

## Spring Plungers · with ball and slot - INCH EH 2B050.



### Product Description

To be used for positioning, indexing, locking, latching as well as for other similar pressure applications.  
Spring plungers can be used for locating or for applying pressure, as a detent or for ejection.

### Material

#### Body

- Free cutting steel, blackened
- Stainless steel 1.4305 (ASTM-A-582)

#### Ball

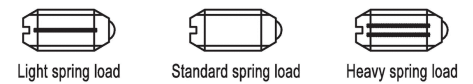
- Stainless steel, hardened

#### Spring

- Stainless steel

### Characteristic

Light spring load: marked with one line  
Standard spring load: no marking  
Heavy spring load: marked with two lines



### More information

### Notes

Customized design on request.  
Spring plungers are specially tested for spring range and forces.

- This product is manufactured in INCH dimensions.

### References

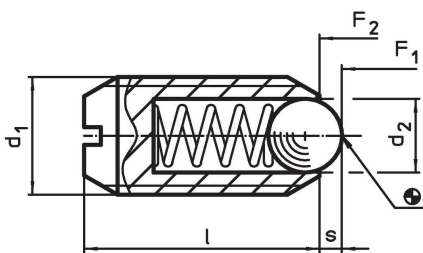
A conversion table can be found in the technical data following these product information pages.

Thread lock: polyamide spot coating (for details please refer to the technical appendix).  
Calculation of indexing resistance, please refer to appendix - Technical Data -

### Further products

- Spring Plungers, with ball and slot
- Locators, with bore hole, for spring plungers
- Locators, smooth, for spring plungers

### Drawing



### Order information

d <sub>1</sub>	Dimensions		d <sub>2</sub>	l	Stroke s	Spring load <sup>1)</sup>		min.   max.		oz	Art. No.	
	Thread	[in]				[in]	[in]	F <sub>1</sub> ~	F <sub>2</sub> ~			[°F]
<b>free cutting steel, light spring load, Without thread lock</b>												
#10-32		0.190	2A-UNF	3/32	33/64	0.025	0.9	1.5	-22	482	0.049	2B050.0010
1/4-20	1/4	0.250	2A-UNC	1/8	17/32	0.035	2.1	4.0	-22	482	0.074	2B050.0012
5/16-18	5/16	0.313	2A-UNC	5/32	37/64	0.040	2.0	4.6	-22	482	0.114	2B050.0016
3/8-16	3/8	0.375	2A-UNC	3/16	5/8	0.048	2.5	5.0	-22	482	0.193	2B050.0018
1/2-13	1/2	0.500	2A-UNC	9/32	3/4	0.072	3.0	6.0	-22	482	0.397	2B050.0020
5/8-11	5/8	0.625	2A-UNC	3/8	63/64	0.096	4.5	9.0	-22	482	0.787	2B050.0022

