

MECHANICAL SPRINGS PRODUCT CATALOG

2024



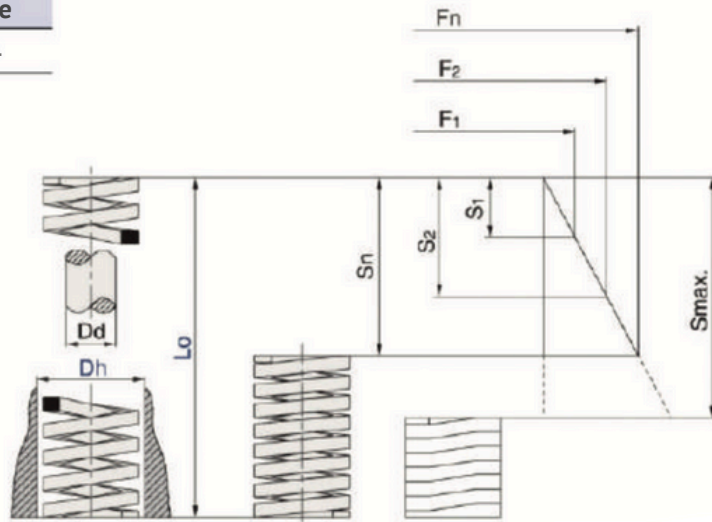
**GB MOLD & DIE
COMPONENTS**

Spring ISO10243

Super Minimal Load Springs- ISO 10243 Standard

Material	Color	Code
Special alloy	light green	GBL

L	tolerance
25 ~ 89	±1mm
102 ~ 305	±1%



Order NO.	Dh	Dd	Lo	R(N/mm)	30%		40%		50%		travel stroke
					S1	F1	S2	F2	S3	F3	
LF20×32	20	10	32	22.6	9.6	217	12.8	289	16	362	18.2
LF20×38			38	18.6	11.4	212	15.2	283	19	353	22
LF20×44			44	15.7	13.2	207	17.6	276	22	345	25.8
LF20×51			51	13.7	15.3	210	20.4	279	25.5	349	30.3
LF20×64			64	11.3	19.2	217	25.6	289	32	362	38.9
LF20×76			76	9.8	22.8	223	30.4	298	38	372	47
LF20×89			89	8.3	26.7	222	35.6	295	44.5	369	55.7
LF20×102			102	7.4	30.6	226	40.8	302	51	377	64.2
LF20×H5			115	6.4	34.5	221	46	294	57.5	368	72.9
LF20×127			127	5.9	38.1	225	50.8	300	63.5	375	80.7
LF20×139	139	5.4	41.7	225	55.6	300	69.5	375	88.4		
LF20×152	4.3×1.7	10	152	4.9	45.6	223	60.8	298	76	372	96.7
LF20×305			305	2.5	91.5	229	122	305	152.5	381	196.3
LF25×25	25	12.5	25	53.9	7.5	404	10	539	12.5	674	12.9
LF25×32			32	42.2	9.6	405	12.8	540	16	675	17.2
LF25×38			38	35.8	11.4	408	15.2	544	19	680	20.7
LF25×44			44	31.4	13.2	414	17.6	553	22	691	24.4
LF25×51			51	27	15.3	413	20.4	551	25.5	689	28.5
LF25×64			64	21.6	19.2	415	25.6	553	32	691	36.5
LF25×76			76	18.1	22.8	413	30.4	550	38	688	43.9
LF25×89			89	15.2	26.7	406	35.6	541	44.5	691	51.4
LF25×102			102	13.2	30.6	404	40.8	539	51	688	59.3
LF25×U5			115	11.8	34.5	407	46	543	57.5	676	67.2
LF25×127	127	10.6	38.1	404	50.8	538	63.5	673	74.4		
LF25×139	139	9.6	41.7	400	55.6	534	69.5	667	81.6		
LF25×152	5.4×2.2	12.5	152	8.8	45.6	401	60.8	535	76	669	89.5
LF25×178			178	7.6	53.4	406	71.2	541	89	676	105.4
LF25×203	5.4×2.2	12.5	203	6.7	60.9	408	81.2	544	101.5	680	120.7
LF25×305			305	4.4	91.5	403	122	537	152.5	671	182.4

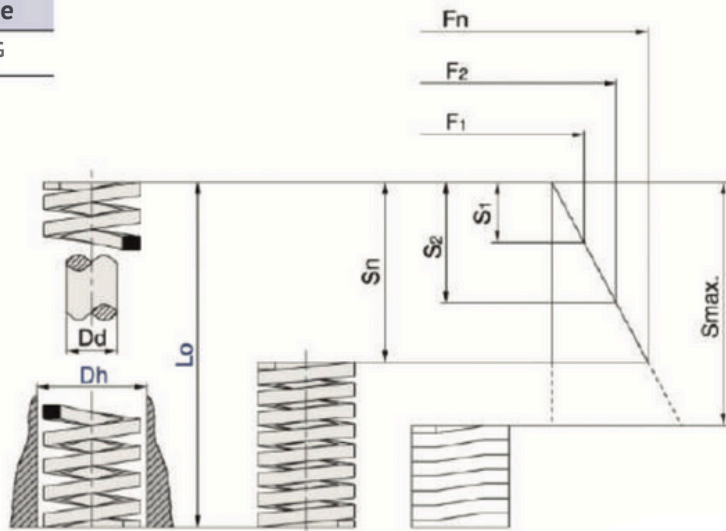
Order NO.	Dh	Dd	Lo	R(N/mm)	30%		40%		50%		travel stroke		
					S1	F1	S2	F2	S3	F3			
LF32×38	32	16	38	43.1	11.4	491	15.2	655	19	819	19.9		
LF32×44			44	37.3	13.2	492	17.6	656	22	821	23.5		
LF32×51			51	32.4	15.3	496	20.4	661	25.5	826	27.6		
LF32×64			64	25.5	19.2	490	25.6	653	32	816	35.2		
LF32×76			76	21.6	22.8	492	30.4	657	38	821	42.4		
LF32×89			89	18.1	26.7	483	35.6	644	44.5	805	50		
LF32×102			102	15.7	30.6	480	40.8	641	51	801	57.6		
LF32×115			115	14.2	34.5	490	46	653	57.5	817	65.5		
LF32×127			127	12.7	38.1	484	50.8	645	63.5	806	72.5		
LF32×139			139	11.6	41.7	484	55.6	645	69.5	806	79.4		
LF32×152	6.5×2.6	16	152	10.6	45.6	483	60.8	644	76	806	87.3		
LF32×178			178	9	53.4	481	71.2	641	89	801	102.9		
LF32×203	6.5×2.6	16	203	7.8	60.9	475	81.2	633	101.5	792	117.7		
LF32×254			254	6.4	76.2	488	101.6	650	127	813	148.1		
LF32×305	6.5×2.6	16	305	5.3	91.5	485	122	647	152.5	808	178.3		
LF40×51			40	20	51	48.1	15.3	736	20.4	981	25.5	1227	28
LF40×64	64	39.2			19.2	753	25.6	1004	32	1254	36.2		
LF40×76	76	33.3			22.8	759	30.4	1012	38	1265	43.7		
LF40×89	89	28.4			26.7	758	35.6	1011	44.5	1264	51.7		
LF40×102	102	24.5			30.6	750	40.8	1000	51	1250	59.8		
LF40×H5	115	22.1			34.5	762	46	1017	57.5	1271	67.9		
LF40×127	127	19.6			38.1	747	50.8	996	63.5	1245	75.2		
LF40×139	139	17.7			41.7	738	55.6	984	69.5	1230	82.4		
LF40×152	8.0×3.4	20			152	16.2	45.6	739	60.8	985	76	1231	90.6
LF40×178					178	13.7	53.4	732	71.2	975	89	1219	106.5
LF40×203	8.0×3.4	20	203	12.3	60.9	749	81.2	999	101.5	1248	122.2		
LF40×254			254	9.8	76.2	747	101.6	996	127	1245	153.6		
LF40×305	8.0×3.4	20	305	8.3	91.5	759	122	1013	152.5	1266	185.4		
LF50×64			50	25	64	86.3	19.2	1657	25.6	2209	32	2762	35.1
LF50×76	76	70.6			22.8	1610	30.4	2146	38	2683	42.2		
LF50×89	89	59.8			26.7	1597	35.6	2129	44.5	2661	50.3		
LF50×102	102	52			30.6	1591	40.8	2122	51	2652	58.4		
LF50×U5	115	46.1			34.5	1590	46	2121	57.5	2651	66.1		
LF50×127	127	42.2			38.1	1608	50.8	2144	63.5	2680	73.8		
LF50×139	139	38.2			41.7	1593	55.6	2124	69.5	2655	80.9		
LF50×152	10.5×4.1	25			152	34.3	45.6	1564	60.8	2085	76	2607	89
LF50×178					178	29.4	53.4	1570	71.2	2093	89	2617	105.3
LF50×203	10.5×4.1	25			203	25.5	60.9	1553	81.2	2071	101.5	2588	120.6
LF50×254			254	20.6	76.2	1570	101.6	2093	127	2616	152.2		
LF50×305	10.5×4.1	25	305	17.2	91.5	1574	122	2098	152.5	2623	183.7		

