



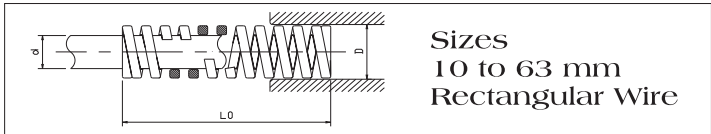
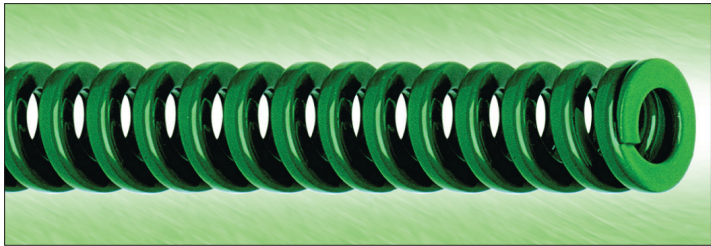
Spring Matrix Die Springs



Mfrs. & Stockist of Springs & Magnets

Light Load Springs
 Color : Green

S11DDDL0L0L0L0



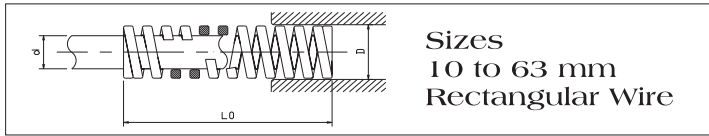
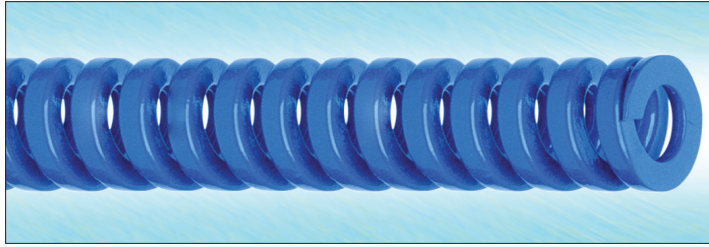
Hole Dia. mm	Rod Dia. mm	Free Length mm	CATALOG NUMBER	Rate daN Required to Deflect 1mm	LOAD - DEFLECTION TABLE			
					Maximum Operating Deflection (40% of L0)		Total Travel to Solid	
D	d	L0			Load daN	Deflect mm	Load daN	Deflect mm
10 (3/8)	5 (3/16)	25	S11010025	1	10.2	10.2	14.3	14.3
		32	S11010032	0.85	10.6	12.5	15.6	18.3
		38	S11010038	0.68	10.2	15	15.0	22
		44	S11010044	0.6	10.8	18	15.6	26
		51	S11010051	0.5	10.0	20	14.5	29
		64	S11010064	0.43	10.8	25	16.3	38
		76	S11010076	0.32	9.6	30	14.7	46
		305	S11010305	0.11	13.4	122	19.6	178
12.5 (1/2)	6.3 (9/32)	25	S11012025	1.79	18.3	10.2	24.3	13.6
		32	S11012032	1.64	20.5	12.5	30.0	18.3
		38	S11012038	1.36	20.4	15	29.9	22
		44	S11012044	1.21	21.8	18	31.5	26
		51	S11012051	1.14	22.8	20	34.2	30
		64	S11012064	0.93	23.3	25	35.3	38
		76	S11012076	0.71	21.3	30	31.2	44
		89	S11012089	0.54	19.4	36	28.1	52
16 (5/8)	8 (11/32)	305	S11012305	0.14	17.1	122	24.5	175
		25	S11016025	2.34	23.9	10.2	31.1	13.3
		32	S11016032	2.29	28.6	12.5	37.6	16.4
		38	S11016038	1.93	29.0	15	40.5	21
		44	S11016044	1.71	30.8	18	42.8	25
		51	S11016051	1.57	31.4	20	45.5	29
		64	S11016064	1.01	25.3	25	37.4	37
		76	S11016076	1	30.0	30	44.0	44
20 (3/4)	10 (3/8)	89	S11016089	0.86	30.1	35	45.6	53
		102	S11016102	0.78	32.0	41	47.6	61
		305	S11016305	0.25	30.5	122	46.0	184
		25	S11020025	5.5	57	10.2	73	13
		32	S11020032	4.2	54	12.5	69	16
		38	S11020038	3.3	51	15	65	19
		44	S11020044	2.77	51	18	64	23
		51	S11020051	2.45	50	20	64	26
20 (3/4)	10 (3/8)	64	S11020064	1.9	49	25	62	32
		76	S11020076	1.61	48	30	62	40
		89	S11020089	1.34	47	35	62	46
		102	S11020102	1.18	48	41	62	53
		115	S11020115	1.04	48	46	62	60
		127	S11020127	0.93	47	51	62	67
		140	S11020140	0.85	48	56	62	73
		152	S11020152	0.79	48	61	62	81
		305	S11020305	0.38	46	122	61	162
		25	S11020025	5.5	57	10.2	73	13
		32	S11020032	4.2	54	12.5	69	16
		38	S11020038	3.3	51	15	65	19

