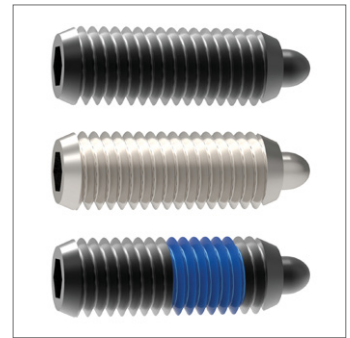
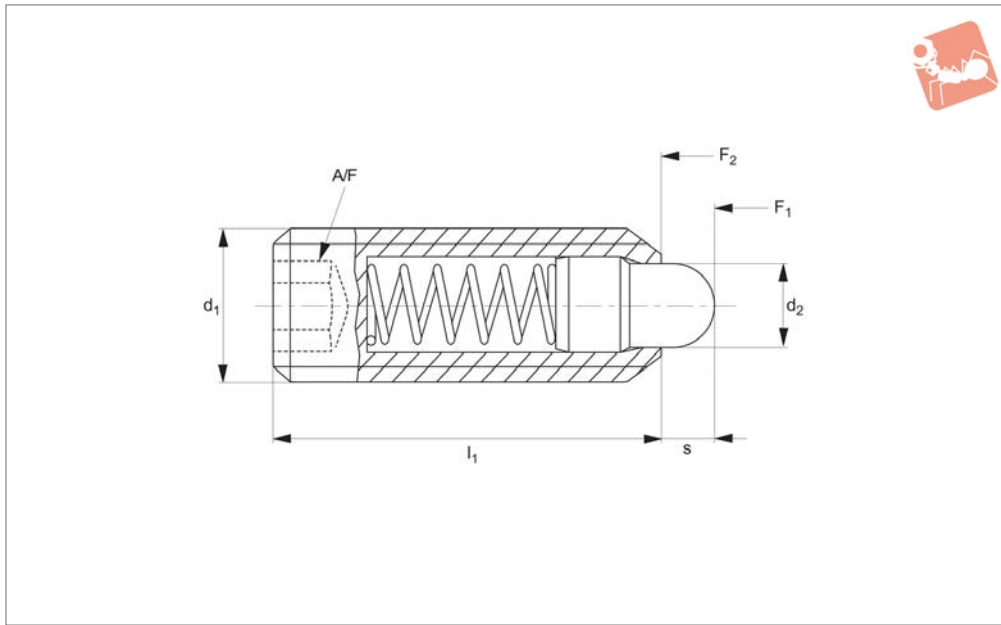




# Spring Plungers - IMPERIAL

with round-ended pin and hex. socket - stainless

# Spring Plunger & Detent Pins



**3B200**

SPRING PLUNGER & DETENT PINS

### Material

#### Free cutting steel type-

Body: free cutting steel, blackened.

Pin: free cutting steel, hardened, blackened.

Spring: stainless steel.

#### Stainless steel type-

Body: stainless steel 1.4305 (AISI 303).

Pin: stainless steel 1.4305 (AISI 303).

Spring: stainless steel.

### Technical Notes

To be used as detents or for locating, positioning, 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

