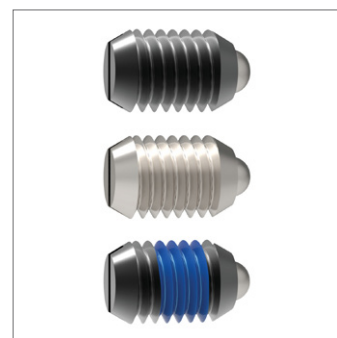
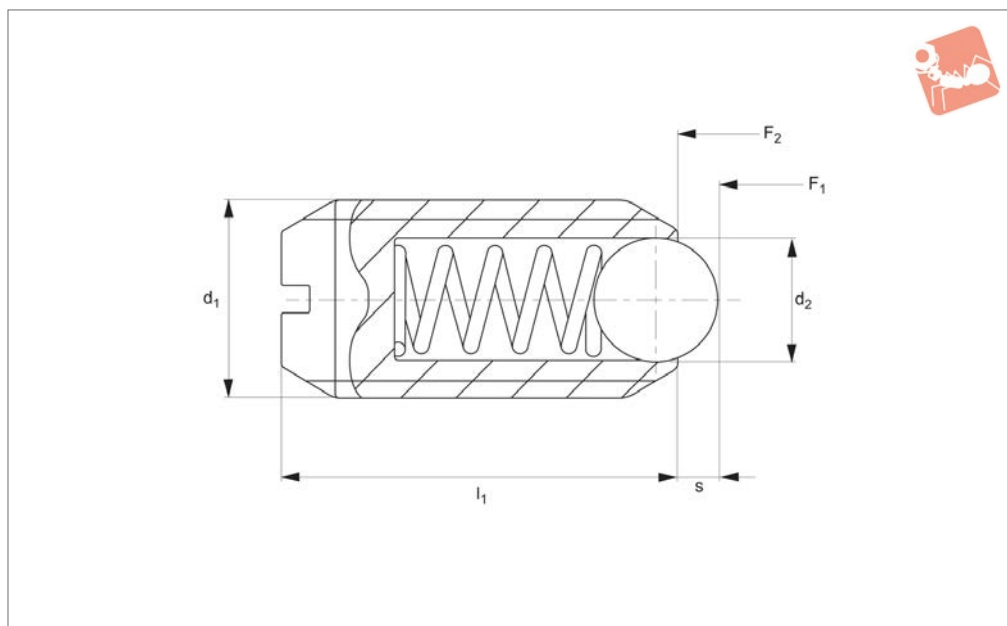




Spring Plungers - IMPERIAL

with ball and slot

Spring Plunger & Detent Pins



3B100

SPRING PLUNGER & DETENT PINS

Material

Free cutting steel type-

Body: free cutting steel, blackened.

Ball: ball bearing steel 1.3505 (100Cr6) hardened.

Spring: stainless steel.

Stainless steel type-

Body: stainless steel 1.4305 (AISI 303).

Ball: ball bearing steel, hardened.

Spring: stainless steel.

Technical Notes

To be used as detents or for locating, posi-

tioning, indexing, locking, latching, ejecting, lifting off and other similar push application.

Temperature range for execution without thread up to 482°F.

Thread lock - Polyamide spot coating.

Tips

Light spring load - marked with one line.

Standard spring load - no marking.

Heavy spring load - marked with two lines.

Special types available on request.

Important Notes

Spring loads are statistical average values

All dimensions are in inches

Thread: 2A-UNC/UNF.