Hole Dia. mm	Rod Dia. mm	Free Length mm	CATALOG NUMBER	Rate daN Required to Deflect 1mm	LOAD - DEFLECTION TABLE			
					Maximum Operating Deflection (40% of L0)		Total Travel to Solid	
D	d	L0			Load daN	Deflect mm	Load daN	Deflect mm
25 (1)	12.5 (1/2)	25	S11025025	10.7	109	10.2	139	13
		32	S11025032	8.1	101	12.5	130	16
		38	S11025038	6.5	98	15	124	19
		44	S11025044	5.3	95	18	122	23
		51	S11025051	4.6	92	20	115	25
		64	S11025064	3.6	90	25	112	31
		76	S11025076	2.92	88	30	112	39
		89	S11025089	2.46	86	35	112	46
		102	S11025102	2.12	87	41	110	52
		115	S11025115	1.87	86	46	110	59
		127	S11025127	1.67	85	51	110	66
		140	S11025140	1.52	85	56	112	74
		152	S11025152	1.4	85	61	110	80
		178	S11025178	1.2	85	71	110	93
		203	S11025203	1.05	85	81	110	107
		305	S11025305	0.7	85	122	110	160
32 (11/4)	16 (5/8)	38	S11032038	10.1	152	15	192	19
		44	S11032044	8.3	149	18	183	22
		51	S11032051	7.1	142	20	178	25
		64	S11032064	5.5	138	25	176	32
		76	S11032076	4.6	138	30	175	39
		89	S11032089	3.9	137	35	175	45
		102	S11032102	3.4	139	41	175	52
		115	S11032115	3	138	46	174	58
		127	S11032127	2.62	134	51	170	65
		140	S11032140	2.38	133	56	171	72
		152	S11032152	2.19	134	61	170	78
		178	S11032178	1.82	129	71	165	88
		203	S11032203	1.59	129	81	165	104
		254	S11032254	1.25	128	102	163	130
		305	S11032305	1.04	127	122	161	155
40 (11/2)	20 (3/4)	51	S11040051	10.6	212	20	265	25
		64	S11040064	8	200	25	256	32
		76	S11040076	6.6	198	30	250	38
		89	S11040089	5.6	196	35	250	45
		102	S11040102	4.8	197	41	245	51
		115	S11040115	4.2	193	46	243	58
		127	S11040127	3.8	194	51	243	65
		140	S11040140	3.4	190	56	241	71
		152	S11040152	3.1	189	61	241	78
		178	S11040178	2.6	185	71	240	92
		203	S11040203	2.3	186	81	240	105
		254	S11040254	1.8	184	102	236	131
		305	S11040305	1.48	181	122	226	157
50 (2)	25 (1)	64	S11050064	15.7	393	25	502	32
		76	S11050076	12.6	378	30	491	39
		89	S11050089	10.5	368	35	473	45
		102	S11050102	9	369	41	468	52
		115	S11050115	7.8	359	46	455	58
		127	S11050127	7	357	51	455	65
		140	S11050140	6.3	353	56	446	72
		152	S11050152	5.7	348	61	445	78
		178	S11050178	4.8	341	71	441	92
		203	S11050203	4.2	340	81	437	104
		254	S11050254	3.3	337	102	429	130
		305	S11050305	2.7	329	122	421	156
63 (21/2)	38 (11/2)	76	S11063076	19.3	579	30	733	38
		89	S11063089	15.8	553	35	695	44
		102	S11063102	13.4	549	41	670	50
		115	S11063115	11.6	534	46	661	57
		127	S11063127	10.2	520	51	653	64
		152	S11063152	8.4	512	61	638	76
		178	S11063178	7	497	71	623	89
		203	S11063203	6	486	81	612	102
		254	S11063254	4.7	479	102	592	126
		305	S11063305	3.9	476	122	592	152
		76	S11063076	19.3	579	30	733	38
		89	S11063089	15.8	553	35	695	44
		102	S11063102	13.4	549	41	670	50
		115	S11063115	11.6	534	46	661	57
		127	S11063127	10.2	520	51	653	64
		152	S11063152	8.4	512	61	638	76

