

34090

SELF-ALIGNING PADS

Material

Spring element: thermoplastic PUR.
 Ball: Ball-bearing steel, hardened, bright.
 stainless steel 1.3541, nickel-plated.
 Body: Heat-treated steel, tempered, phos-

phated. stainless steel 1.4057, heat-treated.

loading capacity valid for steel and stainless steel design.

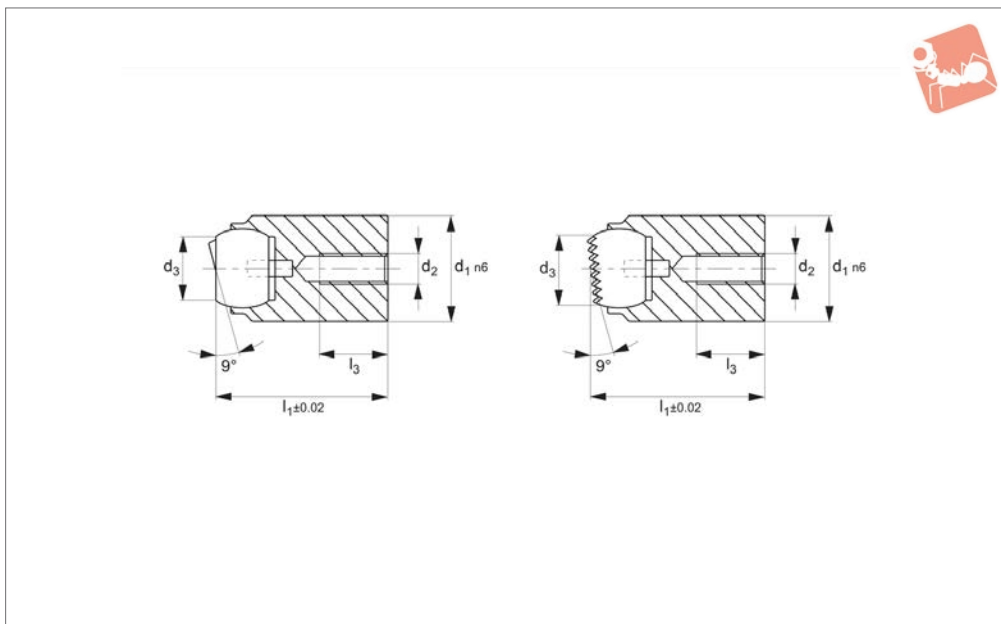
Technical Notes

Ball protected against rotating.

Order No.	Material	Ball	d ₁	d ₂	d ₃	l ₁	l ₂ -0.5	A/F	Load capacity for static load kN max.	Tightening torque Nm max.	Weight g
34090.W0012	Steel Plain Surface	10	13	M 6	7.2	13	8	11	10	13	13
34090.W0013	Steel Plain Surface	10	13	M 8	7.2	13	8	11	10	14	14
34090.W0018	Steel Plain Surface	16	20	M 8	10.5	18	10	17	25	25	39
34090.W0019	Steel Plain Surface	16	20	M10	10.5	18	10	17	25	46	40
34090.W0020	Steel Plain Surface	16	20	M10	10.5	18	10	17	25	46	44
34090.W0030	Steel Plain Surface	25	30	M16	20	27	16	27	90	206	153
34090.W0050	Steel Plain Surface	40	50	M20	34.5	35	20	41	165	407	491
34090.W0060	Steel Plain Surface	40	50	M24	34.5	35	24	41	165	698	526
34090.W0112	Stainless Plain Surface	10	13	M 6	7.2	13	8	11	10	13	13
34090.W0113	Stainless Plain Surface	10	13	M 8	7.2	13	8	11	10	14	14
34090.W0118	Stainless Plain Surface	16	20	M 8	10.5	18	10	17	25	25	39
34090.W0119	Stainless Plain Surface	16	20	M10	10.5	18	10	17	25	46	40
34090.W0120	Stainless Plain Surface	16	20	M10	10.5	18	10	17	25	46	44
34090.W0130	Stainless Plain Surface	25	30	M16	20	27	16	27	90	206	153
34090.W0150	Stainless Plain Surface	40	50	M20	34.5	35	20	41	165	407	491
34090.W0160	Stainless Plain Surface	40	50	M24	34.5	35	24	41	165	698	526
34090.W0312	Steel Ribbed Surface	10	13	M 6	7.2	13	8	11	10	13	13
34090.W0313	Steel Ribbed Surface	10	13	M 8	7.2	13	8	11	10	14	14
34090.W0318	Steel Ribbed Surface	16	20	M 8	10.5	18	10	17	25	25	39
34090.W0319	Steel Ribbed Surface	16	20	M10	10.5	18	10	17	25	46	40
34090.W0320	Steel Ribbed Surface	16	20	M10	10.5	18	10	17	25	46	44
34090.W0330	Steel Ribbed Surface	25	30	M16	20	27	16	27	90	206	153
34090.W0350	Steel Ribbed Surface	40	50	M20	34.5	35	20	41	165	407	491
34090.W0360	Steel Ribbed Surface	40	50	M24	34.5	35	24	41	165	698	526



34091



Material

Spring element: thermoplastic PUR.

Ball: Ball-bearing steel, hardened, bright, stainless steel 1.3541, nickel-plated.

Body: Heat-treated steel, tempered, phos-

phated. stainless steel 1.4057, heat-treated.

loading capacity valid for steel and stainless steel design.

