

# PORTER

## INCH DIE SPRINGS

100% Chrome Silicon Steel  
Rectangular Wire Construction



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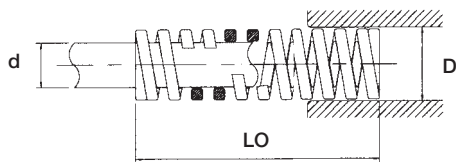


## Medium Load Color Green



Rectangular Wire Construction

Hole Dia. D	Rod Dia. d	Free LO	CATALOG NUMBER	RATE Pounds Required to Deflect 1/10 inch	Load-Deflection Table			
					Maximum Operating Deflection		Total Travel to Solid	
					Load lbs.	Deflect in.	Load lbs.	Deflect in.
3/8	3/16	1	LG0370100	5.7	23	.40	32	.56
		1 1/4	LG0370125	4.9	25	.50	35	.72
		1 1/2	LG0370150	3.9	23	.60	34	.87
		1 3/4	LG0370175	3.4	24	.70	35	1.02
		2	LG0370200	2.9	23	.80	33	1.14
		2 1/2	LG0370250	2.5	25	1.00	38	1.50
		3	LG0370300	1.8	22	1.20	33	1.81
		12	LG0371200	0.6	29	4.80	42	7.01
1/2	9/32	1	LG0500100	10.2	41	.40	52	.51
		1 1/4	LG0500125	9.4	47	.50	63	.67
		1 1/2	LG0500150	7.8	47	.60	68	.87
		1 3/4	LG0500175	6.9	48	.70	68	.98
		2	LG0500200	6.5	52	.80	74	1.14
		2 1/2	LG0500250	5.3	53	1.00	77	1.46
		3	LG0500300	4.1	49	1.20	71	1.73
		12	LG0501200	0.8	38	4.80	55	6.88
5/8	11/32	1	LG0620100	13.4	54	.40	58	.43
		1 1/4	LG0620125	13.1	66	.50	85	.65
		1 1/2	LG0620150	11.0	66	.60	87	.79
		1 3/4	LG0620175	9.8	69	.70	92	.94
		2	LG0620200	9.0	72	.80	103	1.14
		2 1/2	LG0620250	6.1	61	1.00	88	1.44
		3	LG0620300	5.7	68	1.20	94	1.65
		12	LG0621200	1.4	67	4.80	100	7.13
3/4	3/8	1	LG0750100	32	128	.4	162	.51
		1 1/4	LG0750125	24.4	123	.5	158	.65
		1 1/2	LG0750150	19.3	116	.6	150	.78
		1 3/4	LG0750175	16.2	113	.7	150	.92
		2	LG0750200	14.2	113	.8	150	1.06
		2 1/2	LG0750250	11	111	1	147	1.33
		3	LG0750300	9.2	111	1.2	147	1.62
		3 1/2	LG0750350	7.7	108	1.4	144	1.87
		4	LG0750400	6.8	108	1.6	144	2.16
		4 1/2	LG0750450	5.9	106	1.8	143	2.42
		5	LG0750500	5.3	106	2	143	2.69
		12	LG0751200	2.2	104	4.8	140	6.48



If a round wire spring (less force but greater travel to solid) is desired (in green, blue, or red) diameters of less than 3/4", please specify by using the prefix RLG, RMB, or RHB (instead of the usual SSG, SSB, and SSR) in the spring number.

