



Federungs- und Sicherungselemente

Die Springs

Made in Germany



Dynafllex Die Springs are made in Germany to the highest quality standards.

Dynafllex Die Springs comply with the international standard ISO 10 243 concerning overall dimensions and application field.

Classification into four DUTY GROUPS (identified by colour coding) follows the original ISO classification.

However, many properties of the Dynafllex Die Springs are special:

- the special material alloying used gives improved heat resistance and reduced relaxation
- extremely low surface decarburization and absence of surface cracks
- the trapezoid material profile allows lower solid length and therefore larger deflection
- the higher allowable stresses give greater fatigue life
- dimensional accuracy
- accurate fit into existing space

We supply over 400 different Die Springs and give the designer a great deal of choice.

How to find the spring you require:

Compare the space available for the spring with the "HOLE" diameter, "ROD" diameter and "FREE LENGTH" given in this data sheet. Select the "DUTY GROUP" (1, 2, 3 or 4) to allow for the required load.

Standard finish is epoxy powder coating. For special orders we can supply springs with other corrosion resistant coatings.

Advice on application:

The maximum spring deflection should never be exceeded as this will reduce the fatigue life of the spring. The spring should be fitted with some preloading to ensure that uncontrolled dynamic effects do not adversely affect the working life.

Within the particular "DUTY GROUP" the springs are designed for dynamic stress:

Highest working life by load up to s1, high working life by load up to s2 and medium working life by load up to max. operating deflection.

If the spring is overloaded it is possible that the spring will set. Working temperature should not exceed 200 degrees C as higher temperatures will reduce spring life and may affect the spring loads.

DUTY GROUP 1 light				
hole-mm	rod-mm	L-mm	spring rate R/N/mm	order-no.
10	5,0	025	10,0	1-10/05,0/025
		032	8,5	1-10/05,0/032
		038	6,8	1-10/05,0/038
		044	6,0	1-10/05,0/044
		051	5,0	1-10/05,0/051
		064	4,3	1-10/05,0/064
		076	3,2	1-10/05,0/076
305	1,1	1-10/05,0/305		
12,5	6,3	025	17,9	1-12,5/06,3/025
		032	16,4	1-12,5/06,3/032
		038	13,6	1-12,5/06,3/038
		044	12,1	1-12,5/06,3/044
		051	11,4	1-12,5/06,3/051
		064	9,3	1-12,5/06,3/064
		076	7,1	1-12,5/06,3/076
089	5,4	1-12,5/06,3/089		
305	1,4	1-12,5/06,3/305		
16	8,0	025	23,4	1-16/08,0/025
		032	22,9	1-16/08,0/032
		038	19,3	1-16/08,0/038
		044	17,1	1-16/08,0/044
		051	15,7	1-16/08,0/051
		064	10,7	1-16/08,0/064
		076	10,0	1-16/08,0/076
089	8,6	1-16/08,0/089		
102	7,8	1-16/08,0/102		
305	2,5	1-16/08,0/305		
20	10,0	025	55,8	1-20/10,0/025
		032	45,0	1-20/10,0/032
		038	33,3	1-20/10,0/038
		044	30,0	1-20/10,0/044
		051	24,5	1-20/10,0/051
		064	20,0	1-20/10,0/064
		076	16,0	1-20/10,0/076
089	14,0	1-20/10,0/089		
102	12,0	1-20/10,0/102		
115	10,9	1-20/10,0/115		
127	9,5	1-20/10,0/127		
139	8,4	1-20/10,0/139		
152	7,5	1-20/10,0/152		
305	4,0	1-20/10,0/305		
25	12,5	025	100	1-25/12,5/025
		032	80,3	1-25/12,5/032
		038	62,0	1-25/12,5/038
		044	52,9	1-25/12,5/044
		051	44,0	1-25/12,5/051
		064	35,2	1-25/12,5/064
		076	28,0	1-25/12,5/076
089	24,0	1-25/12,5/089		
102	21,1	1-25/12,5/102		
115	18,7	1-25/12,5/115		
127	16,7	1-25/12,5/127		
139	15,3	1-25/12,5/139		
152	14,0	1-25/12,5/152		
178	12,5	1-25/12,5/178		
203	10,4	1-25/12,5/203		
305	6,96	1-25/12,5/305		
32	16,0	038	94,0	1-32/16,0/038
		044	79,5	1-32/16,0/044
		051	67,0	1-32/16,0/051
		064	53,0	1-32/16,0/064
		076	44,0	1-32/16,0/076
		089	37,2	1-32/16,0/089
		102	32,0	1-32/16,0/102
115	29,0	1-32/16,0/115		
127	25,0	1-32/16,0/127		
139	23,0	1-32/16,0/139		
152	21,5	1-32/16,0/152		
178	18,2	1-32/16,0/178		
203	15,8	1-32/16,0/203		
254	12,5	1-32/16,0/254		
305	10,3	1-32/16,0/305		
40	20,0	051	92,0	1-40/20,0/051
		064	73,0	1-40/20,0/064
		076	63,0	1-40/20,0/076
		089	51,0	1-40/20,0/089
		102	43,0	1-40/20,0/102
		115	39,6	1-40/20,0/115
		127	37,0	1-40/20,0/127
139	32,0	1-40/20,0/139		
152	28,0	1-40/20,0/152		
178	25,2	1-40/20,0/178		
203	22,7	1-40/20,0/203		
254	17,0	1-40/20,0/254		
305	14,8	1-40/20,0/305		
50	25,0	064	156,0	1-50/25,0/064
		076	125,0	1-50/25,0/076
		089	109,0	1-50/25,0/089
		102	94,0	1-50/25,0/102
		115	81,0	1-50/25,0/115
		127	71,0	1-50/25,0/127
		139	66,5	1-50/25,0/139
152	60,0	1-50/25,0/152		
178	52,0	1-50/25,0/178		
203	44,0	1-50/25,0/203		
254	35,0	1-50/25,0/254		
305	28,5	1-50/25,0/305		
63	38,0	076	189,0	1-63/38,0/076
		089	158,0	1-63/38,0/089
		102	131,0	1-63/38,0/102
		115	116,0	1-63/38,0/115
		127	103,0	1-63/38,0/127
		152	84,3	1-63/38,0/152
		178	71,5	1-63/38,0/178
203	61,7	1-63/38,0/203		
254	47,0	1-63/38,0/254		
305	38,2	1-63/38,0/305		

