

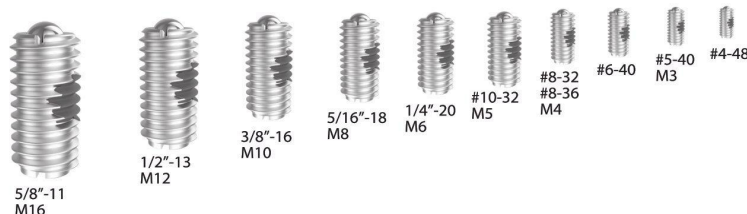
BALL PLUNGERS

STEEL – BODY: 1215 STEEL, ZINC PLATED OR BLACK OXIDE FINISH.

BALL: 440C STAINLESS. SPRING: MUSIC WIRE

STAINLESS STEEL – BODY: 300-SERIES STAINLESS. BALL: 440C STAINLESS. SPRING: 302 STAINLESS.

DELTRIN® – BODY: DELTRIN® 500, WHITE, BLACK, OR YELLOW. BALL: 440C STAINLESS. SPRING: 302 STAINLESS



STANDARD BALL (INCH)

STEEL BODY	PART NO.		A	END FORCE (LBS)		B	C	D DIA
	STAINLESS BODY	DELTRIN® BODY		INITIAL	FINAL			
CL-5-BP-1	CL-5-SBP-1	—	#4-48	1/8	1/2	3/16	.020	.062
CL-10-BP-1	CL-10-SBP-1	—	#5-40	1/4	3/4	1/4		
CL-15-BP-1	CL-15-SBP-1	—	#6-40	1/2	1	5/16	.023	.078
CL-22-BP-1	CL-22-SBP-1	—	#8-32	1/2	1-1/4	11/32	.025	.093
CL-20-BP-1	CL-20-SBP-1	—	#8-36	1/2	1-1/2			
CL-30-BP-1	CL-30-SBP-1	—	#10-32	1-1/2	3	33/64	.025	.093
CL-30-BP-2	CL-30-SBP-2	—		2	5			
CL-30-BP-3	CL-30-SBP-3	—		2	4			
CL-40-BP-1	CL-40-SBP-1	CL-40-DBP-1-LL	1/4-20	2	7	17/32	.035	.125
CL-40-BP-2	CL-40-SBP-2	CL-40-DBP-2-LL		3	12			
CL-40-BP-3	CL-40-SBP-3	CL-40-DBP-3-LL		4	12			
CL-50-BP-1	CL-50-SBP-1	CL-50-DBP-1-LL	5/16-18	2	4-1/2	37/64	.040	.156
CL-50-BP-2	CL-50-SBP-2	CL-50-DBP-2-LL		4	9			
CL-50-BP-3	CL-50-SBP-3	CL-50-DBP-3-LL		6	17			
CL-60-BP-1	CL-60-SBP-1	CL-60-DBP-1-LL	3/8-16	2-1/2	5	5/8	.048	.187
CL-60-BP-2	CL-60-SBP-2	CL-60-DBP-2-LL		5	10			
CL-60-BP-3	CL-60-SBP-3	CL-60-DBP-3-LL		6	21			
CL-70-BP-1	CL-70-SBP-1	—	1/2-13	3	6	3/4	.072	.281
CL-70-BP-2	CL-70-SBP-2	—		6	12			
CL-70-BP-3	CL-70-SBP-3	—		6	30			
CL-80-BP-1	CL-80-SBP-1	—	5/8-11	4-1/2	9	63/64	.096	.375
CL-80-BP-2	CL-80-SBP-2	—		9	18			
CL-80-BP-3	CL-80-SBP-3	—		7	50			

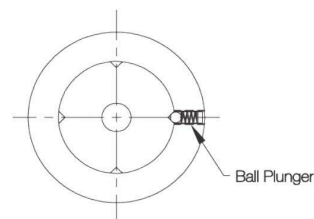
STANDARD BALL (METRIC)

PART NO. STAINLESS STEEL BODY	PART NO. STEEL BODY	A THREAD	THREAD PITCH (mm)	END FORCE	INITIAL END FORCE (N)	FINAL END FORCE (N)	B (mm)	C (mm)	D DIA (mm)
CLM-3-SBP-1	—	M3	.5	Light	.5	2.2	4.7	.5	1.6
CLM-4-SBP-1	CLM-4-BP-1	M4	.7	Light	2.5	5	8.5	.6	2.4
CLM-5-SBP-2	CLM-5-BP-2	M5	.8	Light	2.2	65	13	.6	2.4
CLM-5-SBP-1	CLM-5-BP-1	M5	.8	Medium	6.5	13	13	.6	2.4
CLM-5-SBP-3	CLM-5-BP-3	M5	.8	Heavy	9	22	13	.6	2.4
CLM-6-SBP-2	CLM-6-BP-2	M6	1	Light	9	18	13.5	.9	3.2
CLM-6-SBP-1	CLM-6-BP-1	M6	1	Medium	13	31	13.5	.9	3.2
CLM-6-SBP-3	CLM-6-BP-3	M6	1	Heavy	18	53	13.5	.9	3.2
CLM-8-SBP-2	CLM-8-BP-2	M8	1.25	Light	10	19.5	14.5	1	4
CLM-8-SBP-1	CLM-8-BP-1	M8	1.25	Medium	17.5	39	14.5	1	4
CLM-8-SBP-3	CLM-8-BP-3	M8	1.25	Heavy	27	76	14.5	1	4
CLM-10-SBP-2	CLM-10-BP-2	M10	1.5	Light	11	22	16	1.2	4.8
CLM-10-SBP-1	CLM-10-BP-1	M10	1.5	Medium	22	44	16	1.2	4.8
CLM-10-SBP-3	CLM-10-BP-3	M10	1.5	Heavy	27	93	16	1.2	4.8
CLM-12-SBP-2	CLM-12-BP-2	M12	1.75	Light	13.5	27	19	2	7.1
CLM-12-SBP-1	CLM-12-BP-1	M12	1.75	Medium	27	54	19	2	7.1
CLM-12-SBP-3	CLM-12-BP-3	M12	1.75	Heavy	27	132	19	2	7.1
CLM-16-SBP-2	CLM-16-BP-2	M16	2	Light	20	40	25	2.5	9.5
CLM-16-SBP-1	CLM-16-BP-1	M16	2	Medium	40	80	25	2.5	9.5
CLM-16-SBP-3	CLM-16-BP-3	M16	2	Heavy	31	220	25	2.5	9.5