<sup>1)</sup> statistical average value

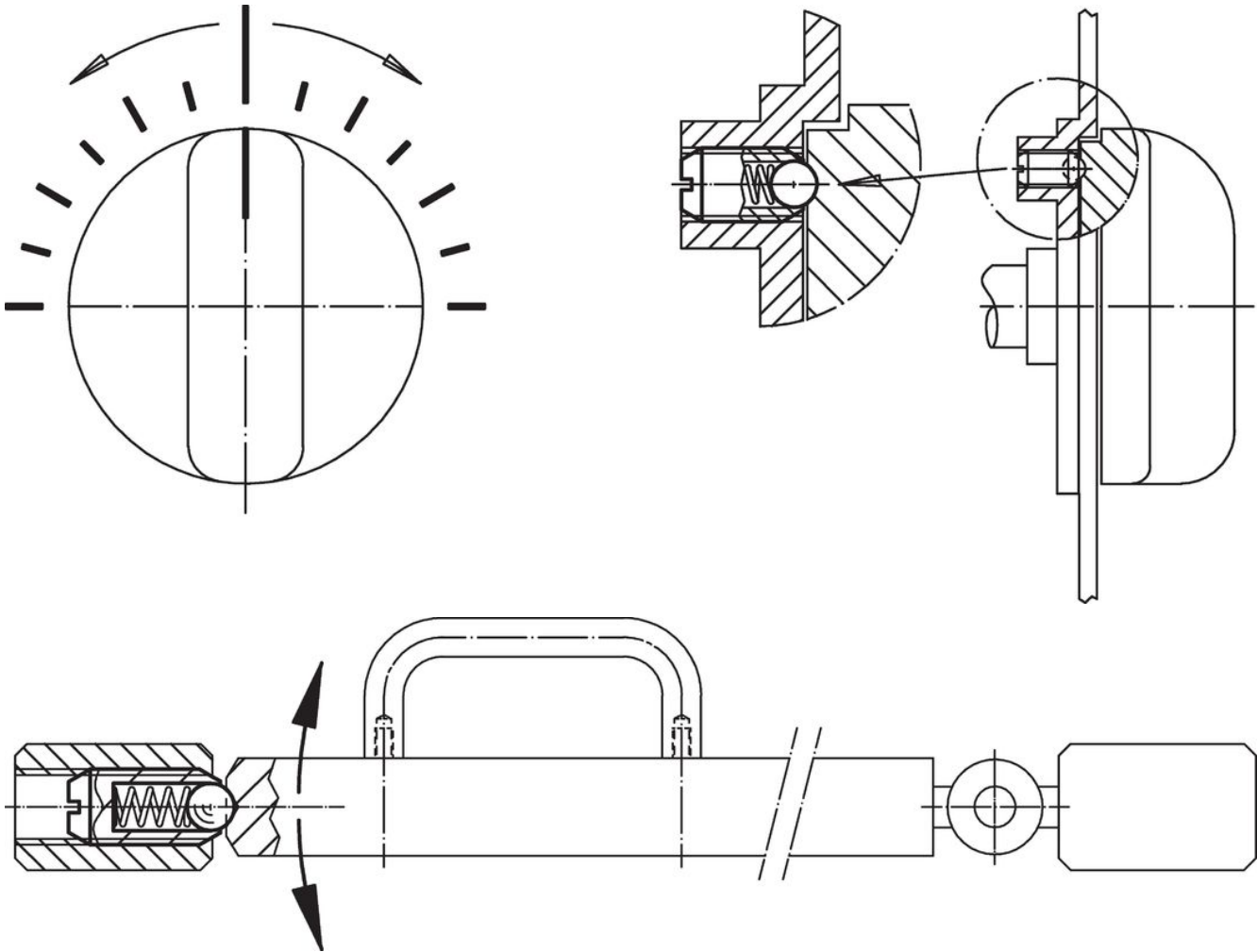
d <sub>1</sub>		Dimensions				Stroke s [in]	Spring load <sup>1)</sup>		min.   max.		oz	Art. No.
		Thread	d <sub>2</sub>	l	[in]		F <sub>1</sub> ~ [lb]	F <sub>2</sub> ~ [lb]	[°F]			
[in]												
<b>free cutting steel, light spring load, With thread lock</b>												
#10-32		0.190	2A-UNF	3/32	33/64	0.025	0.9	1.5	-22	194	0.049	2B050.0210
1/4-20	1/4	0.250	2A-UNC	1/8	17/32	0.035	2.1	4.0	-22	194	0.073	2B050.0212
5/16-18	5/16	0.313	2A-UNC	5/32	37/64	0.040	2.0	4.6	-22	194	0.123	2B050.0216
3/8-16	3/8	0.375	2A-UNC	3/16	5/8	0.048	2.5	5.0	-22	194	0.194	2B050.0218
1/2-13	1/2	0.500	2A-UNC	9/32	3/4	0.072	3.0	6.0	-22	194	0.399	2B050.0220
5/8-11	5/8	0.625	2A-UNC	3/8	63/64	0.096	4.5	9.0	-22	194	0.790	2B050.0222
<b>free cutting steel, standard spring load, Without thread lock</b>												
#4-48		0.112	2A-UNF	1/16	3/16	0.020	0.1	0.5	-22	482	0.004	2B050.0031
#5-40		0.125	2A-UNC	1/16	1/4	0.020	0.3	0.8	-22	482	0.008	2B050.0032
#6-32		0.138	2A-UNC	5/64	5/16	0.023	0.5	1.0	-22	482	0.011	2B050.0033
#6-40		0.138	2A-UNF	5/64	5/16	0.023	0.5	1.0	-22	482	0.012	2B050.0035
#8-32		0.164	2A-UNC	3/32	11/32	0.025	0.8	1.3	-22	482	0.018	2B050.0036
#8-36		0.164	2A-UNF	3/32	11/32	0.025	0.8	1.3	-22	482	0.026	2B050.0038
#10-32		0.190	2A-UNF	3/32	33/64	0.025	2.0	3.1	-22	482	0.049	2B050.0040
1/4-20	1/4	0.250	2A-UNC	1/8	17/32	0.035	3.8	6.8	-22	482	0.065	2B050.0042
