.120-060	12.0	60	1.60	12.35	12.0	12.11	91
P1208.120-065	12.0	65	1.60	12.35	12.0	12.11	91
P1208.120-070	12.0	70	1.60	12.35	12.0	12.11	91
P1208.120-075	12.0	75	1.60	12.35	12.0	12.11	91
P1208.120-080	12.0	80	1.60	12.35	12.0	12.11	91

DOWEL PINS



P1209



Material

Stainless steel (A2, AISI 303).

Technical Notes

To DIN 1473 (GP 3, similar to ISO 8740).

Full length grooves.

Diameters tolerance under $\varnothing 4$ h9, over $\varnothing 4$ tolerance h11.

Nominal length l_1 does not include radi-

used ends.

Allows the use of non precision holes.

Used to fix two or more components together with maximum rigidity.

Tips

Three swaged grooves at 120° pitch all along the length.

When the pin is driven into the drilled hole

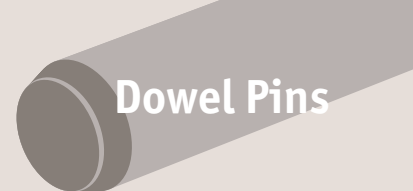
the material displaced is forced back, to close up the groove and lock the pin into place. Allows the use of non precision holes.

Used to fix two or more components together with maximum rigidity.

Order No.	d_1 tol. h9/h11	l_1 tol. js15	l_2	d_2 over grooves	Hole min.	Hole max.	Double shear kN
P1209.010-004	1.0	4	0.14	1.05	1.0	1.025	0.7
P1209.010-005	1.0	5	0.14	1.05	1.0	1.025	0.7
P1209.010-006	1.0	6	0.14	1.05	1.0	1.025	0.7
P1209.010-008	1.0	8	0.14	1.05	1.0	1.025	0.7
P1209.012-004	1.2	4	0.16	1.25	1.2	1.225	1.0
P1209.012-005	1.2	5	0.16	1.25	1.2	1.225	1.0
P1209.012-006	1.2	6	0.16	1.25	1.2	1.225	1.0
P1209.012-008	1.2	8	0.16	1.25	1.2	1.225	1.0
P1209.015-004	1.5	4	0.20	1.60	1.5	1.525	1.6
P1209.015-005	1.5	5	0.20	1.60	1.5	1.525	1.6
P1209.015-006	1.5	6	0.20	1.60	1.5	1.525	1.6
P1209.015-008	1.5	8	0.20	1.60	1.5	1.525	1.6
P1209.015-010	1.5	10	0.20	1.60	1.5	1.525	1.6
P1209.015-012	1.5	12	0.20	1.60	1.5	1.525	1.6
P1209.015-014	1.5	14	0.20	1.60	1.5	1.525	1.6
P1209.015-016	1.5	16	0.20	1.60	1.5	1.525	1.6
P1209.015-018	1.5	18	0.20	1.60	1.5	1.525	1.6
P1209.015-020	1.5	20	0.20	1.60	1.5	1.525	1.6
P1209.020-004	2.0	4	0.25	2.15	2.0	2.025	2.85
P1209.020-005	2.0	5	0.25	2.15	2.0	2.025	2.85
P1209.020-006	2.0	6	0.25	2.15	2.0	2.025	2.85
P1209.020-008	2.0	8	0.25	2.15	2.0	2.025	2.85
P1209.020-010	2.0	10	0.25	2.15	2.0	2.025	2.85
P1209.020-012	2.0	12	0.25	2.15	2.0	2.025	2.85
P1209.020-014	2.0	14	0.25	2.15	2.0	2.025	2.85
P1209.020-016	2.0	16	0.25	2.15	2.0	2.025	2.85
P1209.020-018	2.0	18	0.25	2.15	2.0	2.025	2.85
P1209.020-020	2.0	20	0.25	2.15	2.0	2.025	2.85
P1209.020-022	2.0	24	0.25	2.15	2.0	2.025	2.85