Order No.	Type	Finish	Spring load	d ₁ UNC/UNF	l ₁ ≈	s	d ₂	Spring load f ₁ lb ≈	Spring load f ₂ lb ≈	Weight oz
3B100.W0010	w/o Threadlock	Steel	Light	UNF 10-32	33/64	0.025	3/32	0.9	1.5	0.049
3B100.W0012	w/o Threadlock	Steel	Light	UNC 1/4-20	17/32	0.035	1/8	2.1	4.0	0.074
3B100.W0016	w/o Threadlock	Steel	Light	UNC 5/16-18	37/64	0.040	5/32	2.0	4.6	0.123
3B100.W0018	w/o Threadlock	Steel	Light	UNC 3/8-16	5/8	0.048	3/16	2.5	5.0	0.193
3B100.W0020	w/o Threadlock	Steel	Light	UNC 1/2-13	3/4	0.072	9/32	3.0	6.0	0.397
3B100.W0022	w/o Threadlock	Steel	Light	UNC 5/8-11	63/64	0.096	3/8	4.5	9.0	0.787
3B100.W0031	w/o Threadlock	Steel	Standard	UNF 4-48	3/16	0.020	1/16	0.1	0.5	0.008
3B100.W0032	w/o Threadlock	Steel	Standard	UNC 5-40	1/4	0.020	1/16	0.3	0.8	0.016
3B100.W0033	w/o Threadlock	Steel	Standard	UNC 6-32	5/16	0.023	5/64	0.5	1.0	0.020
3B100.W0035	w/o Threadlock	Steel	Standard	UNF 6-40	5/16	0.023	5/64	0.5	1.0	0.020
3B100.W0036	w/o Threadlock	Steel	Standard	UNC 8-32	11/32	0.025	3/32	0.8	1.3	0.026
3B100.W0038	w/o Threadlock	Steel	Standard	UNF 8-36	11/32	0.025	3/32	0.8	1.3	0.026
3B100.W0040	w/o Threadlock	Steel	Standard	UNF 10-32	33/64	0.025	3/32	2.0	3.1	0.049
3B100.W0042	w/o Threadlock	Steel	Standard	UNC 1/4-20	17/32	0.035	1/8	3.8	6.8	0.073
3B100.W0046	w/o Threadlock	Steel	Standard	UNC 5/16-18	37/64	0.040	5/32	4.0	8.4	0.123
3B100.W0048	w/o Threadlock	Steel	Standard	UNC 3/8-16	5/8	0.048	3/16	5.0	10.3	0.198
3B100.W0050	w/o Threadlock	Steel	Standard	UNC 1/2-13	3/4	0.072	9/32	6.0	12.0	0.406
3B100.W0052	w/o Threadlock	Steel	Standard	UNC 5/8-11	63/64	0.096	3/8	9.0	18.0	0.811
3B100.W0070	w/o Threadlock	Steel	Heavy	UNF 10-32	33/64	0.025	3/32	3.3	4.8	0.049
3B100.W0072	w/o Threadlock	Steel	Heavy	UNC 1/4-20	17/32	0.035	1/8	5.6	8.6	0.073
3B100.W0076	w/o Threadlock	Steel	Heavy	UNC 5/16-18	37/64	0.040	5/32	6.0	11.1	0.122
3B100.W0078	w/o Threadlock	Steel	Heavy	UNC 3/8-16	5/8	0.048	3/16	7.5	15.1	0.196
3B100.W0080	w/o Threadlock	Steel	Heavy	UNC 1/2-13	3/4	0.072	9/32	6.0	24.0	0.408

