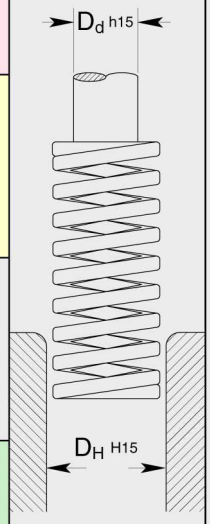
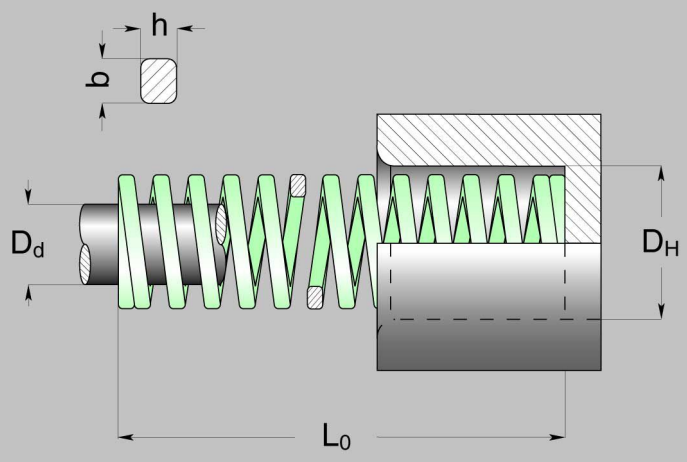
Characteristics and tolerances

Indian Techno Accessories Co.

Series		Cross wire section	Colour	Load	Max. deflection	Diameters	Free length	Rate
VL			Light green	Extra-light	50 % L_0		± 1 % L_0 ± 0,75 min.	± 10 %
V	 ISO 10243		Green	Light	40 % L_0			
B	 ISO 10243		Blue	Medium	37,5 % L_0			
R	 ISO 10243		Red	Heavy	30 % L_0			
G	 ISO 10243		Yellow	Extra-Heavy	25 % L_0			
A			Silver	Ultra-Heavy	15 % L_0			
TV			Green	Light	40 % L_0			
TB			Blue	Medium	37,5 % L_0			
TR			Red	Heavy	30 % L_0			
L			- - - -	- - - -	32 % L_0			

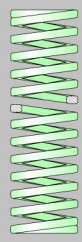
Extra-light load springs

Series VL



D_H	D_d	L_0	Catalogue No.	Rate	30% 3.000.000		40% 1.500.000		50% Max. Defl.		D Approx.	
b x h												
mm	mm	mm		N / mm	mm	N	mm	N	mm	N	mm	N
20	10	25	**VL 20 - 025**	29.4	7.5	221	10.0	294	12.5	368	13.9	409
		32	**VL 20 - 032**	22.6	9.6	217	12.8	289	16.0	362	18.2	411
		38	**VL 20 - 038**	18.6	11.4	212	15.2	283	19.0	353	22.0	409
		44	**VL 20 - 044**	15.7	13.2	207	17.6	276	22.0	345	25.8	405
		51	**VL 20 - 051**	13.7	15.3	210	20.4	279	25.5	349	30.3	415
		64	**VL 20 - 064**	11.3	19.2	217	25.6	289	32.0	362	38.9	440
		76	**VL 20 - 076**	9.8	22.8	223	30.4	298	38.0	372	47.0	461
		89	**VL 20 - 089**	8.3	26.7	222	35.6	295	44.5	369	55.7	462
		102	**VL 20 - 102**	7.4	30.6	226	40.8	302	51.0	377	64.2	475
		115	**VL 20 - 115**	6.4	34.5	221	46.0	294	57.5	368	72.9	467
		127	**VL 20 - 127**	5.9	38.1	225	50.8	300	63.5	375	80.7	476
		139	**VL 20 - 139**	5.4	41.7	225	55.6	300	69.5	375	88.4	477
		152	**VL 20 - 152**	4.9	45.6	223	60.8	298	76.0	372	96.7	474
4.3 x 1.7		305	**VL 20 - 305**	2.5	91.5	229	122.0	305	152.5	381	196.3	491
25	12.5	25	**VL 25 - 025**	53.9	7.5	404	10.0	539	12.5	674	12.9	695
		32	**VL 25 - 032**	42.2	9.6	405	12.8	540	16.0	675	17.2	726
		38	**VL 25 - 038**	35.8	11.4	408	15.2	544	19.0	680	20.7	741
		44	**VL 25 - 044**	31.4	13.2	414	17.6	553	22.0	691	24.4	766
		51	**VL 25 - 051**	27.0	15.3	413	20.4	551	25.5	689	28.5	770
		64	**VL 25 - 064**	21.6	19.2	415	25.6	553	32.0	691	36.5	788
		76	**VL 25 - 076**	18.1	22.8	413	30.4	550	38.0	688	43.9	795
		89	**VL 25 - 089**	15.2	26.7	406	35.6	541	44.5	676	51.4	781
		102	**VL 25 - 102**	13.2	30.6	404	40.8	539	51.0	673	59.3	783
		115	**VL 25 - 115**	11.8	34.5	407	46.0	543	57.5	679	67.2	793
		127	**VL 25 - 127**	10.6	38.1	404	50.8	538	63.5	673	74.4	789
		139	**VL 25 - 139**	9.6	41.7	400	55.6	534	69.5	667	81.6	783
		152	**VL 25 - 152**	8.8	45.6	401	60.8	535	76.0	669	89.5	788
		178	**VL 25 - 178**	7.6	53.4	406	71.2	541	89.0	676	105.4	801
		203	**VL 25 - 203**	6.7	60.9	408	81.2	544	101.5	680	120.7	809
5.4 x 2.2		305	**VL 25 - 305**	4.4	91.5	403	122.0	537	152.5	671	182.4	803
32	16	38	**VL 32 - 038**	43.1	11.4	491	15.2	655	19.0	819	19.9	858
		44	**VL 32 - 044**	37.3	13.2	492	17.6	656	22.0	821	23.5	877
		51	**VL 32 - 051**	32.4	15.3	496	20.4	661	25.5	826	27.6	894
		64	**VL 32 - 064**	25.5	19.2	490	25.6	653	32.0	816	35.2	898
		76	**VL 32 - 076**	21.6	22.8	492	30.4	657	38.0	821	42.4	916
		89	**VL 32 - 089**	18.1	26.7	483	35.6	644	44.5	805	50.0	905
		102	**VL 32 - 102**	15.7	30.6	480	40.8	641	51.0	801	57.6	904
		115	**VL 32 - 115**	14.2	34.5	490	46.0	653	57.5	817	65.5	930
		127	**VL 32 - 127**	12.7	38.1	484	50.8	645	63.5	806	72.5	921
		139	**VL 32 - 139**	11.6	41.7	484	55.6	645	69.5	806	79.4	921
		152	**VL 32 - 152**	10.6	45.6	483	60.8	644	76.0	806	87.3	925
		178	**VL 32 - 178**	9.0	53.4	481	71.2	641	89.0	801	102.9	926
		203	**VL 32 - 203**	7.8	60.9	475	81.2	633	101.5	792	117.7	918
		254	**VL 32 - 254**	6.4	76.2	488	101.6	650	127.0	813	148.1	948
6.5 x 2.6		305	**VL 32 - 305**	5.3	91.5	485	122.0	647	152.5	808	178.3	945

Note: 1 N = 0,102 Kg (force)