Hole Dia. D	Rod Dia. d	Free LO	CATALOG NUMBER	RATE Pounds Required to Deflect 1/10 inch	Load-Deflection Table			
					Maximum Operating Deflection		Total Travel to Solid	
					Load lbs.	Deflect in.	Load lbs.	Deflect in.
1	1/2	1	LG1000100	61	244	.4	311	.51
		1 1/4	LG1000125	46	231	.5	299	.65
		1 1/2	LG1000150	36.9	221	.6	292	.79
		1 3/4	LG1000175	30.5	213	.7	281	.92
		2	LG1000200	26.5	212	.8	280	1.06
		2 1/2	LG1000250	20.4	204	1	270	1.32
		3	LG1000300	16.7	200	1.2	265	1.59
		3 1/2	LG1000350	14.1	197	1.4	261	1.85
		4	LG1000400	12.1	193	1.6	255	2.11
		4 1/2	LG1000450	10.7	192	1.8	254	2.37
		5	LG1000500	9.6	192	2	254	2.65
		5 1/2	LG1000550	8.7	192	2.2	255	2.93
1 1/4	5/8	1 1/2	LG1250150	57.8	347	.6	433	.75
		1 3/4	LG1250175	47.5	332	.7	415	.87
		2	LG1250200	40.7	325	.8	411	1.01
		2 1/2	LG1250250	31.4	315	1	400	1.26
		3	LG1250300	26.2	315	1.2	400	1.53
		3 1/2	LG1250350	22.2	311	1.4	400	1.80
		4	LG1250400	19.2	307	1.6	397	2.07
		4 1/2	LG1250450	16.9	3.4	1.8	397	2.35
		5	LG1250500	15	300	2	390	2.60
		5 1/2	LG1250550	13.5	297	2.2	386	2.86
		6	LG1250600	12.3	295	2.4	383	3.11
		7	LG1250700	10.4	291	2.8	377	3.63
1 1/2	3/4	2	LG1500200	60.3	483	.8	609	1.01
		2 1/2	LG1500250	45.8	458	1	582	1.27
		3	LG1500300	37.6	451	1.2	575	1.53
		3 1/2	LG1500350	31.8	445	1.4	572	1
		4	LG1500400	27.3	437	1.6	565	2.07
		4 1/2	LG1500450	24.1	433	1.8	561	2.33
		5	LG1500500	21.6	432	2	559	2.59
		5 1/2	LG1500550	19.4	427	2.2	559	2.88
		6	LG1500600	17.6	423	2.4	549	3.12
		7	LG1500700	15	420	2.8	546	3.64
		8	LG1500800	13	416	3.2	528	4.06
		10	LG1501000	10.3	412	4	524	5.09
12	LG1501200	8.5	407	4.8	516	6.1		
2	1	2 1/2	LG2000250	89.7	897	1	1148	1.28
		3	LG2000300	71.8	861	1.2	1098	1.53
		3 1/2	LG2000350	59.8	837	1.4	1076	1.8
		4	LG2000400	51.3	821	1.6	1062	2.07
		4 1/2	LG2000450	44.8	806	1.8	1044	2.33
		5	LG2000500	39.9	797	2	1029	2.58
		5 1/2	LG2000550	36	792	2.2	1029	2.86
		6	LG2000600	32.6	782	2.4	1017	3.12
		7	LG2000700	27.6	773	2.8	1007	3.65
		8	LG2000800	23.7	758	3.2	984	4.15
		10	LG2001000	18.8	752	4	978	5.2
		12	LG2001200	15.4	738	4.8	960	6.23
2 1/2	1 1/2	3	LG2500300	110	1320	1.2	1640	1.49
		3 1/2	LG2500350	90.1	1261	1.4	1575	1.75
		4	LG2500400	76.4	1222	1.6	1528	2
		4 1/2	LG2500450	66.2	1192	1.8	1490	2.25
		5	LG2500500	58	1160	2	1456	2.51
		6	LG2500600	47.7	1145	2.4	1440	3.02
		7	LG2500700	40.1	1122	2.8	1412	3.52
		8	LG2500800	34.5	1104	3.2	1390	4.03
		10	LG2501000	26.8	1072	4	1345	5.02
		12	LG2501200	22.1	1061	4.8	1330	6.02