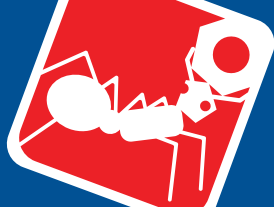
Spring Plunger & Detent Pins

Spring Plungers - IMPERIAL with ball and slot



SPRING PLUNGER & DETENT PINS

Order No.	Type	Finish	Spring load	d ₁ UNC/UNF	l ₁ ≈	s	d ₂	Spring load f ₁ lb ≈	Spring load f ₂ lb ≈	Weight oz
3B100.W0082	w/o Threadlock	Steel	Heavy	UNC 5/8-11	63/64	0.096	3/8	7.0	40.0	0.825
3B100.W0110	w/o Threadlock	Stainless	Light	UNF 10-32	33/64	0.025	3/32	0.9	1.5	0.048
3B100.W0112	w/o Threadlock	Stainless	Light	UNC 1/4-20	17/32	0.035	1/8	2.1	4.0	0.071
3B100.W0116	w/o Threadlock	Stainless	Light	UNC 5/16-18	37/64	0.040	5/32	2.0	4.6	0.123
3B100.W0118	w/o Threadlock	Stainless	Light	UNC 3/8-16	5/8	0.048	3/16	2.5	5.0	0.190
3B100.W0120	w/o Threadlock	Stainless	Light	UNC 1/2-13	3/4	0.072	9/32	3.0	6.0	0.397
3B100.W0122	w/o Threadlock	Stainless	Light	UNC 5/8-11	63/64	0.096	3/8	4.5	9.0	0.790
3B100.W0131	w/o Threadlock	Stainless	Standard	UNF 4-48	3/16	0.020	1/16	0.1	0.5	0.005
3B100.W0132	w/o Threadlock	Stainless	Standard	UNC 5-40	1/4	0.020	1/16	0.3	0.8	0.015
3B100.W0133	w/o Threadlock	Stainless	Standard	UNC 6-32	5/16	0.023	5/64	0.5	1.0	0.018
3B100.W0135	w/o Threadlock	Stainless	Standard	UNF 6-40	5/16	0.023	5/64	0.5	1.0	0.019
3B100.W0136	w/o Threadlock	Stainless	Standard	UNC 8-32	11/32	0.025	3/32	0.8	1.3	0.026
3B100.W0138	w/o Threadlock	Stainless	Standard	UNF 8-36	11/32	0.025	3/32	0.8	1.3	0.026
3B100.W0140	w/o Threadlock	Stainless	Standard	UNF 10-32	33/64	0.025	3/32	2.0	3.1	0.049
3B100.W0142	w/o Threadlock	Stainless	Standard	UNC 1/4-20	17/32	0.035	1/8	3.8	6.8	0.072
3B100.W0146	w/o Threadlock	Stainless	Standard	UNC 5/16-18	37/64	0.040	5/32	4.0	8.4	0.123
3B100.W0148	w/o Threadlock	Stainless	Standard	UNC 3/8-16	5/8	0.048	3/16	5.0	10.3	0.198
3B100.W0150	w/o Threadlock	Stainless	Standard	UNC 1/2-13	3/4	0.072	9/32	6.0	12.0	0.396
3B100.W0152	w/o Threadlock	Stainless	Standard	UNC 5/8-11	63/64	0.096	3/8	9.0	18.0	0.813
3B100.W0170	w/o Threadlock	Stainless	Heavy	UNF 10-32	33/64	0.025	3/32	3.3	4.8	0.046
3B100.W0172	w/o Threadlock	Stainless	Heavy	UNC 1/4-20	17/32	0.35	1/8	5.6	8.6	0.074
3B100.W0176	w/o Threadlock	Stainless	Heavy	UNC 5/16-18	37/64	0.040	5/32	6.0	11.1	0.123
3B100.W0178	w/o Threadlock	Stainless	Heavy	UNC 3/8-16	5/8	0.048	3/16	7.5	15.1	0.197
3B100.W0180	w/o Threadlock	Stainless	Heavy	UNC 1/2-13	3/4	0.072	9/32	6.0	24.0	0.409
3B100.W0182	w/o Threadlock	Stainless	Heavy	UNC 5/8-11	63/64	0.096	3/8	7.0	40.0	0.825
3B100.W0210	With Threadlock	Steel	Light	UNF 10-32	33/64	0.025	3/32	0.9	1.5	0.049
3B100.W0212	With Threadlock	Steel	Light	UNC 1/4-20	17/32	0.035	1/8	2.1	4.0	0.074
3B100.W0216	With Threadlock	Steel	Light	UNC 5/16-18	37/64	0.040	5/32	2.0	4.6	0.123
3B100.W0218	With Threadlock	Steel	Light	UNC 3/8-16	5/8	0.048	3/16	2.5	5.0	0.193
3B100.W0220	With Threadlock	Steel	Light	UNC 1/2-13	3/4	0.072	9/32	3.0	6.0	0.397
3B100.W0222	With Threadlock	Steel	Light	UNC 5/8-11	63/64	0.096	3/8	4.5	9.0	0.787
3B100.W0231	With Threadlock	Steel	Standard	UNF 4-48	3/16	0.020	1/16	0.1	0.5	0.008