Technical Notes

Ball protected against rotating.

Order No.	Material	Ball	d ₁	d ₂	d ₃	Weight g
34091.W0412	Steel Plain Surface	10	12 tol. n6	M 3	7.2	14
34091.W0418	Steel Plain Surface	16	18 tol. n6	M 4	10.5	40
34091.W0428	Steel Plain Surface	25	28 tol. n6	M 5	20.0	150
34091.W0452	Stainless Plain Surface	10	12 tol. n6	M 3	7.2	14
34091.W0458	Stainless Plain Surface	16	18 tol. n6	M 4	10.5	40
34091.W0468	Stainless Plain Surface	25	28 tol. n6	M 5	20.0	150
34091.W0712	Steel Ribbed Surface	10	12 tol. n6	M 3	7.2	14
34091.W0718	Steel Ribbed Surface	16	18 tol. n6	M 4	10.5	40
34091.W0728	Steel Ribbed Surface	25	28 tol. n6	M 5	20.0	150

Order No.	l ₁	l ₃ max.	H7 diameter	Load capacity for static load kN max.	Depth min.	Tightening torque Nm max.
34091.W0412	17	3.2	12	10	12	1.3
34091.W0418	23	4.0	18	25	14	2.9
34091.W0428	34	6.0	28	90	22	6.0
34091.W0452	17	3.2	12	10	12	1.3
34091.W0458	23	4.0	18	25	14	2.9
34091.W0468	34	6.0	28	90	22	6.0
34091.W0712	17	3.2	12	10	12	1.3
34091.W0718	23	4.0	18	25	14	2.9
34091.W0728	34	6.0	28	90	22	6.0

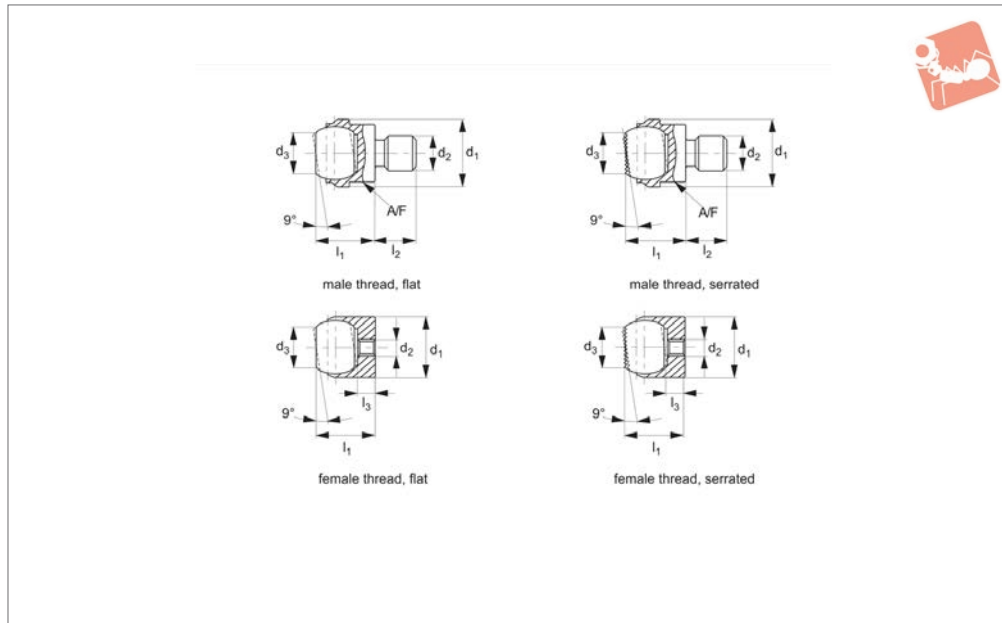


Self-Aligning Pads

fixed - steel



Self-Aligning Pads



34100

SELF-ALIGNING PADS

Material

Body: steel, heat-treated, phosphated.
Ball: ball bearing steel, hardened, bright.

supports and thrust elements in jigs and fixtures. They can also be fitted to existing clamping elements.

applies only when the minimum location hole depth is adhered to.
Ball secured against turning.

Technical Notes

These self-aligning pads serve as stops,

Tips

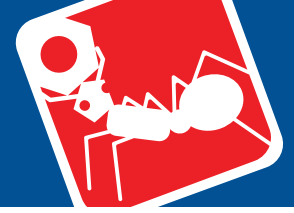
Max. load* for female threads (see table)

