

# Raymond®

## Nested Die Springs

Associated Spring Raymond's Nested Die Springs combine specific springs to maximize spring loading in applications where space is critical, or where additional force is needed. Compared to single springs, nested springs offer up to 30% more load in the same spring volume, or comparable loads with 30% less volume. The combinations offered in the following tables are designed to prevent coil clash, reduce fatigue and optimize life. Other combinations are available upon request by contacting our Engineering Department at (800) 458-0867 or via email: [dceng@asraymond.com](mailto:dceng@asraymond.com).

3/4 INCH HOLE DIAMETER - INCH DIMENSIONS															
Hole Dia. (in)	Rod Dia. (in)	Free Length	Outer Spring Part Number	Inner Spring Part Number	Load at 1/10 in. Def (lb)	Spring Rate	Solid Height	Hole Dia. (in)	Rod Dia. (in)	Free Length	Outer Spring Part Number	Inner Spring Part Number	Load at 1/10 in. Def (lb)	Spring Rate	Solid Height
3/4	3/16	1	103-404	103-104	38	380	0.50	3/4	3/16	1	105-404	105-104	119.6	1196	0.73
3/4	3/16	1 1/4	103-405	103-105	30.6	306	0.65	3/4	3/16	1 1/4	105-405	105-105	97.8	978	0.90
3/4	3/16	1 1/2	103-406	103-106	24.2	242	0.78	3/4	3/16	1 1/2	105-406	105-106	77	770	1.05
3/4	3/16	1 3/4	103-407	103-107	21.3	213	0.88	3/4	3/16	1 3/4	105-407	105-107	67.5	675	1.23
3/4	3/16	2	103-408	103-108	18.1	181	1.00	3/4	3/16	2	105-408	105-108	57.7	577	1.40
3/4	3/16	2 1/2	103-410	103-110	14.6	146	1.25	3/4	3/16	2 1/2	105-410	105-110	45	450	1.75
3/4	3/16	3	103-412	103-112	12.2	122	1.50	3/4	3/16	3	105-412	105-112	37.1	371	2.10
3/4	3/16	1	103-404	104-104	40.4	404	0.63	3/4	3/16	1	105-404	106-104	129	1290	0.75
3/4	3/16	1 1/4	103-405	104-105	32.9	329	0.79	3/4	3/16	1 1/4	105-405	106-105	102.6	1026	0.94
3/4	3/16	1 1/2	103-406	104-106	26.7	267	0.95	3/4	3/16	1 1/2	105-406	106-106	81.5	815	1.13
3/4	3/16	1 3/4	103-407	104-107	23.4	234	1.10	3/4	3/16	1 3/4	105-407	106-107	70.5	705	1.31
3/4	3/16	2	103-408	104-108	20	200	1.26	3/4	3/16	2	105-408	106-108	60.5	605	1.50
3/4	3/16	2 1/2	103-410	104-110	15.7	157	1.58	3/4	3/16	2 1/2	105-410	106-110	47.5	475	1.88
3/4	3/16	3	103-412	104-112	13.1	131	1.89	3/4	3/16	3	105-412	106-112	39.3	393	2.25
3/4	3/16	1	103-404	105-104	43.6	436	0.70	3/4	3/16	1	105-404	104-104	116.4	1164	0.73
3/4	3/16	1 1/4	103-405	105-105	35.4	354	0.88	3/4	3/16	1 1/4	105-405	104-105	95.3	953	0.90
3/4	3/16	1 1/2	103-406	105-106	28	280	1.05	3/4	3/16	1 1/2	105-406	104-106	75.7	757	1.05
3/4	3/16	1 3/4	103-407	105-107	25.1	251	1.23	3/4	3/16	1 3/4	105-407	104-107	65.8	658	1.23
3/4	3/16	2	103-408	105-108	21.2	212	1.40	3/4	3/16	2	105-408	104-108	56.5	565	1.40
3/4	3/16	2 1/2	103-410	105-110	17	170	1.75	3/4	3/16	2 1/2	105-410	104-110	43.7	437	1.75
3/4	3/16	3	103-412	105-112	14.2	142	2.10	3/4	3/16	3	105-412	104-112	36	360	2.10
3/4	3/16	1	103-404	106-104	53	530	0.75	3/4	3/16	1	105-404	103-104	114	1140	0.73