3B100.W0232	With Threadlock	Steel	Standard	UNC 5-40	1/4	0.020	1/16	0.3	0.8	0.016
3B100.W0233	With Threadlock	Steel	Standard	UNC 6-32	5/16	0.023	5/64	0.5	1.0	0.020
3B100.W0235	With Threadlock	Steel	Standard	UNF 6-40	5/16	0.023	5/64	0.5	1.0	0.020
3B100.W0236	With Threadlock	Steel	Standard	UNC 8-32	11/32	0.025	3/32	0.8	1.3	0.026
3B100.W0238	With Threadlock	Steel	Standard	UNF 8-36	11/32	0.025	3/32	0.8	1.3	0.026
3B100.W0240	With Threadlock	Steel	Standard	UNF 10-32	33/64	0.025	3/32	2.0	3.1	0.049
3B100.W0242	With Threadlock	Steel	Standard	UNC 1/4-20	17/32	0.035	1/8	3.8	6.8	0.073
3B100.W0246	With Threadlock	Steel	Standard	UNC 5/16-18	37/64	0.040	5/32	4.0	8.4	0.123
3B100.W0248	With Threadlock	Steel	Standard	UNC 3/8-16	5/8	0.048	3/16	5.0	10.3	0.198
3B100.W0250	With Threadlock	Steel	Standard	UNC 1/2-13	3/4	0.072	9/32	6.0	12.0	0.406
3B100.W0252	With Threadlock	Steel	Standard	UNC 5/8-11	63/64	0.096	3/8	9.0	18.0	0.811
3B100.W0270	With Threadlock	Steel	Heavy	UNF 10-32	33/64	0.025	3/32	3.3	4.8	0.049
3B100.W0272	With Threadlock	Steel	Heavy	UNC 1/4-20	17/32	0.035	1/8	5.6	8.6	0.073
3B100.W0276	With Threadlock	Steel	Heavy	UNC 5/16-18	37/64	0.040	5/32	6.0	11.1	0.122
3B100.W0278	With Threadlock	Steel	Heavy	UNC 3/8-16	5/8	0.048	3/16	7.5	15.1	0.196
3B100.W0280	With Threadlock	Steel	Heavy	UNC 1/2-13	3/4	0.072	9/32	6.0	24.0	0.408
3B100.W0282	With Threadlock	Steel	Heavy	UNC 5/8-11	63/64	0.096	3/8	7.0	40.0	0.825
3B100.W0310	With Threadlock	Stainless	Light	UNF 10-32	33/64	0.025	3/32	0.9	1.5	0.048
3B100.W0312	With Threadlock	Stainless	Light	UNC 1/4-20	17/32	0.035	1/8	2.1	4.0	0.071
3B100.W0316	With Threadlock	Stainless	Light	UNC 5/16-18	37/64	0.040	5/32	2.0	4.6	0.123
3B100.W0318	With Threadlock	Stainless	Light	UNC 3/8-16	5/8	0.048	3/16	2.5	5.0	0.190
3B100.W0320	With Threadlock	Stainless	Light	UNC 1/2-13	3/4	0.072	9/32	3.0	6.0	0.397
3B100.W0322	With Threadlock	Stainless	Light	UNC 5/8-11	63/64	0.096	3/8	4.5	9.0	0.790
3B100.W0331	With Threadlock	Stainless	Standard	UNF 4-48	3/16	0.020	1/16	0.1	0.5	0.005
3B100.W0332	With Threadlock	Stainless	Standard	UNC 5-40	1/4	0.020	1/16	0.3	0.8	0.015
3B100.W0333	With Threadlock	Stainless	Standard	UNC 6-32	5/16	0.023	5/64	0.5	1.0	0.018
3B100.W0335	With Threadlock	Stainless	Standard	UNF 6-40	5/16	0.023	5/64	0.5	1.0	0.019
3B100.W0336	With Threadlock	Stainless	Standard	UNC 8-32	11/32	0.025	3/32	0.8	1.3	0.026
3B100.W0338	With Threadlock	Stainless	Standard	UNF 8-36	11/32	0.025	3/32	0.8	1.3	0.026
3B100.W0340	With Threadlock	Stainless	Standard	UNF 10-32	33/64	0.025	3/32	2.0	3.1	0.035
3B100.W0342	With Threadlock	Stainless	Standard	UNC 1/4-20	17/32	0.035	1/8	3.8	6.8	0.072
3B100.W0346	With Threadlock	Stainless	Standard	UNC 5/16-18	37/64	0.040	5/32	4.0	8.4	0.123
3B100.W0348	With Threadlock	Stainless	Standard	UNC 3/8-16	5/8	0.048	3/16	5.0	10.3	0.198
3B100.W0350	With Threadlock	Stainless	Standard	UNC 1/2-13	3/4	0.072	9/32	6.0	12.0	0.396
3B100.W0352	With Threadlock	Stainless	Standard	UNC 5/8-11	63/64	0.096	3/8	9.0	18.0	0.813