DUTY GROUP 2 medium				
hole-mm	rod-mm	L-mm	spring rate R/N/mm	order-no.
10	5,0	025	16,0	2-10/05,0/025
		032	13,0	2-10/05,0/032
		038	11,9	2-10/05,0/038
		044	10,3	2-10/05,0/044
		051	8,9	2-10/05,0/051
		064	7,5	2-10/05,0/064
		076	5,3	2-10/05,0/076
305	1,6	2-10/05,0/305		
12,5	6,3	025	30,0	2-12,5/06,3/025
		032	24,8	2-12,5/06,3/032
		038	21,4	2-12,5/06,3/038
		044	18,5	2-12,5/06,3/044
		051	15,5	2-12,5/06,3/051
		064	12,1	2-12,5/06,3/064
		076	10,2	2-12,5/06,3/076
089	8,4	2-12,5/06,3/089		
305	2,1	2-12,5/06,3/305		
16	8,0	025	49,4	2-16/08,0/025
		032	37,1	2-16/08,0/032
		038	33,9	2-16/08,0/038
		044	30,0	2-16/08,0/044
		051	26,4	2-16/08,0/051
		064	20,5	2-16/08,0/064
		076	17,8	2-16/08,0/076
089	15,2	2-16/08,0/089		
102	13,5	2-16/08,0/102		
305	4,8	2-16/08,0/305		
20	10,0	025	98,0	2-20/10,0/025
		032	72,6	2-20/10,0/032
		038	56,0	2-20/10,0/038
		044	47,5	2-20/10,0/044
		051	41,7	2-20/10,0/051
		064	32,3	2-20/10,0/064
		076	25,1	2-20/10,0/076
089	22,0	2-20/10,0/089		
102	19,8	2-20/10,0/102		
115	18,1	2-20/10,0/115		
127	16,6	2-20/10,0/127		
139	15,1	2-20/10,0/139		
152	13,15	2-20/10,0/152		
305	6,1	2-20/10,0/305		
25	12,5	025	147,0	2-25/12,5/025
		032	118,0	2-25/12,5/032
		038	93,0	2-25/12,5/038
		044	80,8	2-25/12,5/044
		051	68,3	2-25/12,5/051
		064	53,0	2-25/12,5/064
		076	43,2	2-25/12,5/076
089	38,2	2-25/12,5/089		
102	33,0	2-25/12,5/102		
115	28,0	2-25/12,5/115		
127	25,9	2-25/12,5/127		
139	23,2	2-25/12,5/139		
152	20,8	2-25/12,5/152		
178	17,8	s2-25/12,5/178		
203	15,8	2-25/12,5/203		
305	10,2	2-25/12,5/305		
32	16,0	038	185,0	2-32/16,0/038
		044	158,0	2-32/16,0/044
		051	134,0	2-32/16,0/051
		064	99,0	2-32/16,0/064
		076	80,5	2-32/16,0/076
		089	69,1	2-32/16,0/089
		102	58,8	2-32/16,0/102
115	51,5	2-32/16,0/115		
127	44,8	2-32/16,0/127		
139	42,3	2-32/16,0/139		
152	37,8	2-32/16,0/152		
178	32,5	2-32/16,0/178		
203	28,9	2-32/16,0/203		
254	21,4	2-32/16,0/254		
305	18,3	2-32/16,0/305		
40	20,0	051	181,6	2-40/20,0/051
		064	140,0	2-40/20,0/064
		076	108,0	2-40/20,0/076
		089	90,7	2-40/20,0/089
		102	81,0	2-40/20,0/102
		115	71,8	2-40/20,0/115
		127	62,7	2-40/20,0/127
139	57,5	2-40/20,0/139		
152	51,6	2-40/20,0/152		
178	44,1	2-40/20,0/178		
203	36,7	2-40/20,0/203		
254	30,1	2-40/20,0/254		
305	24,6	2-40/20,0/305		
50	25,0	064	209,0	2-50/25,0/064
		076	188,0	2-50/25,0/076
		089	140,0	2-50/25,0/089
		102	119,0	2-50/25,0/102
		115	106,0	2-50/25,0/115
		127	97,0	2-50/25,0/127
		139	87,0	2-50/25,0/139
152	80,0	2-50/25,0/152		
178	69,5	2-50/25,0/178		
203	59,8	2-50/25,0/203		
229	50,9	2-50/25,0/229		
254	43,9	2-50/25,0/254		
305	36,6	2-50/25,0/305		
63	38,0	076	312,0	2-63/38,0/076
		089	260,0	2-63/38,0/089
		102	221,0	2-63/38,0/102
		115	187,0	2-63/38,0/115
		127	168,0	2-63/38,0/127
		152	136,0	2-63/38,0/152
		178	114,0	2-63/38,0/178
229	89,2	2-63/38,0/229		
203	100,0	2-63/38,0/203		
254	78,4	2-63/38,0/254		
305	64,7	2-63/38,0/305		

