

Short Spring Plungers –Light and Heavy End Forces

Carbon & Stainless Steel Nose

- Excellent wear resistance

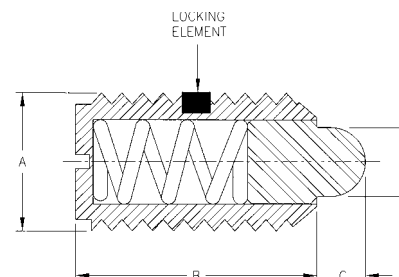
STEEL PLUNGERS:

- Body: 12L14 Steel, Black Oxide Finish
- Nose:
 - Light End Force: Case Hardened 12L14 Steel, Zinc Plated
 - Heavy End Force: Case Hardened 12L14 Steel, Black Oxide Finish



STAINLESS STEEL PLUNGERS:

- 303 Stainless Steel Body and Nose



LIGHT END FORCE				HEAVY END FORCE								Weight (lbs/100pcs)
Steel Part No.	Stainless Steel Part No.	End Force (lbs)		Steel Part No.	Stainless Steel Part No.	End Force (lbs)		Thread A	B	C	+0.000 -.001 D	
52608	53508	.50	1.50	52408	53408	.50	3.50	6-32	3/8	.036	.046	.12
52609	53509	.50	1.50	52409	53409	1.50	4.75	8-32	7/16	.052	.070	.12
52601	53501	.50	1.50	52401	53401	1.50	4.75	8-36	7/16	.052	.069	.15
52602	53502	.75	2.50	52402	53402	1.75	6.25	10-32	15/32	.065	.093	.16
52603	53503	1.00	3.50	52403	53403	3.00	10.50	1/4-20	17/32	.078	.119	.40
52604	53504	1.50	4.00	52404	53404	3.75	15.50	5/16-18	9/16	.084	.135	.60
52605	53505	1.50	5.00	52405	53405	4.50	18.50	3/8-16	5/8	.110	.186	.90
52606	53506	1.75	5.50	52406	53406	5.00	28.00	1/2-13	3/4	.151	.248	2.50
52607	53507	2.00	8.50	52407	53407	7.00	50.00	5/8-11	1-1/16	.215	.310	6.00

*Special sizes quoted upon request – see quotation form on page 115.
For information concerning installation, see page 125.*

Delrin® Nose

- Insulating Delrin Plungers
- Ideal for aluminum, brass, or any soft, easily marred mating material

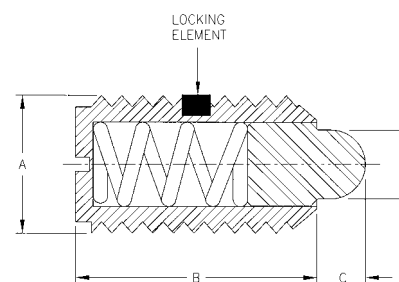


STEEL PLUNGERS:

- Body: 12L14 Steel, Clear Zinc Finish
- Nose:
 - Light End Force: White Delrin
 - Heavy End Force: Black Delrin

STAINLESS STEEL PLUNGERS:

- Body: 303 Stainless Steel
- Nose:
 - Light End Force: White Delrin
 - Heavy End Force: Black Delrin



LIGHT END FORCE: WHITE NOSE				HEAVY END FORCE: BLACK NOSE								Weight (lbs/100pcs)
Steel Part No.	Stainless Steel Part No.	End Force (lbs)		Steel Part No.	Stainless Steel Part No.	End Force (lbs)		Thread A	B	C	+0.000 -.002 D	
52708	53527	0.50	1.50	52508	53427	0.50	3.50	6-32	3/8	.036	.046	.12
52709	53528	0.50	1.50	52509	53428	1.50	4.75	8-32	7/16	.052	.070	.12
52701	53520	0.50	1.50	52501	53420	1.50	4.75	8-36	7/16	.052	.070	.12
52702	53521	0.75	2.50	52502	53421	1.75	6.25	10-32	15/32	.065	.093	.16
52703	53522	1.00	3.50	52503	53422	3.00	10.50	1/4-20	17/32	.078	.119	.40
52704	53523	1.50	4.00	52504	53423	3.75	15.50	5/16-18	9/16	.084	.135	.60
52705	53524	1.50	5.00	52505	53424	4.50	18.50	3/8-16	5/8	.110	.186	.90
52706	53525	1.75	5.50	52506	53425	5.00	28.00	1/2-13	3/4	.151	.248	2.00
52707	53526	2.00	8.50	52507	53426	7.00	50.00	5/8-11	1-1/16	.215	.310	4.60



SPRING LOADED DEVICES

Installation Information for TE-CO Spring Loaded Devices

Most TE-CO Spring & Ball Plungers can be installed using a screwdriver, hex key wrench, or spring/ball plunger wrench (see page 100). Also, many Hand Retractable Spring Plungers can be installed without using any tools by simply using its knob to engage the threads. Because spring loaded devices have hollow bodies, the maximum installation torques they can withstand are significantly less than bolts or screws. The table below should be used as a guideline for installing spring loaded devices.