Medium Load Springs

Color : Blue

S21DDDL0L0L0L0



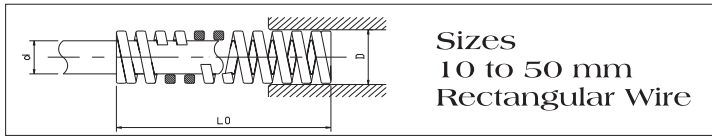
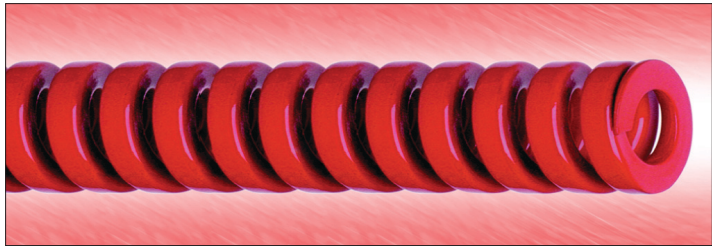
Hole Dia. mm	Rod Dia. mm	Free Length mm	CATALOG NUMBER	Rate daN Required to Deflect 1mm	LOAD - DEFLECTION TABLE			
					Maximum Operating Deflection (37.5% of L0)		Total Travel to Solid	
D	d	L0			Load daN	Deflect mm	Load daN	Deflect mm
10 (3/8)	5 (3/16)	25	S21010025	1.6	15.0	9.4	18.6	11.6
		32	S21010032	1.3	15.6	12	20.7	15.9
		38	S21010038	1.19	16.7	14	23.1	19.4
		44	S21010044	1.03	17.0	16.5	23.7	23
		51	S21010051	0.89	16.9	19	23.1	26
		64	S21010064	0.75	18.0	24	24.8	33
		76	S21010076	0.53	14.8	28	21.2	40
		305	S21010305	0.16	18.2	114	24.6	154
12.5 (1/2)	6.3 (9/32)	25	S21012025	3	28.2	9.4	38.1	12.7
		32	S21012032	2.48	29.8	12	39.9	16.1
		38	S21012038	2.14	30.0	14	42.6	19.9
		44	S21012044	1.85	30.5	16.5	42.6	23
		51	S21012051	1.55	29.5	19	41.9	27
		64	S21012064	1.21	29.0	24	39.9	33
		76	S21012076	1.02	28.6	28	39.8	39
		89	S21012089	0.84	27.7	33	38.6	46
16 (5/8)	8 (11/32)	305	S21012305	0.21	23.9	114	33.8	161
		25	S21016025	4.94	46.4	9.4	55.8	11.3
		32	S21016032	3.71	44.5	12	50.5	13.6
		38	S21016038	3.39	47.5	14	59.7	17.6
		44	S21016044	3	49.5	16.5	63.0	21
		51	S21016051	2.64	50.2	19	66.0	25
		64	S21016064	2.05	49.2	24	63.6	31
		76	S21016076	1.78	49.8	28	67.6	38
20 (3/4)	10 (3/8)	89	S21016089	1.52	50.2	33	68.4	45
		102	S21016102	1.35	51.3	38	70.2	52
		305	S21016305	0.48	54.9	114	73.4	153
		25	S21020025	9.02	84.8	9.4	99	11
		32	S21020032	6.67	80	12	90	13
		38	S21020038	5.48	76.7	14	88	16
		44	S21020044	4.45	73.4	16.5	85	19
		51	S21020051	3.94	74.9	19	83	21
20 (3/4)	10 (3/8)	64	S21020064	3.03	72.7	24	82	27
		76	S21020076	2.49	69.7	28	82	33
		89	S21020089	2.14	70.6	33	82	39
		102	S21020102	1.84	69.9	38	81	44
		115	S21020115	1.63	70.1	43	80	49
		127	S21020127	1.46	70.1	48	80	55
		140	S21020140	1.32	69	52	80	61
		152	S21020152	1.21	69	57	80	66
		305	S21020305	0.61	69.5	114	80	136
		25	S21020025	9.02	84.8	9.4	99	11
		32	S21020032	6.67	80	12	90	13
		38	S21020038	5.48	76.7	14	88	16

