

SPRING PLUNGERS

SPRING PLUNGERS GIVE SURE AND POSITIVE CONTROLLED SPRING TENSION.

APPLICATIONS

Nylon Nose Spring Plungers are generally used with soft materials such as Aluminum, Brass, etc. They are also used for positioning parts in fixtures - Locating Pins - Detents - Ejecting parts - End product users.

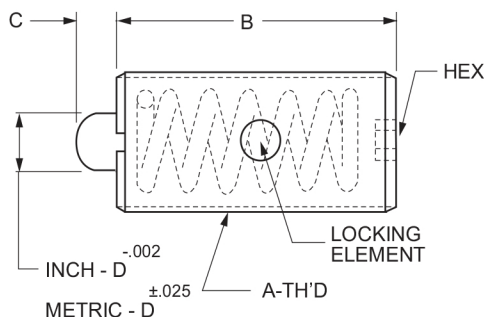
All American Spring Plungers are available in two spring pressures: **Black Nose** with standard pressure and **Silver Nose** with light pressure. The Nylon nose has high tensile strength excellent wear resistance and is reinforced for minimum deformation. Hardened steel plungers assure long life and a black oxide finish resists rust.

The optional self locking element provides a positive, vibration-proof lock. Compression of the nylon pellet creates a spring-like wedging action that locks the mated threads together. That locking element feature eliminates the need for set screws or more expensive methods of locking spring plungers.

NOTE: To provide full locking torque and to prevent damage to the insert when using a Locking Element type spring plungers, it is important that the tapped installation be countersunk 90° by 1/32 larger than the major thread diameter.

NOTE: Do Not use at temperatures above 600° for steels or 300° for for Nylon.

SPECIAL SPRING OR BALL PLUNGERS can be made to your specifications. Prices are quoted upon request.

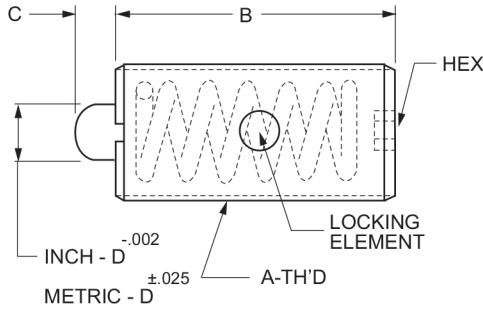


SPRING PLUNGERS							
Steel Black Nose - Standard End Pressure							
With or Without Thread Locking Element - Black Oxide Finish							
P/N		DIMENSIONS				END PRESSURE (LBS.)	
PLAIN	WITH INSERT	A	B	C	D	1/2 COMP.	FULLY COMP.
100-05	101-05	6-32	3/8	1/16	.046	1.3	1.6
100-10	101-10	6-32	17/32	1/16	.046	3.0	4.5
100-15	101-15	8-32	5/8	3/32	.070	5.0	7.3
100-20	101-20	10-32	3/4	1/8	.093	7.0	11.1
100-25	101-25	1/4-20	3/4	1/8	.119	5.5	9.0
100-30	101-30	1/4-20	1	5/32	.119	8.0	13.0
100-35	101-35	1/4-28	1	5/32	.119	8.0	13.0
100-40	101-40	5/16-18	1	3/16	.135	9.0	15.0
100-45	101-45	3/8-16	1-1/8	3/16	.187	10.0	14.5
100-50	101-50	1/2-13	1-1/4	1/4	.249	12.0	17.4
100-55	101-55	5/8-11	1-1/2	5/16	.312	18.0	25.5
100-60	101-60	3/4-10	1-3/4	5/16	.374	22.0	37.3
100-65	101-65	1/8	2-13/32	1/2	.499	42.0	68.0

STAINLESS SPRING PLUNGERS							
Stainless Steel Nose - Standard End Pressure							
With or Without Thread Locking Element							
P/N		DIMENSIONS				END PRESSURE (LBS.)	
PLAIN	WITH INSERT	A	B	C	D	1/2 COMP.	FULLY COMP.
100-05S	101-05S	6-32	3/8	1/16	.046	1.3	1.6
100-10S	101-10S	6-32	17/32	1/16	.046	3.0	4.5
100-15S	101-15S	8-32	5/8	3/32	.070	5.0	7.3
100-20S	101-20S	10-32	3/4	1/8	.093	7.0	11.1
100-25S	101-25S	1/4-20	3/4	1/8	.119	5.5	9.0
100-30S	101-30S	1/4-20	1	3/16	.119	8.0	13.0
100-35S	101-35S	1/4-28	1	3/16	.119	8.0	13.0
100-40S	101-40S	5/16-18	1	3/16	.135	9.0	15.0
100-45S	101-45S	3/8-16	1-1/8	3/16	.186	10.0	14.5
100-50S	101-50S	1/2-13	1-1/4	1/4	.248	12.0	17.4