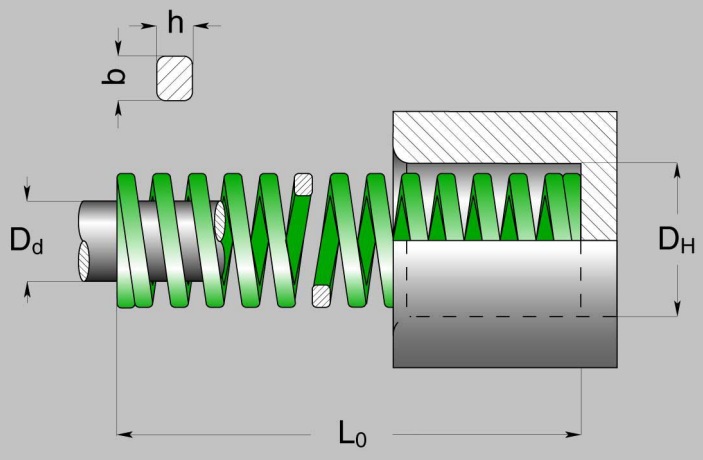
D_H	D_d	L_0	*Catalogue No.*	*Rate*	30% 3.000.000		40% 1.500.000		50% Max. Defl.		D Approx.	
b x h												
mm	mm	mm		N / mm	mm	N	mm	N	mm	N	mm	N
40	20	51	**VL 40 - 051**	48.1	15.3	736	20.4	981	25.5	1227	28.0	1347
		64	**VL 40 - 064**	39.2	19.2	753	25.6	1004	32.0	1254	36.2	1419
		76	**VL 40 - 076**	33.3	22.8	759	30.4	1012	38.0	1265	43.7	1455
		89	**VL 40 - 089**	28.4	26.7	758	35.6	1011	44.5	1264	51.7	1468
		102	**VL 40 - 102**	24.5	30.6	750	40.8	1000	51.0	1250	59.8	1465
		115	**VL 40 - 115**	22.1	34.5	762	46.0	1017	57.5	1271	67.9	1501
		127	**VL 40 - 127**	19.6	38.1	747	50.8	996	63.5	1245	75.2	1474
		139	**VL 40 - 139**	17.7	41.7	738	55.6	984	69.5	1230	82.4	1458
		152	**VL 40 - 152**	16.2	45.6	739	60.8	985	76.0	1231	90.6	1468
		178	**VL 40 - 178**	13.7	53.4	732	71.2	975	89.0	1219	106.5	1459
		203	**VL 40 - 203**	12.3	60.9	749	81.2	999	101.5	1248	122.2	1503
		254	**VL 40 - 254**	9.8	76.2	747	101.6	996	127.0	1245	153.6	1505
8.0 x 3.4		305	**VL 40 - 305**	8.3	91.5	759	122.0	1013	152.5	1266	185.4	1539
50	25	64	**VL 50 - 064**	86.3	19.2	1657	25.6	2209	32.0	2762	35.1	3029
		76	**VL 50 - 076**	70.6	22.8	1610	30.4	2146	38.0	2683	42.2	2979
		89	**VL 50 - 089**	59.8	26.7	1597	35.6	2129	44.5	2661	50.3	3008
		102	**VL 50 - 102**	52.0	30.6	1591	40.8	2122	51.0	2652	58.4	3037
		115	**VL 50 - 115**	46.1	34.5	1590	46.0	2121	57.5	2651	66.1	3047
		127	**VL 50 - 127**	42.2	38.1	1608	50.8	2144	63.5	2680	73.8	3114
		139	**VL 50 - 139**	38.2	41.7	1593	55.6	2124	69.5	2655	80.9	3090
		152	**VL 50 - 152**	34.3	45.6	1564	60.8	2085	76.0	2607	89.0	3053
		178	**VL 50 - 178**	29.4	53.4	1570	71.2	2093	89.0	2617	105.3	3096
		203	**VL 50 - 203**	25.5	60.9	1553	81.2	2071	101.5	2588	120.6	3075
		254	**VL 50 - 254**	20.6	76.2	1570	101.6	2093	127.0	2616	152.2	3135
10.5 x 4.1		305	**VL 50 - 305**	17.2	91.5	1574	122.0	2098	152.5	2623	183.7	3160

Note: 1 N = 0,102 Kg (force)

Light load springs

Series V

ISO 10243



D_H	D_d	L_0	Catalogue No.	Rate	25% 3.000.000		30% 1.500.000		40% Max. Defl.		D Approx.	
b x h												
mm	mm	mm		N / mm	mm	N	mm	N	mm	N	mm	N
10	5	25	V 10 - 025	10	6.3	63	7.5	75	10.0	100	13.5	135
		32	V 10 - 032	8.5	8.0	68	9.6	82	12.8	109	17.5	149
		38	V 10 - 038	6.8	9.5	65	11.4	78	15.2	103	20.8	141
		44	V 10 - 044	6.0	11.0	66	13.2	79	17.6	106	23.9	143
		51	V 10 - 051	5.0	12.8	64	15.3	77	20.4	102	28.9	145
		64	V 10 - 064	4.3	16.0	69	19.2	83	25.6	110	36.1	155
		76	V 10 - 076	3.2	19.0	61	22.8	73	30.4	97	43.2	138
1.7 x 1.1		305	V 10 - 305	1.1	76.3	84	91.5	101	122.0	134	178.7	197
12.5	6.3	25	V 13 - 025	17.9	6.3	113	7.5	134	10.0	179	13.2	236
		32	V 13 - 032	16.4	8.0	131	9.6	157	12.8	210	18.0	295
		38	V 13 - 038	13.6	9.5	129	11.4	155	15.2	207	21.0	286
		44	V 13 - 044	12.1	11.0	133	13.2	160	17.6	213	24.0	290
		51	V 13 - 051	11.4	12.8	146	15.3	174	20.4	233	28.7	327
		64	V 13 - 064	9.3	16.0	149	19.2	179	25.6	238	35.8	333
		76	V 13 - 076	7.1	19.0	135	22.8	162	30.4	216	42.7	303
		89	V 13 - 089	5.4	22.3	120	26.7	144	35.6	192	50.4	272
		102	V 13 - 102	4.1	25.5	105	30.6	125	40.8	167	58.4	239
2.4 x 1.4		305	V 13 - 305	1.4	76.3	107	91.5	128	122.0	171	172.0	241
16	8	25	V 16 - 025	23.4	6.3	147	7.5	176	10.0	234	12.6	295
		32	V 16 - 032	22.9	8.0	183	9.6	220	12.8	293	16.4	376
		38	V 16 - 038	19.3	9.5	183	11.4	220	15.2	293	19.7	380
		44	V 16 - 044	17.1	11.0	188	13.2	226	17.6	301	22.5	385
		51	V 16 - 051	15.7	12.8	201	15.3	240	20.4	320	26.3	413
		64	V 16 - 064	10.7	16.0	171	19.2	205	25.6	274	33.3	356
		76	V 16 - 076	10.0	19.0	190	22.8	228	30.4	304	40.2	402
		89	V 16 - 089	8.6	22.3	192	26.7	230	35.6	306	47.6	409
		102	V 16 - 102	7.8	25.5	199	30.6	239	40.8	318	55.4	432
		115	V 16 - 115	6.6	28.8	190	34.5	228	46.0	304	60.8	401
3.2 x 1.5		305	V 16 - 305	2.5	76.3	191	91.5	229	122.0	305	165.3	413
20	10	25	V 20 - 025	55.8	6.3	352	7.5	419	10.0	558	12.1	675
		32	V 20 - 032	45.0	8.0	360	9.6	432	12.8	576	15.3	689
		38	V 20 - 038	33.3	9.5	316	11.4	380	15.2	506	18.9	629
		44	V 20 - 044	30.0	11.0	330	13.2	396	17.6	528	21.5	645
		51	V 20 - 051	24.5	12.8	314	15.3	375	20.4	500	25.0	613
		64	V 20 - 064	20.0	16.0	320	19.2	384	25.6	512	31.1	622
		76	V 20 - 076	16.0	19.0	304	22.8	365	30.4	486	37.3	597
		89	V 20 - 089	14.0	22.3	312	26.7	374	35.6	498	44.5	623
		102	V 20 - 102	12.0	25.5	306	30.6	367	40.8	490	51.1	613
		115	V 20 - 115	10.9	28.8	314	34.5	376	46.0	501	58.2	634
		127	V 20 - 127	9.5	31.8	302	38.1	362	50.8	483	64.9	617
		139	V 20 - 139	8.4	35.0	294	42.0	353	56.0	470	71.5	601
		152	V 20 - 152	7.5	38.0	285	45.6	342	60.8	456	78.8	591
4.0 x 2.1		305	V 20 - 305	4.0	76.3	305	91.5	366	122.0	488	157.4	630

Note: 1 N = 0,102 Kg (force)