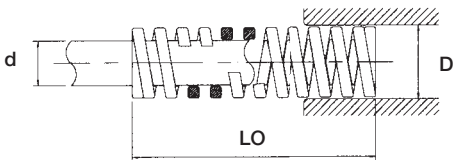


# Medium High Load Color Blue



Rectangular Wire Construction

Hole Dia. D	Rod Dia. d	Free LO	CATALOG NUMBER	RATE Pounds Required to Deflect 1/10 inch	Load-Deflection Table			
					Maximum Operating Deflection		Total Travel to Solid	
					Load lbs.	Deflect in.	Load lbs.	Deflect in.
3/8	3/16	1	MB0370100	9.1	34	.38	39	.43
		1 1/4	MB0370125	7.4	35	.47	47	.63
		1 1/2	MB0370150	6.8	38	.56	52	.76
		1 3/4	MB0370175	5.9	39	.66	51	.87
		2	MB0370200	5.1	38	.75	52	1.02
		2 1/2	MB0370250	4.3	40	.94	54	1.26
		3	MB0370300	3	34	1.13	45	1.50
1/2	9/32	12	MB0371200	.9	41	4.5	53	5.87
		1	MB0500100	17.1	64	.38	86	.50
		1 1/4	MB0500125	14.2	67	.47	89	.63
		1 1/2	MB0500150	12.2	69	.56	95	.78
		1 3/4	MB0500175	10.6	70	.66	96	.91
		2	MB0500200	8.8	66	.75	93	1.06
		2 1/2	MB0500250	6.9	65	.94	90	1.30
5/8	11/32	3	MB0500300	5.8	65	1.13	89	1.54
		3 1/2	MB0500350	4.8	63	1.31	87	1.81
		12	MB0501200	1.2	54	4.50	70	5.87
		1	MB0620100	28.2	106	.38	124	.44
		1 1/4	MB0620125	21.2	99	.47	112	.53
		1 1/2	MB0620150	19.3	109	.56	133	.69
		1 3/4	MB0620175	17.1	112	.66	142	.83
3/4	3/8	2	MB0620200	15.1	113	.75	148	.98
		2 1/2	MB0620250	11.7	110	.94	143	1.22
		3	MB0620300	10.2	115	1.13	153	1.50
		3 1/2	MB0620350	8.7	114	1.31	154	1.77
		4	MB0620400	7.7	116	1.50	157	2.04
		12	MB0621200	2.7	122	4.50	160	5.91
		3/4	3/8	1	MB0750100	51.5	193	.38
1 1/4	MB0750125			38.9	182	.47	212	.55
1 1/2	MB0750150			31.3	176	.56	206	.66
1 3/4	MB0750175			25.8	169	.66	197	.76
2	MB0750200			22.2	167	.75	194	.87
2 1/2	MB0750250			17.3	165	.94	189	1.09
3	MB0750300			14.2	160	1.12	186	1.31
3 1/2	MB0750350			12.2	160	1.31	186	1.54
4	MB0750400			10.6	159	1.5	186	1.75
4 1/2	MB0750450			9.3	157	1.69	184	1.98
5	MB0750500			8.3	156	1.87	184	2.21
5 1/2	MB0750550			7.5	156	2.06	183	2.43
6	MB0750600	6.9	156	2.25	183	2.65		
12	MB0751200	3.5	156	4.5	183	5.35		

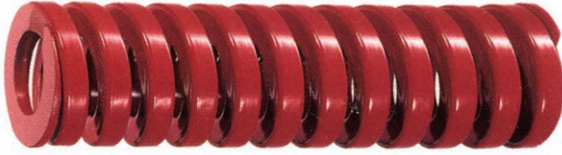


If a round wire spring (less force but greater travel to solid) is desired (in green, blue, or red) diameters of less than 3/4", please specify by using the prefix RLG, RMB, or RHB (instead of the usual SSG, SSB, and SSR) in the spring number.