Hole Dia. mm	Rod Dia. mm	Free Length mm	CATALOG NUMBER	Rate daN Required to Deflect 1mm	LOAD - DEFLECTION TABLE			
					Maximum Operating Deflection (37.5% of L0)		Total Travel to Solid	
D	d	L0			Load daN	Deflect mm	Load daN	Deflect mm
25 (1)	12.5 (1/2)	25	S21025025	16.7	157	9.4	184	11
		32	S21025032	12.5	150	12	170	13
		38	S21025038	9.9	139	14	158	16
		44	S21025044	8.3	137	16.5	158	19
		51	S21025051	7.2	137	19	156	21
		64	S21025064	5.5	132	24	151	27
		76	S21025076	4.5	126	28	148	33
		89	S21025089	3.8	125	33	148	39
		102	S21025102	3.3	125	38	145	44
		115	S21025115	2.91	125	43	145	50
		127	S21025127	2.63	126	48	145	56
		140	S21025140	2.36	123	52	149	63
		152	S21025152	2.17	124	57	145	67
		178	S21025178	1.84	123	67	145	79
		203	S21025203	1.6	122	76	144	90
		305	S21025305	1.05	120	114	142	135
32 (11/4)	16 (5/8)	38	S21032038	16.6	232	14	266	16
		44	S21032044	13.6	224	16.5	258	19
		51	S21032051	11.6	220	19	244	21
		64	S21032064	8.8	211	24	238	27
		76	S21032076	7.1	199	28	227	32
		89	S21032089	6	198	33	222	37
		102	S21032102	5.2	198	38	222	43
		115	S21032115	4.6	198	43	222	49
		127	S21032127	4.2	202	48	222	55
		140	S21032140	3.7	192	52	222	60
		152	S21032152	3.4	194	57	222	66
		178	S21032178	2.91	195	67	222	77
		203	S21032203	2.52	192	76	222	88
		254	S21032254	2	190	95	220	110
		305	S21032305	1.66	189	114	220	133
40 (11/2)	20 (3/4)	51	S21040051	17.1	325	19	359	21
		64	S21040064	12.9	310	24	335	26
		76	S21040076	10.5	294	28	335	32
		89	S21040089	8.8	290	33	326	37
		102	S21040102	7.6	289	38	326	43
		115	S21040115	6.7	288	43	322	48
		127	S21040127	6	288	48	322	54
		140	S21040140	5.4	281	52	319	59
		152	S21040152	4.9	279	57	318	65
		178	S21040178	4.2	281	67	318	76
		203	S21040203	3.6	274	76	315	87
		254	S21040254	2.89	275	95	315	110
		305	S21040305	2.38	271	114	312	131
50 (2)	25 (1)	64	S21050064	21.2	509	24	566	27
		76	S21050076	16.7	468	28	532	32
		89	S21050089	14	462	33	525	37
		102	S21050102	12.2	464	38	525	43
		115	S21050115	10.7	460	43	525	49
		127	S21050127	9.5	456	48	513	54
		140	S21050140	8.6	447	52	507	59
		152	S21050152	7.8	445	57	508	66
		178	S21050178	6.6	442	67	506	77
		203	S21050203	5.7	433	76	506	88
		229	S21050229	5.1	439	86	506	100
		254	S21050254	4.6	437	95	506	117
		305	S21050305	3.8	433	114	504	134
63 (21/2)	38 (11/2)	76	S21063076	30.4	851	28	973	32
		89	S21063089	25	825	33	950	38
		102	S21063102	21.2	806	38	933	44
		115	S21063115	18.6	800	43	930	50
		127	S21063127	16.4	787	48	918	56
		152	S21063152	13.3	758	57	891	67
		178	S21063178	11.2	750	67	874	78
		203	S21063203	9.6	730	76	865	90
		229	S21063229	8.5	731	86	865	102
		254	S21063354	7.7	732	95	865	115
		305	S21063305	6.3	718	114	865	138