3/4	3/16	1 1/4	103-405	106-105	40.2	402	0.94	3/4	3/16	1 1/4	105-405	103-105	93	930	0.90
3/4	3/16	1 1/2	103-406	106-106	32.5	325	1.13	3/4	3/16	1 1/2	105-406	103-106	73.2	732	1.05
3/4	3/16	1 3/4	103-407	106-107	28.1	281	1.31	3/4	3/16	1 3/4	105-407	103-107	63.7	637	1.23
3/4	3/16	2	103-408	106-108	24	240	1.50	3/4	3/16	2	105-408	103-108	54.6	546	1.40
3/4	3/16	2 1/2	103-410	106-110	19.5	195	1.88	3/4	3/16	2 1/2	105-410	103-110	42.6	426	1.75
3/4	3/16	3	103-412	106-112	16.4	164	2.25	3/4	3/16	3	105-412	103-112	35.1	351	2.10
3/4	3/16	1	104-404	104-104	58.4	584	0.63	3/4	3/16	1	106-404	106-104	161	1610	0.75
3/4	3/16	1 1/4	104-405	104-105	45.3	453	0.79	3/4	3/16	1 1/4	106-405	106-105	124.6	1246	0.94
3/4	3/16	1 1/2	104-406	104-106	37.7	377	0.95	3/4	3/16	1 1/2	106-406	106-106	101.5	1015	1.13
3/4	3/16	1 3/4	104-407	104-107	32.8	328	1.10	3/4	3/16	1 3/4	106-407	106-107	85.5	855	1.31
3/4	3/16	2	104-408	104-108	29	290	1.26	3/4	3/16	2	106-408	106-108	75	750	1.50
3/4	3/16	2 1/2	104-410	104-110	22.5	225	1.58	3/4	3/16	2 1/2	106-410	106-110	57.5	575	1.88
3/4	3/16	3	104-412	104-112	17.9	179	1.89	3/4	3/16	3	106-412	106-112	46.8	468	2.25
3/4	3/16	1	104-404	105-104	61.6	616	0.70	3/4	3/16	1	106-404	105-104	151.6	1516	0.75
3/4	3/16	1 1/4	104-405	105-105	47.8	478	0.88	3/4	3/16	1 1/4	106-405	105-105	119.8	1198	0.94
3/4	3/16	1 1/2	104-406	105-106	39	390	1.05	3/4	3/16	1 1/2	106-406	105-106	97	970	1.13
3/4	3/16	1 3/4	104-407	105-107	34.5	345	1.23	3/4	3/16	1 3/4	106-407	105-107	82.5	825	1.31
3/4	3/16	2	104-408	105-108	30.2	302	1.40	3/4	3/16	2	106-408	105-108	72.2	722	1.50
3/4	3/16	2 1/2	104-410	105-110	23.8	238	1.75	3/4	3/16	2 1/2	106-410	105-110	55	550	1.88
3/4	3/16	3	104-412	105-112	19	190	2.10	3/4	3/16	3	106-412	105-112	44.6	446	2.25
3/4	3/16	1	104-404	106-104	71	710	0.75	3/4	3/16	1	106-404	104-104	108	1080	0.73
3/4	3/16	1 1/4	104-405	106-105	52.6	526	0.94	3/4	3/16	1 1/4	106-405	104-105	148.4	1484	0.75
3/4	3/16	1 1/2	104-406	106-106	43.5	435	1.13	3/4	3/16	1 1/2	106-406	104-106	117.3	1173	0.94
3/4	3/16	1 3/4	104-407	106-107	37.5	375	1.31	3/4	3/16	1 3/4	106-407	104-107	95.7	957	1.13
3/4	3/16	2	104-408	106-108	33	330	1.50	3/4	3/16	2	106-408	104-108	80.8	808	1.31
3/4	3/16	2 1/2	104-410	106-110	26.3	263	1.88	3/4	3/16	2 1/2	106-410	104-110	71	710	1.50
3/4	3/16	3	104-412	106-112	21.2	212	2.25	3/4	3/16	3	106-412	104-112	53.7	537	1.88
3/4	3/16	1	104-404	103-104	56	560	0.63	3/4	3/16	1	106-404	103-104	146	1460	0.75
3/4	3/16	1 1/4	104-405	103-105	43	430	0.79	3/4	3/16	1 1/4	106-405	103-105	115	1150	0.94
3/4	3/16	1 1/2	104-406	103-106	35.2	352	0.95	3/4	3/16	1 1/2	106-406	103-106	93.2	932	1.13
3/4	3/16	1 3/4	104-407	103-107	30.7	307	1.10	3/4	3/16	1 3/4	106-407	103-107	78.7	787	1.31
3/4	3/16	2	104-408	103-108	27.1	271	1.26	3/4	3/16	2	106-408	103-108	69.1	691	1.50
3/4	3/16	2 1/2	104-410	103-110	21.4	214	1.58	3/4	3/16	2 1/2	106-410	103-110	52.6	526	1.88
3/4	3/16	3	104-412	103-112	17	170	1.89	3/4	3/16	3	106-412	103-112	42.6	426	2.25