METRIC SPRING PLUNGERS							
Steel Nose - Standard End Pressure							
With Thread Locking Element							
P/N	DIMENSIONS				END PRESSURE (KG)		
	A	B	C	D	1/2 COMP.	FULLY COMP.	
101-71	M6 x 1.00	25.00	5.00	3.00	3.60	5.85	
101-72	M8 x 1.25	25.00	5.00	3.40	4.05	6.75	
101-73	M10 x 1.50	29.00	5.00	4.70	4.50	6.50	
101-74	M12 x 1.75	32.00	6.00	6.30	5.40	7.85	

SPRING PLUNGERS



SPRING PLUNGERS

Steel SILVER Nose - Light End Pressure
With or Without Thread Locking Element - Black Oxide Finish

P/N		DIMENSIONS				END PRESSURE (LBS.)	
PLAIN	WITH INSERT	A	B	C	D	1/2 COMP.	FULLY COMP.
102-05	103-05	6-32	17/32	1/16	.046	1.0	1.5
102-10	103-10	8-32	5/8	3/32	.070	1.5	2.3
102-15	103-15	10-32	3/4	1/8	.093	2.0	2.7
102-20	103-20	1/4-20	3/4	1/8	.119	1.0	2.0
102-25	103-25	1/4-20	1	5/32	.119	2.5	4.0
102-30	103-30	1/4-28	1	5/32	.119	2.5	4.0
102-35	103-35	5/16-18	1	3/16	.135	3.0	4.5
102-40	103-40	3/8-16	1-1/8	3/16	.187	5.0	7.2
102-45	103-45	1/2-13	1-1/4	1/4	.249	6.0	9.3
102-50	103-50	5/8-11	1-1/2	5/16	.312	7.0	10.5
102-55	103-55	3/4-10	1-3/4	5/16	.374	11.0	16.0
102-60	103-60	1/8	2-13/32	1/2	.499	17.5	31.0

STAINLESS SPRING PLUNGERS

Stainless Steel Nose - Light End Pressure
With or Without Thread Locking Element

P/N		DIMENSIONS				END PRESSURE (LBS.)	
PLAIN	WITH INSERT	A	B	C	D	1/2 COMP.	FULLY COMP.
102-05S	103-05S	6-32	17/32	1/16	.046	1.0	1.5
102-10S	103-10S	8-32	5/8	3/32	.070	1.5	2.3
102-15S	103-15S	10-32	3/4	1/8	.093	2.0	2.7
102-25S	103-25S	1/4-20	1	3/16	.119	2.5	4.0
102-30S	103-30S	1/4-28	1	3/16	.119	2.5	4.0
102-35S	103-35S	5/16-18	1	3/16	.135	3.0	4.5
102-40S	103-40S	3/8-16	1-1/8	3/16	.186	5.0	7.2
102-45S	103-45S	1/2-13	1-1/4	1/4	.248	6.0	9.3

METRIC SPRING PLUNGERS

Steel Nose - Light End Pressure
With Thread Locking Element

P/N	DIMENSIONS				END PRESSURE (KG)	
	A	B	C	D	1/2 COMP.	FULLY COMP.
103-74	M6 x 1.00	25.00	5.00	3.00	1.15	1.80
103-75	M8 x 1.25	25.00	5.00	3.40	1.35	2.00
103-76	M10 x 1.50	29.00	5.00	4.70	2.25	3.25
103-77	M12 x 1.75	32.00	6.00	6.30	2.70	4.20

NYLON SPRING PLUNGERS (DIE APPLICATION)

Brown Delrin Nose - Heavy End Pressure
With or Without Thread Locking Element - Black Oxide Finish

P/N		DIMENSIONS				END PRESSURE (LBS.)	
PLAIN	WITH INSERT	A	B	C	D	1/2 COMP.	FULLY COMP.
104-05	105-05	8-32	5/8	3/32	.070	5.0	7.3
104-10	105-10	10-32	3/4	1/8	.093	7.0	11.1
104-15	105-15	1/4-20	1	5/32	.119	8.0	13.0
104-20	105-20	5/16-18	1	3/16	.135	9.0	15.0
104-25	105-25	3/8-16	1-1/8	3/16	.187	10.0	14.5
104-30	105-30	1/2-13	1-1/4	1/4	.249	12.0	17.4
104-35	105-35	5/8-11	1-1/2	5/16	.312	18.0	25.2