Hole Dia. D	Rod Dia. d	Free LO	CATALOG NUMBER	RATE Pounds Required to Deflect 1/10 inch	Load-Deflection Table					
					Maximum Operating Deflection		Total Travel to Solid			
					Load lbs.	Deflect in.	Load lbs.	Deflect in.		
1	1/2	1	MB1000100	95.1	357	.37	409	.43		
		1 1/4	MB1000125	71.3	334	.47	385	.54		
		1 1/2	MB1000150	56.4	317	.56	367	.65		
		1 3/4	MB1000175	47.5	312	.66	366	.77		
		2	MB1000200	41.1	308	.75	366	.89		
		2 1/2	MB1000250	31.5	295	.94	350	1.11		
		3	MB1000300	25.8	290	1.12	346	1.34		
		3 1/2	MB1000350	21.7	285	1.31	336	1.55		
		4	MB1000400	18.8	282	1.5	333	1.77		
		4 1/2	MB1000450	16.6	280	1.69	332	2		
		5	MB1000500	15	280	1.87	332	2.25		
		5 1/2	MB1000550	13.5	279	2.06	332	2.48		
1 1/4	5/8	6	MB1000600	12.4	279	2.25	322	2.7		
		7	MB1000700	10.5	276	2.62	330	3.14		
		8	MB1000800	9.1	273	3	326	3.58		
		12	MB1001200	6	269	4.5	320	5.35		
		1 1/2	MB1250150	94.7	533	.56	606	.65		
		1 3/4	MB1250175	77.9	511	.66	584	.75		
		2	MB1250200	66.2	496	.75	569	.86		
		2 1/2	MB1250250	50.1	470	.94	531	1.06		
		3	MB1250300	40.5	456	1.12	514	1.27		
		3 1/2	MB1250350	34.2	445	1.31	510	1.49		
		4	MB1250400	29.6	444	1.5	510	1.71		
		4 1/2	MB1250450	26.3	444	1.69	510	1.94		
1 1/2	3/4	5	MB1250500	23.7	444	1.87	510	2.18		
		5 1/2	MB1250550	21.4	441	2.06	510	2.39		
		6	MB1250600	19.4	437	2.25	506	2.61		
		7	MB1250700	16.6	437	2.62	506	3.05		
		8	MB1250800	14.4	432	3	501	3.48		
		10	MB1251000	11.4	428	3.75	498	4.36		
		12	MB1251200	9.5	428	4.5	498	5.25		
		1 1/2	3/4	2	MB1500200	97.5	731	.75	809	.83
				2 1/2	MB1500250	73.6	690	.94	765	1.04
				3	MB1500300	60.1	676	1.12	757	1.26
				3 1/2	MB1500350	50.1	658	1.31	736	1.47
				4	MB1500400	43.4	651	1.5	733	1.69
4 1/2	MB1500450			38	641	1.69	720	1.89		
5	MB1500500			34	638	1.87	720	2.12		
5 1/2	MB1500550			31	638	2.06	720	2.33		
6	MB1500600			28	630	2.25	714	2.55		
7	MB1500700			23.7	622	2.62	709	2.99		
8	MB1500800			20.6	618	3	707	3.42		
10	MB1501000			16.5	618	3.75	707	4.33		
12	MB1501200	13.6	612	4.5	703	5.17				
2	1	2 1/2	MB2000250	121	1133	.94	1272	1.05		
		3	MB2000300	95.6	1076	1.12	1197	1.25		
		3 1/2	MB2000350	80.2	1053	1.31	1180	1.46		
		4	MB2000400	69.5	1043	1.5	1180	1.7		
		4 1/2	MB2000450	61.2	1033	1.69	1180	1.93		
		5	MB2000500	54	1013	1.87	1160	2.13		
		5 1/2	MB2000550	49	1009	2.06	1155	2.36		
		6	MB2000600	44.6	1004	2.25	1160	2.59		
		7	MB2000700	37.9	995	2.62	1155	3.05		
		8	MB2000800	32.8	984	3	1140	3.47		
		9	MB2000900	29	979	3.38	1140	3.93		
		10	MB2001000	26.1	979	3.75	1140	4.39		
12	MB2001200	21.5	968	4.5	1135	5.27				
2 1/2	1 1/2	3	MB2500300	174	1954	1.12	2240	1.29		
		3 1/2	MB2500350	143	1872	1.31	2160	1.52		
		4	MB2500400	121	1814	1.5	2104	1.74		
		4 1/2	MB2500450	106	1792	1.69	2103	1.98		
		5	MB2500500	93.7	1757	1.87	2080	2.22		
		6	MB2500600	75.8	1706	2.25	2024	2.67		
		7	MB2500700	63.7	1672	2.62	1987	3.12		
		8	MB2500800	54.9	1647	3	1960	3.57		
		9	MB2500900	48.7	1643	3.38	1960	4.06		
		10	MB2501000	43.8	1642	3.75	1960	4.56		
		12	MB2501200	36.2	1629	4.5	1960	5.45		