Order No.	Thread and face type	Ball dia.	d ₁	d ₂	d ₃	l ₁ ±0.02	l ₂ -0.5	l ₃ max.	A/F	Location hole tol. H7	Static load kN max.	Tightening torque Nm max.	Weight g
34100.W0012	Male, Flat	10	13	M 6	7,2	13	8	11			10	10	12
34100.W0013	Male, Flat	10	13	M 8	7,2	13	8	11			10	25	13
34100.W0018	Male, Flat	16	20	M 8	10,5	18	10	17			25	25	39
34100.W0019	Male, Flat	16	20	M10	10,5	18	10	17			25	46	41
34100.W0020	Male, Flat	16	20	M12	10,5	18	12	17			25	82	44
34100.W0030	Male, Flat	25	30	M16	20,0	27	16	27			90	206	151
34100.W0050	Male, Flat	40	50	M20	34,5	35	20	41			165	407	489
34100.W0060	Male, Flat	40	50	M24	34,5	35	24	41			165	698	526
34100.W0312	Male, Serrated	10	13	M 6	7,2	13	8	11			10	10	12
34100.W0313	Male, Serrated	10	13	M 8	7,2	13	8	11			10	25	13
34100.W0318	Male, Serrated	16	20	M 8	10,5	18	10	17			25	25	38
34100.W0319	Male, Serrated	16	20	M10	10,5	18	10	17			25	46	40
34100.W0320	Male, Serrated	16	20	M12	10,5	18	12	17			25	82	43
34100.W0330	Male, Serrated	25	30	M16	20,0	27	16	27			90	206	150
34100.W0350	Male, Serrated	40	50	M20	34,5	35	20	41			165	407	486
34100.W0360	Male, Serrated	40	50	M24	34,5	35	24	41			165	698	521
34100.W0412	Female, Flat	10	12 tol. n ₆	M 3	7,2	11		3,2		Ø12x6min	10*	1,3	8
34100.W0418	Female, Flat	16	18 tol. n ₆	M 4	10,5	17		4,0		Ø18x8min	25*	2,9	29
34100.W0428	Female, Flat	25	28 tol. n ₆	M 5	20,0	25		5,5		Ø28x13min	90*	6,0	109
34100.W0712	Female, Serrated	10	12 tol. n ₆	M 3	7,2	11		3,2		Ø12x6min	10*	1,3	8
34100.W0718	Female, Serrated	16	18 tol. n ₆	M 4	10,5	17		4,0		Ø18x8min	25*	2,9	29
34100.W0728	Female, Serrated	25	28 tol. n ₆	M 5	20,0	25		5,5		Ø28x13min	90*	6,0	108

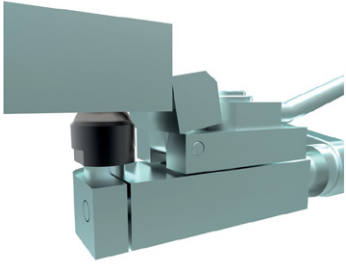
Self-Aligning Pads

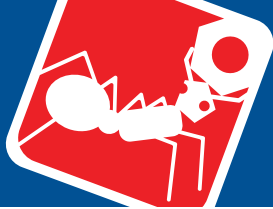


Self-Aligning Pads fixed - steel



SELF-ALIGNING PADS



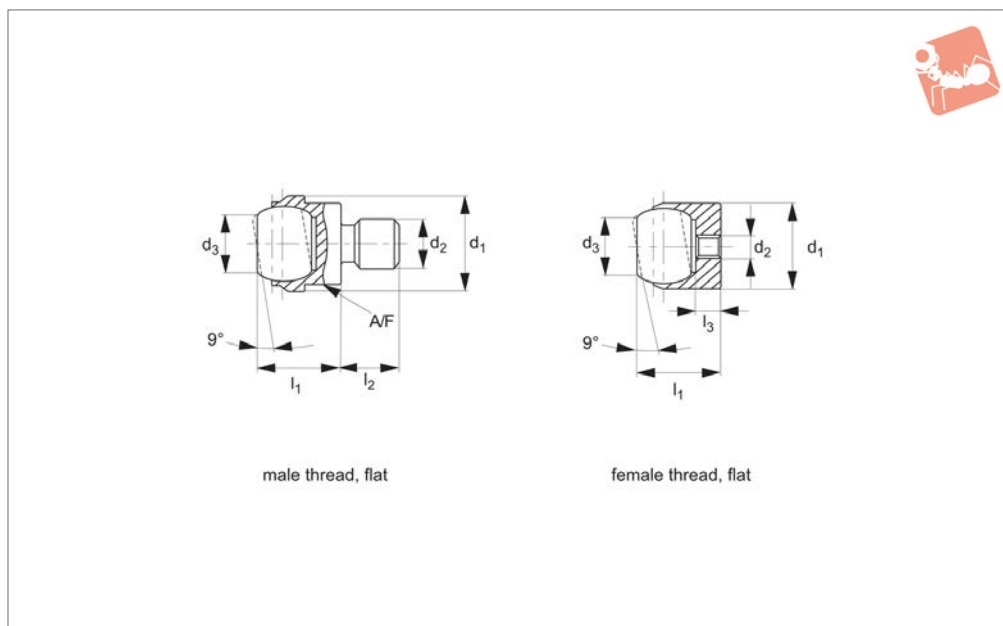


Self-Aligning Pads

fixed - stainless steel



Self-Aligning Pads



34101

SELF-ALIGNING PADS

Material

Body: stainless steel (AISI 431, 1.4057), heat-treated.

Ball: stainless steel (1.3541), nickel plated.

Technical Notes

These self-aligning pads serve as stops,

supports and thrust elements in jigs and fixtures. They can also be fitted to existing clamping elements.

Tips

Max. load* for female threads (see table) applies only when the minimum location hole depth is adhered to.

Ball secured against turning.