Heavy Load Springs

Color : Red

S26DDDL0L0L0



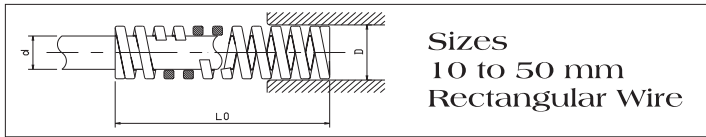
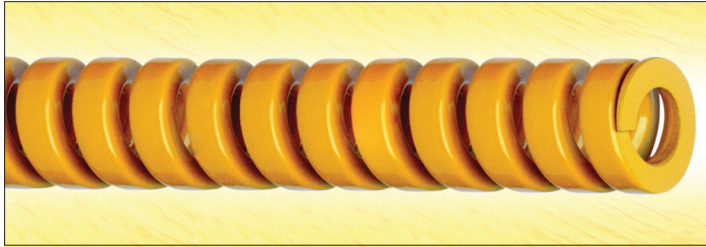
Hole Dia. mm	Rod Dia. mm	Free Length mm	CATALOG NUMBER	Rate daN Required to Deflect	LOAD - DEFLECTION TABLE			
					Maximum Operating Deflection (30% of L0)		Total Travel to Solid	
					Load daN	Deflect mm	Load daN	Deflect mm
D	d	L0		1mm				
10 (3/8)	5 (3/16)	25	S26010025	2.21	16.6	7.5	20.6	9.3
		32	S26010032	1.75	16.8	9.6	20.8	11.9
		38	S26010038	1.71	18.8	11	28.6	16.7
		44	S26010044	1.5	19.5	13	29.7	19.8
		51	S26010051	1.28	19.2	15	28.2	22
		64	S26010064	1.07	20.3	19	31.0	29
		76	S26010076	0.75	17.3	23	24.8	33
		305	S26010305	0.21	19.1	91	28.1	134
12.5 (1/2)	6.3 (9/32)	25	S26012025	4.21	31.6	7.5	46.7	11.1
		32	S26012032	3.32	31.9	9.6	47.5	14.3
		38	S26012038	2.93	32.2	11	51.6	17.6
		44	S26012044	2.46	32.0	13	51.7	21
		51	S26012051	1.96	29.4	15	47.0	24
		64	S26012064	1.5	28.5	19	43.5	29
		76	S26012076	1.32	30.4	23	48.8	37
		89	S26012089	1.14	30.8	27	47.9	42
		305	S26012305	0.28	25.5	91	40.6	145
16 (5/8)	8 (11/32)	25	S26016025	7.57	56.8	7.5	71.2	9.4
		32	S26016032	5.28	50.7	9.6	67.1	12.7
		38	S26016038	4.85	53.4	11	74.2	15.3
		44	S26016044	4.28	55.6	13	81.7	19.1
		51	S26016051	3.71	55.7	15	77.9	21
		64	S26016064	3.03	57.6	19	81.8	27
		76	S26016076	2.57	59.1	23	87.4	34
		89	S26016089	2.17	58.6	27	86.8	40
		102	S26016102	1.93	59.8	31	88.8	46
		305	S26016305	0.71	64.6	91	98.0	138
20 (3/4)	10 (3/8)	25	S26020025	23.1	173	7.5	194	8.4
		32	S26020032	17.4	167	9.6	183	10.5
		38	S26020038	13.9	153	11	174	12.5
		44	S26020044	11.4	148	13	165	14.5
		51	S26020051	9.8	147	15	162	16.5
		64	S26020064	7.7	146	19	162	21
		76	S26020076	6.3	145	23	162	26
		89	S26020089	5.4	145	27	162	30
		102	S26020102	4.7	145	31	162	35
		115	S26020115	4.1	144	35	162	40
		127	S26020127	3.7	141	38	162	44
		140	S26020140	3.4	143	42	167	49
		152	S26020152	3.08	141	46	162	53
		305	S26020305	1.5	137	91	162	108