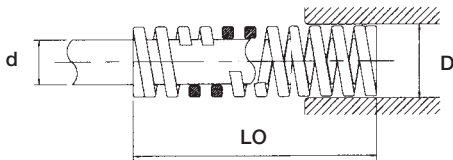


# Heavy Duty Load Color Red



Rectangular Wire Construction

Hole Dia. D	Rod Dia. d	Free LO	CATALOG NUMBER	RATE Pounds Required to Deflect 1/10 inch	Load-Deflection Table			
					Maximum Operating Deflection		Total Travel to Solid	
					Load lbs.	Deflect in.	Load lbs.	Deflect in.
3/8	3/16	1	HR0370100	12.6	38	.30	47	.37
		1 1/4	HR0370125	10	38	.38	47	.47
		1 1/2	HR0370150	9.8	44	.45	58	.59
		1 3/4	HR0370175	8.6	45	.53	65	.75
		2	HR0370200	7.3	44	.60	63	.86
		2 1/2	HR0370250	6.1	46	.75	65	1.06
		3	HR0370300	4.3	39	.90	54	1.26
		12	HR0371200	1.2	43	3.6	63	5.27
1/2	9/32	1	HR0500100	24	72	.30	106	.44
		1 1/4	HR0500125	18.9	71	.38	106	.56
		1 1/2	HR0500150	16.7	75	.45	115	.69
		1 3/4	HR0500175	14	74	.53	115	.82
		2	HR0500200	11.2	67	.60	105	.94
		2 1/2	HR0500250	8.6	65	.75	98	1.14
		3	HR0500300	7.5	68	.90	110	1.46
		12	HR0501200	1.6	58	3.60	82	5.12
5/8	11/32	1	HR0620100	43.2	130	.30	160	.37
		1 1/4	HR0620125	30.1	113	.38	151	.50
		1 1/2	HR0620150	27.7	125	.45	166	.60
		1 3/4	HR0620175	24.4	128	.53	183	.75
		2	HR0620200	21.2	127	.60	176	.83
		2 1/2	HR0620250	17.3	130	.75	183	1.06
		3	HR0620300	14.7	132	.90	196	1.33
		3 1/2	HR0620350	12.4	130	1.05	191	1.54
		4	HR0620400	11	132	1.20	195	1.77
		12	HR0621200	4.1	148	3.60	187	4.57
3/4	3/8	1	HR0750100	132	396	.3	436	.33
		1 1/4	HR0750125	99.6	374	.38	418	.42
		1 1/2	HR0750150	79.3	357	.45	404	.51
		1 3/4	HR0750175	65	345	.53	383	.59
		2	HR0750200	55.9	335	.6	375	.67
		2 1/2	HR0750250	43.9	329	.75	377	.86
		3	HR0750300	36.1	325	.9	373	1.03
		3 1/2	HR0750350	30.7	322	1.05	371	1.21
		4	HR0750400	26.7	320	1.2	371	1.39
		4 1/2	HR0750450	23.6	319	1.35	371	1.58
		5	HR0750500	21.2	318	1.5	371	1.75
		5 1/2	HR0750550	19.4	318	1.65	371	1.92
6	HR0750600	17.6	317	1.8	371	2.11		
12	HR0751200	8.6	309	3.6	360	4.18		



If a round wire spring (less force but greater travel to solid) is desired (in green, blue, or red) diameters of less than 3/4", please specify by using the prefix RLG, RMB, or RHB (instead of the usual SSG, SSB, and SSR) in the spring number.