Spring ISO10243

Light Duty Springs- ISO 10243 Standard

Material	Color	Code
Special alloy	GREEN	GBG

L	tolerance
25 ~ 89	±1mm
102 ~ 305	±1%



Order NO.	Dh	Dd	Lo	R(N/mm)	25%		30%		40X			travel stroke		
					S1	F1	S2	F2	S3	F3				
LV10x25	10	5	26	10	6.3	63	7.5	75	10	100	13.5			
LV10x32			32	8.5	8	68	9.6	82	12.8	109	17.5			
LV10x38			38	6.8	9.5	65	11.4	78	15.2	103	20.8			
LV10x44			44	6	11	66	13.2	79	17.6	106	23.9			
LV10x51			51	5	12.8	64	15.3	77	20.4	102	28.9			
LV10x64			64	4.3	16	69	19.2	83	25.6	110	36.1			
LV10x76			76	3.2	19	61	22.8	73	30.4	97	43.2			
LV10x305			305	1.1	76.3	84	91.5	101	122	134	178.7			
LV12.5x25			12.5	6.3	25	17.9	6.3	113	7.5	134	10	179	13.2	
LV12.5x32					32	16.4	8	131	9.6	157	12.8	210	18	
LV12.5x38	38	13.6			9.5	129	11.4	155	15.2	207	21			
LV12.5x44	44	12.1			11	133	13.2	160	17.6	213	24			
LV12.5x51	61	11.4			12.8	146	16.3	174	20.4	233	28.7			
LV12.5x64	64	9.3			16	149	19.2	179	25.6	238	35.8			
LV12.5x76	76	7.1			19	135	22.8	162	30.4	216	42.7			
LV12.5x89	89	5.4			22.3	120	26.7	144	35.6	192	60.4			
LV12.5x305	305	1.4			76.3	107	91.5	128	122	171	172			
LV16x25	16	8			25	23.4	6.3	147	7.5	176	10	234	12.6	
LV16x32			32	22.9	8	183	9.6	220	12.8	293	16.4			
LV16x38			38	19.3	9.5	183	11.4	220	15.2	293	19.7			
LV16x44			44	17.1	11	188	13.2	226	17.6	301	22.5			
LV16x51			51	15.7	12.8	201	15.3	240	20.4	320	26.3			
LV16x64			64	10.7	16	171	19.2	206	25.6	274	33.3			
LV16x76			76	10	19	190	22.8	228	30.4	304	40.2			
LV16x89			89	8.6	22.3	192	26.7	230	35.6	306	47.6			
LV16x102			102	7.8	25.5	199	30.6	239	40.8	318	55.4			
LV16x305			305	2.5	76.3	191	91.5	229	122	305	165.3			
LV20x25	20	10	25	55.8	6.3	352	7.5	419	to	558	12.1			
LV20x32			32	45	8	360	9.6	432	12.8	576	15.3			
LV20x38			38	33.3	9.5	316	11.4	380	15.2	506	18.9			
LV20x44			44	30	11	330	13.2	396	17.6	528	21.5			
LV20x51			51	24.5	12.8	314	15.3	375	20.4	500	25			
LV20x64			64	20	16	320	19.2	384	25.6	512	31.1			
LV20x76			76	16	19	304	22.8	365	30.4	486	37.3			
LV20x89			89	14	22.3	312	26.7	374	35.6	498	44.5			
LV20x102			102	12	25.6	306	30.6	367	40.8	490	51.1			
LV20xH5			115	10.9	28.8	314	34.5	376	46	501	58.2			
LV20x127	127	9.5	31.8	302	38.1	362	50.8	483	64.9					
LV20x139	139	8.4	35	294	42	353	56	470	71.5					
LV20x152	152	7.5	38	285	45.6	342	60.8	456	78.8					
LV20x305	305	4	76.3	305	91.5	366	122	488	157.4					

