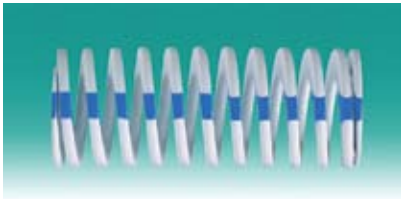
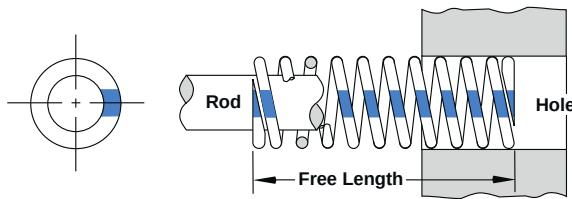


Medium Pressure Inch



Type **M**



Note: Efficient Operating Range is 25% to 50% of the free length. (Maximum deflection = 50%; long life = 40%; and optimum life = 25%.) "Travel to solid" is for reference only. Deflection beyond the Efficient Operating Range could create a safety hazard, and result in premature spring failure.

Hole Dia.	Rod Dia.	Free Length	Catalog Number	LOAD DEFLECTION TABLE							Load @ .1" Deflection (lbs)
				50% Deflection		40% Deflection		25% Deflection		Travel to Solid Deflection(in)	
				Load(lbs)	Deflection (in)	Load (lbs)	Deflection (in)	Load (lbs)	Deflection (in)		
3/8	3/16	1	M37-100	37	.500	29	.400	18	.250	.572	7.3
		1.25	M37-125	41	.625	33	.500	20	.313	.725	6.5
		1.5	M37-150	38	.750	30	.600	19	.375	.896	5.0
		1.75	M37-175	37	.875	29	.700	18	.438	1.088	4.2
		2	M37-200	38	1.000	30	.800	19	.500	1.163	3.8
		2.5	M37-250	38	1.250	30	1.000	19	.625	1.552	3.0
		3	M37-300	30	1.500	24	1.200	15	.750	1.821	2.0
		12	M37-1200	42	6.000	34	4.800	21	3.000	7.800	0.7
1/2	9/32	1	M50-100	55	.500	44	.400	28	.250	.536	11.0
		1.25	M50-125	55	.625	44	.500	28	.313	.719	8.8
		1.5	M50-150	59	.750	47	.600	29	.375	.831	7.8
		1.75	M50-175	51	.875	41	.700	25	.438	.972	5.8
		2	M50-200	52	1.000	42	.800	26	.500	1.091	5.2
		2.5	M50-250	63	1.250	50	1.000	31	.625	1.464	5.0
		3	M50-300	53	1.500	42	1.200	26	.750	1.850	3.5
		3.5	M50-350	56	1.750	45	1.400	28	.875	2.190	3.2
		4.5	M50-450	56	2.250	45	1.800	28	1.125	2.736	2.5
		5.5	M50-550	58	2.750	46	2.200	29	1.375	3.436	2.1
		6.5	M50-650	49	3.250	39	2.600	24	1.625	3.787	1.5
		7.5	M50-750	45	3.750	36	3.000	23	1.875	4.075	1.2
		12	M50-1200	48	6.000	38	4.800	24	3.000	6.215	0.8
5/8	11/32	1	M62-100	95	.500	76	.400	48	.250	.528	19.0
		1.25	M62-125	89	.625	72	.500	45	.313	.665	14.3
		1.5	M62-150	98	.750	78	.600	49	.375	.850	13.0
		1.75	M62-175	86	.875	69	.700	43	.438	.982	9.8
		2	M62-200	102	1.000	82	.800	51	.500	1.126	10.2
		2.5	M62-250	91	1.250	73	1.000	46	.625	1.476	7.3
		3	M62-300	99	1.500	79	1.200	50	.750	1.842	6.6
		3.5	M62-350	88	1.750	70	1.400	44	.875	2.229	5.0
		4	M62-400	92	2.000	74	1.600	46	1.000	2.577	4.6
				12	M62-1200	96	6.000	77	4.800	48	3.000
3/4	3/8	1	M75-100	188	.500	150	.400	94	.250	.516	37.6
		1.25	M75-125	179	.625	144	.500	90	.313	.665	28.7
		1.5	M75-150	167	.750	133	.600	83	.375	.788	22.2
		1.75	M75-175	162	.875	130	.700	81	.438	.934	18.5
		2	M75-200	161	1.000	129	.800	81	.500	1.081	16.1
		2.5	M75-250	159	1.250	127	1.000	79	.625	1.374	12.7
		3	M75-300	158	1.500	126	1.200	79	.750	1.667	10.5
		3.5	M75-350	156	1.750	125	1.400	78	.875	1.961	8.9
		4	M75-400	154	2.000	123	1.600	77	1.000	2.254	7.7
		4.5	M75-450	155	2.250	124	1.800	78	1.125	2.547	6.9
		5	M75-500	153	2.500	122	2.000	76	1.250	2.841	6.1
		5.5	M75-550	154	2.750	123	2.200	77	1.375	3.134	5.6
		6	M75-600	153	3.000	122	2.400	77	1.500	3.426	5.1
		6.5	M75-650	153	3.250	122	2.600	76	1.625	3.720	4.7
7.5	M75-750	154	3.750	123	3.000	77	1.875	4.306	4.1		
		12	M75-1200	150	6.000	120	4.800	75	3.000	6.945	2.5

