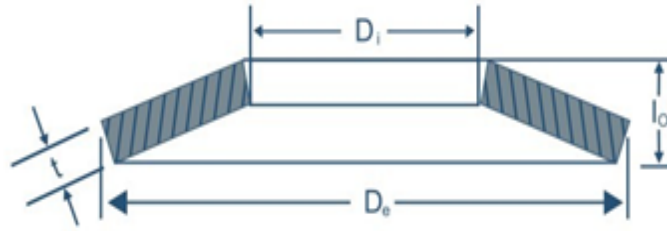


DISC SPRINGS

Do : Outer diameter
Di : Inner diameter
t : Thickness
Lo : Length
F : force (N)
D : Deflection.



AS PER DIN 2093 STANDARD AND OWN LIGHT & HEAVY DUTY SERIES

DISC SPRINGS					S= 25%		S = 50%		S = 75%		S= Lo	
CODE	Do	Di	t	lo	f	S	S	F	F	S	F	
DHS 1018010	18.00	9.20	1.00	1.40	46	0.10	88	0.20	128	0.30	166	
OLS 1020010	20.00	10.20	1.00	1.55	55	0.14	103	0.28	145	0.41	185	
DHS1020011	20.00	10.20	1.10	1.55	56	.0.11	107	0.23	155	0.34	201	
DHS 1022012	22.50	11.20	1.25	1.75	71	0.13	135	0.25	196	0.38	256	
OLS 1023012	23.00	10.20	1.25	1.90	89	0.16	166	0.33	235	0.49	301	
OHS 1023012	23.00	12.20	1.25	1.85	88	0.15	166	0.30	237	0.45	306	
OLS 1023015	23.00	12.20	1.50	2.00	118	0.13	229	0.25	336	0.38	440	
OLS 1025010	25.00	12.20	1.00	1.80	60	0.20	104	0.40	138	0.60	168	
OLS 1025012	25.00	12.20	1.25	1.95	86	0.17	160	0.35	226	0.53	287	
DHS 1025015	25.00	12.20	1.50	2.05	106	0.14	204	0.28	298	0.41	389	
OLS 1028010	28.00	10.20	1.00	1.90	52	0.23	89	0.45	115	0.68	136	
DHS 1028012	28.00	10.20	1.25	2.05	74	0.20	136	0.40	189	0.80	237	
OLS 1028012	28.00	12.20	1.25	2.10	86	0.21	155	0.42	212	0.64	264	
DHS 1028010	28.00	14.20	1.00	1.80	49	0.20	85	0.40	113	0.60	137	
DLS 1028010	28.00	14.20	1.25	2.10	92	0.21	166	0.04	228	0.64	284	
DLS 1028015	31.50	16.30	1.50	2.40	128	0.23	236	0.45	329	0.58	416	
DHS 1031017	31.50	16.30	1.75	2.45	142	0.17	272	0.35	394	0.53	513	
OLS 1031020	31.50	16.30	2.00	2.75	224	0.19	432	0.80	629	0.56	820	
OLS 1034015	34.00	16.30	1.50	2.55	131	0.26	236	0.52	321	0.79	398	
OLS 1034020	34.00	16.30	2.00	2.85	241	0.21	408	0.42	589	0.64	764	
DLS 1035012	35.50	18.30	1.25	2.25	74	0.25	130	0.50	173	0.75	210	
DHS 1035020	35.50	18.30	2.00	2.80	190	0.20	364	0.40	528	0.60	687	
OLS 1040015	40.00	14.20	1.50	2.75	114	0.31	196	0.63	259	0.94	312	
OLS 1040010	40.00	20.40	1.00	2.30	58	0.32	89	0.65	104	0.97	109	
DLS 1040015	40.00	20.40	1.50	2.65	113	0.29	199	0.58	267	0.86	326	
OLS 1040020	40.00	20.40	2.00	3.10	222	0.27	412	0.55	581	0.82	739	
DHS 1040022	40.00	20.40	2.25	3.15	237	0.23	456	0.45	662	0.68	862	
OLS 1040025	40.00	20.40	2.50	3.45	341	0.24	657	0.48	956	0.71	1247	
DLS 1045012	45.00	22.40	1.25	2.85	106	0.40	165	0.80	190	1.20	204	
DLS 1045017	45.00	22.40	1.75	3.05	155	0.32	275	0.65	371	1.97	456	
DHS 1045025	45.00	22.40	2.50	3.50	282	0.25	542	0.50	786	0.75	1022	
OLS 1050015	50.00	18.30	1.50	3.30	140	0.45	222	0.90	265	1.35	289	
OLS 1050030	50.00	18.30	3.00	4.40	513	0.35	971	0.70	1393	1.05	1796	
OLS 1050025	50.00	20.40	2.50	3.85	306	0.34	570	0.87	807	1.01	1028	
OLS 1050025	50.00	22.40	2.50	3.90	332	0.35	616	0.70	867	1.05	1102	
OLS 1050012	50.00	25.40	1.25	2.85	87	0.40	136	0.80	158	1.20	168	
DLS 1050020	50.00	25.40	2.00	3.40	199	0.35	356	0.70	485	1.05	601	
OLS 1050025	50.00	25.40	2.50	3.90	354	0.35	656	0.70	923	1.05	1173	