Green colour

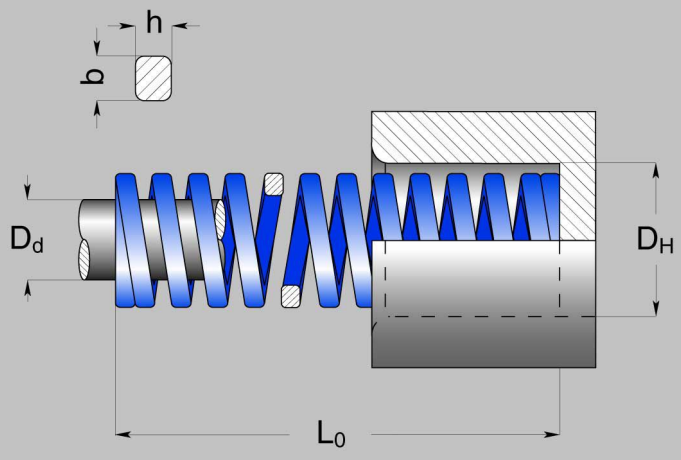
D_H	D_d	L_0	Catalogue No.	Rate	25% 3.000.000		30% 1.500.000		40% Max. Defl.		D Approx.	
b x h												
mm	mm	mm		N / mm	mm	N	mm	N	mm	N	mm	N
25	12.5	25	**V 25 - 025**	100.0	6.3	630	7.5	750	10.0	1000	11.9	1190
		32	**V 25 - 032**	80.3	8.0	642	9.6	771	12.8	1028	16.0	1285
		38	**V 25 - 038**	62.0	9.5	589	11.4	707	15.2	942	18.3	1135
		44	**V 25 - 044**	52.9	11.0	582	13.2	698	17.6	931	21.4	1132
		51	**V 25 - 051**	44.0	12.8	563	15.3	673	20.4	898	24.9	1096
		64	**V 25 - 064**	35.2	16.0	563	19.2	676	25.6	901	31.4	1105
		76	**V 25 - 076**	28.0	19.0	532	22.8	638	30.4	851	37.5	1050
		89	**V 25 - 089**	24.0	22.3	535	26.7	641	35.6	854	43.5	1044
		102	**V 25 - 102**	21.1	25.5	538	30.6	646	40.8	861	51.1	1078
		115	**V 25 - 115**	18.7	28.8	539	34.5	645	46.0	860	58.1	1086
		127	**V 25 - 127**	16.7	31.8	531	38.1	636	50.8	848	64.1	1070
		139	**V 25 - 139**	15.3	35.0	536	42.0	643	56.0	857	70.4	1077
		152	**V 25 - 152**	14.0	38.0	532	45.6	638	60.8	851	77.1	1079
		178	**V 25 - 178**	12.5	44.5	556	53.4	668	71.2	890	93.1	1164
		203	**V 25 - 203**	10.4	50.8	528	60.9	633	81.2	844	102.7	1068
5.4 x 2.7		305	**V 25 - 305**	7.0	76.3	534	91.5	641	122.0	854	155.9	1091
32	16	38	**V 32 - 038**	94.0	9.5	893	11.4	1072	15.2	1429	18.3	1720
		44	**V 32 - 044**	79.5	11.0	875	13.2	1049	17.6	1399	21.5	1709
		51	**V 32 - 051**	67.0	12.8	858	15.3	1025	20.4	1367	25.5	1709
		64	**V 32 - 064**	53.0	16.0	848	19.2	1018	25.6	1357	31.9	1691
		76	**V 32 - 076**	44.0	19.0	836	22.8	1003	30.4	1338	38.6	1698
		89	**V 32 - 089**	37.2	22.3	830	26.7	993	35.6	1324	46.5	1730
		102	**V 32 - 102**	32.0	25.5	816	30.6	979	40.8	1306	53.2	1702
		115	**V 32 - 115**	29.0	28.8	835	34.5	1001	46.0	1334	60.0	1740
		127	**V 32 - 127**	25.0	31.8	795	38.1	953	50.8	1270	66.7	1668
		139	**V 32 - 139**	23.0	35.0	805	42.0	966	56.0	1288	71.8	1651
		152	**V 32 - 152**	21.5	38.0	817	45.6	980	60.8	1307	78.5	1688
		178	**V 32 - 178**	18.2	44.5	810	53.4	972	71.2	1296	94.4	1718
		203	**V 32 - 203**	15.8	50.8	803	60.9	962	81.2	1283	107.1	1692
		254	**V 32 - 254**	12.5	63.5	794	76.2	953	101.6	1270	136.5	1706
6.8 x 3.3		305	**V 32 - 305**	10.3	76.3	786	91.5	942	122.0	1257	162.7	1676
40	20	51	**V 40 - 051**	92.0	12.8	1178	15.3	1408	20.4	1877	25.5	2346
		64	**V 40 - 064**	73.0	16.0	1168	19.2	1402	25.6	1869	31.4	2292
		76	**V 40 - 076**	63.0	19.0	1197	22.8	1436	30.4	1915	37.8	2381
		89	**V 40 - 089**	51.0	22.3	1137	26.7	1362	35.6	1816	44.3	2259
		102	**V 40 - 102**	43.0	25.5	1097	30.6	1316	40.8	1754	50.7	2180
		115	**V 40 - 115**	39.6	28.8	1140	34.5	1366	46.0	1822	58.1	2301
		127	**V 40 - 127**	37.0	31.8	1177	38.1	1410	50.8	1880	64.6	2390
		139	**V 40 - 139**	32.0	35.0	1120	42.0	1344	56.0	1792	70.1	2243
		152	**V 40 - 152**	28.0	38.0	1064	45.6	1277	60.8	1702	76.6	2145
		178	**V 40 - 178**	25.2	44.5	1121	53.4	1346	71.2	1794	90.4	2278
		203	**V 40 - 203**	22.7	50.8	1153	60.9	1382	81.2	1843	102.4	2324
		254	**V 40 - 254**	17.0	63.5	1080	76.2	1295	101.6	1727	128.8	2190
8.1 x 4.0		305	**V 40 - 305**	14.8	76.3	1129	91.5	1354	122.0	1806	156.1	2310
50	25	64	**V 50 - 064**	156	16.0	2496	19.2	2995	25.6	3994	31.0	4836
		76	**V 50 - 076**	125	19.0	2375	22.8	2850	30.4	3800	37.2	4650
		89	**V 50 - 089**	109	22.3	2431	26.7	2910	35.6	3880	43.6	4752
		102	**V 50 - 102**	94.0	25.5	2397	30.6	2876	40.8	3835	50.3	4728
		115	**V 50 - 115**	81.0	28.8	2333	34.5	2795	46.0	3726	58.1	4706
		127	**V 50 - 127**	71.0	31.8	2258	38.1	2705	50.8	3607	63.7	4523
		139	**V 50 - 139**	66.5	35.0	2328	42.0	2793	56.0	3724	69.5	4622
		152	**V 50 - 152**	60.0	38.0	2280	45.6	2736	60.8	3648	76.5	4590
		178	**V 50 - 178**	52.0	44.5	2314	53.4	2777	71.2	3702	91.9	4779
		203	**V 50 - 203**	44.0	50.8	2235	60.9	2680	81.2	3573	104.7	4607
		254	**V 50 - 254**	35.0	63.5	2223	76.2	2667	101.6	3556	130.6	4571
10.9 x 5.3		305	**V 50 - 305**	28.5	76.3	2175	91.5	2608	122.0	3477	154.9	4415
63	38	76	**V 63 - 076**	189	19.0	3591	22.8	4309	30.4	5746	36.5	6899
		89	**V 63 - 089**	158	22.3	3523	26.7	4219	35.6	5625	43.4	6857
		102	**V 63 - 102**	131	25.5	3341	30.6	4009	40.8	5345	49.7	6511
		115	**V 63 - 115**	116	28.8	3341	34.5	4002	46.0	5336	55.6	6450
		127	**V 63 - 127**	103	31.8	3275	38.1	3924	50.8	5232	62.7	6458
		152	**V 63 - 152**	84.3	38.0	3203	45.6	3844	60.8	5125	77.1	6500
		178	**V 63 - 178**	71.5	44.5	3182	53.4	3818	71.2	5091	92.2	6592
		203	**V 63 - 203**	61.7	50.8	3134	60.9	3758	81.2	5010	103.5	6386
		254	**V 63 - 254**	47.0	63.5	2985	76.2	3581	101.6	4775	130.4	6129
11.0 x 7.8		305	**V 63 - 305**	38.2	76.3	2915	91.5	3495	122.0	4660	157.4	6013

Note: 1 N = 0,102 Kg (force)