5/16-18	5/16	0.313	2A-UNC	5/32	37/64	0.040	4.0	8.4	-22	482	0.123	2B050.0046
3/8-16	3/8	0.375	2A-UNC	3/16	5/8	0.048	5.0	10.3	-22	482	0.198	2B050.0048
1/2-13	1/2	0.500	2A-UNC	9/32	3/4	0.072	6.0	12.0	-22	482	0.389	2B050.0050
5/8-11	5/8	0.625	2A-UNC	3/8	63/64	0.096	9.0	18.0	-22	482	0.811	2B050.0052
<b>free cutting steel, standard spring load, With thread lock</b>												
#4-48		0.112	2A-UNF	1/16	3/16	0.020	0.1	0.5	-22	194	0.005	2B050.0231
#5-40		0.125	2A-UNC	1/16	1/4	0.020	0.3	0.8	-22	194	0.007	2B050.0232
#6-32		0.138	2A-UNC	5/64	5/16	0.023	0.5	1.0	-22	194	0.011	2B050.0233
#6-40		0.138	2A-UNF	5/64	5/16	0.023	0.5	1.0	-22	194	0.020	2B050.0235
#8-32		0.164	2A-UNC	3/32	11/32	0.025	0.8	1.3	-22	194	0.026	2B050.0236
#8-36		0.164	2A-UNF	3/32	11/32	0.025	0.8	1.3	-22	194	0.027	2B050.0238
#10-32		0.190	2A-UNF	3/32	33/64	0.025	2.0	3.1	-22	194	0.050	2B050.0240
1/4-20	1/4	0.250	2A-UNC	1/8	17/32	0.035	3.8	6.8	-22	194	0.074	2B050.0242
5/16-18	5/16	0.313	2A-UNC	5/32	37/64	0.040	4.0	8.4	-22	194	0.115	2B050.0246
3/8-16	3/8	0.375	2A-UNC	3/16	5/8	0.048	5.0	10.3	-22	194	0.189	2B050.0248
1/2-13	1/2	0.500	2A-UNC	9/32	3/4	0.072	6.0	12.0	-22	194	0.378	2B050.0250
5/8-11	5/8	0.625	2A-UNC	3/8	63/64	0.096	9.0	18.0	-22	194	0.797	2B050.0252
<b>free cutting steel, heavy spring load, Without thread lock</b>												
#10-32		0.190	2A-UNF	3/32	33/64	0.025	3.3	4.8	-22	482	0.049	2B050.0070
