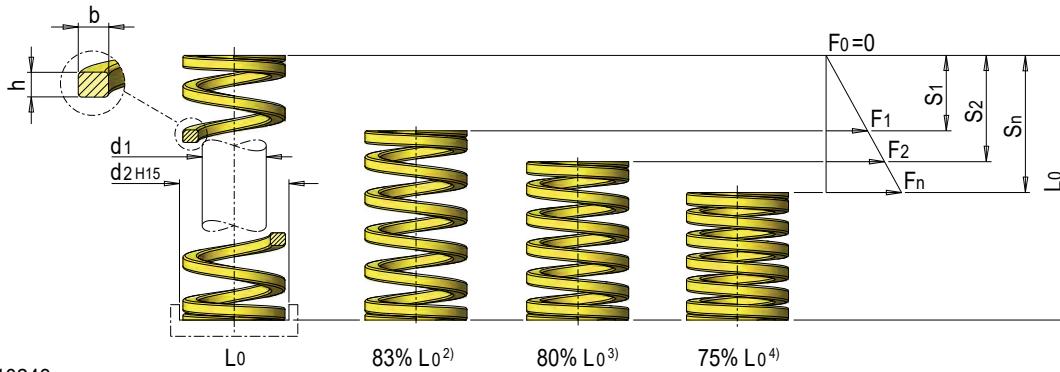


E 1545



Systemdruckfeder, sehr hohe Belastung, gelb

System compression spring, very heavy load, yellow



DIN ISO 10243

t max. = 250°C⁵⁾

c [N/mm] ¹⁾	F1 [N]	S1	F2 [N]	S2	Fn [N]	Sn	b	h	d1	d2	Lo	Nr. / No.				
36.8	158	4.3	184	5	228	6.2	1.9	1.6	5	10	25	E 1545/10 x 25				
27.9	151	5.4	179	6.4	223	8					32	E 1545/10 x 32				
23.7	154	6.5	180	7.6	225	9.5					38	E 1545/10 x 38				
19.2	144	7.5	169	8.8	211	11					44	E 1545/10 x 44				
16.5		8.7	168	10.2	210	12.7					51	E 1545/10 x 51				
13.2		10.9	169	12.8	211	16					64	E 1545/10 x 64				
10.9	141	12.9	166	15.2	207	19					76	E 1545/10 x 76				
2.6	135	51.9	159	61	198	76.3					305	E 1545/10 x 305				
58.5	252	4.3	293	5	363	6.2					2.6	2	6.3	12.5	25	E 1545/12,5 x 25
43.9	237	5.4	281	6.4	351	8									32	E 1545/12,5 x 32
36	234	6.5	274	7.6	342	9.5	38	E 1545/12,5 x 38								
30.3	227	7.5	267	8.8	333	11	44	E 1545/12,5 x 44								
26.2	228	8.7		10.2		12.7	51	E 1545/12,5 x 51								
21.2	231	10.9	271	12.8	339	16	64	E 1545/12,5 x 64								
17.1	221	12.9	260	15.2	325	19	76	E 1545/12,5 x 76								
14.5	219	15.1	258	17.8	322	22.2	89	E 1545/12,5 x 89								
4.3	223	51.9	262	61	328	76.3	305	E 1545/12,5 x 305								
118	507	4.3	590	5	732	6.2	3.2	2.9	8	16					25	E 1545/16 x 25
89	481	5.4	570	6.4	712	8					32	E 1545/16 x 32				
72.1	469	6.5	548	7.6	685	9.5					38	E 1545/16 x 38				
60.9	457	7.5	536	8.8	670	11					44	E 1545/16 x 44				
52.3	455	8.7	533	10.2	664	12.7					51	E 1545/16 x 51				
41.2	449	10.9	527	12.8	659	16					64	E 1545/16 x 64				
34.1	440	12.9	518	15.2	648	19					76	E 1545/16 x 76				
29.5	445	15.1	525	17.8	655	22.2					89	E 1545/16 x 89				
25.6	443	17.3	522	20.4	653	25.5					102	E 1545/16 x 102				
8.4	436	51.9	512	61	641	76.3					305	E 1545/16 x 305				
293	1260	4.3	1465	5	1817	6.2	4.1	3.8	10	20	25	E 1545/20 x 25				
224	1210	5.4	1434	6.4	1792	8					32	E 1545/20 x 32				