Medium load springs

Series B

ISO 10243



D_H	D_d	L_0	Catalogue No.	Rate	25% 3.000.000		30% 1.500.000		37,5% Max. Defl.		D Approx.	
b x h												
mm	mm	mm		N / mm	mm	N	mm	N	mm	N	mm	N
10	5	25	**B 10 - 025**	16.0	6.3	101	7.5	120	9.4	150	10.2	163
		32	**B 10 - 032**	13.0	8.0	104	9.6	125	12.0	156	14.2	185
		38	**B 10 - 038**	11.9	9.5	113	11.4	136	14.3	170	16.8	200
		44	**B 10 - 044**	10.3	11.0	113	13.2	136	16.5	170	19.4	200
		51	**B 10 - 051**	8.9	12.8	114	15.3	136	19.1	170	23.4	208
		64	**B 10 - 064**	7.5	16.0	120	19.2	144	24.0	180	28.2	212
		76	**B 10 - 076**	5.3	19.0	101	22.8	121	28.5	151	34.2	181
1.9 x 1.3		305	**B 10 - 305**	1.6	76.3	122	91.5	146	114.4	183	133.8	214
12.5	6.3	25	**B 13 - 025**	30.0	6.3	189	7.5	225	9.4	282	11.9	357
		32	**B 13 - 032**	24.8	8.0	198	9.6	238	12.0	298	16.2	402
		38	**B 13 - 038**	21.4	9.5	203	11.4	244	14.3	306	18.7	400
		44	**B 13 - 044**	18.5	11.0	204	13.2	244	16.5	305	21.3	394
		51	**B 13 - 051**	15.5	12.8	198	15.3	237	19.1	296	25.6	397
		64	**B 13 - 064**	12.1	16.0	194	19.2	232	24.0	290	32.4	392
		76	**B 13 - 076**	10.2	19.0	194	22.8	233	28.5	291	39.0	398
		89	**B 13 - 089**	8.4	22.3	187	26.7	224	33.4	281	45.9	386
		102	**B 13 - 102**	6.3	25.5	161	30.6	193	38.3	241	52.3	329
2.5 x 1.5		305	**B 13 - 305**	2.1	76.3	160	91.5	192	114.4	240	152.5	320
16	8	25	**B 16 - 025**	49.4	6.3	311	7.5	371	9.4	464	10.5	519
		32	**B 16 - 032**	37.1	8.0	297	9.6	356	12.0	445	13.2	490
		38	**B 16 - 038**	33.9	9.5	322	11.4	386	14.3	485	17.2	583
		44	**B 16 - 044**	30.0	11.0	330	13.2	396	16.5	495	19.4	582
		51	**B 16 - 051**	26.4	12.8	338	15.3	404	19.1	504	24.2	639
		64	**B 16 - 064**	20.5	16.0	328	19.2	394	24.0	492	29.2	599
		76	**B 16 - 076**	17.8	19.0	338	22.8	406	28.5	507	36.3	646
		89	**B 16 - 089**	15.2	22.3	339	26.7	406	33.4	508	41.7	634
		102	**B 16 - 102**	13.5	25.5	344	30.6	413	38.3	517	48.9	660
		115	**B 16 - 115**	11.8	28.8	340	34.5	407	43.1	509	53.1	627
3.2 x 2.0		305	**B 16 - 305**	4.8	76.3	366	91.5	439	114.4	549	141.6	680
20	10	25	**B 20 - 025**	98.0	6.3	617	7.5	735	9.4	921	10.5	1029
		32	**B 20 - 032**	72.6	8.0	581	9.6	697	12.0	871	13.9	1009
		38	**B 20 - 038**	56.0	9.5	532	11.4	638	14.3	801	16.6	930
		44	**B 20 - 044**	47.5	11.0	523	13.2	627	16.5	784	18.8	893
		51	**B 20 - 051**	41.7	12.8	534	15.3	638	19.1	796	23.1	963
		64	**B 20 - 064**	32.3	16.0	517	19.2	620	24.0	775	27.5	888
		76	**B 20 - 076**	25.1	19.0	477	22.8	572	28.5	715	33.8	848
		89	**B 20 - 089**	22.0	22.3	491	26.7	587	33.4	735	39.7	873
		102	**B 20 - 102**	19.8	25.5	505	30.6	606	38.3	758	47.3	937
		115	**B 20 - 115**	18.1	28.8	521	34.5	624	43.1	780	52.5	950
		127	**B 20 - 127**	16.6	31.8	528	38.1	632	47.6	790	56.9	945
		139	**B 20 - 139**	15.1	35.0	529	42.0	634	52.5	793	62.1	938
		152	**B 20 - 152**	13.2	38.0	500	45.6	600	57.0	750	67.6	889
		305	**B 20 - 305**	6.1	76.3	465	91.5	558	114.4	698	143.4	875
4.1 x 2.4												

Note: 1 N = 0,102 Kg (force)

Blue colour

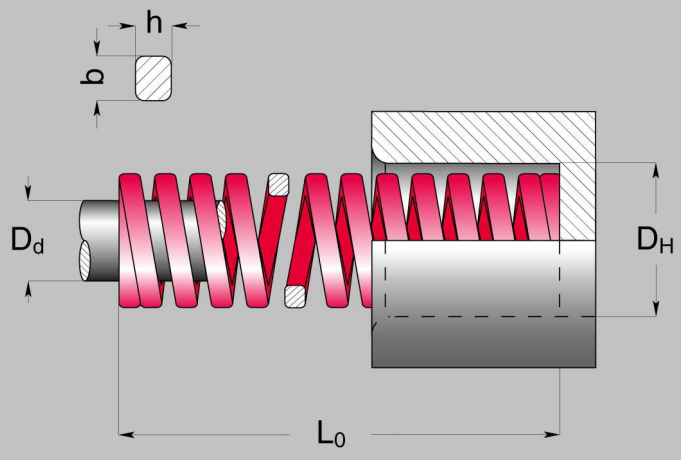
D_H	D_d	L_0	Catalogue No.	Rate	25% 3.000.000		30% 1.500.000		37,5% Max. Defl.		D Approx.	
b x h												
mm	mm	mm		N / mm	mm	N	mm	N	mm	N	mm	N
25	12.5	25	**B 25 - 025**	147	6.3	926	7.5	1103	9.4	1382	10.2	1499
		32	**B 25 - 032**	118	8.0	944	9.6	1133	12.0	1416	13.7	1617
		38	**B 25 - 038**	93.0	9.5	884	11.4	1060	14.3	1330	15.7	1460
		44	**B 25 - 044**	80.8	11.0	889	13.2	1067	16.5	1333	18.2	1471
		51	**B 25 - 051**	68.6	12.8	878	15.3	1050	19.1	1310	21.7	1489
		64	**B 25 - 064**	53.0	16.0	848	19.2	1018	24.0	1272	26.0	1378
		76	**B 25 - 076**	43.2	19.0	821	22.8	985	28.5	1231	32.3	1395
		89	**B 25 - 089**	38.2	22.3	852	26.7	1020	33.4	1276	38.0	1452
		102	**B 25 - 102**	33.0	25.5	842	30.6	1010	38.3	1264	43.0	1419
		115	**B 25 - 115**	28.0	28.8	806	34.5	966	43.1	1207	48.6	1361
		127	**B 25 - 127**	25.9	31.8	824	38.1	987	47.6	1233	53.7	1391
		139	**B 25 - 139**	23.2	35.0	812	42.0	974	52.5	1218	59.4	1378
		152	**B 25 - 152**	20.8	38.0	790	45.6	948	57.0	1186	63.8	1327
		178	**B 25 - 178**	17.8	44.5	792	53.4	951	66.8	1189	76.6	1363
		203	**B 25 - 203**	15.8	50.8	803	60.9	962	76.1	1202	88.4	1397
	5.4 x 3.3	305	**B 25 - 305**	10.2	76.3	778	91.5	933	114.4	1167	135.1	1378
32	16	38	**B 32 - 038**	185	9.5	1758	11.4	2109	14.3	2646	16.3	3016
		44	**B 32 - 044**	158	11.0	1738	13.2	2086	16.5	2607	18.9	2986
		51	**B 32 - 051**	134	12.8	1715	15.3	2050	19.1	2559	23.1	3095
		64	**B 32 - 064**	99.0	16.0	1584	19.2	1901	24.0	2376	28.5	2822
		76	**B 32 - 076**	80.5	19.0	1530	22.8	1835	28.5	2294	34.2	2753
		89	**B 32 - 089**	69.1	22.3	1541	26.7	1845	33.4	2308	40.4	2792
		102	**B 32 - 102**	58.8	25.5	1499	30.6	1799	38.3	2252	48.0	2822
		115	**B 32 - 115**	51.5	28.8	1483	34.5	1777	43.1	2220	54.3	2796
		127	**B 32 - 127**	44.8	31.8	1425	38.1	1707	47.6	2132	59.2	2652
		139	**B 32 - 139**	42.3	35.0	1481	42.0	1777	52.5	2221	65.3	2762
		152	**B 32 - 152**	37.8	38.0	1436	45.6	1724	57.0	2155	73.0	2759
		178	**B 32 - 178**	32.5	44.5	1446	53.4	1736	66.8	2171	84.5	2746
		203	**B 32 - 203**	28.9	50.8	1468	60.9	1760	76.1	2199	96.9	2800
		254	**B 32 - 254**	21.4	63.5	1359	76.2	1631	95.3	2039	120.9	2587
	6.8 x 4.0	305	**B 32 - 305**	18.3	76.3	1396	91.5	1674	114.4	2094	146.9	2688
40	20	51	**B 40 - 051**	181.6	12.8	2324	15.3	2778	19.1	3469	21.4	3886
		64	**B 40 - 064**	140.0	16.0	2240	19.2	2688	24.0	3360	26.8	3752
		76	**B 40 - 076**	108.0	19.0	2052	22.8	2462	28.5	3078	32.7	3532
		89	**B 40 - 089**	90.7	22.3	2023	26.7	2422	33.4	3029	39.0	3537
		102	**B 40 - 102**	81.0	25.5	2066	30.6	2479	38.3	3102	44.1	3572
		115	**B 40 - 115**	71.8	28.8	2068	34.5	2477	43.1	3095	50.6	3633
		127	**B 40 - 127**	62.7	31.8	1994	38.1	2389	47.6	2985	55.9	3505
		139	**B 40 - 139**	57.5	35.0	2013	42.0	2415	52.5	3019	61.8	3554
		152	**B 40 - 152**	51.6	38.0	1961	45.6	2353	57.0	2941	67.5	3483
		178	**B 40 - 178**	44.1	44.5	1962	53.4	2355	66.8	2946	77.2	3405
		203	**B 40 - 203**	36.7	50.8	1864	60.9	2235	76.1	2793	91.8	3369
		254	**B 40 - 254**	30.1	63.5	1911	76.2	2294	95.3	2869	112.7	3392
	8.2 x 4.7	305	**B 40 - 305**	24.6	76.3	1877	91.5	2251	114.4	2814	138.1	3397
50	25	64	**B 50 - 064**	209	16.0	3344	19.2	4013	24.0	5016	28.2	5894
		76	**B 50 - 076**	168	19.0	3192	22.8	3830	28.5	4788	34.9	5863
		89	**B 50 - 089**	140	22.3	3122	26.7	3738	33.4	4676	39.2	5488
		102	**B 50 - 102**	119	25.5	3035	30.6	3641	38.3	4558	47.3	5629
		115	**B 50 - 115**	106	28.8	3053	34.5	3657	43.1	4569	52.6	5576
		127	**B 50 - 127**	97.0	31.8	3085	38.1	3696	47.6	4617	59.8	5801
		139	**B 50 - 139**	87.0	35.0	3045	42.0	3654	52.5	4568	65.1	5664
		152	**B 50 - 152**	80.0	38.0	3040	45.6	3648	57.0	4560	70.8	5664
		178	**B 50 - 178**	69.5	44.5	3093	53.4	3711	66.8	4643	84.2	5852
		203	**B 50 - 203**	59.8	50.8	3038	60.9	3642	76.1	4551	96.5	5771
		229	**B 50 - 229**	50.9	57.3	2917	68.7	3497	85.9	4372	108.5	5523
		254	**B 50 - 254**	43.9	63.5	2788	76.2	3345	95.3	4184	121.8	5347
	11.1 x 5.8	305	**B 50 - 305**	38.6	76.3	2945	91.5	3532	114.4	4416	146.8	5666
63	38	76	**B 63 - 076**	312	19.0	5928	22.8	7114	28.5	8892	30.7	9578
		89	**B 63 - 089**	260	22.3	5798	26.7	6942	33.4	8684	36.5	9490
		102	**B 63 - 102**	221	25.5	5636	30.6	6763	38.3	8464	43.6	9636
		115	**B 63 - 115**	187	28.8	5386	34.5	6452	43.1	8060	48.9	9144
		127	**B 63 - 127**	168	31.8	5342	38.1	6401	47.6	7997	54.2	9106
		152	**B 63 - 152**	136	38.0	5168	45.6	6202	57.0	7752	65.7	8935
		178	**B 63 - 178**	114	44.5	5073	53.4	6088	66.8	7615	76.5	8721
		203	**B 63 - 203**	100	50.8	5080	60.9	6090	76.1	7610	88.0	8800
		229	**B 63 - 229**	89.2	57.3	5111	68.7	6128	85.9	7662	103.9	9268
		254	**B 63 - 254**	78.4	63.5	4978	76.2	5974	95.3	7472	112.4	8812
	11.5 x 9.1	305	**B 63 - 305**	64.7	76.3	4937	91.5	5920	114.4	7402	133.8	8657