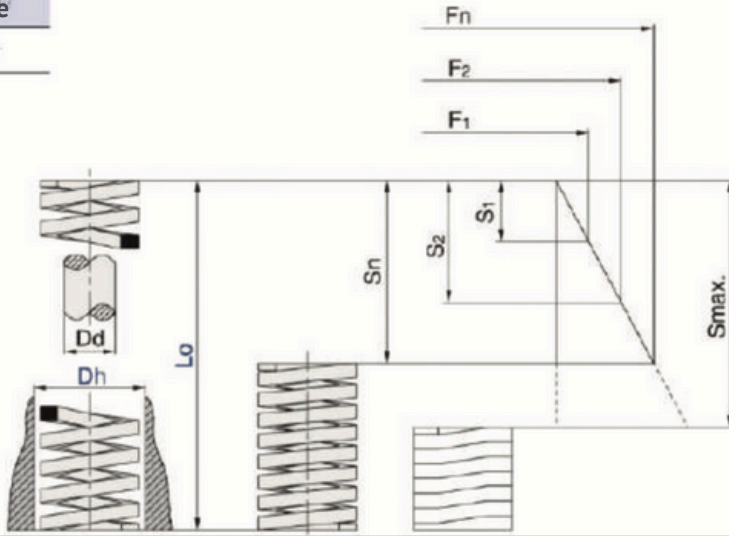
Order NO.	Dh	Dd	Lo	R(N/mm)	25%		30%		40%			travel stroke
					S1	F1	S2	F2	S3	F3		
LV25x25	25	12.5	25	100	6.3	630	7.5	750	10	1000	12.1	
LV25x32			32	80.3	8	642	9.6	771	12.8	1028	15.2	
LV25x38			38	62	9.5	589	11.4	707	15.2	942	18.3	
LV25x44			44	52.9	n	582	13.2	698	17.6	931	21.4	
LV25x51			51	44	12.8	563	15.3	673	20.4	898	24.9	
LV25x64			64	35.2	16	563	19.2	676	25.6	901	31.4	
LV25x76			76	28	19	532	22.8	638	30.4	851	37.5	
LV25x89			89	24	22.3	535	26.7	641	35.6	854	43.5	
LV25x102			102	21.1	25.5	538	30.6	646	40.8	861	51.1	
LV25x115			115	18.7	28.8	539	34.5	645	46	860	58.1	
LV25x127	127	16.7	31.8	531	38.1	636	50.8	848	64.1			
LV25x139	139	15.3	35	536	42	643	56	857	70.4			
LV25x152	152	14	38	532	45.6	638	60.8	851	77.1			
LV25x178	178	12.5	44.5	556	53.4	668	71.2	890	93.1			
LV25x203	203	10.4	50.8	528	60.9	633	81.2	844	102.7			
LV25x305	305	7	76.3	534	91.5	641	122	854	155.9			
LV32x38	32	16	38	94	9.5	893	11.4	1072	15.2	1429	18.3	
LV32x44			44	79.5	11	875	13.2	1049	17	1399	21.5	
LV32x51			61	67	12.8	858	16.3	1026	20.4	1367	25.5	
LV32x64			64	53	16	348	19.2	1018	25.6	1357	31.9	
LV32x76			76	44	19	836	22.8	1003	30.4	1338	38.6	
LV32x89			89	37.2	22.3	830	26.7	993	35.6	1324	46.5	
LV32x102			102	32	25.5	816	30.6	979	40.8	1306	53.2	
LV32x115			115	29	28.8	835	34.5	1001	46	1334	60	
LV32x127			127	25	31.8	796	38.1	953	60.8	1270	66.7	
LV32x139			139	23	35	805	42	966	66	1288	71.8	
LV32x152	152	21.5	38	817	45.6	980	60.8	1307	78.5			
LV32x178	178	18.2	44.5	810	53.4	972	71.2	1296	94.4			
LV32x203	203	16.8	50.8	803	60.9	962	81.2	1283	107.1			
LV32x254	254	12.5	63.5	786	76.2	953	101.6	1270	136.5			
LV32x305	305	10.3	76.3	786	91.5	942	122	1257	162.7			
LV40x51	40	20	51	92	12.8	1178	15.3	1408	20.4	1877	25.5	
LV40x64			64	75	16	1168	19.2	1402	25.6	1869	31.4	
LV40x76			76	63	19	1197	22.8	1436	30.4	1915	37.8	
LV40x89			89	51	22.3	1137	26.7	1362	35.6	1816	44.3	
LV40x102			102	43	25.5	1097	30.6	1316	40.8	1754	50.7	
LV40x115			115	39.6	28.8	1140	34.5	1366	46	1822	58.1	
LV40x127			127	37	31.8	1177	38.1	1410	50.8	1880	64.6	
LV40x139			139	32	35	1120	42	1344	56	1792	70.1	
LV40x152			152	28	38	1064	45.6	1277	60.8	1702	76.6	
LV40x178			178	25.2	44.5	1121	53.4	1346	71.2	1794	90.4	
LV40x203	203	22.7	50.8	1053	60.9	1382	81.2	1843	102.4			
LV40x254	254	17	63.5	1080	76.2	1295	101.6	1727	128.8			
LV40x305	305	14.8	76.3	1129	91.5	1354	122	1806	156.1			
LV50x64	50	25	64	156	16	2496	19.2	2995	25.6	3994	31	
LV50x76			76	125	19	2375	22.8	2850	30.4	3800	37.2	
LV50x89			89	109	22.3	2431	26.7	2910	35.6	3880	43.6	
LV50x102			102	94	25.5	2397	30.6	2876	40.8	3835	50.3	
LV50x115			115	81	28.8	2333	34.5	2795	46	3726	58.1	
LV50x127			127	71	31.8	2258	38.1	2705	50.8	3507	63.7	
LV50x139			139	66.5	35	2328	42	2793	56	3724	69.6	
LV50x152			152	60	38	2280	45.6	2736	60.8	3648	76.5	
LV50x178			178	62	44.5	2314	53.4	2777	71.2	3702	91.9	
LV50x203			203	44	50.8	2235	60.9	2630	81.2	3573	104.7	
LV50x254	254	35	63.5	2223	76.2	2667	101.6	3566	130.6			
LV50x305	305	28.5	76.3	2175	91.5	2608	122	3477	154.9			
LV63x76	63	38	76	189	19	3591	22.8	4309	30.4	5746	36.5	
LV63x89			89	158	22.3	3523	26.7	4219	35.6	5625	43.4	
LV63x102			102	131	25.5	3341	30.6	4009	40.8	5495	49.7	
LV63x115			115	116	28.8	3341	34.5	4002	46	5336	56.6	
LV63x127			127	103	31.8	3275	38.1	3924	50.8	5232	62.7	
LV63x152			152	84.3	38	3203	45.6	3844	60.8	5125	77.1	
LV63x178			178	71.5	44.5	3182	53.4	3818	71.2	5091	92.2	
LV63x203			203	61.7	50.8	3134	60.9	3725	81.2	5010	103.5	
LV63x254			254	47	63.5	2985	76.2	3681	101.6	4775	130.4	
LV63x305			305	38.3	76.3	2916	91.5	3606	122	4660	157.4	