Stainless Grooved Pins



Dowel Pins

Order No.	d ₁ tol. h9/h11	l ₁ tol. js15	l ₂	d ₂ over grooves	Hole min.	Hole max.	Double shear kN
P1209.020-025	2.0	26	0.25	2.15	2.0	2.025	2.85
P1209.020-028	2.0	28	0.25	2.15	2.0	2.025	2.85
P1209.020-030	2.0	30	0.25	2.15	2.0	2.025	2.85
P1209.025-006	2.5	6	0.30	2.65	2.5	2.525	4.25
P1209.025-008	2.5	8	0.30	2.65	2.5	2.525	4.25
P1209.025-010	2.5	10	0.30	2.65	2.5	2.525	4.25
P1209.025-012	2.5	12	0.30	2.65	2.5	2.525	4.25
P1209.025-014	2.5	14	0.30	2.65	2.5	2.525	4.25
P1209.025-016	2.5	16	0.30	2.65	2.5	2.525	4.25
P1209.025-018	2.5	18	0.30	2.65	2.5	2.525	4.25
P1209.025-020	2.5	20	0.30	2.65	2.5	2.525	4.25
P1209.025-022	2.5	24	0.30	2.65	2.5	2.525	4.25
P1209.025-025	2.5	26	0.30	2.65	2.5	2.525	4.25
P1209.025-028	2.5	28	0.30	2.65	2.5	2.525	4.25
P1209.025-030	2.5	30	0.30	2.65	2.5	2.525	4.25
P1209.030-006	3.0	6	0.40	3.20	3.0	3.025	6.15
P1209.030-008	3.0	8	0.40	3.20	3.0	3.025	6.15
P1209.030-010	3.0	10	0.40	3.20	3.0	3.025	6.15
P1209.030-012	3.0	12	0.40	3.20	3.0	3.025	6.15
P1209.030-014	3.0	14	0.40	3.20	3.0	3.025	6.15
P1209.030-016	3.0	16	0.40	3.20	3.0	3.025	6.15
P1209.030-018	3.0	18	0.40	3.20	3.0	3.025	6.15
P1209.030-020	3.0	20	0.40	3.20	3.0	3.025	6.15
P1209.030-022	3.0	22	0.40	3.20	3.0	3.025	6.15
P1209.030-025	3.0	26	0.40	3.20	3.0	3.025	6.15
P1209.030-028	3.0	28	0.40	3.20	3.0	3.025	6.15
P1209.030-030	3.0	30	0.40	3.20	3.0	3.025	6.15
P1209.040-006	4.0	6	0.50	4.25	4.0	4.075	10.6
P1209.040-008	4.0	8	0.50	4.25	4.0	4.075	10.6
P1209.040-010	4.0	10	0.50	4.25	4.0	4.075	10.6
P1209.040-012	4.0	12	0.50	4.25	4.0	4.075	10.6
P1209.040-014	4.0	14	0.50	4.25	4.0	4.075	10.6
P1209.040-016	4.0	16	0.50	4.25	4.0	4.075	10.6
