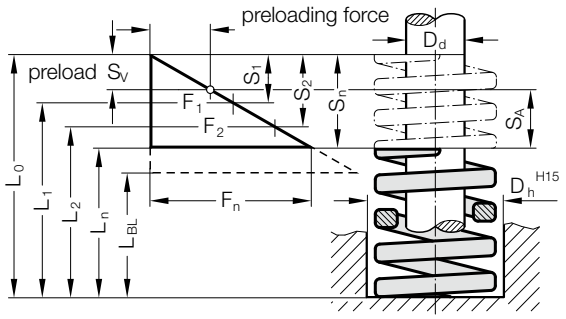
High performance compression spring, MF, Colour Blue, DIN ISO 10243

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D_h = diameter of guide sleeve
D_d = diameter of guide pin
L_0 = free length of spring
$L_1 \ldots L_n$ = length of loaded spring (mm) as related to spring forces $F_1 \ldots F_n$
L_{BL} = length of compacted spring (i.e. wire-to-wire)
$F_1 \ldots F_n$ = forces (N) as related to length of spring $L_1 \ldots L_n$
$S_{V1} \ldots S_{V7}$ = recommend. preload. compression, as relat. to compress. $S_1 \ldots S_7$
$S_1 \ldots S_n$ = compr. as related to spring forces $F_1 \ldots F_n$
R = spring rate (N/mm)
$S_{A1} \ldots S_{A7}$ working stroke (mm)

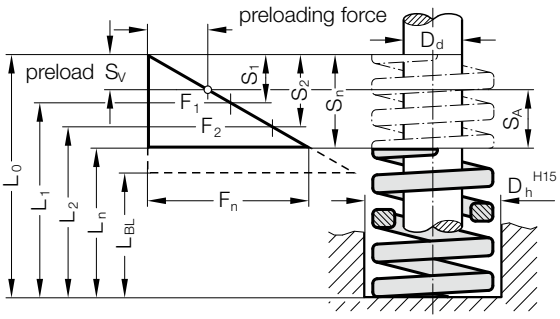
241.15. High performance compression spring, MF, Colour Blue, DIN ISO 10243

					45%				62%				80%				100%	
Order No	D_h	D_d	L_0	R	S_1	S_{V1}	S_{A1}	F_1	S_2	S_{V2}	S_{A2}	F_2	S_3	S_{V3}	S_{A3}	F_3	S_n	F_n
241.15.10.025	10	5	25	16	5.3	1.5	3.8	85	7.3	3.5	3.8	117	9.4	6.8	2.6	151	11.8	189
241.15.10.032	10	5	32	13	6.8	2	4.8	88	9.3	4.5	4.8	121	12	8.7	3.3	156	15	195
241.15.10.038	10	5	38	11.9	8	2.3	5.7	95	11	5.3	5.7	131	14.2	10.3	3.9	169	17.8	212
241.15.10.044	10	5	44	10.3	9.3	2.7	6.6	95	12.8	6.2	6.6	132	16.5	11.9	4.5	170	20.6	212
241.15.10.051	10	5	51	8.9	10.8	3.1	7.6	96	14.8	7.2	7.6	132	19.1	13.9	5.3	170	23.9	213
241.15.10.064	10	5	64	7.5	13.5	3.9	9.6	101	18.6	9	9.6	140	24	17.4	6.6	180	30	225
241.15.10.076	10	5	76	6.2	16	4.6	11.4	99	22.1	10.7	11.4	137	28.5	20.6	7.8	177	35.6	221
241.15.10.305	10	5	305	1.6	64.1	18.5	45.6	103	88.4	42.8	45.6	141	114	82.6	31.4	182	142.5	228
241.15.13.025	12.5	6.3	25	30	5.3	1.5	3.8	159	7.3	3.5	3.8	219	9.4	6.8	2.6	283	11.8	354
241.15.13.032	12.5	6.3	32	24.8	6.8	2	4.8	167	9.3	4.5	4.8	231	12	8.7	3.3	298	15	372
241.15.13.038	12.5	6.3	38	21.4	8	2.3	5.7	171	11	5.3	5.7	236	14.2	10.3	3.9	305	17.8	381
241.15.13.044	12.5	6.3	44	18	9.3	2.7	6.6	167	12.8	6.2	6.6	230	16.5	11.9	4.5	297	20.6	371
241.15.13.051	12.5	6.3	51	15.5	10.8	3.1	7.6	167	14.8	7.2	7.6	230	19.1	13.9	5.3	296	23.9	370
241.15.13.064	12.5	6.3	64	12.1	13.5	3.9	9.6	163	18.6	9	9.6	225	24	17.4	6.6	290	30	363
241.15.13.076	12.5	6.3	76	10.2	16	4.6	11.4	163	22.1	10.7	11.4	225	28.5	20.6	7.8	290	35.6	363
241.15.13.089	12.5	6.3	89	8.4	18.7	5.4	13.3	157	25.8	12.5	13.3	217	33.3	24.1	9.2	280	41.6	349