Order No.	Thread and face type	Ball dia.	d ₁	d ₂	d ₃	Weight g
34101.W0112	Male, Flat	10	13	M 6	7.2	12
34101.W0113	Male, Flat	10	13	M 8	7.2	13
34101.W0118	Male, Flat	16	20	M 8	10.5	39
34101.W0119	Male, Flat	16	20	M10	10.5	41
34101.W0120	Male, Flat	16	20	M12	10.5	44
34101.W0130	Male, Flat	25	30	M16	20.0	151
34101.W0150	Male, Flat	40	50	M20	34.5	489
34101.W0160	Male, Flat	40	50	M24	34.5	526
34101.W0452	Female, Flat	10	12 tol. n6	M 3	7.2	8
34101.W0458	Female, Flat	16	18 tol. n6	M 4	10.5	29
34101.W0468	Female, Flat	25	28 tol. n6	M 5	20.0	109

Order No.	l ₁ ±0.02	l ₂ -0.5	l ₃ max.	A/F	Location hole tol. H7	Static load kN max.	Tightening torque Nm max.
34101.W0112	13	8	-	11	-	10	10.0
34101.W0113	13	8	-	11	-	10	25.0
34101.W0118	18	10	-	17	-	25	25.0
34101.W0119	18	10	-	17	-	25	46.0
34101.W0120	18	12	-	17	-	25	82.0
34101.W0130	27	16	-	27	-	90	206.0
34101.W0150	35	20	-	41	-	165	407.0
34101.W0160	35	24	-	41	-	165	698.0
34101.W0452	11	-	3.2	-	Ø12x6min	10*	1.3
34101.W0458	17	-	4.0	-	Ø18x8min	25*	2.9
34101.W0468	25	-	5.5	-	Ø28x13min	90*	6.0

Self-Aligning Pads

Self-Aligning Pads

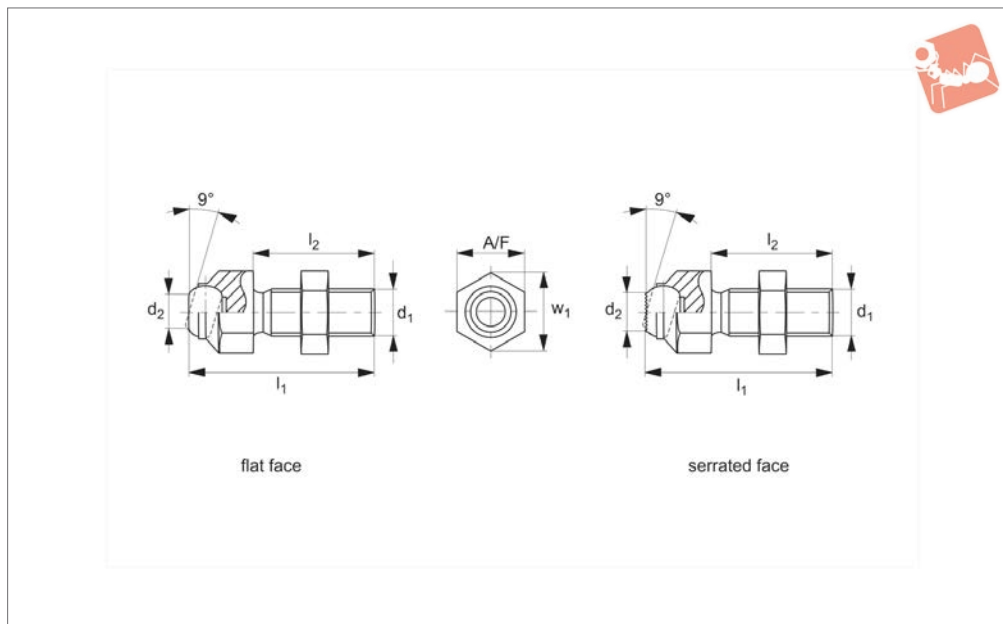
adjustable - steel



SELF-ALIGNING PADS



34120



Material

Body: steel, heat-treated, phosphated.
Ball: ball-bearing steel, hardened, bright.

supports and thrust elements in jigs and fixtures. They can also be fitted to existing clamping elements.

Technical Notes

These self-aligning pads serve as stops,

Tips

Ball secured against turning.

Order No.	Ball type	Ball dia.	d ₁	d ₂	l ₁	l ₂	w ₁	A/F	Static load kN max.	Tightening torque Nm max.	Weight g
34120.W0013	Flat, Smooth	8.5	M 8	5.8	36.6	25	14.5	13	8	25	21
34120.W0016	Flat, Smooth	12.0	M10	8.6	45.7	30	19.0	17	8	46	44
34120.W0017	Flat, Smooth	12.0	M12	8.6	50.7	35	19.0	17	15	82	55
34120.W0024	Flat, Smooth	16.0	M16	10.5	60.7	40	27.0	24	25	206	28
34120.W0030	Flat, Smooth	25.0	M20	20.0	77.3	50	33.0	30	90	407	75
34120.W0036	Flat, Smooth	25.0	M24	20.0	100.0	70	40.0	36	90	698	472
34120.W0046	Flat, Smooth	40.0	M30x1,5	34.6	100.0	65	51.0	46	165	1355	772
34120.W0313	Flat, Serrated	8.5	M 8	5.8	36.6	25	14.5	13	8	25	20
34120.W0316	Flat, Serrated	12.0	M10	8.6	45.7	30	19.0	17	8	46	44
34120.W0317	Flat, Serrated	12.0	M12	8.6	50.7	35	19.0	17	15	82	55
34120.W0324	Flat, Serrated	16.0	M16	10.5	60.7	40	27.0	24	25	206	128
34120.W0330	Flat, Serrated	25.0	M20	20.0	77.3	50	33.0	30	90	407	274
34120.W0336	Flat, Serrated	25.0	M24	20.0	100.0	70	40.0	36	90	698	472
34120.W0346	Flat, Serrated	40.0	M30x1,5	34.6	100.0	65	51.0	46	165	1355	772