Spring ISO10243

Medium Duty Springs- ISO 10243 Standard

Material	Color	Code
Special alloy	Blue	GBB

L	tolerance
25 ~ 89	±1mm
102 ~ 305	±1%



Order NO.	Dh	Dd	Lo	R(N/mm)	25%			30%			37.5%			travel stroke		
					S1	F1	S2	F2	S3	F3						
LB10x25	10	5	25	16	6.3	101	7.5	120	9.4	150	10.2					
LB10x32			32	13	8	104	9.6	125	12	156	14.2					
LB10x38			38	11.9	9.5	113	11.4	136	14.3	170	16.8					
LB10x44			44	10.3	11	113	13.2	136	16.5	170	19.4					
LB10x51			51	8.9	12.8	114	15.3	136	19.1	170	23.4					
LB10x64			64	7.5	16	120	19.2	144	24	180	28.2					
LB10x76			76	5.3	19	101	22.8	121	28.5	151	34.2					
LB10x305			305	1.6	76.3	122	91.5	146	114.4	183	133.8					
LB12.5x25			12.5	6.3	25	30	6.3	189	7.5	225	9.4	282	11.9			
LB12.5x32					32	24.8	8	198	9.6	238	12	298	16.2			
LB12.5x38	38	21.4			9.5	203	11.4	244	14.3	306	18.7					
LB12.5x44	44	18.5			11	204	13.2	244	16.5	305	21.3					
LB12.5x51	51	15.5			12.8	198	15.3	237	19.1	296	25.6					
LB12.5x64	64	12.1			16	194	19.2	232	24	290	32.4					
LB12.5x76	76	10.2			19	194	22.8	233	28.5	291	39					
LB12.5x89	89	8.4			22.3	187	26.7	224	33.4	281	45.9					
LB12.5x305	305	2.1			76.3	160	91.5	192	114.4	240	152.5					
LB16x25	16	8			25	49.4	6.3	311	7.5	371	9.4	464	10.5			
LB16x32			32	37.1	8	297	9.6	356	12	445	13.2					
LB16x38			38	33.9	9.5	322	11.4	386	14.3	485	17.2					
LB16x44			44	30	11	330	13.2	396	16.5	495	19.4					
LB16x51			51	26.4	12.8	338	15.3	404	19.1	504	24.2					
LB16x64			64	20.5	16	338	19.2	394	24	492	29.2					
LB16x76			76	17.8	19	338	22.8	406	28.5	507	36.3					
LB16x89			89	15.2	22.3	339	26.7	406	33.4	508	41.7					
LB16x102			102	13.5	25.5	344	30.6	413	38.3	517	48.9					
LB16x305			305	4.8	76.3	366	91.5	439	114.4	549	141.6					
LB20x25	20	10	25	98	6.3	617	7.5	735	9.4	921	10.5					
LB20x32			32	72.6	8	581	9.6	697	12	871	13.9					
LB20x38			38	56	9.5	532	11.4	638	14.3	801	16.6					
LB20x44			44	47.5	11	523	13.2	627	16.5	784	18.9					
LB20x51			51	41.7	12.8	534	15.3	638	19.1	796	23.1					
LB20x64			64	32.3	16	517	19.2	620	24	775	27.5					
LB20x76			76	25.1	19	477	22.8	572	28.5	715	33.8					
LB20x89			89	22	22.3	491	26.7	587	33.4	735	39.7					
LB20x102			102	19.8	25.5	505	30.6	606	38.3	758	47.3					
LB20x115			115	18.1	28.8	521	34.5	624	43.1	780	52.5					
LB20x127	127	16.6	31.8	528	38.1	632	47.6	790	56.9							
LB20x139	139	15.1	35	529	42	634	52.5	793	62.1							
LB20x152	152	13.2	38	500	45.6	600	57	750	67.6							
LB20x305	305	6.1	76.3	465	91.5	558	114.4	698	143.4							

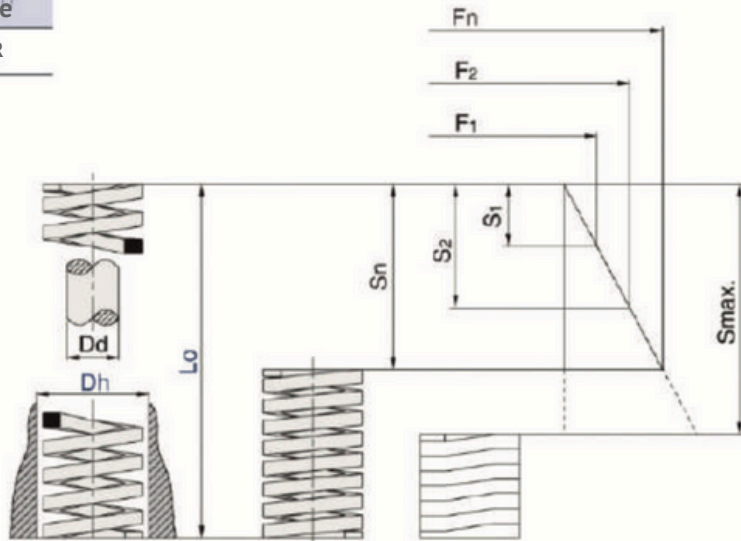
Order NO.	Dh	Dd	Lo	R(N/mm)	25%			30%			37.5%			travel stroke
					S1	F1	S2	F2	S3	F3				
LB25x25	25	12.5	25	147	6.3	926	7.5	1103	9.4	1382	10.2			
LB25x32			32	118	8	944	9.6	1133	12	1416	13.7			
LB25x38			38	93	9.5	884	11.4	1060	14.3	1330	15.7			
LB25x44			44	80.8	11	889	13.2	1057	16.5	1333	18.2			
LB25x51			51	68.6	12.8	878	15.3	1050	19.1	1310	21.1			
LB25x64			64	53	16	848	19.2	1018	24	1272	26			
LB25x76			76	43.2	19	821	22.8	985	28.5	1231	32.3			
LB25x89			89	38.2	22.3	852	26.7	1020	33.4	1276	38			
LB25x102			102	33	25.5	842	30.6	1010	38.3	1264	43			
LB25x115			115	28	28.8	806	34.5	966	41.1	1207	48.6			
LB25x127	127	25.9	31.8	804	38.1	987	47.6	1233	53.7					
LB25x139	139	23.2	35	812	42	974	52.5	1218	59.4					
LB25x152	152	20.8	38	790	45.6	948	57	1186	63.8					
LB25x178	178	17.8	44.5	792	53.4	951	66.8	1189	76.6					
LB25x203	203	15.8	50.8	803	60.9	962	76.1	1202	88.4					
LB25x305	305	10.2	76.3	778	91.5	933	114.4	1167	135.1					
LB32x38	32	16	38	185	9.5	1758	11.4	2109	14.3	2646	16.3			
LB32x44			44	158	11	1738	13.2	2086	16.5	2607	18.9			
LB32x51			51	134	12.8	1715	15.3	2050	19.1	2559	23.1			
LB32x64			64	99	16	1584	19.2	1901	24	2376	28.5			
LB32x76			76	80.5	19	1530	22.8	1835	28.5	2294	34.2			
LB32x89			89	69.1	22.3	1541	26.7	1845	33.4	2308	40.4			
LB32x102			102	58.8	25.5	1499	30.6	1799	38.3	2252	48			
LB32x115			115	51.5	28.8	1483	34.5	1777	43.1	2220	54.3			
LB32x127			127	44.8	31.8	1425	38.1	1707	47.6	2132	59.2			
LB32x139			139	42.3	35	1481	42	1777	52.5	2221	65.3			
LB32x152	152	37.8	38	1436	45.6	1724	57	2155	73					
LB32x178	178	32.5	44.5	1446	53.4	1736	66.8	2171	84.5					
LB32x203	203	28.9	50.8	1468	60.9	1760	76.1	2199	96.9					
LB32x305	305	21.4	63.5	1359	76.2	1631	95.3	2039	120.9					
LB40x44	40	20	44	183	12.8	2324	15.3	2778	19.1	3469	21.4			
LB40x51			51	140	16	2240	19.2	2688	24	3360	26.8			
LB40x64			64	108	19	2052	22.8	2462	28.5	3078	32.7			
LB40x76			76	90.7	22.3	2023	26.1	2422	33.4	3029	39			
LB40x89			89	81	25.5	2066	30.6	2479	38.3	3102	44.1			
LB40x102			102	71.8	28.8	2068	34.5	2477	43.1	3095	50.6			
LB40x115			115	62.7	31.8	1994	38.1	2389	47.6	2985	55.9			
LB40x127			127	57.5	35	2013	42	2415	52.5	3019	61.8			
LB40x152			152	51.6	38	1961	45.6	2353	57	2941	67.5			
LB40x178			178	44.1	44.5	1962	53.4	2355	66.8	2946	77.2			
LB40x203	203	36.7	50.8	1864	60.9	2235	76.1	2793	91.8					
LB40x254	254	30.1	63.5	1911	76.2	2294	95.3	2869	112.7					
LB40x305	305	24.6	76.3	1877	91.5	2251	114.4	2814	138.1					
LB50x64	50	25	64	209	16	3344	19.2	4013	24	5016	28.2			
LB50x76			76	168	19	3192	22.8	3830	28.5	4788	34.9			
LB50x89			89	140	22.3	3122	26.7	3738	33.4	4676	39.2			
LB50x102			102	119	25.5	3035	30.6	3641	38.3	4558	47.3			
LB50x115			115	106	28.8	3053	34.5	3657	43.1	4569	52.6			
LB50x127			127	97	31.8	3085	38.1	3696	47.6	4617	59.8			
LB50x139			139	87	35	3045	42	3654	52.5	4568	65.1			
LB50x152			152	80	38	3040	45.6	3648	57	4560	70.8			
LB50x178			178	69.5	44.5	3093	53.4	3711	66.8	4643	84.2			
LB50x203			203	59.8	50.8	3038	60.9	3642	76.1	4551	96.6			
LB50x229	229	50.9	57.3	2917	68.7	3497	85.9	4372	108.5					
LB50x254	254	43.9	63.5	2788	76.2	3345	95.3	4184	121.8					
LB50x305	305	38.6	76.3	2945	91.5	3532	114.4	4416	146.8					
LB63x76	63	38	76	312	19	5928	22.8	7114	28.5	8892	30.7			
LB63x89			89	260	22.3	5798	26.7	6942	33.4	8684	36.5			
LB63x102			102	221	25.5	5636	30.6	6763	38.3	8464	43.6			
LB63x115			115	187	28.8	5386	34.5	6452	43.1	8060	48.9			
LB63x127			127	168	31.8	5362	38.1	6401	47.6	7997	54.2			
LB63x152			152	136	38	5168	45.6	6202	57	7752	65.7			
LB63x178			178	114	44.5	5073	53.4	6088	66.8	7615	76.5			
LB63x203			203	100	50.8	5080	60.9	6090	76.1	7610	88			
LB63x229			229	89.2	57.3	5111	68.7	6128	85.9	7662	103.9			
LB63x254			254	78.4	63.5	4978	76.2	5974	95.3	7472	112.4			
LB63x305	305	64.7	76.3	4937										