241.15.13.305	12.5	6.3	305	2.4	64.1	18.5	45.6	154	88.4	42.8	45.6	212	114	82.6	31.4	274	142.5	342
241.15.16.025	16	8	25	49.4	5.3	1.5	3.8	262	7.3	3.5	3.8	361	9.4	6.8	2.6	466	11.8	583
241.15.16.032	16	8	32	38.5	6.8	2	4.8	260	9.3	4.5	4.8	358	12	8.7	3.3	462	15	578
241.15.16.038	16	8	38	33.9	8	2.3	5.7	272	11	5.3	5.7	374	14.2	10.3	3.9	483	17.8	603
241.15.16.044	16	8	44	30	9.3	2.7	6.6	278	12.8	6.2	6.6	383	16.5	11.9	4.5	494	20.6	618
241.15.16.051	16	8	51	26.4	10.8	3.1	7.6	284	14.8	7.2	7.6	391	19.1	13.9	5.3	505	23.9	631
241.15.16.064	16	8	64	20.5	13.5	3.9	9.6	277	18.6	9	9.6	381	24	17.4	6.6	492	30	615
241.15.16.076	16	8	76	17.8	16	4.6	11.4	285	22.1	10.7	11.4	393	28.5	20.6	7.8	507	35.6	634
241.15.16.089	16	8	89	15.2	18.7	5.4	13.3	285	25.8	12.5	13.3	392	33.3	24.1	9.2	506	41.6	632
241.15.16.102	16	8	102	13.5	21.5	6.2	15.3	290	29.6	14.3	15.3	400	38.2	27.7	10.5	516	47.8	645
241.15.16.305	16	8	305	4.3	64.1	18.5	45.6	276	88.4	42.8	45.6	380	114	82.6	31.4	490	142.5	613
241.15.20.025	20	10	25	98	5.3	1.5	3.8	520	7.3	3.5	3.8	717	9.4	6.8	2.6	925	11.8	1156
241.15.20.032	20	10	32	72.6	6.8	2	4.8	490	9.3	4.5	4.8	675	12	8.7	3.3	871	15	1089
241.15.20.038	20	10	38	56	8	2.3	5.7	449	11	5.3	5.7	618	14.2	10.3	3.9	797	17.8	997
241.15.20.044	20	10	44	47.5	9.3	2.7	6.6	440	12.8	6.2	6.6	607	16.5	11.9	4.5	783	20.6	978
241.15.20.051	20	10	51	41.7	10.8	3.1	7.6	448	14.8	7.2	7.6	618	19.1	13.9	5.3	797	23.9	997
241.15.20.064	20	10	64	32.3	13.5	3.9	9.6	436	18.6	9	9.6	601	24	17.4	6.6	775	30	969
241.15.20.076	20	10	76	25.1	16	4.6	11.4	402	22.1	10.7	11.4	554	28.5	20.6	7.8	715	35.6	894
241.15.20.089	20	10	89	22	18.7	5.4	13.3	412	25.8	12.5	13.3	567	33.3	24.1	9.2	732	41.6	915
241.15.20.102	20	10	102	19.8	21.5	6.2	15.3	426	29.6	14.3	15.3	587	38.2	27.7	10.5	757	47.8	946
241.15.20.115	20	10	115	18.1	24.3	7	17.2	439	33.4	16.2	17.2	605	43.1	31.3	11.9	780	53.9	976
241.15.20.127	20	10	127	16.6	26.8	7.7	19	444	36.9	17.8	19	612	47.6	34.5	13.1	790	59.5	988
241.15.20.139	20	10	139	15.1	29.3	8.5	20.8	442	40.4	19.5	20.8	609	52.1	37.8	14.3	786	65.1	983
241.15.20.152	20	10	152	13.2	32.1	9.3	22.8	424	44.2	21.4	22.8	584	57	41.4	15.7	753	71.3	941
241.15.20.305	20	10	305	6.1	64.1	18.5	45.6	391	88.4	42.8	45.6	539	114	82.6	31.4	695	142.5	869
241.15.25.025	25	12.5	25	157	5.3	1.5	3.8	834	7.3	3.5	3.8	1149	9.4	6.8	2.6	1482	11.8	1853
241.15.25.032	25	12.5	32	118	6.8	2	4.8	796	9.3	4.5	4.8	1097	12	8.7	3.3	1416	15	1770
