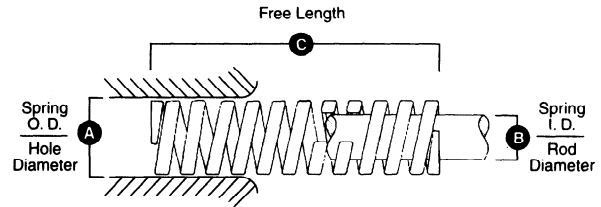




## RAYMOND GREEN EXTRA HEAVY DUTY DIE SPRINGS



Raymond EXTRA HEAVY DUTY DIE SPRINGS						INCH SERIES GREEN							
Spring O.D. Hole Dia.	Spring I.D. Rod Dia.	Free Length (in)	CATALOG NUMBER	PART NUMBER	Load at 1/10 in. Def. (lb)	LOAD DEFLECTION TABLE							
						For Optimum Life (15% of free length)		For Long Life (17% of free length)		Maximum Operating Def. (20% of free length)		*Maximum Deflection (25% of free length)	
						Load (lb)	Deflection (in)	Load (lb)	Deflection (in)	Load (lb)	Deflection (in)	Load (lb)	Deflection (in)
A	B	C											
3/8	3/16	1	04 XH 10	XH-100	22.0	33.0	0.15	37.4	0.17	44.0	0.20	55.0	0.25
		1 1/4	04 XH 12	XH-100A	16.0	30.0	0.19	34.0	0.21	40.0	0.25	50.0	0.31
		1 1/2	04 XH 15	XH-101	12.5	28.1	0.23	31.9	0.26	37.5	0.30	46.9	0.38
		1 3/4	04 XH 17	XH-101A	11.5	30.2	0.26	34.2	0.30	40.3	0.35	50.3	0.44
		2	04 XH 20	XH-102	9.0	27.0	0.30	30.6	0.34	36.0	0.40	45.0	0.50
		2 1/2	04 XH 25	XH-103	7.0	26.3	0.38	29.8	0.43	35.0	0.50	43.8	0.63
		3	04 XH 30	XH-104	6.5	29.3	0.45	33.2	0.51	39.0	0.60	48.8	0.75
		12	04 XH 120	XH-105	1.5	27.0	1.80	30.6	2.04	36.0	2.40	45.0	3.00
1/2	9/32	1	05 XH 10	XH-110	32.0	48.0	0.15	54.4	0.17	64.0	0.20	80.0	0.25
		1 1/4	05 XH 12	XH-110A	24.0	45.0	0.19	51.0	0.21	60.0	0.25	75.0	0.31
		1 1/2	05 XH 15	XH-111	20.0	45.0	0.23	51.0	0.26	60.0	0.30	75.0	0.38
		1 3/4	05 XH 17	XH-111A	17.0	44.6	0.26	50.6	0.30	59.5	0.35	74.4	0.44
		2	05 XH 20	XH-112	14.0	42.0	0.30	47.6	0.34	56.0	0.40	70.0	0.50
		2 1/2	05 XH 25	XH-113	11.5	43.1	0.38	48.9	0.43	57.5	0.50	71.9	0.63
		3	05 XH 30	XH-114	9.0	40.5	0.45	45.9	0.51	54.0	0.60	67.5	0.75
		3 1/2	05 XH 35	XH-115	8.0	42.0	0.53	47.6	0.60	56.0	0.70	70.0	0.88
12	05 XH 120	XH-116	2.5	45.0	1.80	51.0	2.04	60.0	2.40	75.0	3.00		
5/8	11/32	1	06 XH 10	XH-120	63.0	94.5	0.15	107.1	0.17	126.0	0.20	157.5	0.25
		1 1/4	06 XH 12	XH-120A	47.0	88.1	0.19	99.9	0.21	117.5	0.25	146.9	0.31
		1 1/2	06 XH 15	XH-121	38.0	85.5	0.23	96.9	0.26	114.0	0.30	142.5	0.38
		1 3/4	06 XH 17	XH-121A	32.0	84.0	0.26	95.2	0.30	112.0	0.35	140.0	0.44
		2	06 XH 20	XH-122	29.0	87.0	0.30	98.6	0.34	116.0	0.40	145.0	0.50