STAINLESS SPRING PLUNGERS

Brown Delrin Nose - Heavy End Pressure
With or Without Thread Locking Element

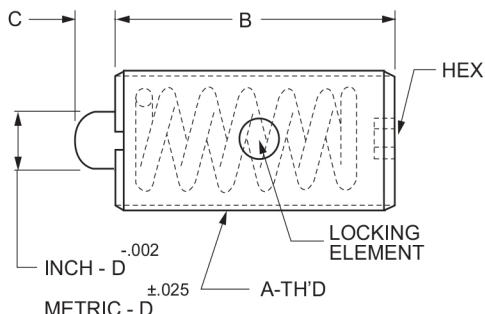
P/N		DIMENSIONS				END PRESSURE (LBS.)	
PLAIN	WITH INSERT	A	B	C	D	1/2 COMP.	FULLY COMP.
104-05S	105-05S	8-32	5/8	3/32	.070	5.0	7.3
104-10S	105-10S	10-32	3/4	1/8	.093	7.0	11.1
104-15S	105-15S	1/4-20	1	3/16	.119	8.0	13.0
104-17S	105-17S	1/4-28	1	3/16	.119	8.0	13.0
104-20S	105-20S	5/16-18	1	3/16	.135	9.0	15.0
104-25S	105-25S	3/8-16	1-1/8	3/16	.186	10.0	14.5
104-30S	105-30S	1/2-13	1-1/4	1/4	.248	12.0	17.4

METRIC SPRING PLUNGERS

Brown Delrin Nose - Heavy End Pressure
With Thread Locking Element

P/N	DIMENSIONS				END PRESSURE (KG)	
	A	B	C	D	1/2 COMP.	FULLY COMP.
105-41	M6 x 1.00	25.00	5.00	3.00	3.60	5.85
105-42	M8 x 1.25	25.00	5.00	3.40	4.05	6.75
105-43	M10 x 1.50	29.00	5.00	4.70	4.50	6.50
105-44	M12 x 1.75	32.00	6.00	6.30	5.40	7.85

SPRING PLUNGERS



NYLON SPRING PLUNGERS (DIE APPLICATION)

White Delsin Nose - Light End Pressure
With or Without Thread Locking Element - Black Oxide Finish

P/N		DIMENSIONS				END PRESSURE (LBS.)	
PLAIN	WITH INSERT	A	B	C	D	1/2 COMP.	FULLY COMP.
106-05	107-05	8-32	5/8	3/32	.070	1.5	2.3
106-10	107-10	10-32	3/4	1/8	.093	2.0	2.7
106-15	107-15	1/4-20	1	5/32	.119	2.5	4.0
106-20	107-20	5/16-18	1	3/16	.135	3.0	4.5
106-25	107-25	3/8-16	1-1/8	3/16	.187	5.0	7.2
106-30	107-30	1/2-13	1-1/4	1/4	.249	6.0	9.3
106-35	107-35	5/8-11	1-1/2	5/16	.312	7.0	10.5

STAINLESS SPRING PLUNGERS

White Delrin Nose - Light End Pressure
With or Without Thread Locking Element

P/N		DIMENSIONS				END PRESSURE (LBS.)	
PLAIN	WITH INSERT	A	B	C	D	1/2 COMP.	FULLY COMP.
106-05S	107-05S	8-32	5/8	3/32	.070	1.5	2.3
106-10S	107-10S	10-32	3/4	1/8	.093	2.0	2.7
106-15S	107-15S	1/4-20	1	3/16	.119	2.5	4.0
106-17S	107-17S	1/4-28	1	3/16	.119	2.5	4.0
106-20S	107-20S	5/16-18	1	3/16	.135	3.0	4.5
106-25S	107-25S	3/8-16	1-1/8	3/16	.186	5.0	7.2
106-30S	107-30S	1/2-13	1-1/4	1/4	.248	6.0	9.3

METRIC SPRING PLUNGERS

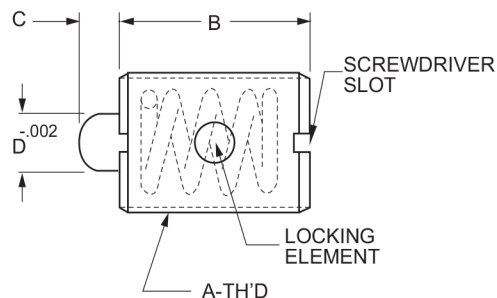
White Delrin Nose - Light End Pressure
With Thread Locking Element - Black Oxide Finish

P/N	DIMENSIONS				END PRESSURE (KG)	
	A	B	C	D	1/2 COMP.	FULLY COMP.
107-41	M6 x 1.00	25.00	5.00	3.00	1.15	1.80
107-42	M8 x 1.25	25.00	5.00	3.40	1.35	2.00
107-43	M10 x 1.50	29.00	5.00	4.70	2.25	3.25
107-44	M12 x 1.75	32.00	6.00	6.30	2.70	4.20

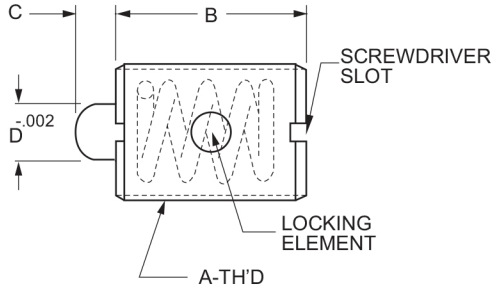
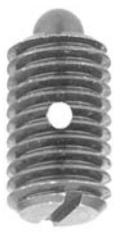
SHORT SPRING PLUNGERS