Hole Dia. mm	Rod Dia. mm	Free Length mm	CATALOG NUMBER	Rate daN Required to Deflect	LOAD - DEFLECTION TABLE			
					Maximum Operating Deflection (30% of L0)		Total Travel to Solid	
					Load daN	Deflect mm	Load daN	Deflect mm
D	d	L0		1mm				
25 (1)	12.5 (1/2)	32	S26025032	27.6	265	9.6	290	10.5
		38	S26025038	22	242	11	286	13
		44	S26025044	18.4	239	13	285	15.5
		51	S26025051	15.7	236	15	283	18
		64	S26025064	12.2	232	19	275	22.5
		76	S26025076	10	230	23	275	27.5
		89	S26025089	8.4	227	27	275	32.5
		102	S26025102	7.4	229	31	275	37.5
		115	S26025115	6.5	228	35	275	42.7
		127	S26025127	5.8	220	38	273	47
		140	S26025140	5.2	218	42	270	52
		152	S26025152	4.8	221	46	273	57.5
		178	S26025178	4.1	217	53	273	68
		203	S26025203	3.59	219	61	273	77
		305	S26025305	2.42	220	91	273	115
32 (1/4)	16 (5/8)	38	S26032038	37.6	414	11	451	12
		44	S26032044	31	403	13	440	14
		51	S26032051	26.3	394	15	435	16.5
		64	S26032064	20.5	389	19	435	21.5
		76	S26032076	16.6	382	23	430	26
		89	S26032089	13.9	375	27	425	30.5
		102	S26032102	12.1	375	31	425	35.5
		115	S26032115	10.6	371	35	425	40.5
		127	S26032127	9.6	365	38	425	45
		140	S26032140	8.6	361	42	430	50
		152	S26032152	7.9	363	46	425	54
		178	S26032178	6.7	355	53	420	63
		203	S26032203	5.8	354	61	420	72
		254	S26032254	4.6	350	76	420	92
		305	S26032305	3.8	346	91	420	110
40 (1/2)	20 (3/4)	51	S26040051	34.9	524	15	593	17
		64	S26040064	26.6	505	19	585	22
		76	S26040076	21.5	495	23	580	27
		89	S26040089	18	486	27	575	32
		102	S26040102	15.7	487	31	575	37
		115	S26040115	13.8	483	35	575	42
		127	S26040127	12.4	471	38	575	47
		140	S26040140	11.3	475	42	588	52
		152	S26040152	10.2	469	46	575	57.5
		178	S26040178	8.7	461	53	575	67
		203	S26040203	7.6	464	61	575	76
		254	S26040254	6	456	76	575	97
		305	S26040305	5	455	91	575	116
50 (2)	25 (1)	64	S26050064	42.3	804	19	910	21.5
		76	S26050076	33.8	777	23	879	26
		89	S26050089	28.1	759	27	860	30.5
		102	S26050102	24.5	760	31	860	35
		115	S26050115	21.5	753	35	860	40
		127	S26050127	18.9	718	38	850	45
		140	S26050140	16.9	710	42	845	50
		152	S26050152	15.4	708	46	830	54
		178	S26050178	13.2	700	53	830	64
		203	S26050203	11.5	701	61	830	72.5
		254	S26050254	9	684	76	825	92
		305	S26050305	7.5	683	91	825	112