241.15.25.038	25	12.5	38	93	8	2.3	5.7	745	11	5.3	5.7	1026	14.2	10.3	3.9	1324	17.8	1655
241.15.25.044	25	12.5	44	80.8	9.3	2.7	6.6	749	12.8	6.2	6.6	1032	16.5	11.9	4.5	1332	20.6	1664
241.15.25.051	25	12.5	51	68.6	10.8	3.1	7.6	738	14.8	7.2	7.6	1017	19.1	13.9	5.3	1312	23.9	1640
241.15.25.064	25	12.5	64	53	13.5	3.9	9.6	716	18.6	9	9.6	986	24	17.4	6.6	1272	30	1590
241.15.25.076	25	12.5	76	43.2	16	4.6	11.4	692	22.1	10.7	11.4	954	28.5	20.6	7.8	1230	35.6	1538
241.15.25.089	25	12.5	89	38.2	18.7	5.4	13.3	715	25.8	12.5	13.3	985	33.3	24.1	9.2	1271	41.6	1589
241.15.25.102	25	12.5	102	33	21.5	6.2	15.3	710	29.6	14.3	15.3	978	38.2	27.7	10.5	1262	47.8	1577
241.15.25.115	25	12.5	115	28	24.3	7	17.2	679	33.4	16.2	17.2	936	43.1	31.3	11.9	1207	53.9	1509
241.15.25.127	25	12.5	127	25.9	26.8	7.7	19	693	36.9	17.8	19	955	47.6	34.5	13.1	1233	59.5	1541
241.15.25.139	25	12.5	139	23.2	29.3	8.5	20.8	680	40.4	19.5	20.8	936	52.1	37.8	14.3	1208	65.1	1510
241.15.25.152	25	12.5	152	20.8	32.1	9.3	22.8	667	44.2	21.4	22.8	919	57	41.4	15.7	1186	71.3	1483
241.15.25.178	25	12.5	178	17.8	37.5	10.8	26.7	668	51.7	25	26.7	920	66.7	48.4	18.3	1188	83.4	1485
241.15.25.203	25	12.5	203	15.8	42.8	12.4	30.4	676	59	28.5	30.4	932	76.1	55.2	20.9	1202	95.1	1503
241.15.25.305	25	12.5	305	10.2	64.1	18.5	45.6	654	88.4	42.8	45.6	901	114	82.6	31.4	1163	142.5	1454

High performance compression spring, MF, Colour Blue, DIN ISO 10243

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D_h = diameter of guide sleeve
D_d = diameter of guide pin
L_0 = free length of spring
$L_1 \ldots L_n$ = length of loaded spring (mm) as related to spring forces $F_1 \ldots F_n$
L_{BL} = length of compacted spring (i.e. wire-to-wire)
$F_1 \ldots F_n$ = forces (N) as related to length of spring $L_1 \ldots L_n$
$S_{V1} \ldots S_{V7}$ = recommend. preload. compression, as relat. to compress. $S_1 \ldots S_7$
$S_1 \ldots S_n$ = compr. as related to spring forces $F_1 \ldots F_n$
R = spring rate (N/mm)
$S_{A1} \ldots S_{A7}$ = working stroke (mm)

241.15. High performance compression spring, MF, Colour Blue, DIN ISO 10243

					45%				62%				80%				100%	
Order No	D_h	D_d	L_0	R	S_1	S_{V1}	S_{A1}	F_1	S_2	S_{V2}	S_{A2}	F_2	S_3	S_{V3}	S_{A3}	F_3	S_n	F_n
241.15.32.038	32	16	38	185	8	2.3	5.7	1482	11	5.3	5.7	2042	14.2	10.3	3.9	2634	17.8	3293
241.15.32.044	32	16	44	158	9.3	2.7	6.6	1465	12.8	6.2	6.6	2018	16.5	11.9	4.5	2604	20.6	3255