Steel Black Nose - Standard End Pressure
With Thread Locking Element - Black Oxide Finish

P/N	DIMENSIONS				END PRESSURE (LBS.)	
	A	B	C	D	1/2 COMP.	FULLY COMP.
107-49	8-32	7/16	.052	.070	3.10	4.75
107-50	8-36	7/16	.052	.070	3.10	4.75
107-51	10-32	15/32	.065	.093	4.00	6.25
107-52	1/4-20	17/32	.078	.119	6.75	10.50
107-53	5/16-18	9/16	.084	.135	9.60	15.50
107-54	3/8-16	5/8	.110	.186	11.50	18.50
107-55	1/2-13	3/4	.151	.248	16.50	28.00
107-56	5/8-11	1-1/16	.215	.310	28.50	50.00



SPRING PLUNGERS



STAINLESS STEEL SHORT SPRING PLUNGERS

Stainless Steel Nose - Standard End Pressure
With Thread Locking Element

P/N	DIMENSIONS				END PRESSURE (LBS.)	
	A	B	C	D	1/2 COMP.	FULLY COMP.
107-49S	8-32	7/16	.052	.070	3.10	4.75
107-50S	8-36	7/16	.052	.070	3.10	4.75
107-51S	10-32	15/32	.065	.093	4.00	6.25
107-52S	1/4-20	17/32	.078	.119	6.75	10.50
107-53S	5/16-18	9/16	.084	.135	9.60	15.50
107-54S	3/8-16	5/8	.110	.186	11.50	18.50
107-55S	1/2-13	3/4	.151	.248	16.50	28.00

SHORT SPRING PLUNGERS

Steel Silver Nose - Light End Pressure
With Thread Locking Element - Black Oxide Finish

P/N	DIMENSIONS				END PRESSURE (LBS.)	
	A	B	C	D	1/2 COMP.	FULLY COMP.
107-59	8-32	7/16	.052	.070	1.00	1.50
107-60	8-36	7/16	.052	.070	1.00	1.50
107-61	10-32	15/32	.065	.093	1.62	2.50
107-62	1/4-20	17/32	.078	.119	2.25	3.50
107-63	5/16-18	9/16	.084	.135	2.75	4.00
107-64	3/8-16	5/8	.110	.186	3.25	5.00
107-65	1/2-13	3/4	.151	.248	3.62	5.50
107-66	5/8-11	1-1/16	.215	.310	5.25	8.50

STAINLESS STEEL SHORT SPRING PLUNGERS

Stainless Steel Nose - Light End Pressure
With Thread Locking Element

P/N	DIMENSIONS				END PRESSURE (LBS.)	
	A	B	C	D	1/2 COMP.	FULLY COMP.
107-59S	8-32	7/16	.052	.070	1.00	1.50
107-60S	8-36	7/16	.052	.070	1.00	1.50
107-61S	10-32	15/32	.065	.093	1.62	2.50
107-62S	1/4-20	17/32	.078	.119	2.25	3.50
107-63S	5/16-18	9/16	.084	.135	2.75	4.00
107-64S	3/8-16	5/8	.110	.186	3.25	5.00
107-65S	1/2-13	3/4	.151	.248	3.62	5.50

SHORT SPRING PLUNGERS

Brown Delrin Nose - Standard End Pressure
With Thread Locking Element - Black Oxide Finish

P/N	DIMENSIONS				END PRESSURE (LBS.)	
	A	B	C	D	1/2 COMP.	FULLY COMP.
107-69	8-32	7/16	.052	.070	3.10	4.75
107-70	8-36	7/16	.052	.070	3.10	4.75
107-71	10-32	15/32	.065	.093	4.00	6.25
107-72	1/4-20	17/32	.078	.119	6.75	10.50
107-73	5/16-18	9/16	.084	.135	9.60	15.50
107-74	3/8-16	5/8	.110	.186	11.50	18.50
107-75	1/2-13	3/4	.151	.248	16.50	28.00
107-76	5/8-11	1-1/16	.215	.310	28.50	50.00

STAINLESS STEEL SHORT SPRING PLUNGERS

Brown Delrin Nose - Standard End Pressure
With Thread Locking Element

P/N	DIMENSIONS				END PRESSURE (LBS.)	
	A	B	C	D	1/2 COMP.	FULLY COMP.
107-69S	8-32	7/16	.052	.070	3.10	4.75
107-70S	8-36	7/16	.052	.070	3.10	4.75
107-71S	10-32	15/32	.065	.093	4.00	6.25
107-72S	1/4-20	17/32	.078	.119	6.75	10.50
107-73S	5/16-18	9/16	.084	.135	9.60	15.50
107-74S	3/8-16	5/8	.110	.186	11.50	18.50
107-75S	1/2-13	3/4	.151	.248	16.50	28.00