Spring ISO10243

Heavy Duty Springs- ISO 10243 Standard

Material	Color	Code
Special alloy	Red	GBR

L	tolerance
25 ~ 89	±1mm
102 ~ 305	±1%



Order NO.	Dh	Dd	Lo	R(N/mm)	20%		25%		30%		travel stroke	
					S1	F1	S2	F2	S3	F3		
LR10x25	10	5	25	22.1	5	111	6.3	139	7.5	166	9.2	
LR10x32			32	17.5	6.4	112	8	140	9.6	168	12.1	
LR10x38			38	17.1	7.6	130	9.5	162	11.4	195	13.2	
LR10x44			44	15	8.8	132	11	165	13.2	198	15.1	
LR10x51			51	12.8	10.2	131	12.8	164	15.3	196	19.5	
LR10x64		64	10.7	12.8	137	16	171	19.2	205	21.8		
LR10x76		76	7.5	15.2	114	19	143	22.8	171	27.9		
LR10x305		305	2.1	61	128	76.3	160	91.5	192	127.2		
LR12.5x25		12.5	6.3	25	42.1	5	211	6.3	265	7.5	316	9.8
LR12.5x32				32	33.2	6.4	212	8	266	9.6	319	13.6
LR12.5x38	38			29.3	7.6	223	9.5	278	11.4	334	14.6	
LR12.5x44	44			24.6	8.8	216	11	271	13.2	325	18.1	
LR12.5x51	51			19.6	10.2	200	12.8	251	15.3	300	22.3	
LR12.5x64	64		15	12.8	192	16	240	19.2	288	27.3		
LR12.5x76	76		13.2	15.2	201	19	251	22.8	301	33.1		
LR12.5x89	89		11.4	17.8	203	22.3	254	26.7	304	38.9		
LR12.5x305	305		2.8	61	171	76.3	214	91.5	256	139.7		
LR16x25	16		8	25	75.7	5	379	6.3	477	7.5	568	8.4
LR16x32		32		52.8	6.4	338	8	422	9.6	507	10.5	
LR16x38		38		48.5	7.6	369	9.5	461	11.4	553	13.6	
LR16x44		44		42.8	8.8	377	11	471	13.2	565	15.9	
LR16x51		51		37.1	10.2	378	12.8	475	15.3	568	18.9	
LR16x64		64	30.3	12.8	388	16	485	19.2	582	24.9		
LR16x76		76	25.7	15.2	391	19	488	22.8	586	29.2		
LR16x89		89	21.7	17.8	386	22.3	484	26.7	579	34.5		
LR16x102		102	19.3	20.4	394	25.5	492	30.6	591	39.1		
LR16x305		305	7.1	61	433	76.3	542	91.5	650	103.6		
LR20x25	20	10	25	216	5	1080	6.3	1361	7.5	1620	8.3	
LR20x32			32	168	6.4	1075	8	1344	9.6	1613	10.9	
LR20x38			38	129	7.6	980	9.5	1226	11.4	1471	12.5	
LR20x44			44	112	8.8	986	11	1232	13.2	1478	15	
LR20x51			51	94	10.2	959	12.8	1203	15.3	1438	17.6	
LR20x64		64	72.1	12.8	923	16	1154	19.2	1384	22.6		
LR20x76		76	59.7	15.2	907	19	1134	22.8	1361	27.5		
LR20x89		89	50.5	17.8	899	22.3	1126	26.7	1348	31.7		
LR20x102		102	44.2	20.4	902	25.5	1127	30.6	1353	37.5		
LR20xH5		115	38.4	23	883	28.8	1106	34.5	1325	42.6		
LR20x127	127	34.1	25.4	866	31.8	1084	38.1	1299	45.5			
LR20x139	139	31	28	868	35	1085	42	1302	50.1			
LR20x152	152	28.2	30.4	857	38	1072	45.6	1286	55.8			
LR20x305	305	15	61	915	76.3	1145	91.5	1373	114.1			