241.15.32.051	32	16	51	134	10.8	3.1	7.6	1441	14.8	7.2	7.6	1986	19.1	13.9	5.3	2562	23.9	3203
241.15.32.064	32	16	64	99	13.5	3.9	9.6	1336	18.6	9	9.6	1841	24	17.4	6.6	2376	30	2970
241.15.32.076	32	16	76	80.5	16	4.6	11.4	1290	22.1	10.7	11.4	1777	28.5	20.6	7.8	2293	35.6	2866
241.15.32.089	32	16	89	69.1	18.7	5.4	13.3	1294	25.8	12.5	13.3	1782	33.3	24.1	9.2	2300	41.6	2875
241.15.32.102	32	16	102	58.8	21.5	6.2	15.3	1265	29.6	14.3	15.3	1743	38.2	27.7	10.5	2249	47.8	2811
241.15.32.115	32	16	115	51.5	24.3	7	17.2	1249	33.4	16.2	17.2	1721	43.1	31.3	11.9	2221	53.9	2776
241.15.32.127	32	16	127	44.8	26.8	7.7	19	1200	36.9	17.8	19	1653	47.6	34.5	13.1	2132	59.5	2666
241.15.32.139	32	16	139	42.3	29.3	8.5	20.8	1239	40.4	19.5	20.8	1707	52.1	37.8	14.3	2203	65.1	2754
241.15.32.152	32	16	152	37.8	32.1	9.3	22.8	1213	44.2	21.4	22.8	1671	57	41.4	15.7	2156	71.3	2695
241.15.32.178	32	16	178	32.5	37.5	10.8	26.7	1220	51.7	25	26.7	1681	66.7	48.4	18.3	2168	83.4	2710
241.15.32.203	32	16	203	28.9	42.8	12.4	30.4	1237	59	28.5	30.4	1704	76.1	55.2	20.9	2199	95.1	2748
241.15.32.254	32	16	254	22.2	53.6	15.5	38.1	1189	73.8	35.7	38.1	1638	95.2	69	26.2	2113	119	2642
241.15.32.305	32	16	305	18.3	64.1	18.5	45.6	1173	88.4	42.8	45.6	1617	114	82.6	31.4	2086	142.5	2608
241.15.40.051	40	20	51	182	10.8	3.1	7.6	1957	14.8	7.2	7.6	2697	19.1	13.9	5.3	3480	23.9	4350
241.15.40.064	40	20	64	140	13.5	3.9	9.6	1890	18.6	9	9.6	2604	24	17.4	6.6	3360	30	4200
241.15.40.076	40	20	76	108	16	4.6	11.4	1730	22.1	10.7	11.4	2384	28.5	20.6	7.8	3076	35.6	3845
241.15.40.089	40	20	89	90.7	18.7	5.4	13.3	1698	25.8	12.5	13.3	2339	33.3	24.1	9.2	3018	41.6	3773
241.15.40.102	40	20	102	81	21.5	6.2	15.3	1742	29.6	14.3	15.3	2401	38.2	27.7	10.5	3097	47.8	3872
241.15.40.115	40	20	115	71.8	24.3	7	17.2	1742	33.4	16.2	17.2	2399	43.1	31.3	11.9	3096	53.9	3870
241.15.40.127	40	20	127	62.7	26.8	7.7	19	1679	36.9	17.8	19	2313	47.6	34.5	13.1	2985	59.5	3731
241.15.40.139	40	20	139	57.5	29.3	8.5	20.8	1684	40.4	19.5	20.8	2321	52.1	37.8	14.3	2995	65.1	3743
241.15.40.152	40	20	152	51.6	32.1	9.3	22.8	1656	44.2	21.4	22.8	2281	57	41.4	15.7	2943	71.3	3679
241.15.40.178	40	20	178	44.1	37.5	10.8	26.7	1655	51.7	25	26.7	2280	66.7	48.4	18.3	2942	83.4	3678
241.15.40.203	40	20	203	36.7	42.8	12.4	30.4	1571	59	28.5	30.4	2164	76.1	55.2	20.9	2792	95.1	3490
241.15.40.254	40	20	254	30.1	53.6	15.5	38.1	1612	73.8	35.7	38.1	2221	95.2	69	26.2	2866	119	3582