Note: 1 N = 0,102 Kg (force)

Heavy load springs

Series R

ISO 10243



D_H	D_d	L_0	Catalogue No.	Rate	20% 3.000.000		25% 1.500.000		30% Max. Defl.		D Approx.	
b x h												
mm	mm	mm		N / mm	mm	N	mm	N	mm	N	mm	N
10	5	25	**R 10 - 025**	22.1	5.0	111	6.3	139	7.5	166	9.2	203
		32	**R 10 - 032**	17.5	6.4	112	8.0	140	9.6	168	12.1	212
		38	**R 10 - 038**	17.1	7.6	130	9.5	162	11.4	195	13.2	226
		44	**R 10 - 044**	15.0	8.8	132	11.0	165	13.2	198	15.1	227
		51	**R 10 - 051**	12.8	10.2	131	12.8	164	15.3	196	19.5	250
		64	**R 10 - 064**	10.7	12.8	137	16.0	171	19.2	205	21.8	233
		76	**R 10 - 076**	7.5	15.2	114	19.0	143	22.8	171	27.9	209
1.9 x 1.5		305	**R 10 - 305**	2.1	61.0	128	76.3	160	91.5	192	127.2	267
12.5	6.3	25	**R 13 - 025**	42.1	5.0	211	6.3	265	7.5	316	9.8	413
		32	**R 13 - 032**	33.2	6.4	212	8.0	266	9.6	319	13.6	452
		38	**R 13 - 038**	29.3	7.6	223	9.5	278	11.4	334	14.6	428
		44	**R 13 - 044**	24.6	8.8	216	11.0	271	13.2	325	18.1	445
		51	**R 13 - 051**	19.6	10.2	200	12.8	251	15.3	300	22.3	437
		64	**R 13 - 064**	15.0	12.8	192	16.0	240	19.2	288	27.3	410
		76	**R 13 - 076**	13.2	15.2	201	19.0	251	22.8	301	33.1	437
		89	**R 13 - 089**	11.4	17.8	203	22.3	254	26.7	304	38.9	443
		102	**R 13 - 102**	8.4	20.4	171	25.5	214	30.6	257	43.8	368
2.4 x 1.9		305	**R 13 - 305**	2.8	61.0	171	76.3	214	91.5	256	139.7	391
16	8	25	**R 16 - 025**	75.7	5.0	379	6.3	477	7.5	568	8.4	636
		32	**R 16 - 032**	52.8	6.4	338	8.0	422	9.6	507	10.5	554
		38	**R 16 - 038**	48.5	7.6	369	9.5	461	11.4	553	13.6	660
		44	**R 16 - 044**	42.8	8.8	377	11.0	471	13.2	565	15.9	681
		51	**R 16 - 051**	37.1	10.2	378	12.8	475	15.3	568	18.9	701
		64	**R 16 - 064**	30.3	12.8	388	16.0	485	19.2	582	24.9	754
		76	**R 16 - 076**	25.7	15.2	391	19.0	488	22.8	586	29.2	750
		89	**R 16 - 089**	21.7	17.8	386	22.3	484	26.7	579	34.5	749
		102	**R 16 - 102**	19.3	20.4	394	25.5	492	30.6	591	39.1	755
		115	**R 16 - 115**	15.7	23.0	361	28.8	452	34.5	542	44.0	691
3.1 x 2.5		305	**R 16 - 305**	7.1	61.0	433	76.3	542	91.5	650	103.6	736
20	10	25	**R 20 - 025**	216	5.0	1080	6.3	1361	7.5	1620	8.3	1793
		32	**R 20 - 032**	168	6.4	1075	8.0	1344	9.6	1613	10.9	1831
		38	**R 20 - 038**	129	7.6	980	9.5	1226	11.4	1471	12.5	1613
		44	**R 20 - 044**	112	8.8	986	11.0	1232	13.2	1478	15.0	1680
		51	**R 20 - 051**	94.0	10.2	959	12.8	1203	15.3	1438	17.6	1654
		64	**R 20 - 064**	72.1	12.8	923	16.0	1154	19.2	1384	22.6	1629
		76	**R 20 - 076**	59.7	15.2	907	19.0	1134	22.8	1361	27.5	1642
		89	**R 20 - 089**	50.5	17.8	899	22.3	1126	26.7	1348	31.7	1601
		102	**R 20 - 102**	44.2	20.4	902	25.5	1127	30.6	1353	37.5	1658
		115	**R 20 - 115**	38.4	23.0	883	28.8	1106	34.5	1325	42.6	1636
		127	**R 20 - 127**	34.1	25.4	866	31.8	1084	38.1	1299	45.5	1552
		139	**R 20 - 139**	31.0	28.0	868	35.0	1085	42.0	1302	50.1	1553
		152	**R 20 - 152**	28.2	30.4	857	38.0	1072	45.6	1286	55.8	1574
4.0 x 3.3		305	**R 20 - 305**	15.0	61.0	915	76.3	1145	91.5	1373	114.1	1712

Note: 1 N = 0,102 Kg (force)