SHORT SPRING PLUNGERS

Nylon White Nose - Light End Pressure
With Thread Locking Element - Black Oxide Finish

P/N	DIMENSIONS				END PRESSURE (LBS.)	
	A	B	C	D	1/2 COMP.	FULLY COMP.
107-79	8-32	7/16	.052	.070	1.00	1.50
107-80	8-36	7/16	.052	.070	1.00	1.50
107-81	10-32	15/32	.065	.093	1.62	2.50
107-82	1/4-20	17/32	.078	.119	2.25	3.50
107-83	5/16-18	9/16	.084	.135	2.75	4.00
107-84	3/8-16	5/8	.110	.186	3.25	5.00
107-85	1/2-13	3/4	.151	.248	3.62	5.50
107-86	5/8-11	1-1/16	.215	.310	5.25	8.50

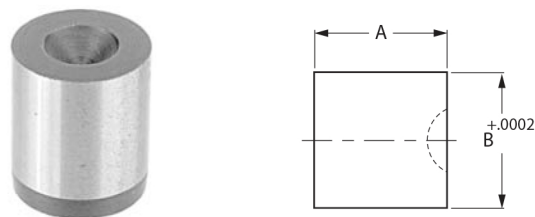
STAINLESS STEEL SHORT SPRING PLUNGERS

White Delrin Nose - Light End Pressure
With Thread Locking Element

P/N	DIMENSIONS				END PRESSURE (LBS.)	
	A	B	C	D	1/2 COMP.	FULLY COMP.
107-79S	8-32	7/16	.052	.070	1.00	1.50
107-80S	8-36	7/16	.052	.070	1.00	1.50
107-81S	10-32	15/32	.065	.093	1.62	2.50
107-82S	1/4-20	17/32	.078	.119	2.25	3.50
107-83S	5/16-18	9/16	.084	.135	2.75	4.00
107-84S	3/8-16	5/8	.110	.186	3.25	5.00
107-85S	1/2-13	3/4	.151	.248	3.62	5.50
107-86S	5/8-11	1-1/16	.215	.310	5.25	8.50

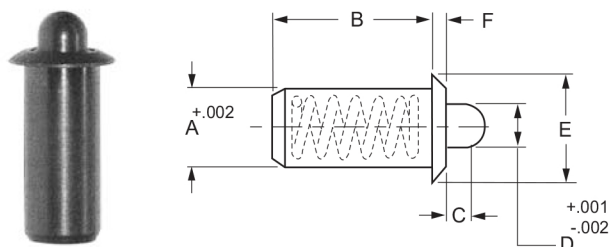
SPRING PLUNGERS

The Ball Plunger Detent provides perfect mating with ball plunger or other similar applications. These Detents are hardened and ground for long wear.



BALL PLUNGER DETENT			
Case Hardened			
P/N	USED WITH BALL PLUNGER	DIMENSIONS	
		A	B
111-05	109-02, 109-04	1/8	.1075
111-10	109-05	1/8	.1175
111-15	109-08 through 109-14	3/16	.1614
111-20	109-16, 109-18, 109-20	1/4	.2034
111-25	109-22, 109-24, 109-26	5/16	.2659
111-30	109-28, 109-30, 109-32	3/8	.3284
111-35	109-34, 109-36, 109-38	1/2	.4378

These are an economical Spring Plunger similar to the Press Fit Ball Plunger in body dimensions and material. The Press Fit Spring Plunger are intended to handle the long travel needs that might be needed.



PRESS FIT BALL PLUNGERS								
Stainless Steel Nose - Heavy End Pressure - No End Color - Black Oxide Finish								
P/N	DIMENSIONS						END PRESSURE (LBS.)	
	A	B	C	D	E	F	STARTING COMP.	FULLY COMP.
111-50	.125	.252	.062	.070	.187	.032	1.0	2.0
111-51	.188	.405	.094	.121	.250	.035	1.5	4.5
111-52	.250	.481	.125	.168	.312	.044	2.5	6.0
111-53	.312	.643	.151	.186	.375	.045	4.0	10.0
111-54	.375	.785	.187	.234	.500	.078	5.0	14.0
111-55	.500	1.130	.250	.332	.688	.088	8.0	18.0

PRESS FIT BALL PLUNGERS								
Stainless Steel Nose - Light End Pressure - White End Color - Black Oxide Finish								
P/N	DIMENSIONS						END PRESSURE (LBS.)	
	A	B	C	D	E	F	STARTING COMP.	FULLY COMP.
111-56	.125	.252	.062	.070	.187	.032	0.50	1.0
111-57	.188	.405	.094	.121	.250	.035	0.75	2.5
111-58	.250	.481	.125	.168	.312	.044	1.50	3.0
111-59	.312	.643	.151	.186	.375	.045	2.00	5.0
111-60	.375	.785	.187	.234	.500	.078	2.50	7.0
111-61	.500	1.130	.250	.332	.688	.088	4.00	9.0