# Nested Die Springs

## 1 INCH HOLE DIAMETER - INCH DIMENSIONS

Hole Dia. (in)	Rod Dia. (in)	Free Length	Outer Spring Part Number	Inner Spring Part Number	Load at 1/10 in. Def (lb)	Spring Rate	Solid Height	Hole Dia. (in)	Rod Dia. (in)	Free Length	Outer Spring Part Number	Inner Spring Part Number	Load at 1/10 in. Def (lb)	Spring Rate	Solid Height
1	9/32	1	103-504	103-204	66	660	0.60	1	9/32	2 1/2	105-510	103-210	71	710	1.75
1	9/32	1 1/4	103-505	103-205	53.2	532	0.70	1	9/32	3	105-512	103-212	57.9	579	2.10
1	9/32	1 1/2	103-506	103-206	44.1	441	0.80	1	9/32	3 1/2	105-514	103-214	48.6	486	2.45
1	9/32	1 3/4	103-507	103-207	38	380	0.88	1	9/32	1	105-504	104-204	208.7	2087	0.73
1	9/32	2	103-508	103-208	32.3	323	1.00	1	9/32	1 1/4	105-505	104-205	158.7	1587	0.88
1	9/32	2 1/2	103-510	103-210	25.4	254	1.25	1	9/32	1 1/2	105-506	104-206	129.8	1298	1.05
1	9/32	3	103-512	103-212	20.6	206	1.50	1	9/32	1 3/4	105-507	104-207	112.5	1125	1.23
1	9/32	3 1/2	103-514	103-214	17.5	175	1.75	1	9/32	2	105-508	104-208	94.7	947	1.40
1	9/32	1	104-504	104-204	15.5	155	0.68	1	9/32	2 1/2	105-510	104-210	72.5	725	1.75
1	9/32	1 1/4	104-505	104-205	12.2	122	0.79	1	9/32	3	105-512	104-212	59.5	595	2.10
1	9/32	1 1/2	104-506	104-206	9.8	98	0.95	1	9/32	3 1/2	105-514	104-214	49.6	496	2.45
1	9/32	1 3/4	104-507	104-207	8.5	85	1.10	1	9/32	1	105-504	106-204	224.2	2242	0.75
1	9/32	2	104-508	104-208	7.5	75	1.26	1	9/32	1 1/4	105-505	106-205	170.5	1705	0.94
1	9/32	2 1/2	104-510	104-210	6	60	1.58	1	9/32	1 1/2	105-506	106-206	139.2	1392	1.13
1	9/32	3	104-512	104-212	5.1	51	1.89	1	9/32	1 3/4	105-507	106-207	121	1210	1.31
1	9/32	3 1/2	104-514	104-214	4	40	2.21	1	9/32	2	105-508	106-208	101.2	1012	1.50
1	9/32	1	105-504	105-204	22.5	225	0.73	1	9/32	2 1/2	105-510	106-210	78	780	1.88
1	9/32	1 1/4	105-505	105-205	18.2	182	0.88	1	9/32	3	105-512	106-212	63.8	638	2.25
1	9/32	1 1/2	105-506	105-206	14.8	148	1.05	1	9/32	3 1/2	105-514	106-214	53.6	536	2.63
1	9/32	1 3/4	105-507	105-207	12.6	126	1.23	1	9/32	1 1/2	106-506	103-206	166.8	1668	1.13
1	9/32	2	105-508	105-208	11	110	1.40	1	9/32	2	106-508	103-208	121.5	1215	1.50
1	9/32	2 1/2	105-510	105-210	8.6	86	1.75	1	9/32	2 1/2	106-510	103-210	94.1	941	1.88
1	9/32	3	105-512	105-212	7.4	74	2.10	1	9/32	3	106-512	103-212	77.1	771	2.25
1	9/32	3 1/2	105-514	105-214	6	60	2.45	1	9/32	3 1/2	106-514	103-214	65.4	654	2.63
1	9/32	1 1/2	106-506	106-206	19.2	192	1.13	1	9/32	1 1/2	106-506	104-206	169.8	1698	1.13
1	9/32	2	106-508	106-208	14	140	1.50	1	9/32	2	106-508	104-208	123.5	1235	1.50
1	9/32	2 1/2	106-510	106-210	11.5	115	1.88	1	9/32	2 1/2	106-510	104-210	95.6	956	1.88