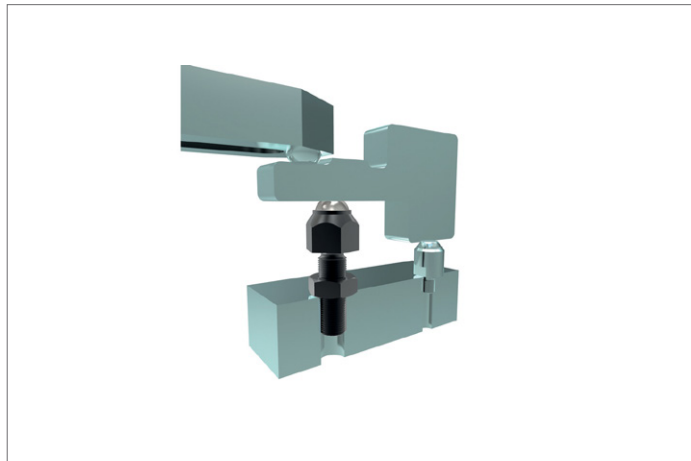


Self-Aligning Pads

adjustable - steel



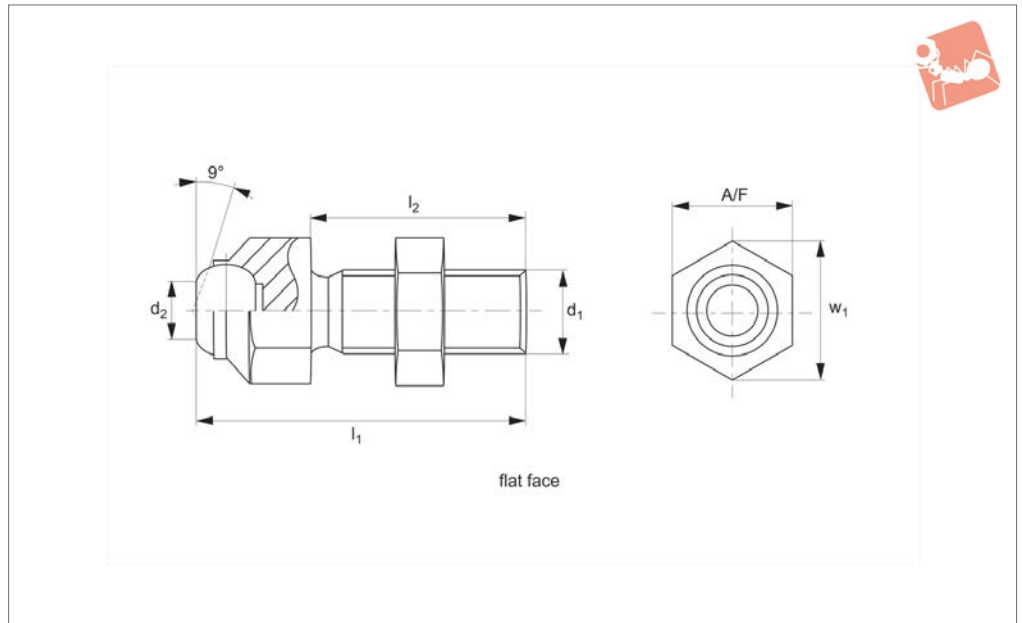
Self-Aligning Pads



SELF-ALIGNING PADS



34121



Material

Body: stainless steel (AISI 431, 1.4057), heat-treated.

Ball: stainless steel (1.3541), nickel plated.

Nut: stainless steel.

Technical Notes

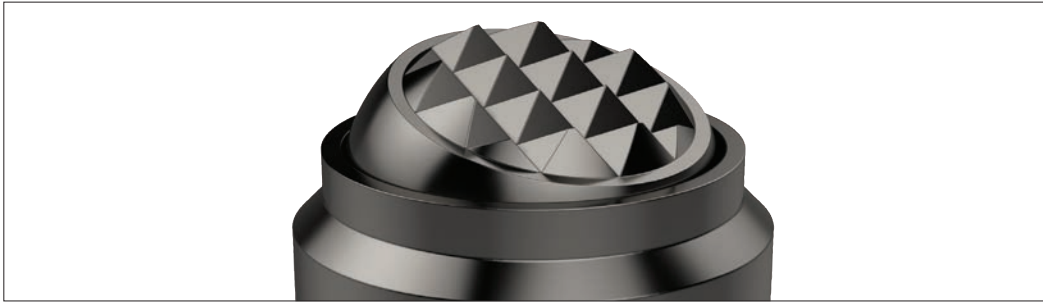
These self-aligning pads serve as stops, supports and thrust elements in jigs and

fixtures. They can also be fitted to existing clamping elements.

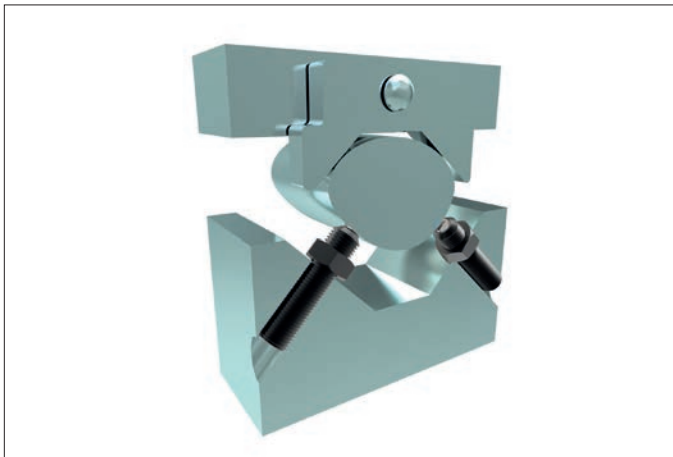
Tips

Ball secured against turning.