DUTY GROUP 3 strong				
hole-mm	rod-mm	L-mm	spring rate R/N/mm	order-no.
10	5,0	025	22,1	3-10/05,0/025
		032	17,5	3-10/05,0/032
		038	17,1	3-10/05,0/038
		044	15,0	3-10/05,0/044
		051	12,8	3-10/05,0/051
		064	10,7	3-10/05,0/064
		076	7,5	3-10/05,0/076
305	2,1	3-10/05,0/305		
12,5	6,3	025	42,1	3-12,5/06,3/025
		032	33,2	3-12,5/06,3/032
		038	29,3	3-12,5/06,3/038
		044	24,6	3-12,5/06,3/044
		051	19,6	3-12,5/06,3/051
		064	15,0	3-12,5/06,3/064
		076	13,2	3-12,5/06,3/076
089	11,4	3-12,5/06,3/089		
305	2,8	3-12,5/06,3/305		
16	8,0	025	75,7	3-16/08,0/025
		032	52,8	3-16/08,0/032
		038	48,5	3-16/08,0/038
		044	42,8	3-16/08,0/044
		051	37,1	3-16/08,0/051
		064	30,3	3-16/08,0/064
		076	25,7	3-16/08,0/076
089	21,7	3-16/08,0/089		
102	19,3	3-16/08,0/102		
305	7,1	3-16/08,0/305		
20	10,0	025	216,0	3-20/10,0/025
		032	168,0	3-20/10,0/032
		038	129,0	3-20/10,0/038
		044	112,0	3-20/10,0/044
		051	94,0	3-20/10,0/051
		064	72,1	3-20/10,0/064
		076	59,7	3-20/10,0/076
089	50,5	3-20/10,0/089		
102	44,2	3-20/10,0/102		
115	38,4	3-20/10,0/115		
127	34,1	3-20/10,0/127		
139	31,0	3-20/10,0/139		
152	28,2	3-20/10,0/152		
305	15,0	3-20/10,0/305		
25	12,5	025	375,0	3-25/12,5/025
		032	297,0	3-25/12,5/032