

MK-D8110 Ordinary disc spring

This series of products implements DIN2093 and GB / T1972 standards and enterprise standards. At the same time, it undertakes the design tasks of non-standard disc springs for users. The surface treatment methods of disc springs include bluing, phosphating, electroplating, electrophoresis and mechanical galvanizing.



This series of products are mainly used in A, B and G materials. That is, the maximum temperature should not exceed 300 $\,^\circ$ C.

No.	Model	Outside diameter	Inner diameter	Thickness	Free height
1	M4	8	4.2	0.4	0.75
2	M5	10	5.2	0.5	0.75
3	M6	12.5	6.2	0.7	1
4	M7	14	7.2	0.8	1.1
5	M8	16	8.2	0.9	1.25
6	M9	18	9.2	1	1.4
7	M10	20	10.2	1.1	1.55
8	M11	22.5	11.2	1.25	1.75
9	M12	25	12.2	1.5	2.05
10	M14	28	14.2	1.5	2.15
11	M16	31.5	16.3	1.75	2.45
12	M18	35.5	18.3	2	2.8
13	M20	40	20.4	2.25	3.15
14	M22	45	22.4	2.5	3.5
15	M25	50	25.4	3	4.1
16	M28	56	28.5	3	4.3
17	M32	63	32.5	3.5	4.9
18	M35	71	35.5	4	5.6
19	M40	80	40.6	5	6.7
20	M45	90	45.6	5	7
21	M50	100	50.8	6	8.2
22	M55	112	55.8	6	8.5
23	M65	125	65.8	7	9.6

HANGZHOU ST.MICHAEL SEAL & PACKING CO.,T LTD

MK-D8120 Medium load disc spring

Bolts with temperatures above 150 $^{\circ}$ C require advanced disc spring pretensioning technology. It is recommended to use this series as much as possible when working at temperatures below 300 $^{\circ}$ C and corrosive media.



The main materials are B, C and D.

Applicable industries: petrochemical, electric power, metallurgy, papermaking, pharmaceutical, food processing, etc.

Applicable equipment:

- · Flange bolt pre-tightening of reactor, stirrer, heat exchanger
- Flange and anchor bolt pre-tightening of pump, fan, centrifuge
- Power busbar, copper-aluminum bolt pre-tightening
- · Pipe flange, valve flange bolt pretension

No.	Model	Outside diameter	Inner diameter	Thickness	Free height
1	M8	14.7	8.4	1.27	1.75
2	M10	18.2	10.4	2.1	2.29
3	M12	21.7	12.4	2.41	2.65
4	M14	25.3	14.4	2.41	2.72
5	M16	29.1	16.6	3.17	3.48
6	M18	32.6	18.6	3.42	3.78
7	M20	36.4	20.8	3.95	4.34
8	M22	40.4	22.9	3.95	4.44
9	M24	43.4	24.8	3.95	4.49
10	M27	48.7	27.8	3.95	4.62
11	M30	53.9	30.8	4.88	5.55
12	M32	57.4	32.8	4.88	5.65
13	M33	59.1	32.8	4.88	5.65
14	M36	64.4	36.8	6.5	7.22
15	M38	68	36.8	6.5	7.32
16	M39	69.7	39.8	6.5	7.35
17	M42	74.9	42.8	6.5	7.27
18	M45	80.5	45.7	7.2	8.2
19	M48	56.1	49.2	8	9.05
20	M52	93.1	53.2	8	9.2
21	M56	103	56.8	9	10.3
22	M64	113.5	65.1	10.01	11.29
23	M72	128.1	73.2	13	14.43

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MK-D8130 Large load disc spring

Bolts with temperatures above 150 ° C require advanced disc spring pretensioning technology. It is recommended to use this series as much as possible at operating temperatures below 300 or around and corrosive media



The main materials are C, D, E, F.

Applicable industries: Ruohua, power, metallurgy, papermaking, pharmaceutical, food processing, etc.

Applicable equipment:

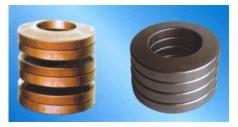
- · Flange bolt pre-tightening of reactor, stirrer, heat exchanger
- Flange and anchor bolt pre-tightening of pump, fan, centrifuge
- Power busbar, copper and aluminum alloy bolts
- Pipe flange, valve flange bolt pretension

No.	Model	Outside diameter	Inner diameter	Thickness	Free height
1	M10	23	10.5	2.5	3.2
2	M12	29	13	3	3.95
3	M14	35	15	3.5	4.65
4	M16	39	17	4	5.25
5	M18	42	19	4.5	5.8
6	M20	45	21	5	6.4
7	M22	49	23	5.5	7.05
8	M24	56	25	6	7.75
9	M27	60	28	6.5	8.35
10	M30	70	31	7	9.2
11	M32	75	33	7.5	8.75
12	M36	80	37	8	9.6
13	M38	85	39	8.5	10.4
14	M42	95	43	9	11.3
15	M45	100	46	9.5	12.2
16	M48	105	49	10	13.1
17	M52	114	53	11	14.4
18	M56	123	58	12	15.5
19	M64	138	65	14	17.7
20	M70	153	71	16	20
21	M80	175	81	18	22.3
22	M90	196	91	20	24.5
23	M100	218	101	22	26.8

HANGZHOU ST.MICHAEL SEAL & PACKING CO.,T LTD

MK-D8140 Overloaded disc spring washer(DIN6796)

DIN6796 Overloaded disc spring washer is a lock washer designed for bolt and screw connection. It is designed and manufactured according to DIN6796 and is used for the connection of high-strength bolts and screws. The elastic recovery with large support load is very effective using this series. The bolt tension can withstand



the slack caused by the following reasons: wear, creep, relaxation, thermal expansion and contraction of wearing parts. Or the compression of the seal. This series increases the elasticity of the screw several times. It can effectively replace the common spring washer, but it is not suitable for the combination of lock washer and flat washer.

This series is a disc spring that can be folded or folded. The combination of the combination mode can increase the deformation of the disc spring group, and the combination of the combination mode can increase the spring force of the disc spring group. The ideal installation method is to flatten as much as possible. The closer to the flattened state, the faster the tension moment increases, and the proper butterfly bolt tension can be obtained without a torque wrench.

No.	Model	Outside diameter	Inner diameter	Thickness	Free height
1	M10	18.24	10.41	3.02	3.2
2	M12	21.69	12.4	3.66	3.86
3	M14	25.27	14.4	4.27	4.5
4	M16	29.16	16.35	5.11	5.38
5	M18	32.64	18.39	5.89	6.17
6	M20	36.96	20.6	6.15	6.45
7	M22	40.39	22.89	7.42	7.8
8	M24	43.41	24.82	7.52	7.9
9	M27	48.69	27.81	8.38	8.81
10	M30	53.92	30.81	9.5	9.98
11	M32	58.67	32.54	9.55	10.16
12	M33	59.18	33.53	10.62	11.13
13	M36	65.53	36.8	11.46	12.04
14	M38/39	68.07	39.62	12.95	13.54
15	M42	74.93	42.85	14.58	15.21
16	M45	80.5	45.7	14.5	15.3
17	M48	86.08	48.23	14.76	15.36
18	M52	91.44	52.81	15.8	16.66
19	M56	103	56.8	17.9	18.9
20	M64	113.87	64.29	19.96	21.03
21	M70	124.97	70.64	22.07	23.24