Order No.	Ball type	Ball dia.	d ₁	d ₂	l ₁	l ₂	w ₁	A/F	Static load kN max.	Tightening torque Nm max.	Weight g
34121.W0013	Flat, Smooth	8.5	M 8	5.8	36.6	25	14.5	13	8	25	20
34121.W0016	Flat, Smooth	12.0	M10	8.6	45.7	30	19.0	17	8	46	44
34121.W0017	Flat, Smooth	12.0	M12	8.6	50.7	35	19.0	17	15	82	56
34121.W0024	Flat, Smooth	16.0	M16	10.5	60.7	40	27.0	24	25	206	128
34121.W0030	Flat, Smooth	25.0	M20	20.0	77.3	50	33.0	30	90	407	275
34121.W0036	Flat, Smooth	25.0	M24	20.0	100.0	70	40.0	36	90	698	472
34121.W0046	Flat, Smooth	40.0	M30x1,5	34.6	100.0	65	51.0	46	165	1355	772

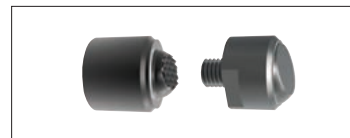
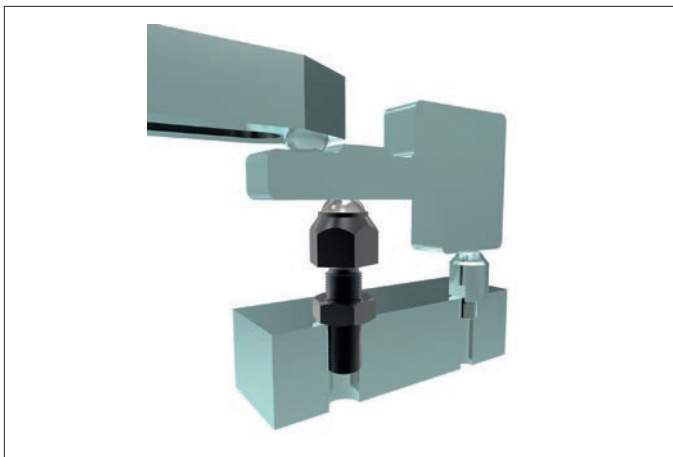


Clamping, supporting and aligning non-parallel and uneven surfaces is greatly simplified with the use of Wixroyd self-aligning pads and thrust screws. Available with ridged faces for improved holding of cast components, or plastic faces for holding more delicate parts.



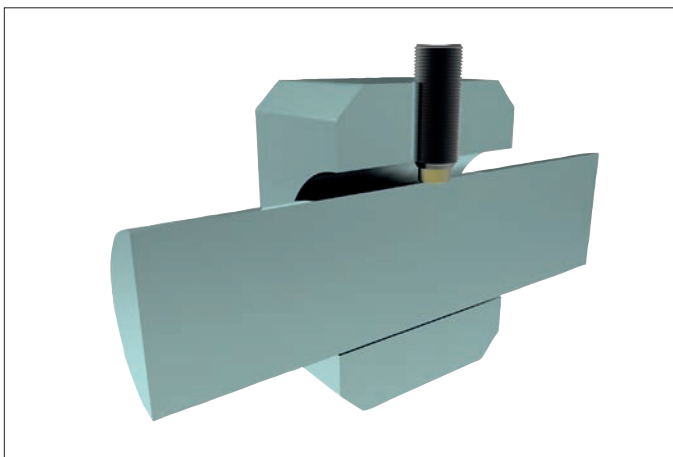
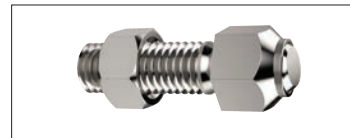
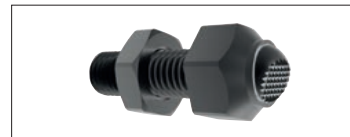
Self-aligning Thrust Screws

34000 to 34060 - Self-aligning thrust screws in sizes M6 to M24, ideal for clamping or supporting non-parallel surfaces.



Self-aligning Pads

34080 to 34121 - Self-aligning pads, both male and female mounting, ideal for accommodating variations between parts in fixtures.



Thrust Screws

34140 to 34160 - Thrust screws, with either brass or thermoplastic pads, are suitable for gentle clamping and positioning more delicate parts.