Hole Dia. D	Rod Dia. d	Free LO	CATALOG NUMBER	RATE Pounds Required to Deflect 1/10 inch	Load-Deflection Table			
					Maximum Operating Deflection		Total Travel to Solid	
					Load lbs.	Deflect in.	Load lbs.	Deflect in.
1	1/2	1 1/4	HR1000125	158	592	.38	663	.42
		1 1/2	HR1000150	125	564	.45	639	.51
		1 3/4	HR1000175	105	558	.53	642	.61
		2	HR1000200	89.8	539	.6	638	.71
		2 1/2	HR1000250	69.4	521	.75	618	.89
		3	HR1000300	57.2	515	.9	618	1.08
		3 1/2	HR1000350	48	506	1.05	618	1.28
		4	HR1000400	42	504	1.2	618	1.47
		4 1/2	HR1000450	37.2	502	1.35	618	1.66
		5	HR1000500	33.2	498	1.5	618	1.86
		5 1/2	HR1000550	30	498	1.65	618	2.06
		6	HR1000600	27.6	497	1.8	618	2.24
7	HR1000700	23.6	496	2.1	618	2.62		
8	HR1000800	20.5	494	2.4	618	3.02		
12	HR1001200	13.8	494	3.6	618	4.6		
1 1/4	5/8	1 1/2	HR1250150	215	967	.45	1052	.49
		1 3/4	HR1250175	177	940	.53	1026	.58
		2	HR1250200	150	902	.6	1007	.67
		2 1/2	HR1250250	117	876	.75	1004	.86
		3	HR1250300	94.7	852	.9	985	1.04
		3 1/2	HR1250350	79.1	831	1.05	973	1.23
		4	HR1250400	69.1	829	1.2	974	1.41
		4 1/2	HR1250450	60.8	821	1.35	960	1.59
		5	HR1250500	54.7	821	1.5	985	1.8
		5 1/2	HR1250550	49	809	1.65	965	1.97
		6	HR1250600	44.9	808	1.8	965	2.15
		7	HR1250700	38.1	800	2.1	960	2.52
8	HR1250800	33	792	2.4	947	2.87		
10	HR1251000	26.4	792	3	960	3.65		
12	HR1251200	21.8	785	3.6	951	4.36		
1 1/2	3/4	2	HR1500200	201	1207	.6	1388	.69
		2 1/2	HR1500250	153	1150	.75	1350	.88
		3	HR1500300	125	1125	.9	1340	1.07
		3 1/2	HR1500350	106	1108	1.05	1340	1.27
		4	HR1500400	90.7	1088	1.2	1333	1.47
		4 1/2	HR1500450	80.5	1086	1.35	1340	1.69
		5	HR1500500	71.5	1072	1.5	1337	1.87
		5 1/2	HR1500550	64	1065	1.65	1335	2.08
		6	HR1500600	59.1	1064	1.8	1347	2.28
		7	HR1500700	50.3	1056	2.1	1343	2.67
		8	HR1500800	43.8	1051	2.4	1347	3.07
		10	HR1501000	34.6	1038	3	1332	3.85
12	HR1501200	28.7	1033	3.6	1339	4.65		
2	1	2 1/2	HR2000250	242	1815	.75	2080	.86
		3	HR2000300	193	1737	.9	2007	1.04
		3 1/2	HR2000350	161	1686	1.05	1960	1.22
		4	HR2000400	140	1678	1.2	1960	1.43
		4 1/2	HR2000450	123	1658	1.35	1960	1.63
		5	HR2000500	108	1622	1.5	1935	1.79
		5 1/2	HR2000550	97	1600	1.65	1910	1.97
		6	HR2000600	88.1	1586	1.8	1910	2.15
		7	HR2000700	75.1	1583	2.1	1910	2.55
		8	HR2000800	65.9	1582	2.4	1910	2.91
		10	HR2001000	51.6	1548	3	1875	3.62
		12	HR2001200	42.7	1537	3.6	1875	4.45

### Die Spring Color Conversion Chart

Associated Spring Raymond \*



MDL Mold & Die Components



\* Associated Spring Raymond is a trademark of Barnes Group Inc. MDL Mold & Die Components, is not affiliated in any way with Associated Spring Raymond, or Barnes Group, Inc.