Medium Pressure Inch

Hole Dia.	Rod Dia.	Free Length	Catalog Number	LOAD DEFLECTION TABLE							Load @ .1" Deflection (lbs)
				50% Deflection		40% Deflection		25% Deflection		Travel to Solid Deflection(in)	
				Load (lbs)	Deflection (in)	Load (lbs)	Deflection (in)	Load (lbs)	Deflection (in)		
1	1/2	1	M100-100	290	.500	232	.400	145	.250	.509	58.0
		1.25	M100-125	330	.625	264	.500	165	.313	.663	52.8
		1.5	M100-150	301	.750	241	.600	150	.375	.792	40.1
		1.75	M100-175	294	.875	235	.700	147	.438	.944	33.6
		2	M100-200	289	1.000	231	.800	145	.500	1.097	28.9
		2.5	M100-250	283	1.250	226	1.000	141	.625	1.403	22.6
		3	M100-300	279	1.500	223	1.200	140	.750	1.709	18.6
		3.5	M100-350	277	1.750	221	1.400	138	.875	2.014	15.8
		4	M100-400	274	2.000	219	1.600	137	1.000	2.320	13.7
		4.5	M100-450	272	2.250	218	1.800	136	1.125	2.625	12.1
		5	M100-500	270	2.500	216	2.000	135	1.250	2.931	10.8
		5.5	M100-550	270	2.750	216	2.200	135	1.375	3.236	9.8
6	M100-600	270	3.000	216	2.400	135	1.500	3.542	9.0		
7	M100-700	266	3.500	213	2.800	133	1.750	4.154	7.6		
8	M100-800	268	4.000	214	3.200	134	2.000	4.764	6.7		
12	M100-1200	264	6.000	211	4.800	132	3.000	7.210	4.4		
1 1/4	5/8	1.5	M125-150	389	.750	311	.600	194	.375	.792	51.8
		1.75	M125-175	350	.875	280	.700	175	.438	.935	40.0
		2	M125-200	357	1.000	286	.800	179	.500	1.156	35.7
		2.5	M125-250	391	1.250	313	1.000	196	.625	1.481	31.3
		3	M125-300	383	1.500	306	1.200	191	.750	1.804	25.5
		3.5	M125-350	378	1.750	302	1.400	189	.875	2.131	21.6
		4	M125-400	374	2.000	299	1.600	187	1.000	2.457	18.7
		4.5	M125-450	371	2.250	297	1.800	186	1.125	2.784	16.5
		5	M125-500	370	2.500	296	2.000	185	1.250	3.112	14.8
		5.5	M125-550	369	2.750	295	2.200	184	1.375	3.435	13.4
		6	M125-600	366	3.000	293	2.400	183	1.500	3.758	12.2
		7	M125-700	364	3.500	291	2.800	182	1.750	4.418	10.4
8	M125-800	364	4.000	291	3.200	182	2.000	5.068	9.1		
10	M125-1000	360	5.000	288	4.000	180	2.500	6.375	7.2		
12	M125-1200	360	6.000	288	4.800	180	3.000	7.681	6.0		
1 1/2	3/4	2	M150-200	450	1.000	360	.800	225	.500	1.120	45.0
		2.5	M150-250	525	1.250	420	1.000	263	.625	1.361	42.0
		3	M150-300	519	1.500	415	1.200	260	.750	1.744	34.6
		3.5	M150-350	520	1.750	416	1.400	260	.875	1.966	29.7
		4	M150-400	532	2.000	426	1.600	266	1.000	2.344	26.6
		4.5	M150-450	513	2.250	410	1.800	257	1.125	2.595	22.8
		5	M150-500	500	2.500	400	2.000	250	1.250	2.960	20.0
		5.5	M150-550	506	2.750	405	2.200	253	1.375	3.203	18.4
		6	M150-600	480	3.000	384	2.400	240	1.500	3.554	16.0
		7	M150-700	497	3.500	398	2.800	249	1.750	4.162	14.2
		8	M150-800	516	4.000	413	3.200	258	2.000	4.856	12.9
		10	M150-1000	500	5.000	400	4.000	250	2.500	6.094	10.0
12	M150-1200	492	6.000	394	4.800	246	3.000	7.172	8.2		
2	1	2.5	M200-250	1216	1.250	973	1.000	608	.625	1.280	97.3
		3	M200-300	1140	1.500	912	1.200	570	.750	1.550	76.0
		3.5	M200-350	1138	1.750	910	1.400	569	.875	1.834	65.0
		4	M200-400	1128	2.000	902	1.600	564	1.000	2.125	56.4
		4.5	M200-450	1105	2.250	884	1.800	552	1.125	2.356	49.1
		5	M200-500	1095	2.500	876	2.000	548	1.250	2.745	43.8
		5.5	M200-550	1108	2.750	887	2.200	554	1.375	2.972	40.3
		6	M200-600	1116	3.000	893	2.400	558	1.500	3.282	37.2
		7	M200-700	1071	3.500	857	2.800	536	1.750	3.806	30.6
		8	M200-800	1072	4.000	858	3.200	536	2.000	4.439	26.8
		10	M200-1000	1050	5.000	840	4.000	525	2.500	5.860	21.0
		12	M200-1200	990	6.000	792	4.800	495	3.000	6.775	16.5