1	9/32	3	106-512	106-212	9.4	94	2.25	1	9/32	3	106-512	104-212	78.7	787	2.25
1	9/32	3 1/2	106-514	106-214	8	80	2.63	1	9/32	3 1/2	106-514	104-214	66.4	664	2.63
1	9/32	1	104-504	103-204	93.7	937	0.68	1	9/32	1 1/2	106-506	105-206	174.8	1748	1.13
1	9/32	1 1/4	104-505	103-205	73.5	735	0.79	1	9/32	2	106-508	105-208	127	1270	1.50
1	9/32	1 1/2	104-506	103-206	60.6	606	0.95	1	9/32	2 1/2	106-510	105-210	98.2	982	1.88
1	9/32	1 3/4	104-507	103-207	52.1	521	1.10	1	9/32	3	106-512	105-212	81	810	2.25
1	9/32	2	104-508	103-208	45.5	455	1.26	1	9/32	3 1/2	106-514	105-214	68.4	684	2.63
1	9/32	2 1/2	104-510	103-210	36.7	367	1.58	1	9/32	1	103-504	104-204	70.5	705	0.63
1	9/32	3	104-512	103-212	30.2	302	1.89	1	9/32	1 1/4	103-505	104-205	57.2	572	0.79
1	9/32	3 1/2	104-514	103-214	25.9	259	2.21	1	9/32	1 1/2	103-506	104-206	47.1	471	0.95
1	9/32	1	104-504	105-204	105.2	1052	0.70	1	9/32	1 3/4	103-507	104-207	40.5	405	1.10
1	9/32	1 1/4	104-505	105-205	83.5	835	0.88	1	9/32	2	103-508	104-208	34.3	343	1.26
1	9/32	1 1/2	104-506	105-206	68.6	686	1.05	1	9/32	2 1/2	103-510	104-210	26.9	269	1.58
1	9/32	1 3/4	104-507	105-207	58.7	587	1.23	1	9/32	3	103-512	104-212	22.2	222	1.89
1	9/32	2	104-508	105-208	51	510	1.40	1	9/32	3 1/2	103-514	104-214	18.5	185	2.21
1	9/32	2 1/2	104-510	105-210	40.8	408	1.75	1	9/32	1	103-504	105-204	77.5	775	0.70
1	9/32	3	104-512	105-212	34.1	341	2.10	1	9/32	1 1/4	103-505	105-205	63.2	632	0.88
1	9/32	3 1/2	104-514	105-214	28.9	289	2.45	1	9/32	1 1/2	103-506	105-206	52.1	521	1.05
1	9/32	1	104-504	106-204	113.7	1137	0.75	1	9/32	1 3/4	103-507	105-207	44.6	446	1.23
1	9/32	1 1/4	104-505	106-205	89.3	893	0.94	1	9/32	2	103-508	105-208	37.8	378	1.40
1	9/32	1 1/2	104-506	106-206	73	730	1.13	1	9/32	2 1/2	103-510	105-210	29.5	295	1.75
1	9/32	1 3/4	104-507	106-207	63.1	631	1.31	1	9/32	3	103-512	105-212	24.5	245	2.10
1	9/32	2	104-508	106-208	54	540	1.50	1	9/32	3 1/2	103-514	105-214	20.5	205	2.45
1	9/32	2 1/2	104-510	106-210	43.7	437	1.88	1	9/32	1	103-504	106-204	86	860	0.75
1	9/32	3	104-512	106-212	36.1	361	2.25	1	9/32	1 1/4	103-505	106-205	69	690	0.94
1	9/32	3 1/2	104-514	106-214	30.9	309	2.63	1	9/32	1 1/2	103-506	106-206	56.5	565	1.13
1	9/32	1	105-504	103-204	204.2	2042	0.73	1	9/32	1 3/4	103-507	106-207	49	490	1.31
1	9/32	1 1/4	105-505	103-205	154.7	1547	0.88	1	9/32	2	103-508	106-208	40.8	408	1.50
1	9/32	1 1/2	105-506	103-206	126.8	1268	1.05	1	9/32	2 1/2	103-510	106-210	32.4	324	1.88
1	9/32	1 3/4	105-507	103-207	110	1100	1.23	1	9/32	3	103-512	106-212	26.5	265	2.25
1	9/32	2	105-508	103-208	92.7	927	1.40	1	9/32	3 1/2	103-514	106-214	22.5	225	2.63