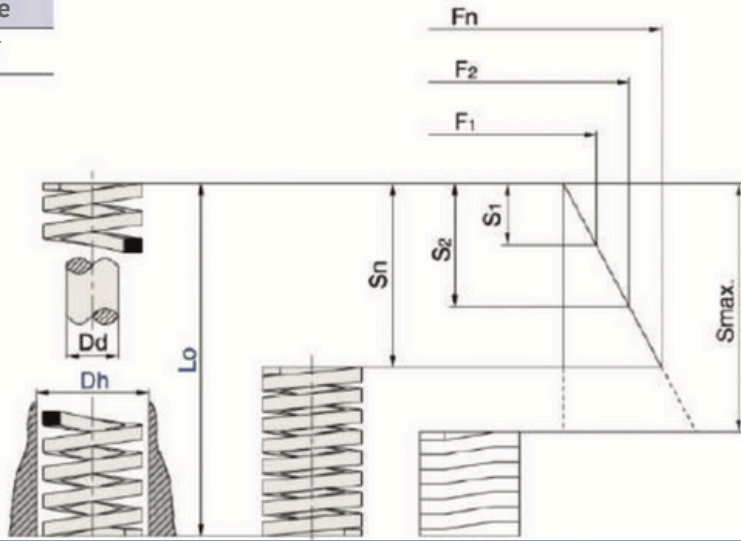
Order NO.	Dh	Dd	Lo	R(N/mm)	20%		25%		30%		travel stroke
					S1	F1	S2	F2	S3	F3	
LR25x25	25	12.5	25	375	5	1875	6.3	2363	7.5	2813	8.5
LR25x32			32	297	6.4	1901	8	2376	9.6	2851	11
LR25x38			38	219	7.6	1664	9.5	2081	11.4	2497	12.6
LR25x44			44	187	8.8	1646	11	2057	13.2	2468	14.8
LR25x51			51	156	10.2	1591	12.8	1997	15.3	2387	17.9
LR25x64		64	123	12.8	1574	16	1968	19.2	2362	23.1	
LR25x76		76	99	15.2	1505	19	1881	22.8	2257	26.3	
LR25x89		89	84	17.8	1495	22.3	1873	26.7	2243	30.5	
LR25x102		102	73	20.4	1489	25.5	1862	30.6	2234	37.3	
LR25xH5		115	65	23	1495	28.8	1872	34.5	2243	41.9	
LR25x127	127	57.7	25.4	1466	31.8	1835	38.1	2198	46.2		
LR25x139	139	52.7	28	1476	35	1845	42	2213	49.3		
LR25x152	152	47.8	30.4	1453	38	1816	45.6	2180	55.7		
LR25x178	178	41	35.6	1460	44.5	1825	53.4	2189	65.1		
LR25x203	203	35.8	40.6	1453	50.8	1819	60.9	2180	74.5		
LR25x305	305	22.9	61	1397	76.3	1747	91.5	2095	110.2		
LR32x38	32	16	38	388	7.6	2949	9.5	3686	11.4	4423	12.5
LR32x44			44	324	8.8	2851	11	3564	13.2	4277	14.9
LR32x51			51	272	10.2	2774	12.8	3482	15.3	4162	17.8
LR32x64			64	212	12.8	2714	16	3392	19.2	4070	22.4
LR32x76			76	172	15.2	2614	19	3268	22.8	3923	26.1
LR32x89		89	141	17.8	2510	22.3	3144	26.7	3765	30.8	
LR32x102		102	122	20.4	2489	25.5	3111	30.6	3733	36.8	
LR32xH5		115	107	23	2461	28.8	3082	34.5	3692	41.4	
LR32x127		127	93	25.4	2362	31.8	2957	38.1	3543	44.4	
LR32x139		139	86	28	2408	35	3010	42	3612	48.5	
LR32x152	152	78	30.4	2371	38	2964	45.6	3557	54.8		
LR32x178	178	67.2	35.6	2392	44.5	2990	53.4	3588	63.6		
LR32x203	203	59.1	40.6	2399	50.8	3002	60.9	3599	72.5		
LR32x254	254	46.4	50.8	2357	63.5	2946	76.2	3536	92.8		
LR32x305	305	38	61	2318	76.3	2899	91.5	3477	111.8		
LR40x51	40	20	51	350	10.2	3570	12.8	4480	15.3	5355	17
LR40x64			64	269	12.8	3443	16	4304	19.2	5165	21.9
LR40x76			76	219	15.2	3329	19	4161	22.8	4993	26.7
LR40x89			89	190	17.8	3382	22.3	4237	26.7	5073	31.3
LR40x102			102	163	20.4	3325	25.5	4157	30.6	4988	37.1
LR40x115		115	142	23	3266	28.8	4090	34.5	4899	41	
LR40x127		127	128	25.4	3251	31.8	4070	38.1	4877	46.5	
LR40x139		139	115	28	3220	35	4025	42	4830	53.1	
LR40x152		152	105	30.4	3192	38	3990	45.6	4788	56.1	
LR40x178		178	89	35.6	3168	44.5	3961	53.4	4753	67.4	
LR40x203	203	77	40.6	3126	50.8	3912	60.9	4699	76.2		
LR40x254	254	61	50.8	3099	63.5	3874	76.2	4648	96.2		
LR40x305	305	51	61	3111	76.3	3891	91.5	4667	114.8		
LR50x64	50	25	64	413	12.8	5286	16	6608	19.2	7930	22.4
LR50x76			76	339	15.2	5153	19	6441	22.8	7729	26.5
LR50x89			89	288	17.8	5126	22.3	6422	26.7	7690	31.5
LR50x102			102	245	20.4	4998	25.5	6248	30.6	7497	37.6
LR50x115			115	215	23	4945	28.8	6192	34.5	7418	42.7
LR50x127		127	192	25.4	4877	31.8	6106	38.1	7315	47.5	
LR50x139		139	168	28	4704	35	5880	42	7056	51.8	
LR50x152		152	154	30.4	4682	38	5852	45.6	7022	57.8	
LR50x178		178	134	35.6	4770	44.5	5963	53.4	7156	68.5	
LR50x203		203	117	40.6	4750	50.8	5944	60.9	7125	78.6	
LR50x254	254	89	50.8	4521	63.5	5652	76.2	6782	97.9		
LR50x305	305	73	61	4453	76.3	5570	91.5	6680	120.7		
LR63x76	63	38	76	618	15.2	9394	19	11742	22.8	14090	24.7
LR63x89			89	515	17.8	9167	22.3	11485	26.7	13751	30
LR63x102			102	438	20.4	8935	25.5	11169	30.6	13403	35.1
LR63x115			115	370	23	8510	28.8	10656	34.5	12765	37.5
LR63x127			127	333	25.4	8458	31.8	10589	38.1	12687	45.9
LR63x152		152	269	30.4	8178	38	10222	45.6	12266	56.5	
LR63x178		178	226	35.6	8046	44.5	10057	53.4	12068	66.8	
LR63x203		203	198	40.6	8039	50.8	10058	60.9	12058	78.8	
LR63x254		254	155	50.8	7874	63.5	9843	76.2	11811	101.7	
LR63x305		305	128	61	7808	76.3	9766	91.5	11712	122.4	