Self-Aligning Pads

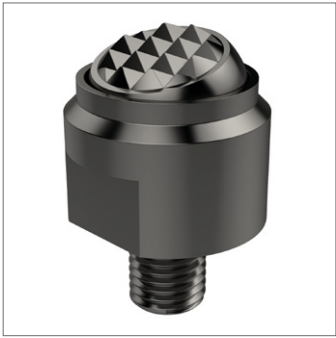


Self-Aligning Pads

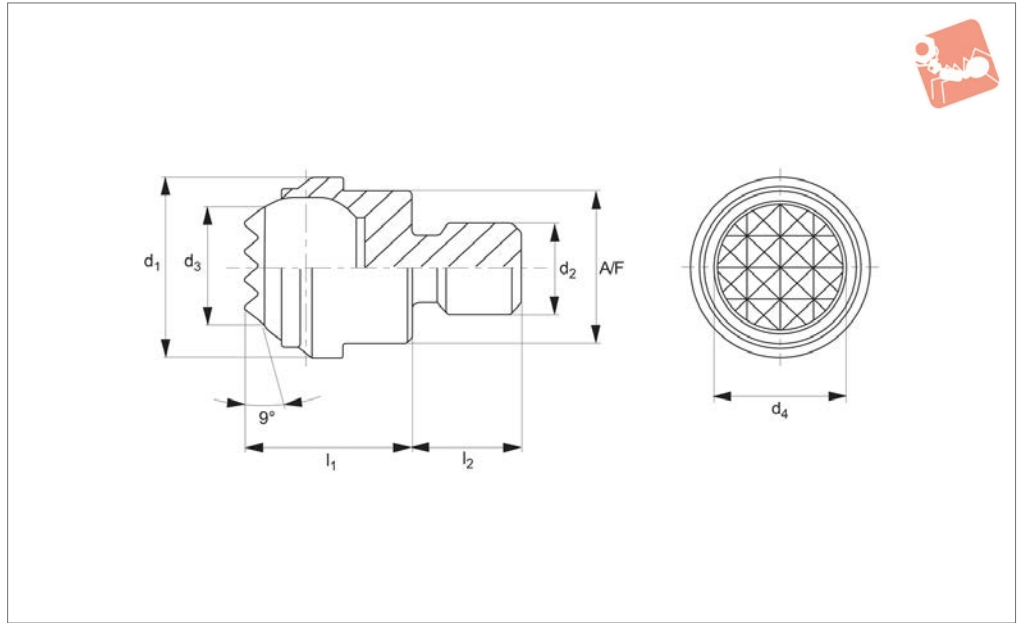
hard metal ball - ribbed



SELF-ALIGNING PADS



34080



Material

Body: steel, heat-treated, phosphated.
Ball: hard metal, nickel plated.

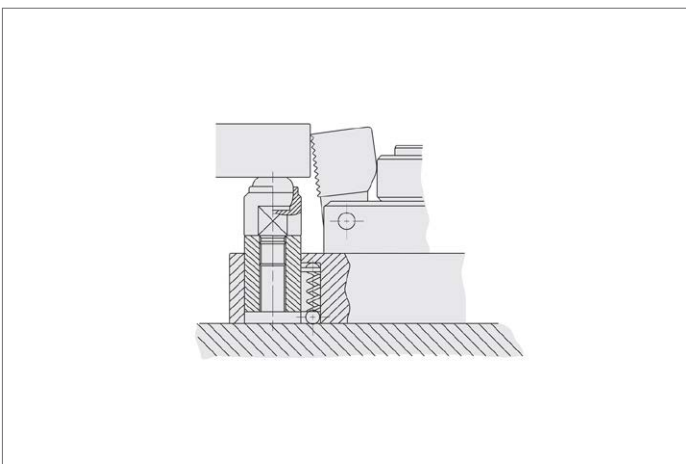
Technical Notes

Ideal as stop, support or thrust pad especially where cast components are being machined. Insert is brazed in position.

Tips

Ball secured against turning.

Order No.	d ₁	d ₂	d ₃	d ₄	l ₁ ±0.2	l ₂ -0.5	A/F	Static load kN max.	Tightening torque Nm max.	Weight g
34080.W0362	13	M 6	8.3	10	13	8	11	10	10	14.0
34080.W0363	13	M 8	8.3	10	13	8	11	10	25	16.0
34080.W0378	20	M 8	12.8	16	18	10	17	25	25	49.0
34080.W0379	20	M10	12.8	16	18	10	17	25	46	57.0
34080.W0380	20	M12	12.8	16	18	12	17	25	82	54.0
34080.W0381	30	M16	20.0	16	27	16	27	90	206	190.0
34080.W0382	50	M20	34.5	40	35	20	41	165	407	639.0
34080.W0383	50	M24	34.5	40	35	24	41	165	698	673.0