# Raymond®

## Nested Die Springs

### 1 1/4 INCH HOLE DIAMETER - INCH DIMENSIONS

Hole Dia. (in)	Rod Dia. (in)	Free Length	Outer Spring Part Number	Inner Spring Part Number	Load at 1/10 in. Def (lb)	Spring Rate	Solid Height	Hole Dia. (in)	Rod Dia. (in)	Free Length	Outer Spring Part Number	Inner Spring Part Number	Load at 1/10 in. Def (lb)	Spring Rate	Solid Height
1 1/4	11/32	1 1/2	103-606	103-306	60.4	604	0.83	1 1/4	11/32	3 1/2	104-614	103-314	49	490	2.21
1 1/4	11/32	1 3/4	103-607	103-307	50.2	502	0.90	1 1/4	11/32	4	104-616	103-316	42.5	425	2.52
1 1/4	11/32	2	103-608	103-308	46.2	462	1.00	1 1/4	11/32	1 1/2	104-606	105-306	151.4	1514	1.05
1 1/4	11/32	2 1/2	103-610	103-310	35.3	353	1.25	1 1/4	11/32	1 3/4	104-607	105-307	131.8	1318	1.23
1 1/4	11/32	3	103-612	103-312	29.8	298	1.50	1 1/4	11/32	2	104-608	105-308	111.8	1118	1.40
1 1/4	11/32	3 1/2	103-614	103-314	25	250	1.75	1 1/4	11/32	2 1/2	104-610	105-310	84.4	844	1.75
1 1/4	11/32	4	103-616	103-316	22	220	2.00	1 1/4	11/32	3	104-612	105-312	70.2	702	2.10
1 1/4	11/32	1 1/2	104-606	104-306	133.4	1334	0.98	1 1/4	11/32	3 1/2	104-614	105-314	59.4	594	2.45
1 1/4	11/32	1 3/4	104-607	104-307	117.6	1176	1.10	1 1/4	11/32	4	104-616	105-316	51.6	516	2.80
1 1/4	11/32	2	104-608	104-308	99.3	993	1.26	1 1/4	11/32	1 1/2	104-606	106-306	151.4	1514	1.13
1 1/4	11/32	2 1/2	104-610	104-310	73.9	739	1.58	1 1/4	11/32	1 3/4	104-607	106-307	131.8	1318	1.31
1 1/4	11/32	3	104-612	104-312	61.2	612	1.89	1 1/4	11/32	2	104-608	106-308	111.8	1118	1.50
1 1/4	11/32	3 1/2	104-614	104-314	52.5	525	2.21	1 1/4	11/32	2 1/2	104-610	106-310	84.4	844	1.88
1 1/4	11/32	4	104-616	104-316	45.7	457	2.52	1 1/4	11/32	3	104-612	106-312	70.2	702	2.25
1 1/4	11/32	1 1/2	105-606	105-306	248	2480	1.05	1 1/4	11/32	3 1/2	104-614	106-314	59.4	594	2.63
1 1/4	11/32	1 3/4	105-607	105-307	205.6	2056	1.23	1 1/4	11/32	4	104-616	106-316	51.6	516	3.00
1 1/4	11/32	2	105-608	105-308	170.4	1704	1.43	1 1/4	11/32	1 1/2	105-606	103-306	230.8	2308	1.05
1 1/4	11/32	2 1/2	105-610	105-310	134.6	1346	1.75	1 1/4	11/32	1 3/4	105-607	103-307	191.2	1912	1.23
1 1/4	11/32	3	105-612	105-312	109.2	1092	2.10	1 1/4	11/32	2	105-608	103-308	158.2	1582	1.43
1 1/4	11/32	3 1/2	105-614	105-314	90.2	902	2.45	1 1/4	11/32	2 1/2	105-610	103-310	124.1	1241	1.75
1 1/4	11/32	4	105-616	105-316	77.2	772	2.80	1 1/4	11/32	3	105-612	103-312	101	1010	2.10
1 1/4	11/32	2	106-608	106-308	233	2330	1.50	1 1/4	11/32	3 1/2	105-614	103-314	83	830	2.45
1 1/4	11/32	2 1/2	106-610	106-310	174.5	1745	1.88	1 1/4	11/32	4	105-616	103-316	70.8	708	2.80
1 1/4	11/32	3	106-612	106-312	141	1410	2.25	1 1/4	11/32	1 1/2	105-606	104-306	239	2390	1.05