Standard spring load = no marking

Heavy spring load = marked with two lines

### Important Notes

Spring loads are statistical average values

All dimensions are in inches

**Thread: 2A-UNC/UNF.**

Order No.	Material	Finish	Spring load	d <sub>1</sub> UNC/UNF	l <sub>1</sub> ≈	s	d <sub>2</sub>	A/F	Spring load f <sub>1</sub> lb ≈	Spring load f <sub>2</sub> lb ≈	Weight oz
3B200.W0033	Steel	w/o Threadlock	Std.	UNC 6-32	17/32	0.063	0.046	1/16	0.5	1.5	0.025
3B200.W0036	Steel	With Threadlock	Std.	UNC 8-32	5/8	0.094	0.070	5/64	0.8	2.3	0.042
3B200.W0040	Steel	w/o Threadlock	Std.	UNF 10-32	3/4	0.125	0.093	3/32	1.4	2.7	0.063
3B200.W0042	Steel	With Threadlock	Std.	UNC 1/4-20	1	0.188	0.119	1/8	1.0	4.0	0.134
3B200.W0044	Steel	w/o Threadlock	Std.	UNF 1/4-28	1	0.188	0.119	1/8	1.0	4.0	0.145
3B200.W0046	Steel	With Threadlock	Std.	UNC 5/16-18	1	0.188	0.135	5/32	1.5	4.5	0.205
3B200.W0048	Steel	w/o Threadlock	Std.	UNC 3/8-16	1 1/8	0.188	0.186	3/16	2.7	7.2	0.335
3B200.W0050	Steel	With Threadlock	Std.	UNC 1/2-13	1 1/4	0.250	0.248	1/4	2.7	9.3	0.656
3B200.W0052	Steel	w/o Threadlock	Std.	UNC 5/8-11	1 1/2	0.313	0.310	5/16	3.5	10.6	1.242
3B200.W0053	Steel	With Threadlock	Std.	UNC 3/4-10	1 3/4	0.313	0.374	3/8	5.5	14.5	2.152
3B200.W0054	Steel	w/o Threadlock	Std.	UNC 1-8	2 13/32	0.500	0.499	3/8	4.0	31.0	5.443
3B200.W0063	Steel	With Threadlock	Heavy	UNC 6-32	17/32	0.063	0.046	1/16	1.5	3.4	0.026
3B200.W0066	Steel	w/o Threadlock	Heavy	UNC 8-32	5/8	0.094	0.070	5/64	2.6	6.6	0.042
3B200.W0070	Steel	With Threadlock	Heavy	UNF 10-32	3/4	0.125	0.093	3/32	3.2	9.0	0.067
3B200.W0072	Steel	w/o Threadlock	Heavy	UNC 1/4-20	1	0.188	0.119	1/8	3.1	10.1	0.134
3B200.W0074	Steel	With Threadlock	Heavy	UNF 1/4-28	1	0.188	0.119	1/8	3.1	10.1	0.145
3B200.W0076	Steel	w/o Threadlock	Heavy	UNC 5/16-18	1	0.188	0.135	5/32	3.0	15.0	0.207
3B200.W0078	Steel	With Threadlock	Heavy	UNC 3/8-16	1 1/8	0.188	0.186	3/16	5.5	12.7	0.335
3B200.W0080	Steel	w/o Threadlock	Heavy	UNC 1/2-13	1 1/4	0.250	0.248	1/4	6.6	16.0	0.649
3B200.W0082	Steel	With Threadlock	Heavy	UNC 5/8-11	1 1/2	0.313	0.310	5/16	10.5	22.2	1.245
3B200.W0083	Steel	w/o Threadlock	Heavy	UNC 3/4-10	1 3/4	0.313	0.374	3/8	6.7	33.0	2.187
3B200.W0084	Steel	With Threadlock	Heavy	UNC 1-8	2 13/32	0.500	0.499	3/8	16.0	60.0	5.538
3B200.W0133	Stainless	w/o Threadlock	Std.	UNC 6-32	17/32	0.063	0.046	1/16	0.5	1.5	0.018
3B200.W0136	Stainless	With Threadlock	Std.	UNC 8-32	5/8	0.094	0.070	5/64	0.8	2.3	0.039
3B200.W0140	Stainless	w/o Threadlock	Std.	UNF 10-32	3/4	0.125	0.093	3/32	1.4	2.7	0.063
3B200.W0142	Stainless	With Threadlock	Std.	UNC 1/4-20	1	0.188	0.119	1/8	1.0	4.0	0.131