241.15.40.305	40	20	305	24.6	64.1	18.5	45.6	1577	88.4	42.8	45.6	2173	114	82.6	31.4	2804	142.5	3506
241.15.50.064	50	25	64	209	13.5	3.9	9.6	2822	18.6	9	9.6	3887	24	17.4	6.6	5016	30	6270
241.15.50.076	50	25	76	168	16	4.6	11.4	2691	22.1	10.7	11.4	3708	28.5	20.6	7.8	4785	35.6	5981
241.15.50.089	50	25	89	140	18.7	5.4	13.3	2621	25.8	12.5	13.3	3611	33.3	24.1	9.2	4659	41.6	5824
241.15.50.102	50	25	102	119	21.5	6.2	15.3	2560	29.6	14.3	15.3	3527	38.2	27.7	10.5	4551	47.8	5688
241.15.50.115	50	25	115	106	24.3	7	17.2	2571	33.4	16.2	17.2	3542	43.1	31.3	11.9	4571	53.9	5713
241.15.50.127	50	25	127	97	26.8	7.7	19	2597	36.9	17.8	19	3578	47.6	34.5	13.1	4617	59.5	5772
241.15.50.139	50	25	139	87	29.3	8.5	20.8	2549	40.4	19.5	20.8	3511	52.1	37.8	14.3	4531	65.1	5664
241.15.50.152	50	25	152	80	32.1	9.3	22.8	2567	44.2	21.4	22.8	3536	57	41.4	15.7	4563	71.3	5704
241.15.50.178	50	25	178	69.5	37.5	10.8	26.7	2608	51.7	25	26.7	3594	66.7	48.4	18.3	4637	83.4	5796
241.15.50.203	50	25	203	59.8	42.8	12.4	30.4	2559	59	28.5	30.4	3526	76.1	55.2	20.9	4550	95.1	5687
241.15.50.229	50	25	229	50.9	48.3	13.9	34.3	2458	66.5	32.2	34.3	3386	85.8	62.2	23.6	4369	107.3	5462
241.15.50.254	50	25	254	46	53.6	15.5	38.1	2463	73.8	35.7	38.1	3394	95.2	69	26.2	4379	119	5474
241.15.50.305	50	25	305	38.6	64.1	18.5	45.6	2475	88.4	42.8	45.6	3410	114	82.6	31.4	4400	142.5	5500
241.15.63.076	63	38	76	320	16	4.6	11.4	5126	22.1	10.7	11.4	7063	28.5	20.6	7.8	9114	35.6	11392
241.15.63.089	63	38	89	260	18.7	5.4	13.3	4867	25.8	12.5	13.3	6706	33.3	24.1	9.2	8653	41.6	10816
241.15.63.102	63	38	102	221	21.5	6.2	15.3	4754	29.6	14.3	15.3	6550	38.2	27.7	10.5	8451	47.8	10564
241.15.63.115	63	38	115	187	24.3	7	17.2	4536	33.4	16.2	17.2	6249	43.1	31.3	11.9	8063	53.9	10079
241.15.63.127	63	38	127	168	26.8	7.7	19	4498	36.9	17.8	19	6198	47.6	34.5	13.1	7997	59.5	9996
241.15.63.152	63	38	152	136	32.1	9.3	22.8	4364	44.2	21.4	22.8	6012	57	41.4	15.7	7757	71.3	9697
241.15.63.178	63	38	178	114	37.5	10.8	26.7	4278	51.7	25	26.7	5895	66.7	48.4	18.3	7606	83.4	9508
241.15.63.203	63	38	203	100	42.8	12.4	30.4	4280	59	28.5	30.4	5896	76.1	55.2	20.9	7608	95.1	9510
241.15.63.229	63	38	229	89.2	48.3	13.9	34.3	4307	66.5	32.2	34.3	5934	85.8	62.2	23.6	7657	107.3	9571
241.15.63.254	63	38	254	78.4	53.6	15.5	38.1	4198	73.8	35.7	38.1	5784	95.2	69	26.2	7464	119	9330
241.15.63.305	63	38	305	64.7	64.1	18.5	45.6	4149	88.4	42.8	45.6	5716	114	82.6	31.4	7376	142.5	9220