1 1/4	11/32	3 1/2	106-614	106-314	123.9	1239	2.63	1 1/4	11/32	1 3/4	105-607	104-307	198.4	1984	1.23
1 1/4	11/32	4	106-616	106-316	102.5	1025	3.00	1 1/4	11/32	2	105-608	104-308	165.1	1651	1.43
1 1/4	11/32	1 1/2	103-606	104-306	79.4	794	0.95	1 1/4	11/32	2 1/2	105-610	104-310	129.1	1291	1.75
1 1/4	11/32	1 3/4	103-607	104-307	67	670	1.10	1 1/4	11/32	3	105-612	104-312	105.2	1052	2.10
1 1/4	11/32	2	103-608	104-308	61.7	617	1.26	1 1/4	11/32	3 1/2	105-614	104-314	86.5	865	2.45
1 1/4	11/32	2 1/2	103-610	104-310	46.8	468	1.58	1 1/4	11/32	4	105-616	104-316	74	740	2.80
1 1/4	11/32	3	103-612	104-312	39.8	398	1.89	1 1/4	11/32	1 1/2	105-606	106-306	248	2480	1.13
1 1/4	11/32	3 1/2	103-614	104-314	33.5	335	2.21	1 1/4	11/32	1 3/4	105-607	106-307	205.6	2056	1.31
1 1/4	11/32	4	103-616	104-316	29.6	296	2.52	1 1/4	11/32	2	105-608	106-308	170.4	1704	1.50
1 1/4	11/32	1 1/2	103-606	105-306	77.6	776	1.05	1 1/4	11/32	2 1/2	105-610	106-310	134.6	1346	1.88
1 1/4	11/32	1 3/4	103-607	105-307	64.6	646	1.23	1 1/4	11/32	3	105-612	106-312	109.2	1092	2.25
1 1/4	11/32	2	103-608	105-308	58.4	584	1.40	1 1/4	11/32	3 1/2	105-614	106-314	90.2	902	2.63
1 1/4	11/32	2 1/2	103-610	105-310	45.8	458	1.75	1 1/4	11/32	4	105-616	106-316	77.2	772	3.00
1 1/4	11/32	3	103-612	105-312	38	380	2.10	1 1/4	11/32	2	106-608	103-308	205	2050	1.50
1 1/4	11/32	3 1/2	103-614	105-314	32.2	322	2.45	1 1/4	11/32	2 1/2	106-610	103-310	152.5	1525	1.88
1 1/4	11/32	4	103-616	105-316	28.4	284	2.80	1 1/4	11/32	3	106-612	103-312	122	1220	2.25
1 1/4	11/32	1 1/2	103-606	106-306	86.6	866	1.13	1 1/4	11/32	3 1/2	106-614	103-314	108.5	1085	2.63
1 1/4	11/32	1 3/4	103-607	106-307	71.6	716	1.31	1 1/4	11/32	4	106-616	103-316	89	890	3.00
1 1/4	11/32	2	103-608	106-308	65.6	656	1.50	1 1/4	11/32	2	106-608	104-308	220.5	2205	1.50
1 1/4	11/32	2 1/2	103-610	106-310	50.8	508	1.88	1 1/4	11/32	2 1/2	106-610	104-310	164	1640	1.88
1 1/4	11/32	3	103-612	106-312	43	430	2.25	1 1/4	11/32	3	106-612	104-312	132	1320	2.25
1 1/4	11/32	3 1/2	103-614	106-314	35.4	354	2.63	1 1/4	11/32	3 1/2	106-614	104-314	117	1170	2.63
1 1/4	11/32	4	103-616	106-316	31.1	311	3.00	1 1/4	11/32	4	106-616	104-316	96.6	966	3.00
1 1/4	11/32	1 1/2	104-606	103-306	125.2	1252	0.98	1 1/4	11/32	2	106-608	105-308	165.1	1651	1.50
1 1/4	11/32	1 3/4	104-607	103-307	110.4	1104	1.10	1 1/4	11/32	2 1/2	106-610	105-310	129.1	1291	1.88
1 1/4	11/32	2	104-608	103-308	92.4	924	1.26	1 1/4	11/32	3	106-612	105-312	105.2	1052	2.25
1 1/4	11/32	2 1/2	104-610	103-310	68.9	689	1.58	1 1/4	11/32	3 1/2	106-614	105-314	86.5	865	2.63
1 1/4	11/32	3	104-612	103-312	57	570	1.89	1 1/4	11/32	4	106-616	105-316	74	740	3.00