Spring ISO10243

Extra Heavy Duty Springs - ISO 10243 Standard

Material	Color	Code
Special alloy	Yellow	GBY

L	tolerance
25 ~ 89	±1mm
102 ~ 305	±1%



Order NO.	Dh	Dd	Lo	R(N/mm)	17%		20%		25%		travel stroke		
					S1	F1	S2	F2	S3	F3			
LG10x25	10	5	25	36.8	4.3	158	5	184	6.3	232	7.7		
LG10x32			32	27.9	5.4	151	6.4	179	8	223	10.6		
LG10x38			38	23.7	6.5	154	7.6	180	9.5	225	12.6		
LG10x44			44	19.2	7.5	144	8.8	169	11	211	13.8		
LG10x51			51	16.5	8.7	144	10.2	168	12.8	211	16.2		
LG10x64			64	13.2	10.9	144	12.8	169	16	211	20.4		
LG10x76			76	10.9	12.9	141	15.2	166	19	207	25.2		
LG10x305			305	2.6	51.9	135	61	159	76.3	198	110.8		
LG12.5x25			12.5	6.3	25	58.5	4.3	262	5	293	6.3	369	8.1
LG12.5x32					32	43.9	5.4	237	6.4	281	8	351	9.9
LG12.5x38	38	36			6.5	234	7.6	274	9.5	342	12.9		
LG12.5x44	44	30.3			7.5	227	8.8	267	11	333	14.1		
LG12.5x51	51	26.2			8.7	228	10.2	267	12.8	335	17.4		
LG12.5x64	64	21.2			10.9	231	12.8	271	16	339	21		
LG12.5x76	76	17.1			12.9	221	15.2	260	19	325	26.4		
LG12.5x89	89	14.5			15.1	219	17.8	258	22.3	323	31.5		
LG12.5x305	305	4.3			51.9	223	61	262	76.3	328	111.3		
LG20x25	20	10			25	118	4.3	507	5	590	6.3	743	8.5
LG20x32			32	89	5.4	481	6.4	570	8	712	11		
LG20x38			38	72.1	6.5	469	7.6	548	9.5	685	13.2		
LG20x44			44	60.9	7.5	457	8.8	536	11	670	14.7		
LG20x51			51	52.3	8.7	455	10.2	533	12.8	669	17.7		
LG20x64			64	41.2	10.9	449	12.8	527	16	659	21.9		
LG20x76			76	34.1	12.9	440	15.2	518	19	648	27.8		
LG20x89			89	29.5	15.1	445	17.8	525	22.3	658	31.2		
LG20x102			102	25.6	17.3	443	20.4	522	25.5	653	37.9		
LG16x305			305	8.4	51.9	436	61	512	76.3	641	113.6		
LG20x25	20	10	25	293	4.3	1260	5	1465	6.3	1846	6.9		
LG20x32			32	224	5.4	1210	6.4	1434	8	1792	9.4		
LG20x38			38	177	6.5	1151	7.6	1345	9.5	1682	12		
LG20x44			44	149	7.5	1118	8.8	1311	11	1639	13.5		
LG20x51			51	128	8.7	1114	10.2	1306	12.8	1638	16.2		
LG20x64			64	99	10.9	1079	12.8	1267	16	1584	21.2		
LG20x76			76	81.7	12.9	1054	15.2	1242	19	1552	24.7		
LG20x89			89	69.5	15.1	1049	17.8	1237	22.3	1550	28.8		
LG20x102			102	60.6	17.3	1048	20.4	1236	25.5	1545	34.8		
LG20x115			115	53	19.6	1039	23	1219	28.8	1526	39		
LG20x127	127	47.5	21.6	1026	26.4	1207	31.8	1511	43				
LG20x139	139	43	23.8	1023	28	1204	35	1505	45.3				
LG20x152	152	39	25.8	1006	30.4	1186	38	1482	50.4				
LG20x305	305	21.2	51.9	1100	61	1293	76.3	1618	103.6				

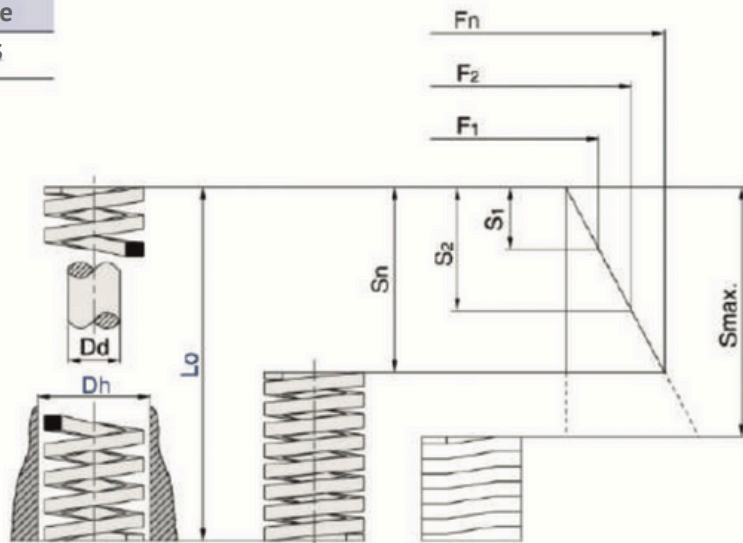
Order NO.	Dh	Dd	Lo	R(N/mm)	17%		20%		25%		travel stroke	
					S1	F1	S2	F2	S3	F3		
LG25x25	25	12.5	25	459	4.3	1974	5	2295	6.3	2892	7.3	
LG26x32			32	374.4	5.4	2022	6.4	2396	8	2996	10.7	
LG25x38			38	346	6.5	2249	7.6	2630	9.5	3287	12	
LG25x44			44	244	7.5	1830	8.8	2147	11	2684	14.4	
LG25x51			51	207.5	8.7	1805	10.2	2117	12.8	2656	17.4	
LG25x64			64	161	10.9	1755	12.8	2081	16	2576	21.4	
LG25x76			76	130.8	12.9	1687	15.2	1988	19	2485	26.9	
LG25x89			89	110.5	15.1	1669	17.8	1967	22.3	2464	30.9	
LG25x102			102	96.3	17.3	1666	20.4	1965	25.5	2456	36.7	
LG25x115			115	85.7	19.6	1680	23	1971	28.8	2468	40.3	
LG25x127	127	76.3	21.6	1648	25.4	1938	31.8	2426	45.1			
LG25x139	139	68.9	23.8	1640	28	1929	35	2412	47.6			
LG25x152	152	63.5	25.8	1638	30.4	1930	38	2413	53.5			
LG25x178	178	53.9	30.3	1633	35.6	1919	44.5	2399	63.9			
LG25x203	203	47	35.5	1622	40.6	1908	50.8	2388	70.2			
LG25x305	305	30.9	51.9	1604	61	1885	76.3	2358	110.1			
LG32x38	32	16	38	528.2	6.5	3433	7.6	4014	9.5	5018	11.4	
LG32x44			44	424.4	7.5	3183	8.8	3735	11	4668	13.7	
LG32x51			51	353	8.7	3071	10.2	3601	12.8	4518	15.6	
LG32x64			64	269.2	10.9	2934	12.8	3446	16	4307	20	
LG32x76			76	218.5	12.9	2819	15.2	3321	19	4152	24.4	
LG32x89			89	180.3	15.1	2723	17.8	3209	22.3	4021	29.7	
LG32x102			102	155	17.3	2682	20.4	3162	26.6	3953	36.1	
LG32x115			115	140	19.6	2744	23	3220	28.8	4032	39	
LG32x127			127	124	21.6	2678	25.4	3150	31.8	3943	42.8	
LG32x139			139	112.3	23.8	2673	28	3144	35	3931	48.6	
LG32x152	162	102	25.8	2632	30.4	3101	38	3876	52.4			
LG32x178	178	88.2	30.3	2612	35.6	3140	44.5	3925	60.9			
LG32x203	203	76	34.5	2622	40.6	3086	50.8	3861	69.2			
LG32x254	254	60.8	43.2	2627	50.8	3089	63.5	3861	88.1			
LG32x305	305	49	51.9	2543	61	2989	76.3	3739	104.2			
LG40x51	40	20	51	628	8.7	5464	10.2	6406	12.8	8038	15	
LG40x64			64	487	10.9	5308	12.8	6234	16	7792	19.5	
LG40x76			76	379	12.9	4889	15.2	5761	19	7201	23.3	
LG40x89			89	321	15.1	4847	17.8	5714	22.3	7158	26.7	
LG40x102			102	281	17.3	4861	20.4	5732	25.5	7166	33.8	
LG40x115			115	245	19.6	4802	23	5635	28.8	7056	36.2	
LG40x127			127	221	21.6	4774	25.4	5613	31.8	7028	40.7	
LG40x139			139	190	23.8	4522	28	5320	35	6650	44.5	
LG40x152			152	168	25.8	434	30.4	5107	38	6384	49.6	
LG40x178			178	146	30.3	4424	35.6	5198	44.5	6497	59.9	
LG40x203	203	132	34.5	453	40.6	5359	50.8	6706	67.1			
LG40x254	254	107	43.2	4622	50.8	5436	63.5	6795	86.3			
LG40x305	305	87.8	51.9	4567	61	6356	76.3	6699	103.6			
LG50x64	50	25	64	709	10.9	7728	12.8	9075	16	11344	19.3	
LG50x76			76	572	12.9	7379	15.2	8694	19	10868	24.2	
LG50x89			89	475	15.1	7173	17.8	8455	22.3	10593	28	
LG50x102			102	406	17.3	7007	20.4	8262	26.6	10328	33.5	
LG50x115			115	352	19.6	6899	23	8096	28.8	10138	38.6	
LG50x127			127	316	21.6	6826	25.4	8026	31.8	10049	41.4	
LG50x139			139	274	23.8	6521	28	7672	35	9590	47.3	
LG50x162			162	239	25.8	6166	30.4	7266	38	9082	50.2	
LG850x178			178	215	30.3	6515	35.6	7654	44.5	9568	61.1	
LG50x203			203	187	34.5	6452	40.6	7592	50.8	9500	67.7	
LG50x254	254	153	43.2	6610	50.8	7772	63.5	9716	81			
LG50x305	305	127	51.9	6591	61	7747	76.3	9690	103.4			
LG63x76	63	38	76	952	12.9	12280	15.2	14470	-	-	15.5	
LG63x89			89	819	15.1	12360	17.8	14680	-	-	-	20
LG63x102			102	700	17.3	12110	20.4	14280	26.5	17860	30.7	
LG63x115			115	620	19.6	12152	23	14260	28.8	17860	34.9	
LG63x127			127	565	21.6	12204	25.4	14351	31.8	17967	38	
LG63x152			152	458	25.8	11816	30.4	13923	38	1746	47.2	
LG63x178			178	384	30.3	11635	35.6	13670	44.5	17088	55.8	
LG63x203			203	337	34.5	11627	40.6	13682	50.8	17120	64.8	
LG63x254			254	263	43.2	11362	50.8	13360	63.5	16701	86.7	
LG63x305			305	218	51.9	11314	61	13298	76.3	16633	105.7	