STAINLESS STEEL PRESS FIT BALL PLUNGERS								
Stainless Steel Nose - Heavy End Pressure - No End Color								
P/N	DIMENSIONS						END PRESSURE (LBS.)	
	A	B	C	D	E	F	STARTING COMP.	FULLY COMP.
111-62	.125	.252	.062	.070	.187	.032	1.0	2.0
111-63	.188	.405	.094	.121	.250	.035	1.5	4.5
111-64	.250	.481	.125	.168	.312	.044	2.5	6.0
111-65	.312	.643	.151	.186	.375	.045	4.0	10.0
111-66	.375	.785	.187	.234	.500	.078	5.0	14.0
111-67	.500	1.130	.250	.332	.688	.088	8.0	18.0

STAINLESS STEEL PRESS FIT BALL PLUNGERS								
Stainless Steel Nose - Light End Pressure - White End Color								
P/N	DIMENSIONS						END PRESSURE (LBS.)	
	A	B	C	D	E	F	STARTING COMP.	FULLY COMP.
111-68	.125	.252	.062	.070	.187	.032	0.50	1.0
111-69	.188	.405	.094	.121	.250	.035	0.75	2.5
111-70	.250	.481	.125	.168	.312	.044	1.50	3.0
111-71	.312	.643	.151	.186	.375	.045	2.00	5.0
111-72	.375	.785	.187	.234	.500	.078	2.50	7.0
111-73	.500	1.130	.250	.332	.688	.088	4.00	9.0

PRESS FIT BALL PLUNGERS								
Brown Delrin Nose - Heavy End Pressure - No End Color - Black Oxide Finish								
P/N	DIMENSIONS						END PRESSURE (LBS.)	
	A	B	C	D	E	F	STARTING COMP.	FULLY COMP.
111-74	.125	.252	.062	.070	.187	.032	1.0	2.0
111-75	.188	.405	.094	.121	.250	.035	1.5	4.5
111-76	.250	.481	.125	.168	.312	.044	2.5	6.0
111-77	.312	.643	.151	.186	.375	.045	4.0	10.0
111-78	.375	.785	.187	.234	.500	.078	5.0	14.0
111-79	.500	1.130	.250	.332	.688	.088	8.0	18.0

PRESS FIT BALL PLUNGERS									
White Delrin Nose - Light End Pressure - No End Color - Black Oxide Finish									
P/N	DIMENSIONS						END PRESSURE (LBS.)		
	A	B	C	D	E	F	NET LBS PER 100	STARTING COMP.	FULLY COMP.
111-80	.125	.252	.062	.070	.187	.032	1	0.50	1.0
111-81	.188	.405	.094	.121	.250	.035	1	0.75	2.5
111-82	.250	.481	.125	.168	.312	.044	1	1.50	3.0
111-83	.312	.643	.151	.186	.375	.045	1	2.00	5.0
111-84	.375	.785	.187	.234	.500	.078	2	2.50	7.0
111-85	.500	1.130	.250	.332	.688	.088	4	4.00	9.0

STAINLESS STEEL PRESS FIT BALL PLUNGERS								
Brown Delrin Nose - Heavy End Pressure - No End Color								
P/N	DIMENSIONS						END PRESSURE (LBS.)	
	A	B	C	D	E	F	STARTING COMP.	FULLY COMP.
111-86	.125	.252	.062	.070	.187	.032	1.0	2.0
111-87	.188	.405	.094	.121	.250	.035	1.5	4.5
111-88	.250	.481	.125	.168	.312	.044	2.5	6.0
111-89	.312	.643	.151	.186	.375	.045	4.0	10.0
111-90	.375	.785	.187	.234	.500	.078	5.0	14.0
111-91	.500	1.130	.250	.332	.688	.088	8.0	18.0

SPRING & BALL PLUNGERS

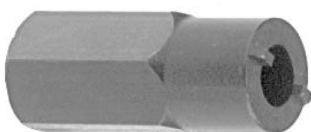
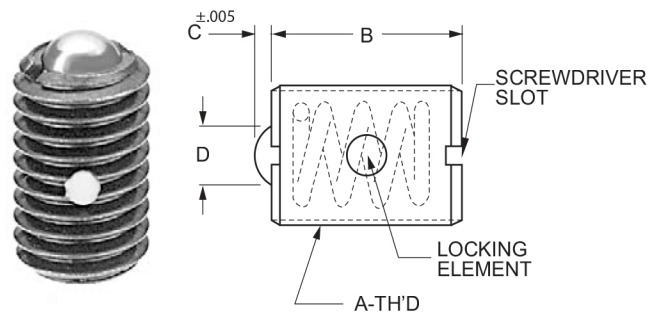
Plunger Wrenches makes it easy to install or remove spring or ball plungers. They also prevent possible spring damage that can result when a screwdriver is used on the plunger end.



