

TABLE #1 MAXIMUM SIDE LOAD

Stroke	BORE SIZE			
	1/2	3/4	1 1/8	1 1/2
1	19.73	37.70	82.05	131.91
2	15.31	29.93	68.45	112.01
3	12.49	24.71	58.68	97.26
4	10.54	20.96	51.32	85.86
5	9.11	18.33	45.57	76.83
6	8.02	16.20	40.95	69.46
7	7.15	14.50	37.18	63.36
8	5.84	13.15	34.02	58.21
9	4.23	12.00	31.35	53.82
10	3.15	11.05	20.14	50.02
11	2.39	7.28	15.65	46.71
12	1.85	5.70	13.35	43.79
13	—	—	—	29.37
14	—	—	—	24.00
15	—	—	—	19.79
16	—	—	—	16.44
17	—	—	—	13.74
18	—	—	—	13.63

TABLE #2 MAXIMUM MOMENTS (INCH LBS.)

Stroke	BORE SIZE			
	1/2	3/4	1 1/8	1 1/2
1	20.97	49.48	148.71	280.30
2	16.26	39.28	124.06	238.03
3	13.27	32.43	106.35	206.68
4	11.20	27.51	93.01	182.45
5	9.68	24.06	82.60	163.26
6	8.52	21.26	74.23	147.60
7	7.60	19.04	67.38	134.65
8	6.21	17.26	61.67	123.70
9	4.50	15.76	56.83	114.38
10	3.34	14.50	36.50	106.29
11	2.54	9.56	28.36	99.26
12	1.96	7.49	24.20	93.05
13	—	—	—	62.42
14	—	—	—	51.00
15	—	—	—	42.05
16	—	—	—	34.93
17	—	—	—	29.19
18	—	—	—	28.96

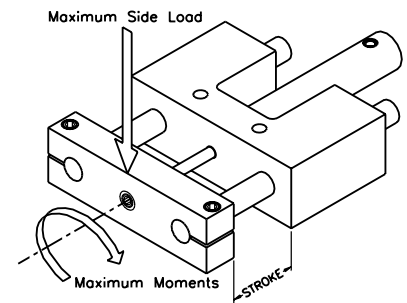
TABLE #3 MAXIMUM DEFLECTION AT MAXIMUM SIDE LOAD

POWERED SLIDES
OPS / MPS

Stroke	BORE SIZE			
	1/2	3/4	1 1/8	1 1/2
1	.001	.001	.001	.0006
2	.003	.002	.002	.001
3	.006	.004	.003	.002
4	.009	.006	.004	.003
5	.014	.009	.006	.004
6	.019	.012	.008	.005
7	.026	.016	.010	.006
8	.030	.020	.013	.008
9	.030	.025	.015	.009
10	.030	.030	.015	.011
11	.030	.030	.015	.013
12	.030	.030	.015	.015
13	—	—	—	.015
14	—	—	—	.015
15	—	—	—	.015
16	—	—	—	.015
17	—	—	—	.015
18	—	—	—	.015

TABLE #4 DEFLECTION VS. WORK WEIGHT

Stroke	BORE SIZE			
	1/2	3/4	1 1/8	1 1/2
1	19,730	37,700	82,050	219,850
2	5,103	14,965	34,225	112,010
3	2,082	6,178	19,560	48,360
4	1,171	3,493	12,830	28,620
5	651	2,037	7,595	19,208
6	422	1,350	5,119	13,892
7	275	906	3,718	10,560
8	195	658	2,617	7,276
9	141	480	2,090	5,980
10	105	368	1,343	4,547
11	80	243	1,043	3,593
12	62	190	890	2,919
13	—	—	—	1,958
14	—	—	—	1,600
15	—	—	—	1,319
16	—	—	—	1,096
17	—	—	—	916
18	—	—	—	908



USE TABLE #4 TO CALCULATE THE WEIGHT THAT CAN BE CARRIED BY A PARTICULAR POWERED SLIDE (GIVEN BORE AND STROKE) THAT WOULD NOT DEFLECT MORE THAN A GIVEN AMOUNT. FOR EXAMPLE: WHAT WEIGHT CAN BE CARRIED BY A POWERED SLIDE (WITH A 1 1/2" BORE AND 18" STROKE) THAT WOULD NOT DEFLECT MORE THAN .005?
SOLUTION: (SEE TABLE #4) X .005 = 4.54 LBS