DLS = DIN LIGHT SERIES

OLS = WN LIGHT SERIES

DHS = DIN HEAVY SERIES

OHS = OWN HEAVY SERIES

ALL DIMENSION ARE IN MM

DISC SPRINGS

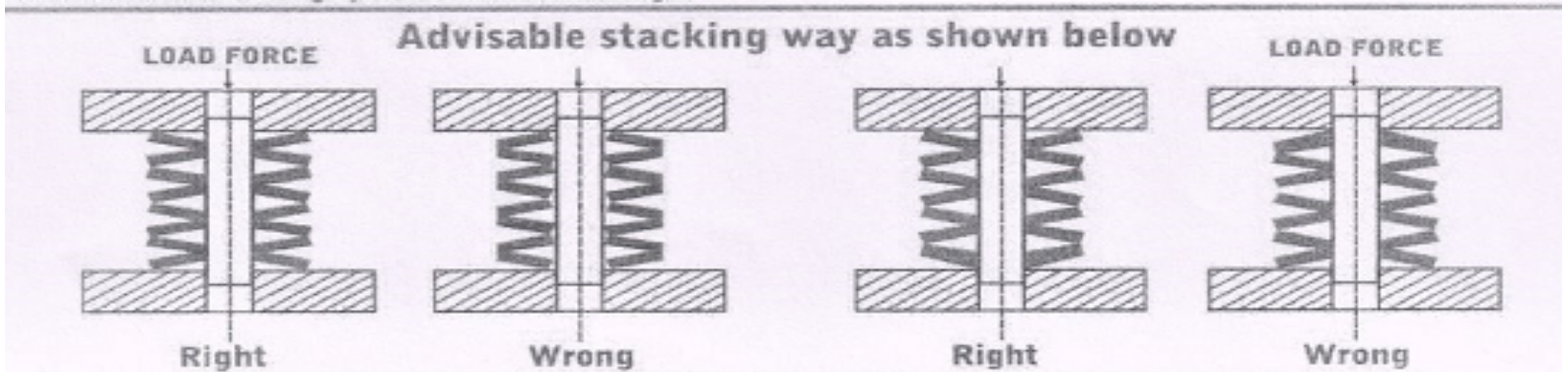
DISC SPRINGS					S = 25%		S = 50%		S = 75%		S = Lo
CODE	Do	Di	t	lo	f	S	S	F	F	S	F
DHS 1050030	50.00	25.40	3.0	4.1	433	0.27	837	0.55	1220	0.82	1593
OLS 1050015	56.00	28.50	1.5	3.5	149	0.49	230	0.98	267	1.46	262
DLS 1056020	56.00	28.50	2.0	3.6	195	0.40	340	0.80	452	1.20	547
DHS 10506030	56.00	28.50	3.0	4.3	422	0.32	804	0.65	1160	0.97	1502
OLS 1060030	60.00	20.40	3.0	4.7	453	0.43	838	0.35	1178	1.28	1496
OLS 1060025	60.00	25.40	3.5	4.4	351	0.48	619	0.95	831	1.43	1017
OHS 1060030	60.00	25.40	3.0	4.7	457	0.41	850	0.83	1199	1.24	1526
OHS 1060025	60.00	30.50	2.5	4.3	351	0.45	626	0.90	850	1.35	1048
OHS 1060030	60.00	30.50	3.0	4.7	518	0.43	958	0.85	1347	1.28	1710
OLS 1060035	60.00	30.50	3.5	5.0	671	0.38	1281	0.75	1849	1.13	2396
OLS 1060018	63.00	31.00	1.8	4.2	241	0.59	373	1.17	432	1.78	454
DHS 1063025	63.00	31.00	2.5	4.25	300	0.44	537	0.88	732	1.31	907
OLS 1063030	63.00	31.00	3.0	4.8	498	0.45	915	0.90	1277	1.35	1612
DHS 1063035	63.00	31.00	3.5	4.9	550	0.35	1055	0.70	1530	1.05	1991
OLS 2070030	70.00	30.50	3.0	5.1	476	0.52	853	1.05	1164	1.58	1441
OHS 2070030	70.00	35.50	3.0	5.1	512	0.52	917	1.05	1251	1.58	1550
OLS 2070040	70.00	35.50	4.0	5.8	892	0.45	1694	0.90	2436	1.35	3149
OHS 2070040	70.00	40.50	4.0	5.6	855	0.40	1640	0.80	2378	1.20	3094
OLS 2070050	70.00	40.50	5.0	6.2	1176	0.30	2315	0.60	3429	0.90	4532
DLS 2071025	71.00	36.00	2.5	4.5	295	0.50	515	1.00	685	1.50	830
DHS 2071040	71.00	36.00	4.0	5.6	752	0.40	1422	0.80	2091	1.20	2720
OLS 2080030	80.00	31.00	3.0	5.5	462	0.83	799	1.25	1054	1.88	1268
OLS 2080040	80.00	31.00	4.0	6.1	745	0.52	1393	1.05	195	1.58	2525
OHS20 80030	80.00	36.00	3.0	5.7	550	0.68	937	1.35	1214	2.03	1437