1/4-20	1/4	0.250	2A-UNC	1/8	17/32	0.035	5.6	8.6	-22	482	0.064	2B050.0072
5/16-18	5/16	0.313	2A-UNC	5/32	37/64	0.040	6.0	11.1	-22	482	0.113	2B050.0076
3/8-16	3/8	0.375	2A-UNC	3/16	5/8	0.048	7.5	15.1	-22	482	0.196	2B050.0078
1/2-13	1/2	0.500	2A-UNC	9/32	3/4	0.072	6.0	24.0	-22	482	0.408	2B050.0080
5/8-11	5/8	0.625	2A-UNC	3/8	63/64	0.096	7.0	40.0	-22	482	0.825	2B050.0082
<b>free cutting steel, heavy spring load, With thread lock</b>												
#10-32		0.190	2A-UNF	3/32	33/64	0.025	3.3	4.8	-22	194	0.041	2B050.0270
1/4-20	1/4	0.250	2A-UNC	1/8	17/32	0.035	5.6	8.6	-22	194	0.065	2B050.0272
5/16-18	5/16	0.313	2A-UNC	5/32	37/64	0.040	6.0	11.1	-22	194	0.113	2B050.0276
3/8-16	3/8	0.375	2A-UNC	3/16	5/8	0.048	7.5	15.1	-22	194	0.198	2B050.0278
1/2-13	1/2	0.500	2A-UNC	9/32	3/4	0.072	6.0	24.0	-22	194	0.398	2B050.0280
5/8-11	5/8	0.625	2A-UNC	3/8	63/64	0.096	7.0	40.0	-22	194	0.819	2B050.0282
<b>stainless steel, light spring load, Without thread lock</b>												
#10-32		0.190	2A-UNF	3/32	33/64	0.025	0.9	1.5	-22	482	0.041	2B050.0110
1/4-20	1/4	0.250	2A-UNC	1/8	17/32	0.035	2.1	4.0	-22	482	0.052	2B050.0112
5/16-18	5/16	0.313	2A-UNC	5/32	37/64	0.040	2.0	4.6	-22	482	0.117	2B050.0116
3/8-16	3/8	0.375	2A-UNC	3/16	5/8	0.048	2.5	5.0	-22	482	0.190	2B050.0118
1/2-13	1/2	0.500	2A-UNC	9/32	3/4	0.072	3.0	6.0	-22	482	0.397	2B050.0120
5/8-11	5/8	0.625	2A-UNC	3/8	63/64	0.096	4.5	9.0	-22	482	0.790	2B050.0122