Extra Heavy Load Springs

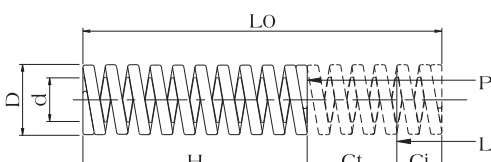
Color : Yellow

S36DDDL0L0L0



Hole Dia. mm	Rod Dia. mm	Free Length mm	CATALOG NUMBER	Rate daN Required to Deflect	LOAD - DEFLECTION TABLE			
					Maximum Operating Deflection (25% of L0)		Total Travel to Solid	
D	d	L0		1mm	Load daN	Deflect mm	Load daN	Deflect mm
10 (3/8)	5 (3/16)	25	S36010025	3.27	20.3	6.2	29.5	8.7
		32	S36010032	2.5	20	8	27	10.5
		38	S36010038	2.12	20.1	9.5	27	13.2
		44	S36010044	1.77	19.5	11	26.5	15
		51	S36010051	1.53	19.9	13	26.5	17
		64	S36010064	1.22	19.5	16	26.5	21.5
		76	S36010076	1.01	19.2	19	26.5	26.5
		305	S36010305	0.25	19	76	26	106
12.5 (1/2)	6.3 (9/32)	25	S36012025	5.87	36.4	6.2	53	9
		32	S36012032	4.43	35.4	8	48	10.8
		38	S36012038	3.63	34.5	9.5	47	13
		44	S36012044	3.06	33.7	11	47	15.5
		51	S36012051	2.71	35.2	13	47	18
		64	S36012064	2.17	34.7	16	47	22
		76	S36012076	1.77	33.6	19	47	27
		89	S36012089	1.51	33	22	50	33
16 (5/8)	8 (11/32)	305	S36012305	0.42	31.9	76	47	112
		25	S36016025	12.6	78	6.2	113	9
		32	S36016032	9.3	74	8	103	10.8
		38	S36016038	7.5	71	9.5	98	13
		44	S36016044	6.3	69	11	96	15
		51	S36016051	5.5	72	13	96	18
		64	S36016064	4.3	69	16	95	22
		76	S36016076	3.52	67	19	94	26.5
20 (3/4)	10 (3/8)	89	S36016089	3	66	22	94	31.5
		102	S36016102	2.61	68	26	94	36.5
		305	S36016305	0.85	65	76	94	110
		25	S36020025	32.2	202	6.2	248	7.7
		32	S36020032	24.2	194	8	237	9.8
		38	S36020038	19.5	185	9.5	234	12
		44	S36020044	16.3	179	11	228	14
		51	S36020051	14	182	13	225	16
20 (3/4)	10 (3/8)	64	S36020064	10.9	174	16	225	21
		76	S36020076	9	171	19	225	25
		89	S36020089	7.6	167	22	225	30
		102	S36020102	6.6	172	26	225	34
		115	S36020115	5.8	168	29	220	38
		127	S36020127	5.2	166	32	220	43
		140	S36020140	4.7	165	35	221	47
		152	S36020152	4.3	163	38	220	51
20 (3/4)	10 (3/8)	305	S36020305	2.12	161	76	220	105