		2 1/2	06 XH 25	XH-123	22.0	82.5	0.38	93.5	0.43	110.0	0.50	137.5	0.63
		3	06 XH 30	XH-124	19.0	85.5	0.45	96.9	0.51	114.0	0.60	142.5	0.75
		3 1/2	06 XH 35	XH-125	16.0	84.0	0.53	95.2	0.60	112.0	0.70	140.0	0.88
4	06 XH 40	XH-126	13.5	81.0	0.60	91.8	0.68	108.0	0.80	135.0	1.00		
12	06 XH 120	XH-127	4.5	81.0	1.80	91.8	2.04	108.0	2.40	135.0	3.00		
3/4	3/8	1	07 XH 10	XH-1	140.0	210.0	0.15	238.0	0.17	280.0	0.20	350.0	0.25
		1 1/4	07 XH 12	XH-1A	110.0	206.3	0.19	233.8	0.21	275.0	0.25	343.8	0.31
		1 1/2	07 XH 15	XH-2	89.0	200.3	0.23	227.0	0.26	267.0	0.30	333.8	0.38
		1 3/4	07 XH 17	XH-2A	75.0	196.9	0.26	223.1	0.30	262.5	0.35	328.1	0.44
		2	07 XH 20	XH-3	68.0	204.0	0.30	231.2	0.34	272.0	0.40	340.0	0.50
		2 1/2	07 XH 25	XH-4	50.0	187.5	0.38	212.5	0.43	250.0	0.50	312.5	0.63
		3	07 XH 30	XH-5	40.5	182.3	0.45	206.6	0.51	243.0	0.60	303.8	0.75
		3 1/2	07 XH 35	XH-6	34.5	181.1	0.53	205.3	0.60	241.5	0.70	301.9	0.88
		4	07 XH 40	XH-7	30.0	180.0	0.60	204.0	0.68	240.0	0.80	300.0	1.00
		4 1/2	07 XH 45	XH-8	26.5	178.9	0.68	202.7	0.77	238.5	0.90	298.1	1.13
		5	07 XH 50	XH-9	23.5	176.3	0.75	199.8	0.85	235.0	1.00	293.8	1.25
		5 1/2	07 XH 55	XH-10	21.5	177.4	0.83	201.0	0.94	236.5	1.10	295.6	1.38
6	07 XH 60	XH-11	19.5	175.5	0.90	198.9	1.02	234.0	1.20	292.5	1.50		
12	07 XH 120	XH-12	9.5	171.0	1.80	193.8	2.04	228.0	2.40	285.0	3.00		
1	1/2	1 1/2	10 XH 15	XH-13	160.0	360.0	0.23	408.0	0.26	480.0	0.30	600.0	0.38
		2	10 XH 20	XH-14	116.0	348.0	0.30	394.4	0.34	464.0	0.40	580.0	0.50
		2 1/2	10 XH 25	XH-15	89.6	336.0	0.38	380.8	0.43	448.0	0.50	560.0	0.63
		3	10 XH 30	XH-16	73.6	331.2	0.45	375.4	0.51	441.6	0.60	552.0	0.75
		3 1/2	10 XH 35	XH-17	62.4	327.6	0.53	371.3	0.60	436.8	0.70	546.0	0.88
		4	10 XH 40	XH-18	55.2	331.2	0.60	375.4	0.68	441.6	0.80	552.0	1.00
		4 1/2	10 XH 45	XH-19	48.8	329.4	0.68	373.3	0.77	439.2	0.90	549.0	1.13
		5	10 XH 50	XH-20	43.2	324.0	0.75	367.2	0.85	432.0	1.00	540.0	1.25
6	10 XH 60	XH-21	36.0	324.0	0.90	367.2	1.02	432.0	1.20	540.0	1.50		
12	10 XH 120	XH-22A	17.6	316.8	1.80	359.0	2.04	422.4	2.40	528.0	3.00		

\*Tabulated load values shown represent loads near solid and are for design information only.