



GENESIS ENMECH PVT LTD

GENESIS ESTD IN 1995, SERVING POWER, STEEL, SUGAR, AUTOMOTIVE, PETROCHEMICAL, OIL&GAS, WIND ENERGY, MACHINE TOOLS AND ANCILLARY INDUSTRIES.



SPECIALIST IN DISC SPRINGS

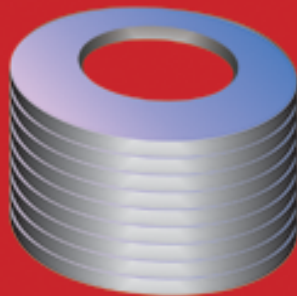
INTRODUCTION

Disc springs are conically formed annular discs, which are loaded in the axial direction. Disc Springs offer a well-developed solution to many engineering problems through a unique combination of high force in a small space. Disc Springs can be used as single disc or arranged in stacks. A spring stack can consist of either single spring or parallel spring sets. Disc Springs and Belleville Washers are manufactured to DIN 2093 AND DIN 6769. Heavy series Disc Springs are manufactured from forgings. Disc Springs are manufactured from imported 50CrV4 material.

Our Disc Springs are AUSTEMPERED. This method of heat treatment is particularly effective for springs, as it gives the maximum toughness and therefore considerable durability

ADVANTAGES OF DISC SPRINGS

1. No Deformation or Fatigue under normal loads.
2. High Energy Storage Capacity.
3. Long Service Life.
4. Stock keeping is minimized as the individual spring sizes can be combined universally.
5. Space Saving.
6. Largely Self-damping, giving good shock absorption and energy dissipation.
7. Efficient use of space and high spring force with small deflections.
8. Adaptable to stacking in numerous configurations.
9. Combination use as a modular spring element.
10. Low Maintenance cost
11. Greater Security



DISC SPRINGS ARE USED IN ALL TYPES OF APPLICATIONS:

Automotive & Engines
Brakes & Clutches
Dampers
Hoists
Machine Tools
Shock Mounts
Vibrators
And many more applications....

DISC SPRINGS IN SERIES & PARALLEL COMBINATION



Stacked in parallel
TOTAL DEFLECTION = Deflection of 1 disc.
TOTAL LOAD = Load on 1 disc x no. of discs.



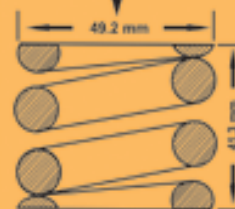
Series :-
TOTAL DEFLECTION = Deflection of 1 disc X no. disc in stack.
TOTAL LOAD = Load on 1 disc.



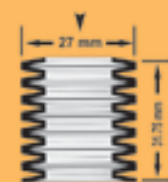
Parallel Series :-
COMBINATIONS can be designed to accommodate virtually any load or deflection and to obtain progressive or regressive characteristics.

DISC SPRING STACK COMPARED TO HELICAL SPRING

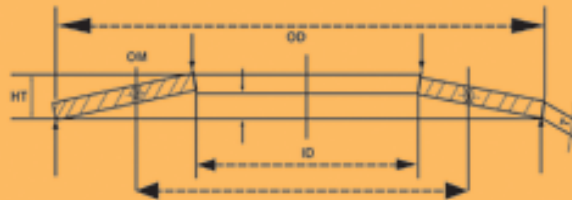
Coil spring weight : .26 kg.
Volume : 78.5 cm³
409 kg.



Disc spring Weight : .08 kg.
Volume : 18.2 cm³
409 kg.