P1209.040-018	4.0	18	0.50	4.25	4.0	4.075	10.6
P1209.040-020	4.0	20	0.50	4.25	4.0	4.075	10.6
P1209.040-025	4.0	26	0.50	4.25	4.0	4.075	10.6
P1209.040-028	4.0	28	0.50	4.25	4.0	4.075	10.6
P1209.040-030	4.0	30	0.50	4.25	4.0	4.075	10.6
P1209.040-032	4.0	32	0.50	4.25	4.0	4.075	10.6
P1209.040-036	4.0	36	0.50	4.25	4.0	4.075	10.6
P1209.040-040	4.0	40	0.50	4.25	4.0	4.075	10.6
P1209.040-045	4.0	45	0.50	4.25	4.0	4.075	10.6
P1209.040-050	4.0	50	0.50	4.25	4.0	4.075	10.6
P1209.050-008	5.0	8	0.60	5.25	5.0	5.075	16.5
P1209.050-010	5.0	10	0.60	5.25	5.0	5.075	16.5
P1209.050-012	5.0	12	0.60	5.25	5.0	5.075	16.5
P1209.050-014	5.0	14	0.60	5.25	5.0	5.075	16.5
P1209.050-016	5.0	16	0.60	5.25	5.0	5.075	16.5
P1209.050-018	5.0	18	0.60	5.25	5.0	5.075	16.5
P1209.050-020	5.0	20	0.60	5.25	5.0	5.075	16.5
P1209.050-022	5.0	24	0.60	5.25	5.0	5.075	16.5
P1209.050-025	5.0	26	0.60	5.25	5.0	5.075	16.5
P1209.050-028	5.0	28	0.60	5.25	5.0	5.075	16.5
P1209.050-030	5.0	30	0.60	5.25	5.0	5.075	16.5
P1209.050-032	5.0	32	0.60	5.25	5.0	5.075	16.5
P1209.050-036	5.0	36	0.60	5.25	5.0	5.075	16.5
P1209.050-040	5.0	40	0.60	5.25	5.0	5.075	16.5
P1209.050-045	5.0	45	0.60	5.25	5.0	5.075	16.5
P1209.050-050	5.0	50	0.60	5.25	5.0	5.075	16.5
P1209.060-008	6.0	8	0.80	6.30	6.0	6.075	22.8
P1209.060-010	6.0	10	0.80	6.30	6.0	6.075	22.8
P1209.060-012	6.0	12	0.80	6.30	6.0	6.075	22.8
P1209.060-014	6.0	14	0.80	6.30	6.0	6.075	22.8
P1209.060-016	6.0	16	0.80	6.30	6.0	6.075	22.8
P1209.060-018	6.0	18	0.80	6.30	6.0	6.075	22.8
P1209.060-020	6.0	20	0.80	6.30	6.0	6.075	22.8
P1209.060-022	6.0	24	0.80	6.30	6.0	6.075	22.8
P1209.060-025	6.0	26	0.80	6.30	6.0	6.075	22.8

