

## HP Series DIE Springs – GOLD (High Pressure)

Hole Dia. (O.D.)	Part Number	Rod Dia. (I.D.)	Free Length		Load at 50% Deflection		Load at 1/10" Deflection		
			in.	mm.	lb.	g.	lb.	g.	
<b>3/8"</b> <b>9.5mm</b>	HP-02	<b>3/16"</b> <b>4.8 mm</b>	1	25.4	37.2	16.87	12.4	5.62	
	HP-02A		1 ¼	31.78	36.8	166.67	9.8	4.45	
	HP-03		1 ½	38.1	43.2	19.6	9.6	4.35	
	HP-03A		1 ¾	44.45	44.1	20.	8.4	3.81	
	HP-04		2	50.8	43.2	19.6	7.2	3.27	
	HP-05		2 ½	63.5	45.	20.41	6.	2.72	
	<b>Wire</b> <b>.054 x .072</b>		HP-06	3	76.2	37.8	17.15	4.2	1.91
	HP-024	12	304.8	43.2	19.6	1.2	.54		
<b>½"</b> <b>12.7 mm</b>	HP-12	<b>9/32"</b> <b>7.1 mm</b>	1	25.4	70.8	32.11	23.06	10.7	
	HP-12A		1 ¼	31.78	69.8	31.64	18.6	8.44	
	HP-13		1 ½	38.1	73.8	33.48	16.4	7.44	
	HP-13A		1 ¾	44.45	72.5	32.86	13.8	6.26	
	HP-14		2	50.8	66.	29.94	11.	4.99	
	HP-15		2 ½	63.5	63.	28.58	8.4	3.81	
	<b>Wire</b> <b>.072 x .095</b>		HP-16	3	76.2	66.6	30.21	7.4	3.36
			HP-17	3 ½	88.9	67.2	30.48	6.4	2.9
			MP-124	12	304.8	57.6	26.13	1.6	.73
<b>5/8"</b> <b>15.9 mm</b>	HP-22	<b>11/32"</b> <b>8.7 mm</b>	1	25.4	127.2	57.7	42.4	19.23	
	HP-22A		1 ¼	31.78	111.	50.35	29.6	13.43	
	HP-23		1 ½	38.1	122.4	55.52	27.2	12.34	
	HP-23A		1 ¾	44.5	126.	57.15	24.	10.89	
	HP-24		2	50.8	124.8	56.61	2.8	9.43	
	HP-25		2 ½	63.5	127.5	57.83	17.	7.71	
	HP-26		3	76.2	129.6	58.79	14.4	6.53	
	<b>Wire</b> <b>.093 x .125</b>		HP-27	3 ½	88.9	128.1	58.11	12.2	5.53
			HP-28	4	101.6	129.6	58.79	10.8	4.9
			HP-224	12	304.8	144.	65.32	4.	1.81
<b>¾"</b> <b>19.1 mm</b>	HP-32	<b>3/8"</b> <b>9.5 mm</b>	1	25.4	324.	146.97	108.	48.99	
	HP-32A		1 ¼	31.78	330.	149.69	88.	39.92	
	HP-33		1 ½	38.1	295.2	133.9	65.6	29.76	
	HP-33A		1 ¾	44.5	315.	142.88	60.	27.22	
	HP-34		2	50.8	297.6	134.99	49.6	22.5	
	HP-35		2 ½	63.5	282.	127.92	37.6	17.06	