STANDARD SIZES AVAILABLE AS PER DIN 2093



GROUP CLASSIFICATION OF DISC SPRINGS

In accordance with Din 2093 Standard, Disc Springs are classified into 3 groups as given in the table:

SERIES A			
OD	ID	T	HT
8.2	4.2	0.4	0.50
10	5.2	0.5	0.75
12.5	6.2	0.7	1.00
14	7.2	0.8	1.10
16	8.2	0.9	1.25
18	9.2	1.0	1.4
20	10.2	1.1	1.55
22.5	11.2	1.25	1.75
25	12.2	1.5	2.05
28	14.2	1.5	2.15
31.5	16.3	1.75	2.45
35.5	18.3	2.0	2.80
40	20.4	2.25	3.15
45	22.4	2.5	3.50
50	25.4	3.0	3.50
56	28.5	3.0	4.30
63	31	3.5	4.90
71	36	4.0	5.60
80	41	5.0	6.70
90	46	5.0	7.00
100	51	6.0	8.20
112	57	6.0	8.50
125	64	8.0	10.00
140	72	8.0	11.20
160	82	10	13.50
180	92	10	14.00
200	102	12	16.2
225	112	12	17
250	127	14	19.6

SERIES B			
OD	ID	T	HT
8.0	4.2	0.3	0.55
10	5.2	0.4	0.7
12.5	6.2	0.5	0.85
14	7.2	0.5	0.9
16	8.2	0.6	1.05
18	9.2	0.7	1.2
20	10.2	0.8	1.35
22.5	11.2	0.8	1.45
25	12.2	0.9	1.6
28	14.2	1.0	1.8
31.5	16.3	1.25	2.15
35.5	18.3	1.25	2.25
40	20.4	1.5	2.65
45	22.4	1.75	3.05
50	25.4	2.0	3.4
56	28.5	2.0	3.6
63	31	2.5	4.25
71	36	2.5	4.5
80	41	3.0	5.3
90	46	3.5	6.0
100	51	3.5	6.3
112	57	4.0	7.2
125	64	5.0	8.5
140	72	5.0	9.0
160	82	6.0	10.5
180	92	6.0	11.1
200	102	8.0	13.6
225	112	8.0	14.5
250	127	10	17

SERIES C			
OD	ID	T	HT
8.0	4.2	0.2	0.45
10	5.2	0.25	0.55
12.5	6.2	0.35	0.8
14	7.2	0.35	0.8
16	8.2	0.4	0.9
18	9.2	0.45	1.05
20	10.2	0.50	1.15
22.5	11.2	0.60	1.40
25	12.2	0.70	1.60
28	14.2	0.80	1.80
31.5	16.3	0.80	1.85
35.5	18.3	0.90	2.05
40	20.4	1.00	2.30
45	22.4	1.25	2.85
50	25.4	1.25	2.85
56	28.5	1.50	3.45
63	31	1.80	4.15
71	36	2.00	4.60
80	41	2.25	5.20
90	46	2.5	5.70
100	51	2.70	6.20
112	57	3.00	6.90
125	64	3.50	8.00
140	72	3.80	8.70
160	82	4.30	9.90
180	92	4.80	11.00
200	102	5.50	12.50
225	112	6.50	13.60
250	127	7.00	14.80

LIST OF ITEMS OF SUPPLY

1. COIL SPRINGS (HELICAL, COMPRESSION, TENSION, TORSION SPRINGS)
2. BELLEVILLE WASHERS DIN 6796
3. SHEET METAL PRESS PARTS & COMPONENTS
4. WAVE, LOCK, SERRATED & CONICAL WASHERS
5. HOT COILED SPRINGS
6. PLATE HEAT EXCHANGER(PHE) GASKETS & PLATES
7. NITRILE, EPDM, SILICON, VITON CORDS, GASKETS & COMPONENTS



GENESIS ENMECH PVT LTD



New # 27, Soundarajan Street, T.Nagar, Chennai - 600 017, India. Telefax : 044 - 2436 1023, 2433 5309.

E-mail : genesisenmech@airtelmail.in Website : www.genesisengineering.in

BRANCHES: Bangalore, Hyderabad, Vijayawada, Kochi, Trichy, Madurai, Coimbatore.

Created with

nitroPDF professional

download the free trial online at nitropdf.com/professional