Hole Dia. mm	Rod Dia. mm	Free Length mm	CATALOG NUMBER	Rate daN Required to Deflect	LOAD - DEFLECTION TABLE			
					Maximum Operating Deflection (25% of L0)		Total Travel to Solid	
D	d	L0		1mm	Load daN	Deflect mm	Load daN	Deflect mm
25 (1)	12.5 (1/2)	32	S36025032	35.4	283	8	354	10
		38	S36025038	28	266	9.5	336	12
		44	S36025044	23.2	255	11	325	14
		51	S36025051	19.8	257	13	317	16
		64	S36025064	15.4	246	16	316	21
		76	S36025076	12.5	238	19	313	25
		89	S36025089	10.5	231	22	310	29
		102	S36025102	9.1	237	26	310	34
		115	S36025115	8.1	235	29	310	39
		127	S36025127	7.2	230	32	310	43
		140	S36025140	6.6	231	35	317	48
		152	S36025152	6	228	38	310	53
		178	S36025178	5.1	224	44	310	62
		203	S36025203	4.5	230	51	310	70
		305	S36025305	2.96	225	76	310	108
32 (1 1/4)	16 (5/8)	38	S36032038	48.9	465	9.5	558	11
		44	S36032044	40.5	446	11	547	13
		51	S36032051	34.6	450	13	535	15
		64	S36032064	26.7	427	16	535	20
		76	S36032076	21.6	410	19	525	24
		89	S36032089	18.2	400	22	525	29
		102	S36032102	15.6	406	26	520	33
		115	S36032115	13.6	394	29	500	36
		127	S36032127	12.2	390	32	500	41
		140	S36032140	11.2	392	35	526	47
		152	S36032152	10.1	384	38	500	50
		178	S36032178	8.6	378	44	500	59
		203	S36032203	7.5	383	51	500	68
		254	S36032254	6	384	64	500	85
		305	S36032305	5	380	76	500	103
40 (1 1/2)	20 (3/4)	51	S36040051	56	714	13	840	15
		64	S36040064	42.2	675	16	820	19
		76	S36040076	34.3	652	19	815	24
		89	S36040089	28.2	620	22	800	28
		102	S36040102	24.4	634	26	800	33
		115	S36040115	21.4	621	29	792	37
		127	S36040127	19	608	32	780	41
		140	S36040140	17.1	599	35	787	46
		152	S36040152	15.6	593	38	780	50
		178	S36040178	13.2	581	44	765	58
		203	S36040203	11.4	581	51	765	67
		254	S36040254	9.1	582	64	765	85
		305	S36040305	7.5	570	76	760	102
50 (2)	25 (1)	64	S36050064	72.4	1,158	16	1,376	19
		76	S36050076	57.3	1,089	19	1,318	23
		89	S36050089	47.4	1,043	22	1,280	27
		102	S36050102	40.4	1,050	26	1,252	31
		115	S36050115	35.3	1,024	29	1,235	35
		127	S36050127	31.2	998	32	1,217	39
		140	S36050140	28.2	987	35	1,241	44
		152	S36050152	25.5	969	38	1,200	47
		178	S36050178	21.5	946	44	1,200	56
		203	S36050203	18.6	949	51	1,190	64
		254	S36050254	14.6	934	64	1,170	80
		305	S36050305	12.1	920	76	1,170	97



$Ci > 20\% Ct$
 $Ci + Ct < \text{Max. operat. deflection}$

Suggestions

D = Hole diameter (mm)
L0 = Free length (mm)
d = Rod diameter (mm)
H = Compressed length (mm)

Ci = Initial compression (mm)
L = Pre-load (daN)
Ct = Operating travel (mm)
P = Load required to deflect
Ci + Ct (daN)