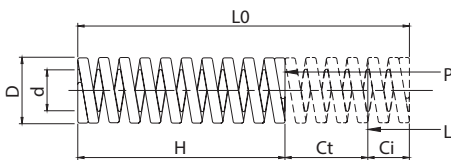
# Extra Heavy Duty Load Color Yellow



Rectangular Wire Construction

Hole Dia.	Rod Dia.	Free	CATALOG NUMBER	RATE Pounds Required to Deflect 1/10 inch	Load-Deflection Table							
					Maximum Operating Deflection		Total Travel to Solid					
					Load lbs.	Deflect in.	Load lbs.	Deflect in.				
D	d	LO										
3/8	3/16	1	XY0370100	18.7	46.8	.25	62	.33				
		1 1/4	XY0370125	14.3	45	.31	60	.41				
		1 1/2	XY0370150	12.1	45	.38	60	.52				
		1 3/4	XY0370175	10.1	44.2	.44	60	.6				
		2	XY0370200	8.8	43.8	.5	60	.68				
		2 1/2	XY0370250	7	43.5	.63	60	.86				
		3	XY0370300	5.8	43.3	.75	60	1.05				
		12	XY0371200	1.4	42	3	59	4.2				
1/2	9/32	1	XY0500100	33.5	84	.25	119	.35				
		1 1/4	XY0500125	25.3	79	.31	110	.43				
		1 1/2	XY0500150	20.7	78	.38	110	.52				
		1 3/4	XY0500175	17.5	77	.44	110	.61				
		2	XY0500200	15.5	77	.5	110	.72				
		2 1/2	XY0500250	12.4	77	.63	110	.9				
		3	XY0500300	10.1	76	.75	110	1.12				
		12	XY0501200	2.4	72	3	108	4.47				
5/8		1	XY0620100	72.1	180	.25	256	.35				
		1 1/4	XY0620125	53.3	167	.31	230	.43				
		1 1/2	XY0620150	43	161	.38	221	.51				
		1 3/4	XY0620175	36	158	.44	220	.6				
		2	XY0620200	31.4	157	.5	220	.71				
		2 1/2	XY0620250	24.5	153	.63	218	.88				
		3	XY0620300	20.1	151	.75	216	1.06				
		3 1/2	XY0620350	17.1	150	.88	215	1.26				
		4	XY0620400	14.9	149	1	215	1.45				
		12	XY0621200	4.8	145	3	214	4.43				
		3/4	3/8	1	XY0750100	184	460	.25	551	.3		
				1 1/4	XY0750125	138	431	.31	535	.39		
1 1/2	XY0750150			112	419	.38	535	.48				
1 3/4	XY0750175			92.8	406	.44	529	.57				
2	XY0750200			80.1	401	.5	527	.66				
2 1/2	XY0750250			62.5	391	.63	525	.84				
3	XY0750300			51.5	386	.75	522	1.02				
3 1/2	XY0750350			43.4	380	.88	516	1.19				
4	XY0750400			37.5	375	1	508	1.36				
4 1/2	XY0750450			33	371	1.13	508	1.52				
5	XY0750500			29.7	371	1.25	505	1.71				
5 1/2	XY0750550			27	371	1.38	505	1.87				
6	XY0750600	24.4	366	1.5	505	2.04						
12	XY0751200	12.1	363	3	505	4.16						