Red colour

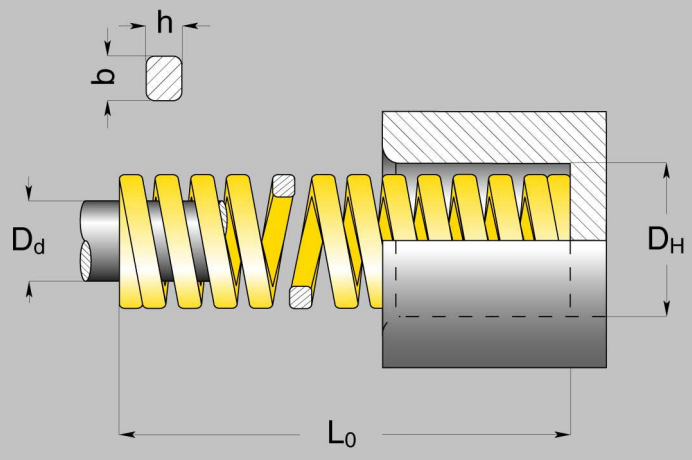
D_H	D_d	L_0	Catalogue No.	Rate	20% 3.000.000		25% 1.500.000		30% Max. Defl.		D Approx.	
b x h												
mm	mm	mm		N / mm	mm	N	mm	N	mm	N	mm	N
25	12.5	25	**R 25 - 025**	375	5.0	1875	6.3	2363	7.5	2813	8.5	3188
		32	**R 25 - 032**	297	6.4	1901	8.0	2376	9.6	2851	11.0	3267
		38	**R 25 - 038**	219	7.6	1664	9.5	2081	11.4	2497	12.6	2759
		44	**R 25 - 044**	187	8.8	1646	11.0	2057	13.2	2468	14.8	2768
		51	**R 25 - 051**	156	10.2	1591	12.8	1997	15.3	2387	17.9	2792
		64	**R 25 - 064**	123	12.8	1574	16.0	1968	19.2	2362	23.1	2841
		76	**R 25 - 076**	99.0	15.2	1505	19.0	1881	22.8	2257	26.3	2604
		89	**R 25 - 089**	84.0	17.8	1495	22.3	1873	26.7	2243	30.5	2562
		102	**R 25 - 102**	73.0	20.4	1489	25.5	1862	30.6	2234	37.3	2723
		115	**R 25 - 115**	65.0	23.0	1495	28.8	1872	34.5	2243	41.9	2724
		127	**R 25 - 127**	57.7	25.4	1466	31.8	1835	38.1	2198	46.2	2666
		139	**R 25 - 139**	52.7	28.0	1476	35.0	1845	42.0	2213	49.3	2598
		152	**R 25 - 152**	47.8	30.4	1453	38.0	1816	45.6	2180	55.7	2662
		178	**R 25 - 178**	41.0	35.6	1460	44.5	1825	53.4	2189	65.1	2669
		203	**R 25 - 203**	35.8	40.6	1453	50.8	1819	60.9	2180	74.5	2667
5.5 x 4.2		305	**R 25 - 305**	22.9	61.0	1397	76.3	1747	91.5	2095	110.2	2524
32	16	38	**R 32 - 038**	388	7.6	2949	9.5	3686	11.4	4423	12.5	4850
		44	**R 32 - 044**	324	8.8	2851	11.0	3564	13.2	4277	14.9	4828
		51	**R 32 - 051**	272	10.2	2774	12.8	3482	15.3	4162	17.8	4842
		64	**R 32 - 064**	212	12.8	2714	16.0	3392	19.2	4070	22.4	4749
		76	**R 32 - 076**	172	15.2	2614	19.0	3268	22.8	3922	26.1	4489
		89	**R 32 - 089**	141	17.8	2510	22.3	3144	26.7	3765	30.8	4343
		102	**R 32 - 102**	122	20.4	2489	25.5	3111	30.6	3733	36.8	4490
		115	**R 32 - 115**	107	23.0	2461	28.8	3082	34.5	3692	41.4	4430
		127	**R 32 - 127**	93.0	25.4	2362	31.8	2957	38.1	3543	44.4	4129
		139	**R 32 - 139**	86.0	28.0	2408	35.0	3010	42.0	3612	48.5	4171
		152	**R 32 - 152**	78.0	30.4	2371	38.0	2964	45.6	3557	54.8	4274
		178	**R 32 - 178**	67.2	35.6	2392	44.5	2990	53.4	3588	63.6	4274
		203	**R 32 - 203**	59.1	40.6	2399	50.8	3002	60.9	3599	72.5	4285
		254	**R 32 - 254**	46.4	50.8	2357	63.5	2946	76.2	3536	92.8	4306
7.1 x 5.4		305	**R 32 - 305**	38.0	61.0	2318	76.3	2899	91.5	3477	111.8	4248
40	20	51	**R 40 - 051**	350	10.2	3570	12.8	4480	15.3	5355	17.0	5950
		64	**R 40 - 064**	269	12.8	3443	16.0	4304	19.2	5165	21.9	5891
		76	**R 40 - 076**	219	15.2	3329	19.0	4161	22.8	4993	26.7	5847
		89	**R 40 - 089**	190	17.8	3382	22.3	4237	26.7	5073	31.3	5947
		102	**R 40 - 102**	163	20.4	3325	25.5	4157	30.6	4988	37.1	6047
		115	**R 40 - 115**	142	23.0	3266	28.8	4090	34.5	4899	41.0	5822
		127	**R 40 - 127**	128	25.4	3251	31.8	4070	38.1	4877	46.5	5952
		139	**R 40 - 139**	115	28.0	3220	35.0	4025	42.0	4830	53.1	6107
		152	**R 40 - 152**	105	30.4	3192	38.0	3990	45.6	4788	56.1	5891
		178	**R 40 - 178**	89	35.6	3168	44.5	3961	53.4	4753	67.4	5999
		203	**R 40 - 203**	77	40.6	3126	50.8	3912	60.9	4689	76.2	5867
		254	**R 40 - 254**	61	50.8	3099	63.5	3874	76.2	4648	96.2	5868
8.4 x 6.2		305	**R 40 - 305**	51	61.0	3111	76.3	3891	91.5	4667	114.8	5855
50	25	64	**R 50 - 064**	413	12.8	5286	16.0	6608	19.2	7930	22.4	9251
		76	**R 50 - 076**	339	15.2	5153	19.0	6441	22.8	7729	26.5	8984
		89	**R 50 - 089**	288	17.8	5126	22.3	6422	26.7	7690	31.5	9072
		102	**R 50 - 102**	245	20.4	4998	25.5	6248	30.6	7497	37.6	9212
		115	**R 50 - 115**	215	23.0	4945	28.8	6192	34.5	7418	42.7	9181
		127	**R 50 - 127**	192	25.4	4877	31.8	6106	38.1	7315	47.5	9120
		139	**R 50 - 139**	168	28.0	4704	35.0	5880	42.0	7056	51.8	8702
		152	**R 50 - 152**	154	30.4	4682	38.0	5852	45.6	7022	57.8	8901
		178	**R 50 - 178**	134	35.6	4770	44.5	5963	53.4	7156	68.5	9179
		203	**R 50 - 203**	117	40.6	4750	50.8	5944	60.9	7125	77.6	9079
		254	**R 50 - 254**	89	50.8	4521	63.5	5652	76.2	6782	97.9	8713
11.1 x 7.6		305	**R 50 - 305**	73	61.0	4453	76.3	5570	91.5	6680	120.7	8811
63	38	76	**R 63 - 076**	618	15.2	9394	19.0	11742	22.8	14090	24.7	15265
		89	**R 63 - 089**	515	17.8	9167	22.3	11485	26.7	13751	30.0	15450
		102	**R 63 - 102**	438	20.4	8935	25.5	11169	30.6	13403	35.1	15374
		115	**R 63 - 115**	370	23.0	8510	28.8	10656	34.5	12765	37.5	13875
		127	**R 63 - 127**	333	25.4	8458	31.8	10589	38.1	12687	45.9	15285
		152	**R 63 - 152**	269	30.4	8178	38.0	10222	45.6	12266	56.5	15199
		178	**R 63 - 178**	226	35.6	8046	44.5	10057	53.4	12068	66.8	15097
		203	**R 63 - 203**	198	40.6	8039	50.8	10058	60.9	12058	78.8	15602
		254	**R 63 - 254**	155	50.8	7874	63.5	9843	76.2	11811	101.7	15763
11.6 x 12.3		305	**R 63 - 305**	128	61.0	7808	76.3	9766	91.5	11712	122.4	15667

Note: 1 N = 0,102 Kg (force)