BALL PLUNGERS

STAINLESS STEEL – BODY: 300-SERIES STAINLESS. BALL: WHITE DELRIN® 500. SPRING: 302 STAINLESS.
DELRIN® – BODY: DELRIN® 500, BLACK, OR YELLOW. BALL: WHITE DELRIN® 500. SPRING: 302 STAINLESS.

Self-contained ball-and-spring device available in many sizes and forces. Available in thread sizes from #4-48 to 5/8-11 (M3 to M16 in metric). Choice of light, medium, or heavy force in most thread sizes. Available in steel, stainless steel or Delrin®, all with a 440C stainless steel ball (optionally available with a Delrin® ball). Locking element (steel and stainless only) holds the unit securely in place after installation. Install and/or adjust from either end (when using the slot at the ball end, install with a Plunger Wrench to avoid over-compressing the spring). The three smallest sizes, and all Delrin® sizes, have no slot at the ball end.



DELRIN® BALL (INCH)

PART NO.		A	END FORCE (LBS)		B	C	D DIA
STAINLESS BODY	DELRIN® BODY		INITIAL	FINAL			
CL-5-SBPN-1	—	#4-48	1/8	1/2	3/16	.020	.062
CL-10-SBPN-1	—	#5-40	1/4	3/4	1/4	.023	.078
CL-15-SBPN-1	—	#6-40	1/2	1	5/16	.025	.093
CL-22-SBPN-1	—	#8-32	1/2	1-1/4	11/32	.025	.093
CL-20-SBPN-1	—	#8-36	1/2	1-1/2	33/64	.025	.093
CL-30-SBPN-1	—	#10-32	1/2	1-1/2	17/32	.035	.125
CL-30-SBPN-2	—		1-1/2	3			
CL-30-SBPN-3	—		2	5			
CL-40-SBPN-1	CL-40-DBPN-1-LL		2	4			
CL-40-SBPN-2	CL-40-DBPN-2-LL	1/4-20	3	7	37/64	.040	.156
CL-40-SBPN-3	—		4	12			
CL-50-SBPN-1	CL-50-DBPN-1-LL		2	4-1/2	5/8	.048	.187
CL-50-SBPN-2	CL-50-DBPN-2-LL	5/16-18	4	9			
CL-50-SBPN-3	—		6	17			
CL-60-SBPN-1	CL-60-DBPN-1-LL	3/8-16	2-1/2	5	3/4	.072	.281
CL-60-SBPN-2	CL-60-DBPN-2-LL		5	10			
CL-60-SBPN-3	—		6	21	63/64	.096	.375
CL-70-SBPN-1	—	1/2-13	3	6			
CL-70-SBPN-2	—		6	12			
CL-70-SBPN-3	—		6	30	5/8-11	.096	.375
CL-80-SBPN-1	—	5/8-11	4-1/2	9			
CL-80-SBPN-2	—		9	18			
CL-80-SBPN-3	—		7	50			

DELRIN® BALL (METRIC)

PART NO.	A THREAD	THREAD PITCH (mm)	END FORCE	INITIAL END FORCE (N)	FINAL END FORCE (N)	B (mm)	C (mm)	D DIA (mm)
CLM-3-SBPN-1	M3	.5	Light	.5	2.2	4.7	.5	1.6
CLM-4-SBPN-1	M4	.7	Light	2.5	5	8.5	.6	2.4
CLM-5-SBPN-2	M5	.8	Light	2.2	6.5	13	.6	2.4
CLM-5-SBPN-1	M5	.8	Medium	6.5	13	13	.6	2.4
CLM-6-SBPN-2	M6	1	Light	9	18	13.5	.9	3.2
CLM-6-SBPN-1	M6	1	Medium	13	31	13.5	.9	3.2
CLM-8-SBPN-2	M8	1.25	Light	10	19.5	14.5	1	4
CLM-8-SBPN-1	M8	1.25	Medium	17.5	39	14.5	1	4
CLM-10-SBPN-2	M10	1.5	Light	11	22	16	1.2	4.8
CLM-10-SBPN-1	M10	1.5	Medium	22	44	16	1.2	4.8
CLM-12-SBPN-2	M12	1.75	Light	13.5	27	19	2	7.1
CLM-12-SBPN-1	M12	1.75	Medium	27	54	19	2	7.1
CLM-16-SBPN-2	M16	2	Light	20	40	25	2.5	9.5
CLM-16-SBPN-1	M16	2	Medium	40	80	25	2.5	9.5