# Spring Plunger & Detent Pins

# Spring Plungers - IMPERIAL

with round-ended pin and hex. socket - stainless



SPRING PLUNGER & DETENT PINS

Order No.	Material	Finish	Spring load	d <sub>1</sub> UNC/UNF	l <sub>1</sub> ≈	s	d <sub>2</sub>	A/F	Spring load f <sub>1</sub> lb ≈	Spring load f <sub>2</sub> lb ≈	Weight oz
3B200.W0144	Stainless	w/o Threadlock	Std.	UNF 1/4-28	1	0.188	0.119	1/8	1.0	4.0	0.141
3B200.W0146	Stainless	With Threadlock	Std.	UNC 5/16-18	1	0.188	0.135	5/32	1.5	4.5	0.208
3B200.W0148	Stainless	w/o Threadlock	Std.	UNC 3/8-16	1 1/8	0.188	0.186	3/16	2.7	7.2	0.328
3B200.W0150	Stainless	With Threadlock	Std.	UNC 1/2-13	1 1/4	0.250	0.248	1/4	2.7	9.3	0.653
3B200.W0152	Stainless	w/o Threadlock	Std.	UNC 5/8-11	1 1/2	0.313	0.310	5/16	3.5	10.6	1.242
3B200.W0153	Stainless	With Threadlock	Std.	UNC 3/4-10	1 3/4	0.313	0.374	3/8	5.5	14.5	2.180
3B200.W0154	Stainless	w/o Threadlock	Std.	UNC 1-8	2 13/32	0.500	0.499	3/8	4.0	31.0	5.474
3B200.W0163	Stainless	With Threadlock	Heavy	UNC 6-32	17/32	0.063	0.046	1/16	1.5	3.4	0.025
3B200.W0166	Stainless	w/o Threadlock	Heavy	UNC 8-32	5/8	0.094	0.070	5/64	2.6	6.6	0.042
3B200.W0170	Stainless	With Threadlock	Heavy	UNF 10-32	3/4	0.125	0.093	3/32	3.2	9.0	0.063
3B200.W0172	Stainless	w/o Threadlock	Heavy	UNC 1/4-20	1	0.188	0.119	1/8	3.1	10.1	0.131
3B200.W0174	Stainless	With Threadlock	Heavy	UNF 1/4-28	1	0.188	0.119	1/8	3.1	10.1	0.145
3B200.W0176	Stainless	w/o Threadlock	Heavy	UNC 5/16-18	1	0.188	0.135	5/32	3.0	15.0	0.212
3B200.W0178	Stainless	With Threadlock	Heavy	UNC 3/8-16	1 1/8	0.188	0.186	3/16	5.5	12.7	0.339
3B200.W0180	Stainless	w/o Threadlock	Heavy	UNC 1/2-13	1 1/4	0.250	0.248	1/4	6.6	16.0	0.653
3B200.W0182	Stainless	With Threadlock	Heavy	UNC 5/8-11	1 1/2	0.313	0.310	5/16	10.5	22.2	1.252
3B200.W0183	Stainless	w/o Threadlock	Heavy	UNC 3/4-10	1 3/4	0.313	0.374	3/8	6.7	33.0	2.198
3B200.W0184	Stainless	With Threadlock	Heavy	UNC 1-8	2 13/32	0.500	0.499	3/8	16.0	60.0	5.524
3B200.W0233	Steel	w/o Threadlock	Std.	UNC 6-32	17/32	0.063	0.046	1/16	0.5	1.5	0.025
3B200.W0236	Steel	With Threadlock	Std.	UNC 8-32	5/8	0.094	0.070	5/64	0.8	2.3	0.042
3B200.W0240	Steel	w/o Threadlock	Std.	UNF 10-32	3/4	0.125	0.093	3/32	1.4	2.7	0.063
3B200.W0242	Steel	With Threadlock	Std.	UNC 1/4-20	1	0.188	0.119	1/8	1.0	4.0	0.134
3B200.W0244	Steel	w/o Threadlock	Std.	UNF 1/4-28	1	0.188	0.119	1/8	1.0	4.0	0.145
3B200.W0246	Steel	With Threadlock	Std.	UNC 5/16-18	1	0.188	0.135	5/32	1.5	4.5	0.205
3B200.W0248	Steel	w/o Threadlock	Std.	UNC 3/8-16	1 1/8	0.188	0.186	3/16	2.7	7.2	0.335
3B200.W0250	Steel	With Threadlock	Std.	UNC 1/2-13	1 1/4	0.250	0.248	1/4	2.7	9.3	0.656
3B200.W0252	Steel	w/o Threadlock	Std.	UNC 5/8-11	1 1/2	0.313	0.310	5/16	3.5	10.6	1.242
3B200.W0253	Steel	With Threadlock	Std.	UNC 3/4-10	1 3/4	0.313	0.374	3/8	5.5	14.5	2.152
3B200.W0254	Steel	w/o Threadlock	Std.	UNC 1-8	2 13/32	0.500	0.499	3/8	4.0	31.0	5.443