Unified Thread Size	Metric Thread Size	Max Installation Torque (inch pounds)
No. 4	M2.5 x 0.45	.60
No. 5	M3 x 0.5	1.25
No. 6	M3.5 x 0.6-6g	1.65
No. 8	M4 x 0.7-6g	2.15
No. 10	M5 x 0.8-6g	3.15
1/4	M6 x 1-6g	6.0
5/16	M8 x 1.25	11.0
3/8	M10 x 1.5	16.0
7/16	M11 x 1.5	22.0
1/2	M12 x 1.75	28.0
9/16	M14 x 2.0	36.0
5/8	M16 x 2.0	55.0
3/4	M20 x 2.5	70.0
7/8	M22 x 2.5	95.0
1	M24 x 3.0	130.0
1-1/8	M30 x 3.5	160.0
1-1/4	M33 x 3.5	190.0

Most TE-CO Spring Loaded Devices can be ordered with or without a nylon thread locking element (see each product group for details). The nylon-locking element forces the threads on the opposite side of a spring loaded device to compress against the mating threads of a tapped hole, providing the thread locking property. The nylon-locking element can cause installation problems when installing into softer metals or aluminum. This can be prevented by either using a larger tap drill when tapping, by ordering a spring plunger without a locking element, or by requesting a quote for a special plunger that will fit your needs.

When installing spring loaded devices with a nylon thread locking element pellet (thread sizes 5/16" and larger or M8 and larger), TE-CO recommends that the tapped installation hole be countersunk 90 degrees by 1/32 larger than major thread diameter to prevent damage to the locking element.

For more detailed information you may contact any of our knowledgeable TE-CO Customer Service Representatives at 800-543-4071.

Inch Tap Drill Sizes Table for Spring Plungers

Tap	Tap Drill	Decimal Equiv. of Tap Drill	Probable Hole Size	Percent Of Thread %
4-48	42	0.0935	0.0955	61
	3/32	0.0938	0.0958	60
	41	0.0960	0.0980	52
5-40	40	0.098	0.1003	76
	39	0.0995	0.1018	71
	38	0.1015	0.1038	65
	37	0.1040	0.1063	58
	37	0.1040	0.1063	78
6-32	36	0.1065	0.1091	71
	7/64	0.1094	0.1120	64
	35	0.1100	0.1126	63
	34	0.1110	0.1136	60
	33	0.1130	0.1156	55
6-40	34	0.1110	0.1136	75
	33	0.1130	0.1156	69
	32	0.1160	0.1186	60
8-32	29	0.1360	0.1389	62
	28	0.1405	0.1434	51
8-36	29	0.1360	0.1389	70
	28	0.1405	0.1434	57
	9/64	0.1406	0.1435	57
10-32	5/32	0.1563	0.1595	75
	22	0.1570	0.1602	73
	21	0.1590	0.1622	68
	20	0.1610	0.1642	64
	19	0.1660	0.1692	51
1/4-20	9	0.1960	0.1998	77
	8	0.1990	0.2028	73
	7	0.2010	0.2048	70
	13/64	0.2031	0.2069	66
	6	0.2040	0.2078	65
	5	0.2055	0.2093	63
	4	0.2090	0.2128	57
1/4-28	3	0.2130	0.2168	72
	7/32	0.2188	0.2226	59
	2	0.2210	0.2248	55
5/16-18	F	0.257	0.2608	72
	G	0.261	0.2651	66
	17/64	0.2656	0.2697	59
	H	0.2660	0.2701	59
3/8-16	5/16	0.3125	0.3169	72
	O	0.3160	0.3204	68
	P	0.3230	0.3274	59
1/2-13	27/64	0.4219	0.4266	73
	7/16	0.4375	0.4422	58
5/8-11	17/32	0.5313	0.5362	75
	36/64	0.5469	0.5518	62
3/4-10	41/64	0.6406	0.6456	80
	21/32	0.6563	0.6613	68
1-8	55/64	0.8594	0.8653	83
	7/8	0.8750	0.8809	73
	57/64	0.8906	0.8965	64
	29/32	0.9063	0.9122	54