Extra-heavy load springs

Series **G**

ISO 10243



D_H	D_d	L_0	*Catalogue No.*	*Rate*	17% 3.000.000		20% 1.500.000		25% Max. Defl.		D Approx.	
b x h												
mm	mm	mm		N / mm	mm	N	mm	N	mm	N	mm	N
10	5	25	**G 10 - 025**	36.8	4.3	158	5.0	184	6.3	232	7.7	283
		32	**G 10 - 032**	27.9	5.4	151	6.4	179	8.0	223	10.6	296
		38	**G 10 - 038**	23.7	6.5	154	7.6	180	9.5	225	12.6	299
		44	**G 10 - 044**	19.2	7.5	144	8.8	169	11.0	211	13.8	265
		51	**G 10 - 051**	16.5	8.7	144	10.2	168	12.8	211	16.2	267
		64	**G 10 - 064**	13.2	10.9	144	12.8	169	16.0	211	20.4	269
		76	**G 10 - 076**	10.9	12.9	141	15.2	166	19.0	207	25.2	275
1.9 x 1.6		305	**G 10 - 305**	2.6	51.9	135	61.0	159	76.3	198	110.8	288
12.5	6.3	25	**G 13 - 025**	58.5	4.3	252	5.0	293	6.3	369	8.1	474
		32	**G 13 - 032**	43.9	5.4	237	6.4	281	8.0	351	9.9	435
		38	**G 13 - 038**	36.0	6.5	234	7.6	274	9.5	342	12.9	464
		44	**G 13 - 044**	30.3	7.5	227	8.8	267	11.0	333	14.1	427
		51	**G 13 - 051**	26.2	8.7	228	10.2	267	12.8	335	17.4	456
		64	**G 13 - 064**	21.2	10.9	231	12.8	271	16.0	339	21.0	445
		76	**G 13 - 076**	17.1	12.9	221	15.2	260	19.0	325	26.4	451
		89	**G 13 - 089**	14.5	15.1	219	17.8	258	22.3	323	31.5	457
		102	**G 13 - 102**	12.7	17.3	220	20.4	259	25.5	324	36.0	457
2.6 x 2.0		305	**G 13 - 305**	4.3	51.9	223	61.0	262	76.3	328	111.3	479
16	8	25	**G 16 - 025**	118	4.3	507	5.0	590	6.3	743	8.5	1003
		32	**G 16 - 032**	89.0	5.4	481	6.4	570	8.0	712	11.0	979
		38	**G 16 - 038**	72.1	6.5	469	7.6	548	9.5	685	13.2	952
		44	**G 16 - 044**	60.9	7.5	457	8.8	536	11.0	670	14.7	895
		51	**G 16 - 051**	52.3	8.7	455	10.2	533	12.8	669	17.7	926
		64	**G 16 - 064**	41.2	10.9	449	12.8	527	16.0	659	21.9	902
		76	**G 16 - 076**	34.1	12.9	440	15.2	518	19.0	648	27.8	948
		89	**G 16 - 089**	29.5	15.1	445	17.8	525	22.3	658	31.2	920
		102	**G 16 - 102**	25.6	17.3	443	20.4	522	25.5	653	37.9	970
		115	**G 16 - 115**	22.4	19.6	439	23.0	515	28.8	645	44.5	997
3.2 x 2.9		305	**G 16 - 305**	8.4	51.9	436	61.0	512	76.3	641	113.5	953
20	10	25	**G 20 - 025**	293	4.3	1260	5.0	1465	6.3	1846	6.9	2022
		32	**G 20 - 032**	224	5.4	1210	6.4	1434	8.0	1792	9.4	2106
		38	**G 20 - 038**	177	6.5	1151	7.6	1345	9.5	1682	12.0	2124
		44	**G 20 - 044**	149	7.5	1118	8.8	1311	11.0	1639	13.5	2012
		51	**G 20 - 051**	128	8.7	1114	10.2	1306	12.8	1638	16.2	2074
		64	**G 20 - 064**	99.0	10.9	1079	12.8	1267	16.0	1584	21.2	2099
		76	**G 20 - 076**	81.7	12.9	1054	15.2	1242	19.0	1552	24.7	2018
		89	**G 20 - 089**	69.5	15.1	1049	17.8	1237	22.3	1550	28.8	2002
		102	**G 20 - 102**	60.6	17.3	1048	20.4	1236	25.5	1545	34.8	2109
		115	**G 20 - 115**	53.0	19.6	1039	23.0	1219	28.8	1526	39.0	2067
		127	**G 20 - 127**	47.5	21.6	1026	25.4	1207	31.8	1511	43.0	2043
		139	**G 20 - 139**	43.0	23.8	1023	28.0	1204	35.0	1505	45.3	1948
		152	**G 20 - 152**	39.0	25.8	1006	30.4	1186	38.0	1482	50.4	1966
4.1 x 3.8		305	**G 20 - 305**	21.2	51.9	1100	61.0	1293	76.3	1618	103.5	2194

Note: 1 N = 0,102 Kg (force)