OHS 2080040	80.00	36.00	4.0	6.2	831	0.55	1545	1.10	2179	1.65	2775
DLS 2080030	80.00	41.00	3.0	5.3	453	0.57	798	1.15	1071	1.72	1308
OLS 2080040	80.00	41.00	4.0	6.2	889	0.55	1651	1.10	2330	1.65	2966
DHS 2080050	80.00	41.00	5.0	6.7	1204	0.43	2335	0.85	3418	1.28	4476
OLS 2080025	90.00	46.00	2.5	5.7	431	0.80	671	1.80	783	2.40	831
DLS 2090035	90.00	46.00	3.5	6.0	594	0.63	1061	1.25	1442	1.88	1781
DHS 2090050	90.00	46.00	5.0	7.0	1148	0.50	2202	1.00	3193	1.50	4154
OLS 2100040	100.00	41.00	4.0	7.2	887	0.80	1550	1.50	2062	2.40	2500
DLS 2100035	100.00	51.00	3.5	6.3	573	0.70	1000	1.40	1331	2.10	1813
OLS 2100050	100.00	51.00	5.0	7.8	1418	0.70	2628	1.40	3700	2.10	4704
DHS 2100060	100.00	51.00	6.0	8.2	1738	0.55	3354	1.10	4891	1.65	6387
DLS 2112040	112.00	57.00	4.0	7.2	778	0.80	1359	1.60	1808	2.40	2161
DHS 2112060	112.00	57.00	6.0	8.5	1809	0.63	3077	1.25	4451	1.88	5778
OLS 2125050	125.00	61.00	5.0	9.0	1488	1.00	2600	2.00	3459	3.00	4193
OLS 2125060	125.00	61.00	6.0	9.6	2015	0.90	3701	1.80	5166	2.70	6521
OLS 2125080	125.00	61.00	8.0	10.9	3381	0.73	6533	1.45	9530	2.18	12451
OLS 2125035	125.00	64.00	3.5	8.0	867	1.13	1347	2.25	1570	3.38	1664
DLS 2125050	125.00	64.00	5.0	8.5	1246	0.88	2233	1.75	3048	2.63	3772
DHS 2125080	125.00	64.00	8.0	10.6	3069	0.65	5967	1.30	8751	1.95	11479
OLS 2125060	125.00	71.00	6.0	9.3	1990	0.82	3697	1.85	5216	2.47	6641
OLS 2125080	125.00	71.00	8.0	10.4	3031	0.60	5917	1.20	8707	1.80	11498
DLS 2140050	140.00	72.00	5.0	9.0	1224	1.00	2137	2.00	2844	3.00	3447
DHS 2140080	140.00	72.00	8.0	11.2	3120	0.80	5986	1.60	8682	2.40	11294
OLS 2150060	150.00	61.00	6.0	10.8	1992	1.20	3479	2.40	4829	3.80	5614
OHS 2150060	150.00	71.00	6.0	10.8	2110	1.20	3586	2.40	4904	3.60	5944
OLS 2150080	150.00	71.00	8.0	12.0	3417	1.00	6422	2.00	9151	3.00	11742
OHS 2150080	150.00	81.00	8.0	11.7	3354	0.93	6354	1.85	9118	2.78	11765