SPRING AND BALL PLUNGERS	
P/N	PLUNGER SIZE
108-10	#8
108-15	#10
108-20	1/4
108-25	5/16
108-30	3/8
108-35	1/2
108-40	5/8
108-45	3/4
108-50	1

Ball Plungers are used for many locating applications in dies, jigs, fixtures and other tooling. They are also used in indexing automatic feed devices, for gear shifters, as locators in progressive dies, in torque-limiting clutches, for positioning levers, in gauges anywhere you need controlled end pressure. They are also used with detents where predetermined positioning is required. Ball plungers are furnished in three end pressures and are color-coded for easy identification. For Standard Measurements, **Black** is for standard end pressure, **Silver** is for light end pressure and **Gold** is for heavy end pressure. For Metric sizes, **White** is for light end pressure, **Green** is for medium end pressure and **Yellow** is for heavy end pressure.

Special Ball Plungers are made to your specifications will be priced upon request.



SPRING AND BALL PLUNGERS	
P/N	PLUNGER SIZE
108-75	#6
108-76	#8 and M4
108-77	#10 and M5
108-78	1/4 and M6
108-79	5/16 and M8
108-80	3/8 and M10
108-81	1/2 and M12
108-82	5/8
108-83	3/4
108-84	1

SPRING PLUNGERS						
Stainless Steel Ball Nose - With Thread Locking Element						
P/N	COLOR CODE	DIMENSIONS				END PRESSURE (LBS.)
		A	B	C	D	
109-02	Plain	4-48	.187	.020	.062	1/2
109-04	Plain	5-40	.250	.020	.062	3/4
109-06	Plain	6-40	.312	.023	.078	1
109-08	Plain	8-36	.344	.025	.093	1-1/4
109-09	Plain	8-32	.344	.025	.093	1-1/4
109-10	Black	10-32	.513	.025	.093	3
109-12	Silver	10-32	.513	.025	.093	1-1/2
109-14	Gold	10-32	.513	.025	.093	5
109-16	Black	1/4-20	.531	.035	.125	7
109-18	Silver	1/4-20	.531	.035	.125	4
109-20	Gold	1/4-20	.531	.035	.125	12
109-22	Black	5/16-18	.578	.040	.156	9
109-24	Silver	5/16-18	.578	.040	.156	4-1/2
109-26	Gold	5/16-18	.578	.040	.156	17
109-28	Black	3/8-16	.625	.048	.187	10
109-30	Silver	3/8-16	.625	.048	.187	5
109-32	Gold	3/8-16	.625	.048	.187	21
109-34	Black	1/2-13	.750	.072	.281	12
109-36	Silver	1/2-13	.750	.072	.281	6
109-38	Gold	1/2-13	.750	.072	.281	30
109-40	Black	5/8-11	.984	.096	.375	18
109-42	Silver	5/8-11	.984	.096	.375	9
109-44	Gold	5/8-11	.984	.096	.375	50

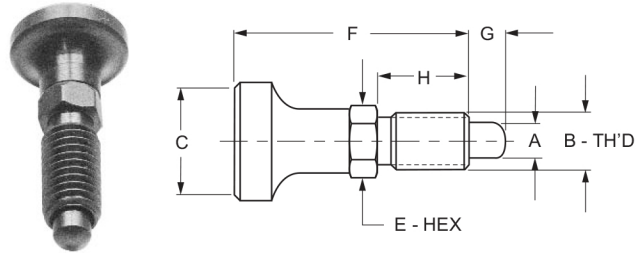
SPRING PLUNGERS & RETRACTABLE PLUNGERS

STAINLESS STEEL PRESS FIT BALL PLUNGERS

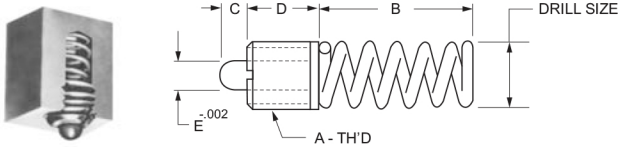
White Delrin Nose - Light End Pressure - No End Color

P/N	DIMENSIONS						END PRESSURE (LBS.)	
	A	B	C	D	E	F	STARTING COMP.	FULLY COMP.
111-92	.125	.252	.062	.070	.187	.032	0.50	1.0
111-93	.188	.405	.094	.121	.250	.035	0.75	2.5
111-94	.250	.481	.125	.168	.312	.044	1.50	3.0
111-95	.312	.643	.151	.186	.375	.045	2.00	5.0
111-96	.375	.785	.187	.234	.500	.078	2.50	7.0
111-97	.500	1.130	.250	.332	.688	.088	4.00	9.0

Delrin Button Head Retractable plungers are spring loaded to work in a variety of uses in both tooling and equipment. White Delrin Knob Stainless Steel body and springs are ideal for food and medical industry applications.