1) statistical average value

d <sub>1</sub>		Dimensions				Stroke s [in]	Spring load <sup>1)</sup>		min.   max.		oz	Art. No.
		Thread	d <sub>2</sub>	l	[in]		F <sub>1</sub> ~ [lb]	F <sub>2</sub> ~ [lb]	[°F]			
[in]												
<b>stainless steel, light spring load, With thread lock</b>												
#10-32		0.190	2A-UNF	3/32	33/64	0.025	0.9	1.5	-22	194	0.048	2B050.0310
1/4-20	1/4	0.250	2A-UNC	1/8	17/32	0.035	2.1	4.0	-22	194	0.074	2B050.0312
5/16-18	5/16	0.313	2A-UNC	5/32	37/64	0.040	2.0	4.6	-22	194	0.123	2B050.0316
3/8-16	3/8	0.375	2A-UNC	3/16	5/8	0.048	2.5	5.0	-22	194	0.188	2B050.0318
1/2-13	1/2	0.500	2A-UNC	9/32	3/4	0.072	3.0	6.0	-22	194	0.399	2B050.0320
5/8-11	5/8	0.625	2A-UNC	3/8	63/64	0.096	4.5	9.0	-22	194	0.790	2B050.0322
<b>stainless steel, standard spring load, Without thread lock</b>												
#4-48		0.112	2A-UNF	1/16	3/16	0.020	0.1	0.5	-22	482	0.004	2B050.0131
#5-40		0.125	2A-UNC	1/16	1/4	0.020	0.3	0.8	-22	482	0.007	2B050.0132
#6-32		0.138	2A-UNC	5/64	5/16	0.023	0.5	1.0	-22	482	0.011	2B050.0133
#6-40		0.138	2A-UNF	5/64	5/16	0.023	0.5	1.0	-22	482	0.012	2B050.0135
#8-32		0.164	2A-UNC	3/32	11/32	0.025	0.8	1.3	-22	482	0.018	2B050.0136
#8-36		0.164	2A-UNF	3/32	11/32	0.025	0.8	1.3	-22	482	0.019	2B050.0138
#10-32		0.190	2A-UNF	3/32	33/64	0.025	2.0	3.1	-22	482	0.041	2B050.0140
1/4-20	1/4	0.250	2A-UNC	1/8	17/32	0.035	3.8	6.8	-22	482	0.065	2B050.0142
5/16-18	5/16	0.313	2A-UNC	5/32	37/64	0.040	4.0	8.4	-22	482	0.123	2B050.0146
3/8-16	3/8	0.375	2A-UNC	3/16	5/8	0.048	5.0	10.3	-22	482	0.198	2B050.0148
1/2-13	1/2	0.500	2A-UNC	9/32	3/4	0.072	6.0	12.0	-22	482	0.383	2B050.0150
5/8-11	5/8	0.625	2A-UNC	3/8	63/64	0.096	9.0	18.0	-22	482	0.813	2B050.0152
<b>stainless steel, standard spring load, With thread lock</b>												
#4-48		0.112	2A-UNF	1/16	3/16	0.020	0.1	0.5	-22	194	0.005	2B050.0331
#5-40		0.125	2A-UNC	1/16	1/4	0.020	0.3	0.8	-22	194	0.015	2B050.0332
#6-32		0.138	2A-UNC	5/64	5/16	0.023	0.5	1.0	-22	194	0.185	2B050.0333
#6-40		0.138	2A-UNF	5/64	5/16	0.023	0.5	1.0	-22	194	0.020	2B050.0335
#8-32		0.164	2A-UNC	3/32	11/32	0.025	0.8	1.3	-22	194	0.018	2B050.0336
#8-36		0.164	2A-UNF	3/32	11/32	0.025	0.8	1.3	-22	194	0.026	2B050.0338
#10-32		0.190	2A-UNF	3/32	33/64	0.025	2.0	3.1	-22	194	0.041	2B050.0340
1/4-20	1/4	0.250	2A-UNC	1/8	17/32	0.035	3.8	6.8	-22	194	0.073	2B050.0342
5/16-18	5/16	0.313	2A-UNC	5/32	37/64	0.040	4.0	8.4	-22	194	0.123	2B050.0346
3/8-16	3/8	0.375	2A-UNC	3/16	5/8	0.048	5.0	10.3	-22	194	0.191	2B050.0348
1/2-13	1/2	0.500	2A-UNC	9/32	3/4	0.072	6.0	12.0	-22	194	0.406	2B050.0350
5/8-11	5/8	0.625	2A-UNC	3/8	63/64	0.096	9.0	18.0	-22	194	0.815	2B050.0352
<b>stainless steel, heavy spring load, Without thread lock</b>												
#10-32		0.190	2A-UNF	3/32	33/64	0.025	3.3	4.8	-22	482	0.046	2B050.0170
1/4-20	1/4	0.250	2A-UNC	1/8	17/32	0.035	5.6	8.6	-22	482	0.074	2B050.0172
5/16-18	5/16	0.313	2A-UNC	5/32	37/64	0.040	6.0	11.1	-22	482	0.123	2B050.0176
3/8-16	3/8	0.375	2A-UNC	3/16	5/8	0.048	7.5	15.1	-22	482	0.197	2B050.0178
1/2-13	1/2	0.500	2A-UNC	9/32	3/4	0.072	6.0	24.0	-22	482	0.395	2B050.0180
5/8-11	5/8	0.625	2A-UNC	3/8	63/64	0.096	7.0	40.0	-22	482	0.825	2B050.0182
<b>stainless steel, heavy spring load, With thread lock</b>												
#10-32		0.190	2A-UNF	3/32	33/64	0.025	3.3	4.8	-22	194	0.049	2B050.0370
1/4-20	1/4	0.250	2A-UNC	1/8	17/32	0.035	5.6	8.6	-22	194	0.071	2B050.0372
5/16-18	5/16	0.313	2A-UNC	5/32	37/64	0.040	6.0	11.1	-22	194	0.115	2B050.0376
3/8-16	3/8	0.375	2A-UNC	3/16	5/8	0.048	7.5	15.1	-22	194	0.198	2B050.0378
1/2-13	1/2	0.500	2A-UNC	9/32	3/4	0.072	6.0	24.0	-22	194	0.409	2B050.0380
5/8-11	5/8	0.625	2A-UNC	3/8	63/64	0.096	7.0	40.0	-22	194	0.825	2B050.0382

<sup>1)</sup> statistical average value

Application example



Compliance

For detailed compliance information please select the desired article number.