DISC SPRINGS

Disc springs					S= 25%		S = 50%		S = 75%		S= Lo	
CODE	Do	Di	t	lo	f	S	S	F	F	S	F	
OHS 2150100	150	81	10.00	13.00	4933	0.75	9630	1.50	14169	2.25	18630	
DHS 2160060	160	82	6.00	10.50	1752	1.13	3099	2.25	4176	3.38	5119	
DHS 2160100	160	82	10.00	13.50	4978	0.88	96.39	1.75	14088	2.63	18432	
DLS 2180060	180	92	6.00	11.10	1686	1.28	2908	2.55	3819	3.83	4578	
DHS 2180100	180	92	10.00	14.00	4590	1.00	8806	2.00	12773	3.00	16615	
OHS 2020080	200	82	8.00	14.20	3376	1.55	5935	3.10	7947	4.65	9687	
OHS 2020100	200	82	10.00	15.50	5029	1.38	9344	2.50	13183	4.13	16784	
OLS 2020080	200	92	10.00	15.60	5373	1.40	9959	2.80	14023	4.20	17824	
OLS 2200120	200	92	12.00	16.80	7293	1.20	13992	2.40	20294	3.80	26399	
DLS 2200080	200	102	8.00	13.60	3183	1.40	5702	2.80	7779	4.20	9633	
OLS 2200100	200	102	10.00	15.60	5672	1.40	10515	2.80	14804	4.20	18816	
DHS 2200120	200	102	12.00	16.20	6587	1.05	12753	2.10	16840	3.15	24386	
DLS 2225080	225	112	8.00	14.50	3120	1.63	5432	3.25	7205	4.88	8709	
DHS 2225120	225	112	12.00	17.00	6296	1.25	12041	2.50	17417	3.75	22609	
OHS 2250120	250	102	12.00	19.00	7215	1.75	13300	3.50	18634	5.25	23591	
DLS 2250100	250	127	10.00	17.00	4961	1.75	8888	3.50	12125	5.25	15017	
OHS 2250130	250	127	12.00	19.30	8408	1.83	15408	3.65	21469	5.47	27061	
DHS 2250140	250	127	14.00	19.60	9106	1.40	17471	2.80	25342	4.20	32965	
DHS 2250160	250	127	16.00	21.80	13840	1.45	26738	2.90	39008	4.35	50964	

DLS = DIN LIGHT SERIES OLS = WN LIGHT SERIES DHS = DIN HEAVY SERIES OHS = OWN HEAVY SERIES

ALL DIMENSION ARE IN MM



DISC SPRING MATERIAL

Commonly spring steel grade " Chrome Vanadium " 50 CrV4 (EN 47) SAE 61500 is used.

DISC SPRING can be offer in other material against order in large qty.