Hole Dia.	Rod Dia.	Free	CATALOG NUMBER	RATE Pounds Required to Deflect 1/10 inch	Load-Deflection Table					
					Maximum Operating Deflection		Total Travel to Solid			
					Load lbs.	Deflect in.	Load lbs.	Deflect in.		
D	d	LO								
1	1/2	1 1/4	XY1000125	202	637	.31	799	.4		
		1 1/2	XY1000150	160	600	.38	768	.48		
		1 3/4	XY1000175	132	589	.44	749	.57		
		2	XY1000200	113	564	.5	733	.65		
		2 1/2	XY1000250	87.9	549	.63	735	.84		
		3	XY1000300	71.4	536	.75	720	1.01		
		3 1/2	XY1000350	60.2	526	.88	720	1.18		
		4	XY1000400	52	520	1	715	1.35		
		4 1/2	XY1000450	46.2	520	1.13	715	1.55		
		5	XY1000500	41.2	515	1.25	715	1.72		
		5 1/2	XY1000550	38	515	1.38	715	1.91		
		6	XY1000600	34.4	515	1.5	715	2.11		
7	XY1000700	29.3	512	1.75	715	2.48				
8	XY1000800	25.5	510	2	715	2.48				
12	XY1001200	16.9	507	3	715	4.31				
1 1/4	5/8	1 1/2	XY1250150	279	1047	.38	1231	.44		
		1 3/4	XY1250175	231	1011	.44	1225	.53		
		2	XY1250200	197	986	.5	1222	.62		
		2 1/2	XY1250250	153	953	.63	1220	.8		
		3	XY1250300	123	925	.75	1200	.97		
		3 1/2	XY1250350	104	911	.88	1195	1.15		
		4	XY1250400	89.1	891	1	1160	1.3		
		4 1/2	XY1250450	77.8	875	1.13	1160	1.46		
		5	XY1250500	69.8	873	1.25	1160	1.64		
		5 1/2	XY1250550	64	870	1.38	1160	1.85		
		6	XY1250600	57.9	869	1.5	1160	2		
		7	XY1250700	49	858	1.75	1160	2.33		
8	XY1250800	42.8	856	2	1160	2.69				
10	XY1251000	34.1	853	2.5	1160	3.42				
12	XY1251200	28.3	849	3	1160	4.14				
1 1/2	3/4	2	XY1500200	320	1598	.5	1964	.62		
		2 1/2	XY1500250	241	1504	.63	1885	.78		
		3	XY1500300	193	1448	.75	1834	.95		
		3 1/2	XY1500350	161	1411	.88	1802	1.12		
		4	XY1500400	140	1395	1	1813	1.3		
		4 1/2	XY1500450	122	1373	1.13	1796	1.47		
		5	XY1500500	109	1356	1.25	1779	1.64		
		5 1/2	XY1500550	98	1348	1.38	1774	1.81		
		6	XY1500600	88.8	1332	1.5	1754	1.97		
		7	XY1500700	75.1	1314	1.75	1733	2.31		
		8	XY1500800	65.1	1302	2	1730	2.65		
		10	XY1501000	71.7	1293	2.5	1730	3.35		
12	XY1501200	42.9	1287	3	1730	4.06				
2	1	2 1/2	XY2000250	413	2583	.63	3140	.76		
		3	XY2000300	327	2453	.75	3013	.92		
		3 1/2	XY2000350	271	2369	.88	2929	1.08		
		4	XY2000400	231	2309	1	2872	1.24		
		4 1/2	XY2000450	201	2265	1.13	2828	1.41		
		5	XY2000500	178	2230	1.25	2794	1.57		
		5 1/2	XY2000550	161	2214	1.38	2790	1.75		
		6	XY2000600	145	2181	1.5	2745	1.89		
		7	XY2000700	123	2147	1.75	2712	2.21		
		8	XY2000800	106	2122	2	2686	2.53		
		10	XY2001000	83.5	2088	2.5	2653	3.18		
		12	XY2001200	68.9	2067	3	2633	3.82		



## Suggestions

$C_i < 20\% C_t$   
 $C_i + C_t < \text{Max operation deflec-}$

- D = Hole diameter (in)
- LO = Free Length (in)
- d = Rod diameter (in)
- H = Compressed length (in)
- Ci = Initial compression (in)
- L = Pre-load (lbs)
- Ct = Operating travel (in)
- P = Load required to Deflect Ci + Ct



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