Blind Hole Mounting is especially useful where space is limited. Also, excellent when used as strippers or locators.



THREE PIECE SPRING PLUNGERS

Type A - Blind Hole Mounting - Hardened - Black Oxide

P/N	DIMENSIONS						DRILL SIZE
	A	B	C	D	E		
112-05	8/32	1/2	3/32	1/8	.070	#29	
112-10	10-32	5/8	1/8	5/32	.093	#21	
112-15	1/4-20	13/16	5/32	3/16	.119	#6	
112-20	5/16-18	13/16	3/16	7/32	.135	F	
112-25	3/8-16	7/8	7/32	7/32	.187	5/16	
112-30	1/2-13	1	1/4	1/4	.249	27/64	
112-35	5/8-11	1-5/16	5/16	5/16	.312	17/32	
112-40	3/4-10	1-3/8	5/16	3/8	.374	21/32	

DELRIN BUTTON HEAD RETRACTABLE PLUNGERS

Non Locking Plunger - Radiused, Case Hardened - Black Oxide Finish

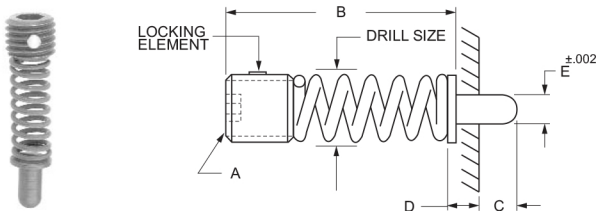
P/N	DIMENSIONS							END PRESSURE (LBS.)	
	A	B	C	E	F	G	H	STARTING COMP.	FULLY COMP.
113-42	.16	14-20	.50	1/4	0.97	.13	.50	.12	.36
113-43	.25	3/8-16	.75	3/8	1.40	.18	.75	.25	2.00
113-44	.31	1/2-13	1.00	1/2	1.90	.25	1.00	.50	1.75

STAINLESS STEEL DELRIN BUTTON HEAD RETRACTABLE PLUNGERS

Non Locking Plunger

P/N	DIMENSIONS							END PRESSURE (LBS.)	
	A	B	C	E	F	G	H	STARTING COMP.	FULLY COMP.
113-42S	.16	14-20	.50	1/4	0.97	.13	.50	.12	.36
113-43S	.25	3/8-16	.75	3/8	1.40	.18	.75	.25	2.00
113-44S	.31	1/2-13	1.00	1/2	1.90	.25	1.00	.50	1.75

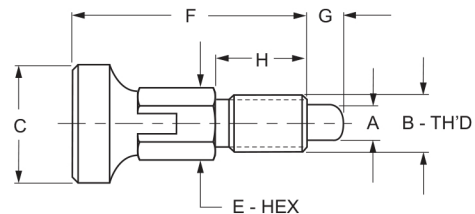
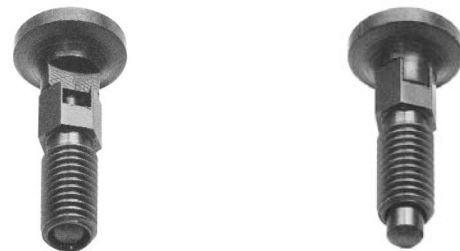
Through Hole Mounting inserts from the top of the die. Easily replaced. The thread locking element furnished with this type prevents vibrations from moving the screw after assembly



THREE PIECE SPRING PLUNGERS

Type B - Through Hole Mounting - Black Oxide - with Thread Locking Element

P/N	DIMENSIONS						DRILL SIZE
	A	B	C	D	E		
113-05	8/32 x 3/16	21/32	1/8	3/32	.070	#29	
113-10	10-32 x 3/16	13/16	5/32	1/8	.093	#21	
113-15	1/4-20 x 1/4	1-3/32	3/16	5/32	.119	#6	
113-20	5/16-18 x 5/16	1-3/16	7/32	3/16	.135	F	
113-25	3/8-16 x 5/16	1-9/32	7/32	7/32	.187	5/16	
113-30	1/2-13 x 7/16	1-3/8	1/4	1/4	.249	27/64	
113-35	5/8-11 x 1/2	1-13/16	5/16	5/16	.312	17/32	
113-40	3/4-10 x 5/8	2-1/8	3/8	5/16	.374	21/32	



DELRIN BUTTON HEAD RETRACTABLE PLUNGERS

Locking Plunger - Radiused, Case Hardened - Black Oxide Finish

P/N	DIMENSIONS							END PRESSURE (LBS.)	
	A	B	C	E	F	G	H	STARTING COMP.	FULLY COMP.
113-45	.16	14-20	.50	1/4	.97	.13	.50	.12	.36
113-46	.25	3/8-16	.75	3/8	1.40	.18	.75	.25	2.00
113-47	.31	1/2-13	1.00	1/2	1.90	.25	1.00	.50	1.75