3B200.W0263	Steel	With Threadlock	Heavy	UNC 6-32	17/32	0.063	0.046	1/16	1.5	3.4	0.026
3B200.W0266	Steel	w/o Threadlock	Heavy	UNC 8-32	5/8	0.094	0.070	5/64	2.6	6.6	0.042
3B200.W0270	Steel	With Threadlock	Heavy	UNF 10-32	3/4	0.125	0.093	3/32	3.2	9.0	0.067
3B200.W0272	Steel	w/o Threadlock	Heavy	UNC 1/4-20	1	0.188	0.119	1/8	3.1	10.1	0.134
3B200.W0274	Steel	With Threadlock	Heavy	UNF 1/4-28	1	0.188	0.119	1/8	3.1	10.1	0.145
3B200.W0276	Steel	w/o Threadlock	Heavy	UNC 5/16-18	1	0.188	0.135	5/32	3.0	15.0	0.207
3B200.W0278	Steel	With Threadlock	Heavy	UNC 3/8-16	1 1/8	0.188	0.186	3/16	5.5	12.7	0.335
3B200.W0280	Steel	w/o Threadlock	Heavy	UNC 1/2-13	1 1/4	0.250	0.248	1/4	6.6	16.0	0.649
3B200.W0282	Steel	With Threadlock	Heavy	UNC 5/8-11	1 1/2	0.313	0.310	5/16	10.5	22.2	1.245
3B200.W0283	Steel	w/o Threadlock	Heavy	UNC 3/4-10	1 3/4	0.313	0.374	3/8	6.7	33.0	2.187
3B200.W0284	Steel	With Threadlock	Heavy	UNC 1-8	2 13/32	0.500	0.499	3/8	16.0	60.0	5.538
3B200.W0333	Stainless	w/o Threadlock	Std.	UNC 6-32	17/32	0.063	0.046	1/16	0.5	1.5	0.018
3B200.W0336	Stainless	With Threadlock	Std.	UNC 8-32	5/8	0.094	0.070	5/64	0.8	2.3	0.039
3B200.W0340	Stainless	w/o Threadlock	Std.	UNF 10-32	3/4	0.125	0.093	3/32	1.4	2.7	0.063
3B200.W0342	Stainless	With Threadlock	Std.	UNC 1/4-20	1	0.188	0.119	1/8	1.0	4.0	0.131
3B200.W0344	Stainless	w/o Threadlock	Std.	UNF 1/4-28	1	0.188	0.119	1/8	1.0	4.0	0.141
3B200.W0346	Stainless	With Threadlock	Std.	UNC 5/16-18	1	0.188	0.135	5/32	1.5	4.5	0.208
3B200.W0348	Stainless	w/o Threadlock	Std.	UNC 3/8-16	1 1/8	0.188	0.186	3/16	2.7	7.2	0.328
3B200.W0350	Stainless	With Threadlock	Std.	UNC 1/2-13	1 1/4	0.250	0.248	1/4	2.7	9.3	0.653
3B200.W0352	Stainless	w/o Threadlock	Std.	UNC 5/8-11	1 1/2	0.313	0.310	5/16	3.5	10.6	1.242
3B200.W0353	Stainless	With Threadlock	Std.	UNC 3/4-10	1 3/4	0.313	0.374	3/8	5.5	14.5	2.180
3B200.W0354	Stainless	w/o Threadlock	Std.	UNC 1-8	2 13/32	0.500	0.499	3/8	4.0	31.0	5.474
3B200.W0363	Stainless	With Threadlock	Heavy	UNC 6-32	17/32	0.063	0.046	1/16	1.5	3.4	0.025
3B200.W0366	Stainless	w/o Threadlock	Heavy	UNC 8-32	5/8	0.094	0.070	5/64	2.6	6.6	0.042
3B200.W0370	Stainless	With Threadlock	Heavy	UNF 10-32	3/4	0.125	0.093	3/32	3.2	9.0	0.063
3B200.W0372	Stainless	w/o Threadlock	Heavy	UNC 1/4-20	1	0.188	0.119	1/8	3.1	10.1	0.131
3B200.W0374	Stainless	With Threadlock	Heavy	UNF 1/4-28	1	0.188	0.119	1/8	3.1	10.1	0.145
3B200.W0376	Stainless	w/o Threadlock	Heavy	UNC 5/16-18	1	0.188	0.135	5/32	3.0	15.0	0.212
3B200.W0378	Stainless	With Threadlock	Heavy	UNC 3/8-16	1 1/8	0.188	0.186	3/16	5.5	12.7	0.339
3B200.W0380	Stainless	w/o Threadlock	Heavy	UNC 1/2-13	1 1/4	0.250	0.248	1/4	6.6	16.0	0.653
3B200.W0382	Stainless	With Threadlock	Heavy	UNC 5/8-11	1 1/2	0.313	0.310	5/16	10.5	22.2	1.252
3B200.W0383	Stainless	w/o Threadlock	Heavy	UNC 3/4-10	1 3/4	0.313	0.374	3/8	6.7	33.0	2.198
3B200.W0384	Stainless	With Threadlock	Heavy	UNC 1-8	2 13/32	0.500	0.499	3/8	16.0	60.0	5.524