177	1151	6.5	1345	7.6	1682	9.5					38	E 1545/20 x 38				
149	1118	7.5	1311	8.8	1639	11					44	E 1545/20 x 44				
128	1114	8.7	1306	10.2	1626	12.7					51	E 1545/20 x 51				
99	1079	10.9	1267	12.8	1584	16					64	E 1545/20 x 64				
81.7	1054	12.9	1242	15.2	1552	19					76	E 1545/20 x 76				
69.5	1049	15.1	1237	17.8	1543	22.2					89	E 1545/20 x 89				
60.6	1048	17.3	1236	20.4	1545	25.5					102	E 1545/20 x 102				
53	1039	19.6	1219	23	1521	28.7					115	E 1545/20 x 115				
47.5	1026	21.6	1207	25.4	1506	31.7	127	E 1545/20 x 127								
43	1015	23.8	1195	27.8	1492	34.7	139	E 1545/20 x 139								
39	1006	25.8	1186	30.4	1482	38	152	E 1545/20 x 152								
20	1038	51.9	1220	61	1526	76.3	305	E 1545/20 x 305								
459	1974	4.3	2295	5	2846	6.2	5.4	4.6	12.5	25	25	E 1545/25 x 25				
374	2020	5.4	2394	6.4	2992	8					32	E 1545/25 x 32				
300	1950	6.5	2280	7.6	2850	9.5					38	E 1545/25 x 38				
244	1830	7.5	2147	8.8	2684	11					44	E 1545/25 x 44				
208	1810	8.7	2122	10.2	2642	12.7					51	E 1545/25 x 51				
161	1755	10.9	2061	12.8	2576	16					64	E 1545/25 x 64				
131	1690	12.9	1991	15.2	2489	19					76	E 1545/25 x 76				
111	1676	15.1	1976	17.8	2464	22.2					89	E 1545/25 x 89				
96.3	1666	17.3	1965	20.4	2456	25.5					102	E 1545/25 x 102				
85.7	1680	19.6	1971	23	2460	28.7					115	E 1545/25 x 115				
76.3	1648	21.6	1938	25.4	2419	31.7	127	E 1545/25 x 127								
66	1558	23.6	1835	27.8	2290	34.7	139	E 1545/25 x 139								
63.5	1638	25.8	1930	30.4	2413	38	152	E 1545/25 x 152								
53.9	1633	30.3	1919	35.6	2399	44.5	178	E 1545/25 x 178								
47	1622	34.5	1908	40.6	2383	50.7	203	E 1545/25 x 203								
30.9	1604	51.9	1885	61	2358	76.3	305	E 1545/25 x 305								
480	3120	6.5	3648	7.6	4560	9.5	7.3	5.9	16	32	38	E 1545/32 x 38				
390	2925	7.5	3432	8.8	4290	11					44	E 1545/32 x 44				
336	2923	8.7	3427	10.2	4267	12.7					51	E 1545/32 x 51				
269	2932	10.9	3443	12.8	4304	16					64	E 1545/32 x 64				