# Raymond®

## Nested Die Springs

### 2 INCH HOLE DIAMETER - INCH DIMENSIONS

Hole Dia. (in)	Rod Dia. (in)	Free Length	Outer Spring Part Number	Inner Spring Part Number	Load at 1/10 in. Def (lb)	Spring Rate	Solid Height	Hole Dia. (in)	Rod Dia. (in)	Free Length	Outer Spring Part Number	Inner Spring Part Number	Load at 1/10 in. Def (lb)	Spring Rate	Solid Height
2	1/2	2 1/2	103-810	103-510	12.09	121	1.40	2	1/2	4	104-816	106-516	12.16	122	3.00
2	1/2	3	103-812	103-512	10.01	100	1.60	2	1/2	4 1/2	104-818	106-518	10.88	109	3.38
2	1/2	3 1/2	103-814	103-514	8.22	82	1.83	2	1/2	5	104-820	106-520	9.66	97	3.75
2	1/2	4	103-816	103-516	7.25	73	2.05	2	1/2	5 1/2	104-822	106-524	8.5	85	4.50
2	1/2	4 1/2	103-818	103-518	6.4	64	2.35	2	1/2	6	104-824	106-548	6.26	63	9.00
2	1/2	5	103-820	103-520	5.66	57	2.55	2	1/2	2 1/2	105-810	103-510	27.21	272	1.75
2	1/2	5 1/2	103-822	103-522	4.93	49	2.75	2	1/2	3	105-812	103-512	22.31	223	2.10
2	1/2	6	103-824	103-524	4.7	47	3.00	2	1/2	3 1/2	105-814	103-514	18.45	185	2.45
2	1/2	2 1/2	104-810	104-510	3.22	32	1.58	2	1/2	4	105-816	103-516	16.25	163	2.80
2	1/2	3	104-812	104-512	2.67	27	1.89	2	1/2	4 1/2	105-818	103-518	13.82	138	3.15
2	1/2	3 1/2	104-814	104-514	2.29	23	2.21	2	1/2	5	105-820	103-520	12.82	128	3.50
2	1/2	4	104-816	104-516	2.02	20	2.52	2	1/2	5 1/2	105-822	103-522	11.65	117	3.85
2	1/2	4 1/2	104-818	104-518	1.78	18	2.84	2	1/2	6	105-824	103-524	10.57	106	4.20
2	1/2	5	104-820	104-520	1.57	16	3.15	2	1/2	2 1/2	105-810	104-510	28.34	283	1.75
2	1/2	5 1/2	104-822	104-522	1.37	14	3.47	2	1/2	3	105-812	104-512	23.27	233	2.10
2	1/2	6	104-824	104-524	1.25	13	3.78	2	1/2	3 1/2	105-814	104-514	19.29	193	2.45
2	1/2	2 1/2	105-810	105-510	6.65	67	1.75	2	1/2	4	105-816	104-516	17.02	170	2.80
2	1/2	3	105-812	105-512	5.44	54	2.10	2	1/2	4 1/2	105-818	104-518	14.5	145	3.15
2	1/2	3 1/2	105-814	105-514	4.56	46	2.45	2	1/2	5	105-820	104-520	13.43	134	3.50
2	1/2	4	105-816	105-516	4	40	2.80	2	1/2	5 1/2	105-822	104-522	12.14	121	3.85
2	1/2	4 1/2	105-818	105-518	3.52	35	3.15	2	1/2	6	105-824	104-524	11.02	110	4.20
2	1/2	5	105-820	105-520	3.12	31	3.50	2	1/2	2 1/2	105-810	106-510	34.08	341	1.88
2	1/2	5 1/2	105-822	105-522	2.88	29	3.85	2	1/2	3	105-812	106-512	27.96	280	2.25