DOWEL PINS



Order No.	d ₁ tol. h9/h11	l ₁ tol. js15	l ₂	d ₂ over grooves	Hole min.	Hole max.	Double shear kN
P1209.060-028	6.0	28	0.80	6.30	6.0	6.075	22.8
P1209.060-030	6.0	30	0.80	6.30	6.0	6.075	22.8
P1209.060-032	6.0	32	0.80	6.30	6.0	6.075	22.8
P1209.060-036	6.0	36	0.80	6.30	6.0	6.075	22.8
P1209.060-040	6.0	40	0.80	6.30	6.0	6.075	22.8
P1209.060-045	6.0	45	0.80	6.30	6.0	6.075	22.8
P1209.060-050	6.0	50	0.80	6.30	6.0	6.075	22.8
P1209.060-055	6.0	55	0.80	6.30	6.0	6.075	22.8
P1209.060-060	6.0	60	0.80	6.30	6.0	6.075	22.8
P1209.080-010	8.0	10	1.00	8.30	8.0	8.090	40.5
P1209.080-012	8.0	12	1.00	8.30	8.0	8.090	40.5
P1209.080-014	8.0	14	1.00	8.30	8.0	8.090	40.5
P1209.080-016	8.0	16	1.00	8.30	8.0	8.090	40.5
P1209.080-018	8.0	18	1.00	8.30	8.0	8.090	40.5
P1209.080-020	8.0	20	1.00	8.30	8.0	8.090	40.5
P1209.080-022	8.0	24	1.00	8.30	8.0	8.090	40.5
P1209.080-025	8.0	26	1.00	8.30	8.0	8.090	40.5
P1209.080-028	8.0	28	1.00	8.30	8.0	8.090	40.5
P1209.080-030	8.0	30	1.00	8.30	8.0	8.090	40.5
P1209.080-032	8.0	32	1.00	8.30	8.0	8.090	40.5
P1209.080-036	8.0	36	1.00	8.30	8.0	8.090	40.5
P1209.080-040	8.0	40	1.00	8.30	8.0	8.090	40.5
P1209.080-045	8.0	45	1.00	8.30	8.0	8.090	40.5
P1209.080-050	8.0	50	1.00	8.30	8.0	8.090	40.5
P1209.080-055	8.0	55	1.00	8.30	8.0	8.090	40.5
P1209.080-060	8.0	60	1.00	8.30	8.0	8.090	40.5
P1209.080-065	8.0	65	1.00	8.30	8.0	8.090	40.5
P1209.080-070	8.0	70	1.00	8.30	8.0	8.090	40.5
P1209.100-014	10.0	14	1.20	10.35	10.0	10.09	63.2
P1209.100-016	10.0	16	1.20	10.35	10.0	10.09	63.2
P1209.100-018	10.0	18	1.20	10.35	10.0	10.09	63.2
P1209.100-020	10.0	20	1.20	10.35	10.0	10.09	63.2
P1209.100-022	10.0	24	1.20	10.35	10.0	10.09	63.2
P1209.100-025	10.0	26	1.20	10.35	10.0	10.09	63.2
P1209.100-028	10.0	28	1.20	10.35	10.0	10.09	63.2
P1209.100-030	10.0	30	1.20	10.35	10.0	10.09	63.2
P1209.100-032	10.0	32	1.20	10.35	10.0	10.09	63.2
P1209.100-036	10.0	36	1.20	10.35	10.0	10.09	63.2
P1209.100-040	10.0	40	1.20	10.35	10.0	10.09	63.2
P1209.100-045	10.0	45	1.20	10.35	10.0	10.09	63.2
P1209.100-050	10.0	50	1.20	10.35	10.0	10.09	63.2
P1209.100-055	10.0	55	1.20	10.35	10.0	10.09	63.2
P1209.100-060	10.0	60	1.20	10.35	10.0	10.09	63.2
P1209.100-065	10.0	65	1.20	10.35	10.0	10.09	63.2
P1209.100-070	10.0	70	1.20	10.35	10.0	10.09	63.2
P1209.100-075	10.0	75	1.20	10.35	10.0	10.09	63.2
P1209.100-080	10.0	80	1.20	10.35	10.0	10.09	63.2
P1209.120-014	12.0	14	1.60	12.35	12.0	12.11	91
P1209.120-016	12.0	16	1.60	12.35	12.0	12.11	91
P1209.120-018	12.0	18	1.60	12.35	12.0	12.11	91
P1209.120-020	12.0	20	1.60	12.35	12.0	12.11	91
P1209.120-022	12.0	24	1.60	12.35	12.0	12.11	91
P1209.120-025	12.0	26	1.60	12.35	12.0	12.11	91
P1209.120-028	12.0	28	1.60	12.35	12.0	12.11	91
P1209.120-030	12.0	30	1.60	12.35	12.0	12.11	91
P1209.120-032	12.0	32	1.60	12.35	12.0	12.11	91
P1209.120-036	12.0	36	1.60	12.35	12.0	12.11	91
P1209.120-040	12.0	40	1.60	12.35	12.0	12.11	91
P1209.120-045	12.0	45	1.60	12.35	12.0	12.11	91
P1209.120-050	12.0	50	1.60	12.35	12.0	12.11	91
P1209.120-055	12.0	55	1.60	12.35	12.0	12.11	91
P1209.120-060	12.0	60	1.60	12.35	12.0	12.11	91
P1209.120-065	12.0	65	1.60	12.35	12.0	12.11	91
P1209.120-070	12.0	70	1.60	12.35	12.0	12.11	91
P1209.120-075	12.0	75	1.60	12.35	12.0	12.11	91
P1209.120-080	12.0	80	1.60	12.35	12.0	12.11	91