## HP Series DIE Springs – GOLD (High Pressure)

Hole Dia. (O.D)	Part Number	Rod Dia. (I.D.)	Free Length		Load at 50% Deflection		Load at 1/10" Deflection	
			in.	mm.	lb.	g.	lb.	g.
Wire .125 x .165	HP-36		3	76.2	280.8	127.37	31.2	14.15
	HP-37		3 ½	88.9	277.2	125.74	26.4	11.98
	HP-38		4	101.6	278.2	126.28	23.2	10.52
	HP-39		4 ½	114.3	270.	122.47	20.	9.07
	HP-310		5	127.	264.	119.75	17.6	7.98
	HP-311		5 ½	139.7	264.	119.75	16.	7.26
	HP-312		6	152.4	259.2	117.57	14.4	6.53
	HP-324		12	304.8	259.2	117.57	7.2	3.27
Wire .158 x .221	HP-42	½" 12.7 mm	1	25.4	624.	283.05	208.	94.35
	HP-42A		1 ¼	31.78	642.	291.21	171.2	77.66
	HP-43		1 ½	38.1	532.8	241.68	118.4	53.71
	HP-43A		1 ¾	44.5	546.	247.67	104.	47.17
	HP-44		2	50.8	504.	228.61	84.	38.1
	HP-45		2 ½	63.5	510.	231.34	68.	30.84
	HP-46		3	76.2	489.6	222.08	54.4	24.68
	HP-47		3 ½	88.9	478.8	217.18	45.6	20.68
	HP-48		4	101.6	480.	217.73	40.	18.14
	HP-49		4 ½	114.3	475.2	215.55	35.2	15.97
	HP-410		5	127.	468.	212.28	31.2	14.15
	HP-411		5 ½	139.7	475.2	215.55	28.8	13.06
	HP-412		6	152.4	460.8	209.02	25.6	11.61
	HP-414		7	177.8	470.4	213.37	22.4	10.16
	HP-416		8	203.2	460.8	209.02	19.2	8.71
	HP-424		12	304.8	432.	195.96	12.	5.44
Wire .200 x .286	HP-53	5/8" 15.9 mm	1 ½	38.1	954.	432.73	212.	96.16
	HP-53A		1 ¾	44.5	953.40	432.46	181.6	82.37
	HP-54		2	50.8	897.6	407.15	149.6	67.86
	HP-55		2 ½	63.5	882.	400.08	117.6	53.34
	HP-56		3	76.2	856.80	388.64	95.2	43.18
	HP-57		3 ½	88.9	789.6	358.16	75.2	34.11
	HP-58		4	101.6	796.8	361.43	66.4	30.12
	HP-59		4 ½	114.3	788.40	357.62	58.4	26.49
	HP-510		5	127.	744.	337.48	49.6	22.50
	HP-511		5 ½	139.7	778.80	353.26	47.2	21.41
	HP-512		6	152.4	763.20	346.19	42.4	19.23
	HP-514		7	177.8	772.80	350.54	36.8	16.69
	HP-516		8	203.2	787.20	357.07	32.8	14.88
	HP-520		10	254.	768.	348.36	25.6	11.61
HP-524	12	304.8	748.8	339.66	20.8	9.43		
Wire 38.1 mm	HP-64	¾" 19.1 mm	2	50.8	1142.4	518.19	190.4	86.37
	HP-65		2 ½	63.5	1116.	506.22	148.8	67.5

## HP Series DIE Springs – GOLD (High Pressure)

Hole Dia. (O.D)	Part Number	Rod Dia. (I.D.)	Free Length		Load at 50% Deflection		Load at 1/10" Deflection	
			in.	mm.	lb.	g.	lb.	g.
<b>Wire</b> <b>.225 X .33</b>	HP-66		3	76.2	1101.6	499.69	122.4	55.52
	HP-67		3 ½	88.9	1117.2	506.76	106.4	48.26
	HP-68		4	101.6	1094.4	496.42	91.2	41.37
	HP-69		4 ½	114.3	1058.4	490.09	78.4	35.56
	HP-610		5	127.	1068.	484.44	71.2	32.3
	HP-611		5 ½	139.7	1056.	479.	64.	29.03
	HP-612		6	152.4	1051.2	476.82	58.4	26.49
	HP-614		7	177.8	1041.6	427.47	49.6	22.5
	HP-616		8	203.2	1036.8	470.29	43.2	19.6
	HP-620		10	254.	1032.	468.12	34.4	15.6
	HP-624		12	304.8	1036.8	470.29	28.8	13.06
<b>2"</b> <b>5.8 mm</b>  <b>Wire</b> <b>.280 x .470</b>	HP-85	<b>1"</b> <b>25. mm</b>	2 ½	63.5	1650.	748.44	220.	99.79
	HP-86		3	76.2	1670.4	757.69	185.6	84.19
	HP-87		3 ½	88.9	1680.	762.05	160.	72.58
	HP-88		4	101.6	1603.2	727.21	133.6	60.6
	HP-89		4 ½	114.3	1587.6	720.14	117.6	53.34
	HP-810		5	127.	1560.	707.62	104.	47.17
	HP-811		5 ½	139.7	1531.2	694.55	92.8	42.09
	HP-812		6	152.4	1497.6	679.31	83.2	37.74
	HP-814		7	177.8	1545.6	701.08	73.6	33.38
	HP-816		8	203.2	1536.	696.73	64.	29.03
	HP-820		10	254.	1464.	664.07	48.8	22.14
	HP-824		12	304.8	1440.	653.18	40.	18.14