Yellow colour

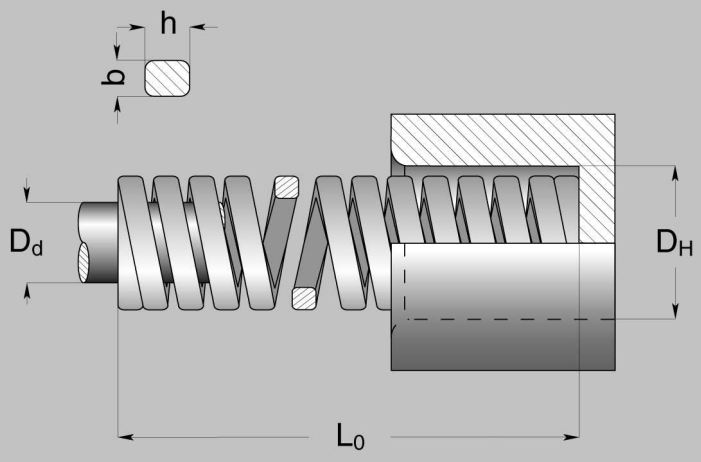
D_H	D_d	L_0	Catalogue No.	Rate	17% 3.000.000		20% 1.500.000		25% Max. Defl.		D Approx.	
b x h												
mm	mm	mm		N / mm	mm	N	mm	N	mm	N	mm	N
25	12.5	25	**G 25 - 025**	459.0	4.3	1974	5.0	2295	6.3	2892	7.3	3351
		32	**G 25 - 032**	374.4	5.4	2022	6.4	2396	8.0	2995	10.7	4006
		38	**G 25 - 038**	346.0	6.5	2249	7.6	2630	9.5	3287	12.0	4152
		44	**G 25 - 044**	244.0	7.5	1830	8.8	2147	11.0	2684	14.4	3514
		51	**G 25 - 051**	207.5	8.7	1805	10.2	2117	12.8	2656	17.4	3611
		64	**G 25 - 064**	161.0	10.9	1755	12.8	2061	16.0	2576	21.4	3445
		76	**G 25 - 076**	130.8	12.9	1687	15.2	1988	19.0	2485	26.9	3519
		89	**G 25 - 089**	110.5	15.1	1669	17.8	1967	22.3	2464	30.9	3414
		102	**G 25 - 102**	96.3	17.3	1666	20.4	1965	25.5	2456	36.7	3534
		115	**G 25 - 115**	85.7	19.6	1680	23.0	1971	28.8	2468	40.3	3454
		127	**G 25 - 127**	76.3	21.6	1648	25.4	1938	31.8	2426	45.1	3441
		139	**G 25 - 139**	68.9	23.8	1640	28.0	1929	35.0	2412	47.6	3280
		152	**G 25 - 152**	63.5	25.8	1638	30.4	1930	38.0	2413	53.5	3397
		178	**G 25 - 178**	53.9	30.3	1633	35.6	1919	44.5	2399	63.9	3444
		203	**G 25 - 203**	47.0	34.5	1622	40.6	1908	50.8	2388	70.2	3299
	5.4 x 4.6	305	**G 25 - 305**	30.9	51.9	1604	61.0	1885	76.3	2358	110.1	3402
32	16	38	**G 32 - 038**	528.2	6.5	3433	7.6	4014	9.5	5018	11.4	6021
		44	**G 32 - 044**	424.4	7.5	3183	8.8	3735	11.0	4668	13.7	5814
		51	**G 32 - 051**	353.0	8.7	3071	10.2	3601	12.8	4518	15.6	5507
		64	**G 32 - 064**	269.2	10.9	2934	12.8	3446	16.0	4307	20.0	5384
		76	**G 32 - 076**	218.5	12.9	2819	15.2	3321	19.0	4152	24.4	5331
		89	**G 32 - 089**	180.3	15.1	2723	17.8	3209	22.3	4021	29.7	5355
		102	**G 32 - 102**	155.0	17.3	2682	20.4	3162	25.5	3953	35.1	5441
		115	**G 32 - 115**	140.0	19.6	2744	23.0	3220	28.8	4032	39.0	5460
		127	**G 32 - 127**	124.0	21.6	2678	25.4	3150	31.8	3943	42.8	5307
		139	**G 32 - 139**	112.3	23.8	2673	28.0	3144	35.0	3931	48.6	5458
		152	**G 32 - 152**	102.0	25.8	2632	30.4	3101	38.0	3876	52.4	5345
		178	**G 32 - 178**	88.2	30.3	2672	35.6	3140	44.5	3925	60.9	5371
		203	**G 32 - 203**	76.0	34.5	2622	40.6	3086	50.8	3861	69.2	5259
		254	**G 32 - 254**	60.8	43.2	2627	50.8	3089	63.5	3861	88.1	5356
	7.3 x 5.9	305	**G 32 - 305**	49.0	51.9	2543	61.0	2989	76.3	3739	104.2	5106
40	20	51	**G 40 - 051**	628	8.7	5464	10.2	6406	12.8	8038	15.0	9420
		64	**G 40 - 064**	487	10.9	5308	12.8	6234	16.0	7792	19.5	9497
		76	**G 40 - 076**	379	12.9	4889	15.2	5761	19.0	7201	23.3	8831
		89	**G 40 - 089**	321	15.1	4847	17.8	5714	22.3	7158	26.7	8571
		102	**G 40 - 102**	281	17.3	4861	20.4	5732	25.5	7166	33.8	9498
		115	**G 40 - 115**	245	19.6	4802	23.0	5635	28.8	7056	36.2	8869
		127	**G 40 - 127**	221	21.6	4774	25.4	5613	31.8	7028	40.7	8995
		139	**G 40 - 139**	190	23.8	4522	28.0	5320	35.0	6650	44.5	8455
		152	**G 40 - 152**	168	25.8	4334	30.4	5107	38.0	6384	49.6	8333
		178	**G 40 - 178**	146	30.3	4424	35.6	5198	44.5	6497	59.9	8745
		203	**G 40 - 203**	132	34.5	4554	40.6	5359	50.8	6706	67.1	8857
		254	**G 40 - 254**	107	43.2	4622	50.8	5436	63.5	6795	86.3	9234
	8.4 x 7.5	305	**G 40 - 305**	87.8	51.9	4557	61.0	5356	76.3	6699	103.6	9096
50	25	64	**G 50 - 064**	709	10.9	7728	12.8	9075	16.0	11344	19.3	13684
		76	**G 50 - 076**	572	12.9	7379	15.2	8694	19.0	10868	24.2	13842
		89	**G 50 - 089**	475	15.1	7173	17.8	8455	22.3	10593	28.0	13300
		102	**G 50 - 102**	405	17.3	7007	20.4	8262	25.5	10328	33.5	13568
		115	**G 50 - 115**	352	19.6	6899	23.0	8096	28.8	10138	38.6	13587
		127	**G 50 - 127**	316	21.6	6826	25.4	8026	31.8	10049	41.4	13082
		139	**G 50 - 139**	274	23.8	6521	28.0	7672	35.0	9590	47.3	12960
		152	**G 50 - 152**	239	25.8	6166	30.4	7266	38.0	9082	50.2	11998
		178	**G 50 - 178**	215	30.3	6515	35.6	7654	44.5	9568	61.1	13137
		203	**G 50 - 203**	187	34.5	6452	40.6	7592	50.8	9500	67.7	12660
		254	**G 50 - 254**	153	43.2	6610	50.8	7772	63.5	9716	87.0	13311
	11.5 x 9.0	305	**G 50 - 305**	127	51.9	6591	61.0	7747	76.3	9690	103.4	13132
63	38	76	**G 63 - 076**	952	12.9	12280	15.2	14470	*	*	15.5	14756
		89	**G 63 - 089**	819	15.1	12360	17.8	14580	*	*	20.0	19040
		102	**G 63 - 102**	700	17.3	12110	20.4	14280	25.5	17850	30.7	21449
		115	**G 63 - 115**	620	19.6	12152	23.0	14260	28.8	17860	34.9	21640
		127	**G 63 - 127**	565	21.6	12204	25.4	14351	31.8	17967	38.0	21470
		152	**G 63 - 152**	458	25.8	11816	30.4	13923	38.0	17404	47.2	21618
		178	**G 63 - 178**	384	30.3	11635	35.6	13670	44.5	17088	55.8	21427
		203	**G 63 - 203**	337	34.5	11627	40.6	13682	50.8	17120	64.8	21838
		254	**G 63 - 254**	263	43.2	11362	50.8	13360	63.5	16701	86.7	22802
	11.6 x 14.9	305	**G 63 - 305**	218	51.9	11314	61.0	13298	76.3	16633	105.7	23043

Note: 1 N = 0,102 Kg (force)

* Max. deflection = 20% L_0

Ultra-heavy load springs

Series **A**



D_H	D_d	L_0	*Catalogue No.*	*Rate*	10% 3.000.000		12% 1.500.000		15% Max. Defl.		D Approx.	
b x h												
mm	mm	mm		N / mm	mm	N	mm	N	mm	N	mm	N
25	12.5	64	**A 25 - 064**	644	6.4	4122	7.7	4959	9.6	6182	13	8372
		76	**A 25 - 076**	556	7.6	4226	9.1	5060	11.4	6338	16	8896
		89	**A 25 - 089**	462	8.9	4112	10.7	4943	13.4	6168	20	9240
		102	**A 25 - 102**	390	10.2	3978	12.2	4758	15.3	5967	23	8970
		115	**A 25 - 115**	360	11.5	4140	13.8	4968	17.3	6210	26	9360
		127	**A 25 - 127**	326	12.7	4140	15.2	4955	19.1	6210	28	9128
		152	**A 25 - 152**	255	15.2	3876	18.2	4641	22.8	5814	34	8670
		178	**A 25 - 178**	230	17.8	4094	21.4	4922	26.7	6141	39	8970
		203	**A 25 - 203**	202	20.3	4101	24.4	4929	30.5	6151	45	9090
5.6 x 7.5		305	**A 25 - 305**	136	30.5	4148	36.6	4978	45.8	6222	63	8568
32	16	64	**A 32 - 064**	1077	6.4	6892	7.7	8270	9.6	10337	13	13998
		76	**A 32 - 076**	874	7.6	6642	9.1	7971	11.4	9964	16	13984
		89	**A 32 - 089**	721	8.9	6419	11	7702	13.35	9628	20	14424
		102	**A 32 - 102**	620	10	6324	12	7589	15.3	9486	23	14260
		115	**A 32 - 115**	560	12	6440	14	7728	17.25	9660	26	14560
		127	**A 32 - 127**	496	13	6299	15	7559	19.05	9449	28	13888
		152	**A 32 - 152**	408	15	6202	18	7442	22.8	9302	34	13872
		178	**A 32- 178**	353	18	6280	21	7536	26.7	9420	39	13759
		203	**A 32 - 203**	304	20	6171	24	7405	30.45	9257	45	13680
		254	**A 32 - 254**	243	25	6177	30	7413	38.1	9266	62	15078
7.5 x 9.2		305	**A 32 - 305**	196	31	5978	37	7174	45.75	8967	75	14700
40	20	89	**A 40 - 089**	880	8.9	7832	10.7	9416	13.4	11748	20	17600
		102	**A 40 - 102**	762	10.2	7772	12.2	9296	15.3	11659	23	17526
		115	**A 40 - 115**	679	11.5	7809	13.8	9370	17.3	11713	26	17654
		127	**A 40 - 127**	622	12.7	7899	15.2	9454	19.1	11849	28	17416
		152	**A 40 - 152**	509	22.8	7737	18.2	9264	22.8	11605	36	18324
		178	**A 40 - 178**	429	17.8	7636	21.4	9181	26.7	11454	43	18447
		203	**A 40 - 203**	374	20.3	7592	24.4	9126	30.5	11388	49	18326
		254	**A 40 - 254**	296	25.4	7518	30.5	9028	38.1	11278	62	18352
8.5 x 11.0		305	**A 40 - 305**	246	30.5	7530	36.6	9004	45.8	11255	75	18450
50	25	89	**A 50 - 089**	1410	8.9	12549	10.7	15087	13.4	18824	19	26790
		102	**A 50 - 102**	1215	10.2	12393	12.2	14823	15.3	18590	22	26730
		115	**A 50 - 115**	1076	11.5	12374	13.8	14849	17.3	18561	25	26900
		127	**A 50 - 127**	968	12.7	12294	15.2	14714	19.1	18440	28	27104
		152	**A 50 - 152**	806	15.2	12251	18.2	14669	22.8	18377	34	27404
		178	**A 50 - 178**	698	17.8	12424	21.4	14937	26.7	18637	40	27920
		203	**A 50 - 203**	612	20.3	12424	24.4	14933	30.5	18635	45	27540
		254	**A 50 - 254**	472	25.4	11989	30.5	14396	38.1	17983	58	27376
11.8 x 13.5		305	**A 50 - 305**	388	30.5	11834	36.6	14201	45.8	17751	70	27160

Note: 1 N = 0,102 Kg (force)