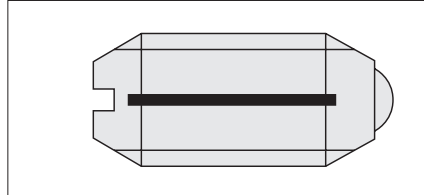
# Wixroyd Imperial Spring Plungers

imperial thread

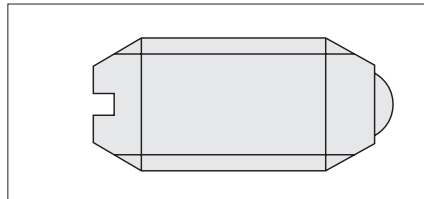
**3B100 - 3B200**  
Positioning Elements

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

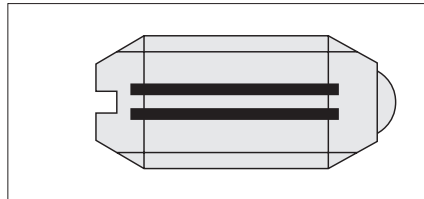
## At Last – Imperial Version Spring Plungers Stocked in the UK!



Light spring load = marked with one line.



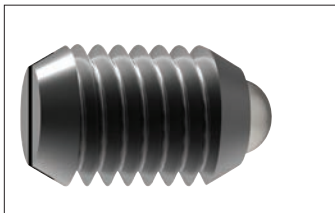
Standard spring load = no marking.



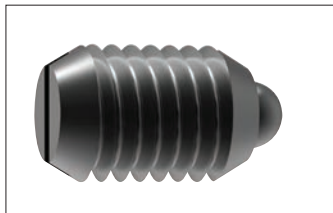
Heavy spring load = marked with two lines.

### Spring Loads

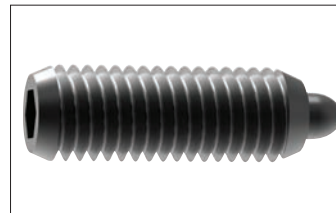
Three available spring pressure models.



**3B100** Imperial plunger with ball and slot.



**3B150** Imperial plunger with pin and slot.



**3B200** Imperial plunger with pin and hex socket.

### Thread Details

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

## Conversion table: Metric/Imperial values

	To convert from	To	Use conversion factor
<b>Lengths</b>	Inch (in)	Millimeter (mm)	in x 25,4 = mm
	Millimeter (mm)	Inch (in)	mm x 0,03937 = in
<b>Weight/force</b>	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
<b>Temperature</b>	Degree fahrenheit (°F)	Degree centigrade (°C)	(°F-32) x 5/9 = °C
	Degree centigrade (°C)	Degree fahrenheit (°F)	°C x 9/5 + 32 = °F
<b>Torque</b>	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