MaxLife Die Springs

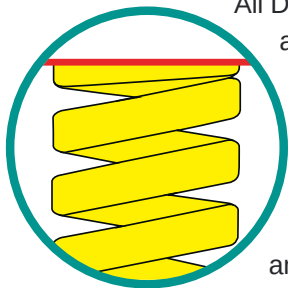
Product Applications

Dayton MaxLife® Die Springs are designed to the highest quality standards, and manufactured to outperform and outlast other major brands. All Dayton die springs are available in a wide range of lengths, diameters, and load classifications in both inch and metric sizes. In addition, all springs are color-coded for easy identification of load range.

Corrosion-resistant Dayton die springs are made from pre-tempered chrome silicon wire to improve dimensional accuracy, minimize high-stress cracking, optimize the working life of press and mold dies, and help reduce downtime. Many manufacturers specify Dayton die springs to ensure optimum operation in heavy industry applications, including: automotive; aircraft; appliance; electrical; and electronic.

Quality & Performance

From the incoming raw material (tested for tensile strength, dimensional accuracy, and surface quality) to the finished product, every Dayton die spring undergoes continuous quality control to ensure optimum product performance. In comparison testing, Dayton die springs consistently outperform and outlast other major brands.



All Dayton die springs are stress relieved after coiling, then compressed to solid to enhance fatigue life. Further, they are ground square at both ends (see insert), then shot-peened. (Shot-peening supplements compressive strength to reduce stress and extend spring life.) Finally, all finished springs are electro-statically coated with a durable, anti-corrosive vinyl, and color-coded for easy identification of load ranges.



Ordering Information

Dayton die springs are ordered according to: the amount of pressure applied to the spring (see “Load Deflection Table”); the hole diameter (which determines the rod diameter); and, the free length of the spring (see drawing on usage category page). On each order, please specify quantity and “Catalog Number.”

In the example below, the first “Catalog Number” is DMD37-100. “DMD” refers to Medium Duty Inch. “37” refers to a $\frac{3}{8}$ hole diameter and $\frac{3}{16}$ rod diameter. The “100” designation further defines the product with a free length of 1. The “Load Deflection Table” on each catalog page provides percentage of deflection, travel to solid, and load @ 1" or 1mm deflection to help determine the exact spring to select. The second product code shown is for an extra heavy duty metric spring.

The “Efficient Operating Range” of any spring should not be exceeded. For safe operation, when changing from another manufacturer to a Dayton die spring, verify that the travel of both springs is the same.

HOW TO ORDER

Specify:	Qty.	Catalog Number
Example:	16	DMD37-1200

Worldwide Distribution, On-time Delivery

Dayton maintains a large inventory of Dayton MaxLife® Die Springs in all standard categories throughout our system. There are no minimum size orders, and on-time delivery is a top priority. A Firm Delivery Schedule (FDS) is provided in each catalog section.

Industry Standards

All Dayton MaxLife® Die Springs are designed to meet or exceed technical specifications and other criteria as established by industry guidelines. Designated springs are manufactured to meet or exceed The International Organization for Standardization (ISO) and/or Japanese Industrial Standards (JIS).