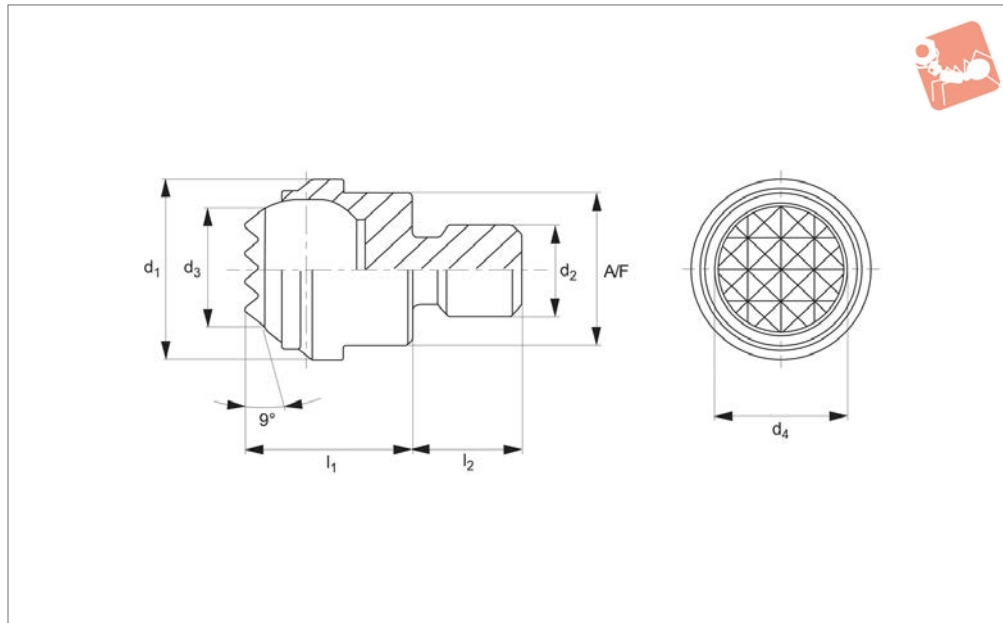


Self-Aligning Pads

hard metal ball - ribbed - stainless steel



Self-Aligning Pads



34081

SELF-ALIGNING PADS

Material

Body: stainless steel (AISI 431, 1.4057), heat treated.
Ball: hard metal, nickel plated.

Technical Notes

Ideal as stop, support or thrust pad especially where cast components are being machined. Insert is brazed in position.

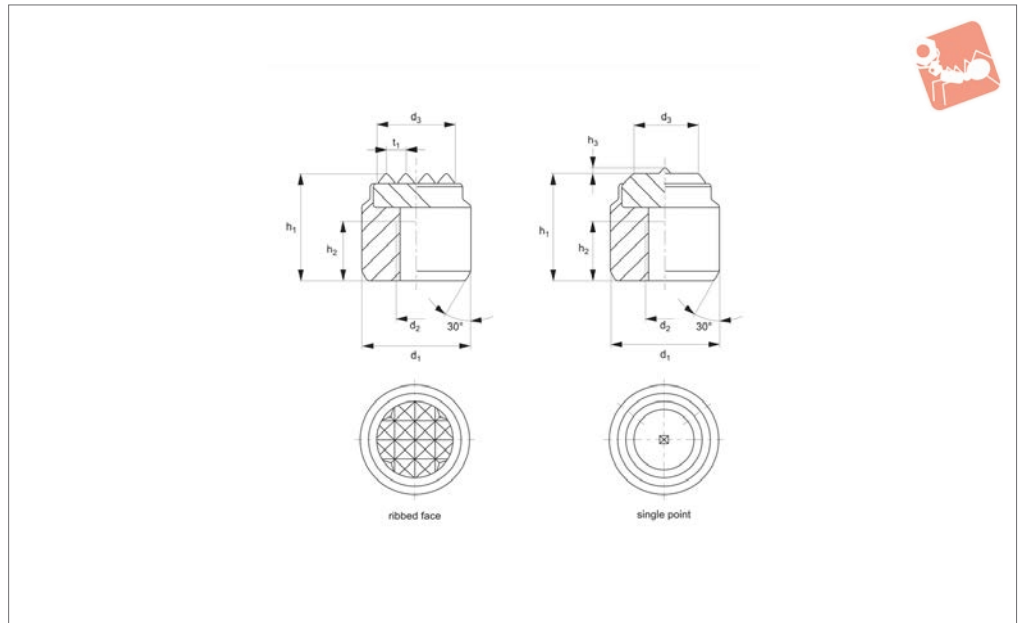
Tips

Ball secured against turning.

Order No.	d ₁	d ₂	d ₃	d ₄	l ₁ ±0.2	l ₂ -0.5	A/F	Static load kN max.	Tightening torque Nm max.	Weight g
34081.W0390	13	M 6	8.3	10	13	8	11	10	10	14.0
34081.W0392	13	M 8	8.3	10	13	8	11	10	25	16.0
34081.W0394	20	M 8	12.8	16	18	10	17	25	25	49.0
34081.W0396	20	M10	12.8	16	18	10	17	25	46	51.0
34081.W0398	20	M12	12.8	16	18	12	17	25	82	54.0
34081.W0399	30	M16	20.0	25	27	16	27	90	206	190.0
34081.W0400	50	M20	34.5	40	35	20	41	165	407	639.0
34081.W0401	50	M24	34.5	40	35	24	41	165	407	673.0



34082



Material

Body: steel, heat-treated, phosphated.
Insert: steel, heat-treated.

Technical Notes

Ideal as stop, support or thrust pad especially where cast components are being

machined. Insert is brazed in position.

Order No.	Type	d ₁ tol. n6	d ₂	d ₃ ≈	h ₁	h ₂ min.	h ₃	t ₁	Location hole tol. H7	Weight g
34082.W0208	Ribbed Face	10	M 5	7.7	13	6	-	2	10	8
34082.W0211	Ribbed Face	14	M 6	10.6	13	6	-	2	14	15
34082.W0213	Ribbed Face	16	M 6	11.9	13	6	-	3	16	20
34082.W0215	Ribbed Face	20	M 6	16.0	13	6	-	3	20	32
34082.W0217	Ribbed Face	25	M 6	21.0	13	6	-	3	25	51
34082.W0228	Single Point	10	M 5	6.3	13	6	0.8	-	10	8
34082.W0231	Single Point	14	M 6	9.3	13	6	0.8	-	14	16
34082.W0233	Single Point	16	M 6	10.0	13	6	0.8	-	16	21