2	1/2	6	105-824	105-524	2.56	26	4.20	2	1/2	3 1/2	105-814	106-514	23.24	232	2.63
2	1/2	2 1/2	106-810	106-510	8.96	90	1.88	2	1/2	4	105-816	106-516	20.52	205	3.00
2	1/2	3	106-812	106-512	7.36	74	2.25	2	1/2	4 1/2	105-818	106-518	17.6	176	3.38
2	1/2	3 1/2	106-814	106-514	6.24	62	2.63	2	1/2	5	105-820	106-520	16.18	162	3.75
2	1/2	4	106-816	106-516	5.52	55	3.00	2	1/2	5 1/2	105-822	106-522	14.37	144	4.50
2	1/2	4 1/2	106-818	106-518	4.88	49	3.38	2	1/2	6	105-824	106-524	11.53	115	9.00
2	1/2	5	106-820	106-520	4.32	43	3.75	2	1/2	2 1/2	106-810	103-510	43.19	432	1.90
2	1/2	6	106-824	106-548	1.76	18	9.00	2	1/2	3	106-812	103-512	33.61	336	2.30
2	1/2	2 1/2	104-810	103-510	13.93	139	1.58	2	1/2	3 1/2	106-814	103-514	29.09	291	2.63
2	1/2	3	104-812	103-512	11.01	110	1.89	2	1/2	4	106-816	103-516	24.36	244	3.03
2	1/2	3 1/2	104-814	103-514	9.27	93	2.21	2	1/2	4 1/2	106-818	103-518	19.98	200	3.38
2	1/2	4	104-816	103-516	7.89	79	2.52	2	1/2	5	106-820	103-520	19	190	3.75
2	1/2	4 1/2	104-818	103-518	7.1	71	2.84	2	1/2	6	106-824	103-524	15.53	155	4.50
2	1/2	5	104-820	103-520	6.3	63	3.15	2	1/2	2 1/2	106-810	104-510	44.32	443	1.90
2	1/2	5 1/2	104-822	103-522	5.78	58	3.47	2	1/2	3	106-812	104-512	34.57	346	2.30
2	1/2	6	104-824	103-524	5.3	53	3.78	2	1/2	3 1/2	106-814	104-514	29.93	299	2.63
2	1/2	2 1/2	104-810	105-510	18.49	185	1.75	2	1/2	4	106-816	104-516	25.13	251	3.03
2	1/2	3	104-812	105-512	14.74	147	2.10	2	1/2	4 1/2	106-818	104-518	20.66	207	3.38
2	1/2	3 1/2	104-814	105-514	12.38	124	2.45	2	1/2	5	106-820	104-520	19.61	196	3.75
2	1/2	4	104-816	105-516	10.64	106	2.80	2	1/2	6	106-824	104-524	15.98	160	4.50
2	1/2	4 1/2	104-818	105-518	9.52	95	3.15	2	1/2	2 1/2	106-810	105-510	47.75	478	1.90
2	1/2	5	104-820	105-520	8.46	85	3.50	2	1/2	3	106-812	105-512	37.34	373	2.30
2	1/2	5 1/2	104-822	105-522	7.78	78	3.85	2	1/2	3 1/2	106-814	105-514	32.2	322	2.63
2	1/2	6	104-824	105-524	7.06	71	4.20	2	1/2	4	106-816	105-516	27.11	271	3.03
2	1/2	2 1/2	104-810	106-510	20.8	208	1.88	2	1/2	4 1/2	106-818	105-518	22.4	224	3.38
2	1/2	3	104-812	106-512	16.66	167	2.25	2	1/2	5	106-820	105-520	21.16	212	3.75
2	1/2	3 1/2	104-814	106-514	14.06	141	2.63	2	1/2	6	106-824	105-524	17.29	173	4.50

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