Spring Plungers - IMPERIAL

with ball and slot

Spring Plunger & Detent Pins

Order No.	Type	Finish	Spring load	d ₁ UNC/UNF	l ₁ ≈	s	d ₂	Spring load f ₁ lb ≈	Spring load f ₂ lb ≈	Weight oz
3B100.W0370	With Threadlock	Stainless	Heavy	UNF 10-32	33/64	0.025	3/32	3.3	4.8	0.046
3B100.W0372	With Threadlock	Stainless	Heavy	UNC 1/4-20	17/32	0.35	1/8	5.6	8.6	0.074
3B100.W0376	With Threadlock	Stainless	Heavy	UNC 5/16-18	37/64	0.040	5/32	6.0	11.1	0.123
3B100.W0378	With Threadlock	Stainless	Heavy	UNC 3/8-16	5/8	0.048	3/16	7.5	15.1	0.197
3B100.W0380	With Threadlock	Stainless	Heavy	UNC 1/2-13	3/4	0.072	9/32	6.0	24.0	0.409
3B100.W0382	With Threadlock	Stainless	Heavy	UNC 5/8-11	63/64	0.096	3/8	7.0	40.0	0.825

SPRING PLUNGER & DETENT PINS

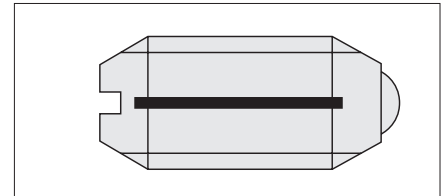


Wixroyd have applied their extensive experience and expertise in spring plunger design and production to offer a range of imperial plungers.

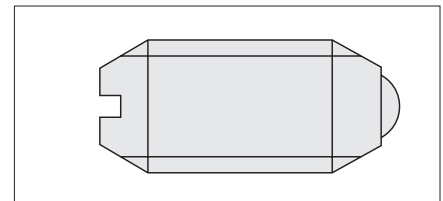
At Last – Imperial Version Spring Plungers Stocked in the UK!

Spring Loads

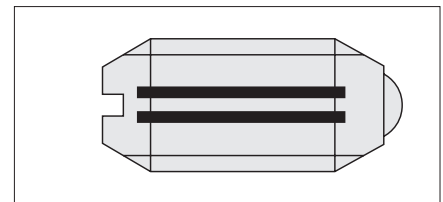
Three available spring pressure models.



Light spring load = marked with one line.



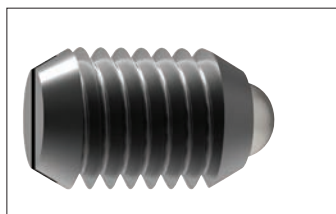
Standard spring load = no marking.



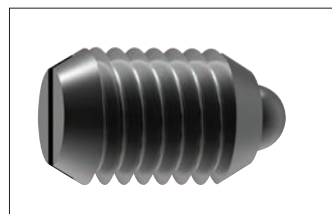
Heavy spring load = marked with two lines.

Thread Details

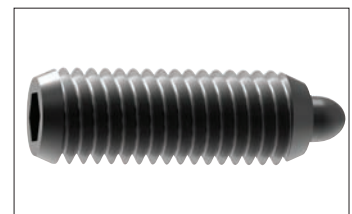
2A-UNC/UNF: sizes 4-48 to 5/8-11.



3B100 Imperial plunger with ball and slot.



3B150 Imperial plunger with pin and slot.



3B200 Imperial plunger with pin and hex socket.

Conversion table: Metric/Imperial values

	To convert from	To	Use conversion factor
Lengths	Inch (in)	Millimeter (mm)	in x 25,4 = mm
	Millimeter (mm)	Inch (in)	mm x 0,03937 = in
Weight/force	Ounces (oz)	Gram (g)	oz x 28 = g
	Gram (g)	Ounces (oz)	g x 0,035 = oz
	Pounds (lbs)	Kilogram (Kg)	lbs x 0,4536 = Kg
	Kilogram (Kg)	Pounds (lbs)	Kg x 2,205 = lbs
	Kilogram (Kg)	Newton (N)	Kg x 9,81 = N
	Newton (N)	Kilogram (Kg)	N/ 9,81 = Kg
Temperature	Degree fahrenheit (°F)	Degree centigrade (°C)	(°F-32) x 5/9 = °C
	Degree centigrade (°C)	Degree fahrenheit (°F)	°C x 9/5 + 32 = °F
Torque	Foot-pounds (ft-lbs)	Newton-meter (Nm)	ft/lbs x 1,35 = Nm
	Newton-meter (Nm)	Foot-pounds (ft-lbs)	Nm x 0,74 = ft/lbs