Spring ISO10243

Super Heavy Duty Springs- ISO 10243 Standard

Material	Color	Code
Special alloy	Silver	GBS

L	tolerance
25 ~ 89	±1mm
102 ~ 305	±1%



Order NO.	Dh	Dd	Lo	R(N/mm)	10%		12%		15%		travel stroke
					S1	F1	S2	F2	S3	F3	
LA25×64	25	12.5	64	644	4122	6.4	4959	8.6	6182	9.6	13
LA25×76			76	556	4226	7.6	5060	10.3	6338	11.4	16
LA25×89			89	462	4112	8.9	4943	12	6168	13.4	20
LA25×102			102	390	3978	10.2	4758	13.8	5967	15.3	23
LA25×115			115	360	4140	11.5	4968	15.5	6210	17.3	26
LA25×127			127	326	4140	12.7	4955	17.1	6210	19.1	28
LA25×152			152	255	3876	15.2	4641	20.5	5814	22.8	34
LA25×178			178	230	4094	17.8	4922	24	6141	26.7	39
LA25×203			5.6×7.5	203	202	4101	20.3	4929	27.4	6151	30.5
LA25×305	305	136		4148	30.5	4978	41.2	6222	45.8	63	
LA32×64	32	16		64	1077	6892	6.4	8270	8.6	10337	9.6
LA32×76			76	874	6642	7.6	7971	10.3	9964	11.4	16
LA32×89			89	721	6419	8.9	7702	12	9628	13.4	20
LA32×102			102	620	6324	10.2	7589	13.8	9486	15.3	23
LA32×115			115	560	6440	11.5	7728	15.5	9660	17.3	26
LA32×127			127	496	6299	12.7	7559	17.1	9449	19.1	28
LA32×152			152	408	6202	15.2	7442	20.5	9302	22.8	34
LA32×178			178	353	6280	17.8	7536	24	9420	26.7	39
LA32×203			203	304	6171	20.3	7405	27.4	9257	30.5	45
LA32×254	7.5×9.2	254	243	6177	25.4	7413	34.3	9266	38.1	62	
LA32×305		305	196	5978	30.5	7174	41.2	8967	45.8	75	
LA40×89	40	20	89	880	7832	8.9	9416	12	11748	13.4	20
LA40×102			102	762	7772	10.2	9296	13.8	11659	15.3	23
LA40×115			115	679	7809	11.5	9370	15.5	11713	17.3	26
LA40×127			127	622	7899	12.7	9454	17.1	11849	19.1	28
LA40×152			152	509	7737	15.2	9264	20.5	11605	22.8	36
LA40×178			178	429	7636	17.8	9181	24	11454	26.7	43
LA40×203			203	374	7592	20.3	9126	27.4	11388	30.5	49
LA40×254			8.5×11.0	254	296	7518	25.4	9028	34.3	11278	38.1
LA40×305	305	246		7530	30.5	9004	41.2	11255	45.8	75	
LA50×89	50	25	89	1410	12549	8.9	15087	12	18824	13.4	19
LA50×102			102	1215	12393	10.2	14823	13.8	18590	15.3	22
LA50×115			115	1076	12374	11.5	14849	15.5	18561	17.3	25
LA50×127			127	968	12294	12.7	14714	17.1	18440	19.1	28
LA50×152			152	806	12251	15.2	14669	20.5	18377	22.8	34
LA50×178			178	698	12424	17.8	14937	24	18637	26.7	40
LA50×203			203	612	12424	20.3	14933	27.4	18635	30.5	45
LA50×254			11.8×13.5	254	472	11989	25.4	14396	34.3	17983	38.1
LA50×305	305	388		11834	30.5	14201	41.2	17751	45.8	70	



MECHANICAL SPRINGS
PRODUCT
CATALOG

2024