c [N/mm] ¹⁾	F1 [N]	S1	F2 [N]	S2	Fn [N]	Sn	b	h	d1	d2	Lo	Nr. / No.				
219	2825	12.9	3329	15.2	4161	19	7.3	5.9	16	32	76	E 1545/32 x 76				
180	2718	15.1	3204	17.8	3996	22.2					89	E 1545/32 x 89				
155	2682	17.3	3162	20.4	3953	25.5					102	E 1545/32 x 102				
140	2744	19.6	3220	23	4018	28.7					115	E 1545/32 x 115				
124	2678	21.6	3150	25.4	3931	31.7					127	E 1545/32 x 127				
112	2643	23.6	3114	27.8	3886	34.7					139	E 1545/32 x 139				
102	2632	25.8	3101	30.4	3876	38					152	E 1545/32 x 152				
88.2	2672	30.3	3140	35.6	3925	44.5					178	E 1545/32 x 178				
76	2622	34.5	3086	40.6	3853	50.7					203	E 1545/32 x 203				
60.8	2627	43.2	3089	50.8	3861	64					254	E 1545/32 x 254				
49	2543	51.9	2989	61	3739	76.3					305	E 1545/32 x 305				
628	5464	8.7	6406	10.2	7976	12.7					8.4	7.5	20	40	51	E 1545/40 x 51
487	5308	10.9	6234	12.8	7792	16									64	E 1545/40 x 64
379	4889	12.9	5761	15.2	7201	19									76	E 1545/40 x 76
321	4847	15.1	5714	17.8	7126	22.2									89	E 1545/40 x 89
281	4861	17.3	5732	20.4	7165	25.5									102	E 1545/40 x 102
245	4802	19.6	5635	23	7032	28.7									115	E 1545/40 x 115
221	4774	21.6	5613	25.4	7006	31.7									127	E 1545/40 x 127
185	4366	23.6	5143	27.8	6420	34.7	139	E 1545/40 x 139								
168	4334	25.8	5107	30.4	6384	38	152	E 1545/40 x 152								
150	4545	30.3	5340	35.6	6675	44.5	178	E 1545/40 x 178								
132	4554	34.5	5359	40.6	6692	50.7	203	E 1545/40 x 203								
107	4622	43.2	5436	50.8	6848	64	254	E 1545/40 x 254								
87.8	4557	51.9	5356	61	6699	76.3	305	E 1545/40 x 305								
709	7728	10.9	9075	12.8	11344	16	11.5	9	25	50					64	E 1545/50 x 64
572	7379	12.9	8694	15.2	10868	19									76	E 1545/50 x 76
475	7173	15.1	8455	17.8	10545	22.2									89	E 1545/50 x 89
405	7007	17.3	8262	20.4	10328	25.5									102	E 1545/50 x 102
352	6899	19.6	8096	23	10102	28.7									115	E 1545/50 x 115
316	6826	21.6	8026	25.4	10017	31.7									127	E 1545/50 x 127
289	6820	23.6	8034	27.8	10028	34.7									139	E 1545/50 x 139
255	6579	25.8	7752	30.4	9690	38									152	E 1545/50 x 152
215	6515	30.3	7654	35.6	9568	44.5									178	E 1545/50 x 178
187	6452	34.5	7592	40.6	9481	50.7									203	E 1545/50 x 203
153	6610	43.2	7772	50.8	9792	64									254	E 1545/50 x 254
127	6591	51.9	7747	61	9690	76.3					305	E 1545/50 x 305				
952	12280	12.9	14470	15.2	-	-					11.6	14.9	38	63	76	E 1545/63 x 76
819	12367	15.1	14578	17.8	-	-									89	E 1545/63 x 89
700	12110	17.3	14280	20.4	17850	25.5									102	E 1545/63 x 102
620	12152	19.6	14260	23	17794	28.7									115	E 1545/63 x 115
565	12204	21.6	14351	25.4	17911	31.7									127	E 1545/63 x 127
458	11816	25.8	13923	30.4	17404	38									152	E 1545/63 x 152
384	11635	30.3	13670	35.6	17088	44.5									178	E 1545/63 x 178
337	11627	34.5	13682	40.6	17086	50.7									203	E 1545/63 x 203
263	11362	43.2	13360	50.8	16832	64									254	E 1545/63 x 254
218	11314	51.9	13298	61	16633	76.3									305	E 1545/63 x 305

1) c: Federrate (Kraftzunahme pro mm Federweg) / c: spring rate (load increase per mm spring travel)

2) 83% Lo \triangleq S1=17% Lo: Lange Lebensdauer (> 3 Mio. Lastwechsel) / 83% Lo \triangleq S1=17% Lo: long service life (> 3 million changes of load)

3) 80% Lo \triangleq S2=20% Lo: Mittlere Lebensdauer (~1.5 Mio. Lastwechsel) / 80% Lo \triangleq S2=20% Lo: medium service life (~1.5 million changes of load)

4) 75% Lo \triangleq Sn=25% Lo: Max. zulässiger Federweg (~200.000 Lastwechsel) / 75% Lo \triangleq Sn=25% Lo: maximum travel (~200.000 changes of load)

5) t max. = 250°C: Ab 120°C: 1%-2% Spannungsverlust pro 40°C / t max. = 250°C: from 120°C: loss of spring load is 1%-2% per 40°C



1 N = 0.1 daN = 0.102 kg